

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



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-24
Sewage System			
Zoning			



CONVENTIONAL FRAMING BY OTHERS

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

JOB INFORMATION

Customer	GREENPARK HOMES
Job #	20-00414R0
Address	TRINAR HALL EAST QWILLIMBURY,ON
Model	BRENTWOOD 1 EL 3
Sales Rep	RALPH MIRIGELLO
Designer	KR
Date	12/16/2020
Path	C:\MITEK\CA\JOBS\GREENPARK HOMES\TRINAR HALL\BRENTWOOD 1\ELEV 3\T-BRENTWOOD1-3\

DESIGN INFORMATION

Code	NBCC 2015
Bldg	Residential - HSB (NBCC Part 9)
TC LL	34.8 lb/ft²
TC DL	8.0 lb/ft²
BC LL	10.5 lb/ft²
BC DL	7.3 lb/ft²
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



NE1220-109
GREENPARK - TRINAR HALL
- BRENTWOOD 1 EL 3

ENGINEERING NOTE PAGE (ENP-1)

PLEASE READ PRIOR TO INSTALLATION

RESPONSIBILITIES

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

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

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

USE AND OCCUPANCY

- The building is of the type indicated on the drawing

LOADING

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

HANDLING, INSTALLATION AND BRACING

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

SUPPORTS

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

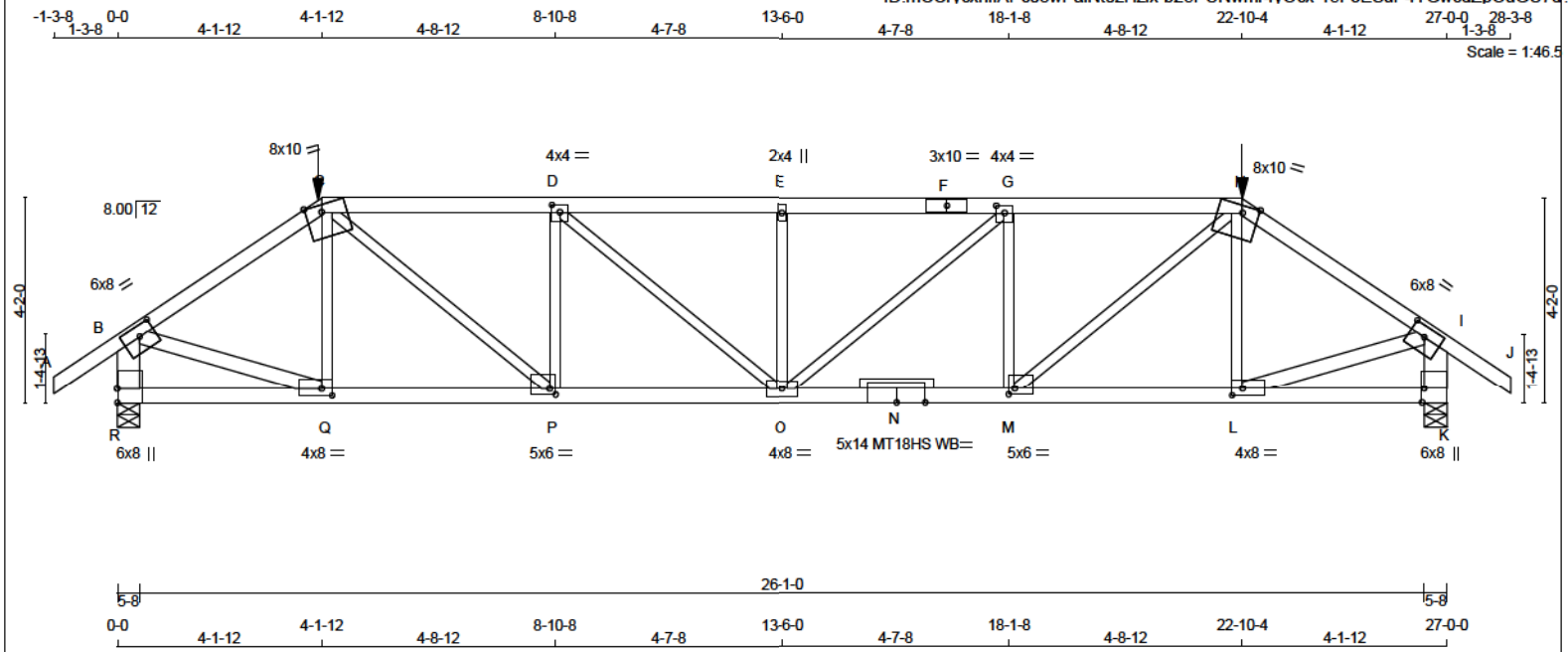
DIMENSIONS

- Geometry of the truss and dimensions indicated on the drawing shall be followed. The use of the installed truss.



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-24
Sewage System			
Zoning			



LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY 2100F 1.8E	SPF
C - F	2x4	DRY 2100F 1.8E	SPF
F - H	2x4	DRY 2100F 1.8E	SPF
H - J	2x4	DRY 2100F 1.8E	SPF
R - B	2x6	DRY No.2	SPF
K - I	2x6	DRY No.2	SPF
R - N	2x4	DRY 2100F 1.8E	SPF
N - K	2x4	DRY 2100F 1.8E	SPF
ALL WEBS	2x3	DRY No.2	SPF
EXCEPT			
B - Q	2x4	DRY No.2	SPF
L - I	2x4	DRY No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	8.0	8.0	2.50	3.75
C	TTWW-m	MT20	8.0	10.0	Edge	4.00
D	TMVW-t	MT20	4.0	4.0	1.75	2.00
E	TMVW-w	MT20	2.0	4.0		
F	TS-t	MT20	3.0	10.0		
G	TMVW-t	MT20	4.0	4.0	1.75	2.00
H	TTWW-m	MT20	8.0	10.0	Edge	4.00
I	TMVW-t	MT20	6.0	8.0	2.50	3.75
K	BMV1+p	MT20	6.0	8.0	Edge	0.50
L	BMVW-t	MT20	4.0	8.0	1.75	2.50
M	BMVW-t	MT20	5.0	6.0	1.50	1.50
N	BS-t	MT18HS	5.0	14.0		
O	BMVW-t	MT20	4.0	8.0		
P	BMVW-t	MT20	5.0	6.0	1.50	1.50
Q	BMVW-t	MT20	4.0	8.0	1.75	2.50
R	BMV1+p	MT20	6.0	8.0	Edge	

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.
WB - INDICATES BLOCKING REQUIRED



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

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
R	4287	0	0	5-8
K	4287	0	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
R	3155	1828	0
K	3155	1828	0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.27 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)	VERT. LOAD (PLF)	MAX. FACTORED (LC1)	MEMB.	FORCE (LBS)	MAX. FACTORED (LC1)	MAX. FACTORED (LC1)
FR-TO				FR-TO			
A-B	0 / 47	-124.4	-124.4 0.12 (1)	10.00	Q-C	-843 / 39	0.18 (1)
B-C	-4840 / 0	-124.4	-124.4 0.44 (1)	3.60	C-P	0 / 3516	0.87 (1)
C-D	-8727 / 0	-234.6	-234.6 0.87 (1)	2.53	P-D	-1896 / 0	0.52 (1)
D-E	-7528 / 0	-234.6	-234.6 0.94 (1)	2.27	D-O	0 / 1044	0.28 (1)
E-F	-7528 / 0	-234.6	-234.6 0.94 (1)	2.27	O-E	-1000 / 0	0.28 (1)
F-G	-7528 / 0	-234.6	-234.6 0.94 (1)	2.27	G-Q	0 / 1044	0.28 (1)
G-H	-8727 / 0	-234.6	-234.6 0.87 (1)	2.53	M-G	-1896 / 0	0.52 (1)
H-I	-4840 / 0	-124.4	-124.4 0.44 (1)	3.60	M-H	0 / 3516	0.87 (1)
I-J	0 / 47	-124.4	-124.4 0.12 (1)	10.00	L-H	-843 / 39	0.18 (1)
R-B	-4145 / 0	0.0	0.0 0.30 (1)	5.23	B-Q	0 / 4149	0.73 (1)
K-I	-4145 / 0	0.0	0.0 0.30 (1)	5.23	L-I	0 / 4149	0.73 (1)
R-Q	0 / 0	-74.0	-74.0 0.20 (3)	10.00			
Q-P	0 / 4004	-74.0	-74.0 0.48 (1)	10.00			
P-O	0 / 8727	-74.0	-74.0 0.87 (1)	10.00			
O-N	0 / 8727	-74.0	-74.0 0.87 (1)	10.00			
N-M	0 / 8727	-74.0	-74.0 0.87 (1)	10.00			
M-L	0 / 4004	-74.0	-74.0 0.48 (1)	10.00			
L-K	0 / 0	-74.0	-74.0 0.20 (3)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	4-1-12	-387	-387		FRONT	VERT	TOTAL		C1
H	22-10-4	-387	-387		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: 4-1-12
END SETBACK: 6-0-0
END WALL WIDTH: 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.90")
CALCULATED VERT. DEFL.(LL)= L/969 (0.28")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL)= L/703 (0.46")

CSI: TC=0.94/1.00 (D-E-1) , BC=0.87/1.00 (M-O-1) , WB=0.87/1.00 (C-P-1) , SSI=0.57/1.00 (C-D-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	850	371	1747
MT18HS	588	403	2455

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

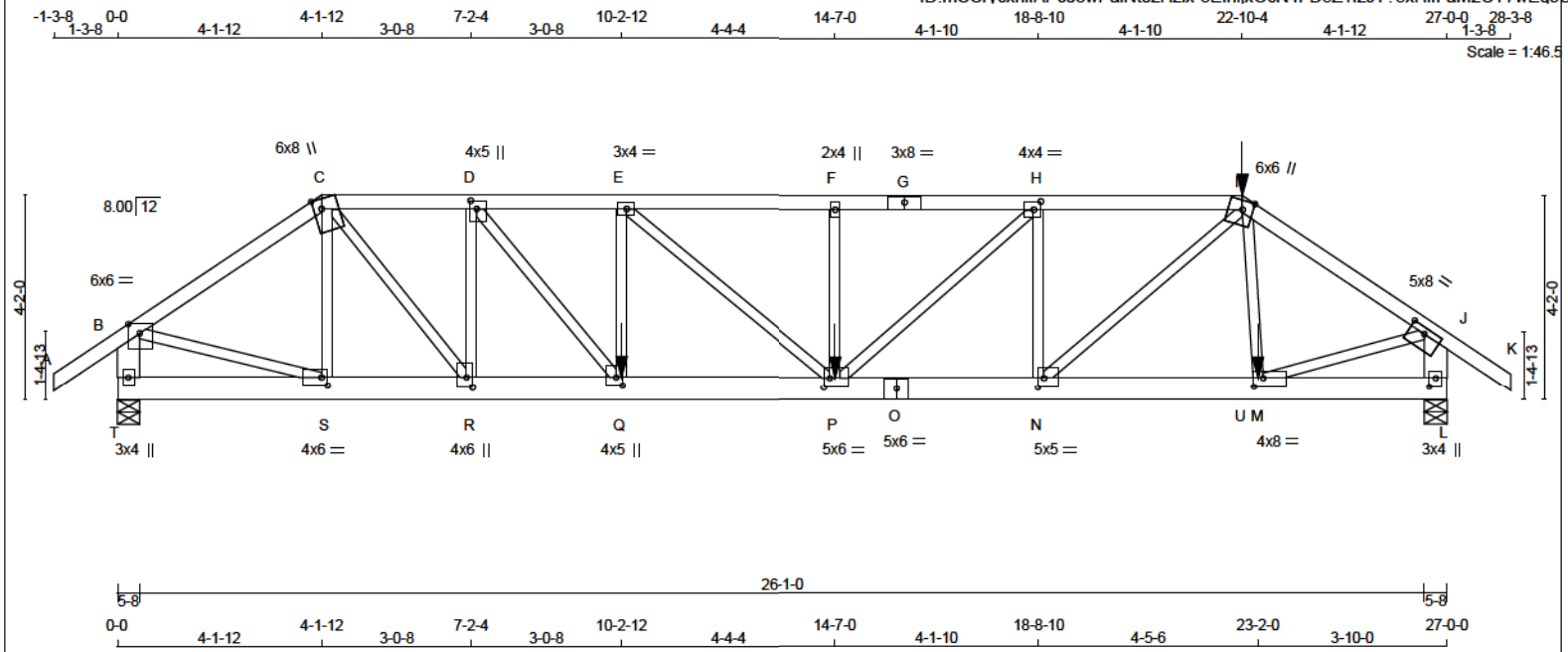
JSI GRIP= 0.90 (Q) (INPUT = 0.90)
JSI METAL = 0.98 (N) (INPUT = 1.00)



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Sewage System			
Zoning			





TOTAL WEIGHT = 2 X 131 = 262 LB

LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - C	2x4	DRY	No.2
C - G	2x4	DRY	No.2
G - I	2x4	DRY	No.2
I - K	2x4	DRY	No.2
T - B	2x6	DRY	No.2
L - J	2x6	DRY	No.2
O - L	2x6	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			

DRY: SEASONED LUMBER.

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

CHORDS#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A - C	12	TOP
C - G	12	SIDE(59.0)
G - I	12	SIDE(59.0)
I - K	12	SIDE(0.0)
T - B	2	TOP
L - J	2	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
T - O	12	SIDE(23.6)
O - L	12	SIDE(23.6)
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. 3/8 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.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERRING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

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	4578	4578	0	5-8
T HORZ	0	0	0	2-8
L DOWN	5912	5912	0	4-2

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	3380	1974 / 0	562 / 0
T SNOW	4375	2523 / 0	750 / 0
L LIVE			0 / 0
PERM. LIVE			0 / 0
WIND			1102 / 0
DEAD			0 / 0
SOIL			0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.35 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM TO	LENGTH	FR-TO					
A-B	0 / 47	-124.4 -124.4	0.09 (1)	10.00	S-C	-882 / 0	0.11 (1)		
B-C	-5422 / 0	-124.4 -124.4	0.35 (1)	3.88	C-R	0 / 4403	0.54 (1)		
C-D	-7241 / 0	-124.4 -124.4	0.28 (1)	3.45	R-D	-3314 / 0	0.43 (1)		
D-E	-9864 / 0	-124.4 -124.4	0.52 (1)	2.75	Q-E	0 / 3873	0.48 (1)		
E-F	-10573 / 0	-242.4 -242.4	0.73 (1)	2.45	Q-E	-1555 / 0	0.20 (1)		
F-G	-10573 / 0	-242.4 -242.4	0.78 (1)	2.35	E-P	0 / 1205	0.15 (1)		
G-H	-10573 / 0	-242.4 -242.4	0.78 (1)	2.35	P-F	-1028 / 0	0.13 (1)		
H-I	-8970 / 0	-242.4 -242.4	0.84 (1)	2.73	P-H	0 / 2175	0.27 (1)		
I-J	-8904 / 0	-124.4 -124.4	0.43 (1)	3.41	N-H	-2550 / 0	0.33 (1)		
J-K	0 / 47	-124.4 -124.4	0.09 (1)	10.00	N-I	0 / 4357	0.54 (1)		
T-B	-4503 / 0	0.0 0.0	0.16 (1)	6.78	I-M	-203 / 211	0.03 (3)		
L-J	-5769 / 0	0.0 0.0	0.21 (1)	6.13	B-S	0 / 4626	0.57 (1)		
					M-J	0 / 5927	0.73 (1)		
T-S	0 / 0	-39.2 -39.2	0.03 (3)	10.00					
S-R	0 / 4480	-39.2 -39.2	0.31 (1)	10.00					
R-Q	0 / 7241	-39.2 -39.2	0.52 (1)	10.00					
Q-P	0 / 9864	-76.5 -76.5	0.75 (1)	10.00					
P-O	0 / 8970	-76.5 -76.5	0.68 (1)	10.00					
O-N	0 / 8970	-76.5 -76.5	0.68 (1)	10.00					
N-U	0 / 5753	-76.5 -76.5	0.43 (1)	10.00					
U-M	0 / 5753	-76.5 -76.5	0.43 (1)	10.00					
M-L	0 / 0	-76.5 -76.5	0.05 (2)	10.00					

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
I	22-10-4	-408	-408		FRONT	VERT	TOTAL		C1
M	23-2-0	-980	-980		FRONT	VERT	TOTAL		C1
P	14-7-0	-980	-980		FRONT	VERT	TOTAL		C1
Q	10-2-12	-1248	-1248		FRONT	VERT	TOTAL		C1

CONNECTION REQUIREMENTS

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



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-24
Sewage System			
Zoning			

DESIGN CRITERIA

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

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 4-1-12
END SETBACK = 6-3-0
END WALL WIDTH = 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF G.S.L.
LOADS APPLIED TO FIRST 16-9-4 OF SPAN MEASURED FROM THE RIGHT.

*** NON STANDARD GIRDER ***

ADDTL USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/999 (0.22")
ALLOWABLE DEFL.(TL) = L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/802 (0.30")

CSI: TC=0.78/1.00 (F-H:1), BC=0.75/1.00 (P-Q:1),
WB=0.73/1.00 (J-M:1), SSI=0.25/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MAX MIN	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.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	6.0	6.0	2.25	2.75
C	TTWW+m	MT20	6.0	8.0	Edge	2.00
D	TMWW+t	MT20	4.0	5.0	2.00	1.50
E	TMWW-t	MT20	3.0	4.0		
F	TMWW+w	MT20	2.0	4.0		
G	TS-t	MT20	3.0	8.0		
H	TMWW-t	MT20	4.0	4.0	2.00	1.75
I	TTWW+m	MT20	6.0	6.0	Edge	2.50
J	TMVW-t	MT20	5.0	8.0	1.50	3.75
L	BMV1+p	MT20	3.0	4.0	2.25	1.50
M	BMWW-t	MT20	4.0	8.0	2.25	2.25
N	BMWW-t	MT20	5.0	5.0	2.50	1.50
O	BS-t	MT20	5.0	6.0		
P	BMWWW-t	MT20	5.0	6.0	2.50	1.50
Q	BMWW+t	MT20	4.0	5.0	2.00	1.50
R	BMWW+t	MT20	4.0	6.0	2.50	1.50
S	BMWW-t	MT20	4.0	6.0	2.00	1.50
T	BMV1+p	MT20	3.0	4.0		

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (N) (INPUT = 0.90)

JSI METAL= 0.87 (O) (INPUT = 1.00)

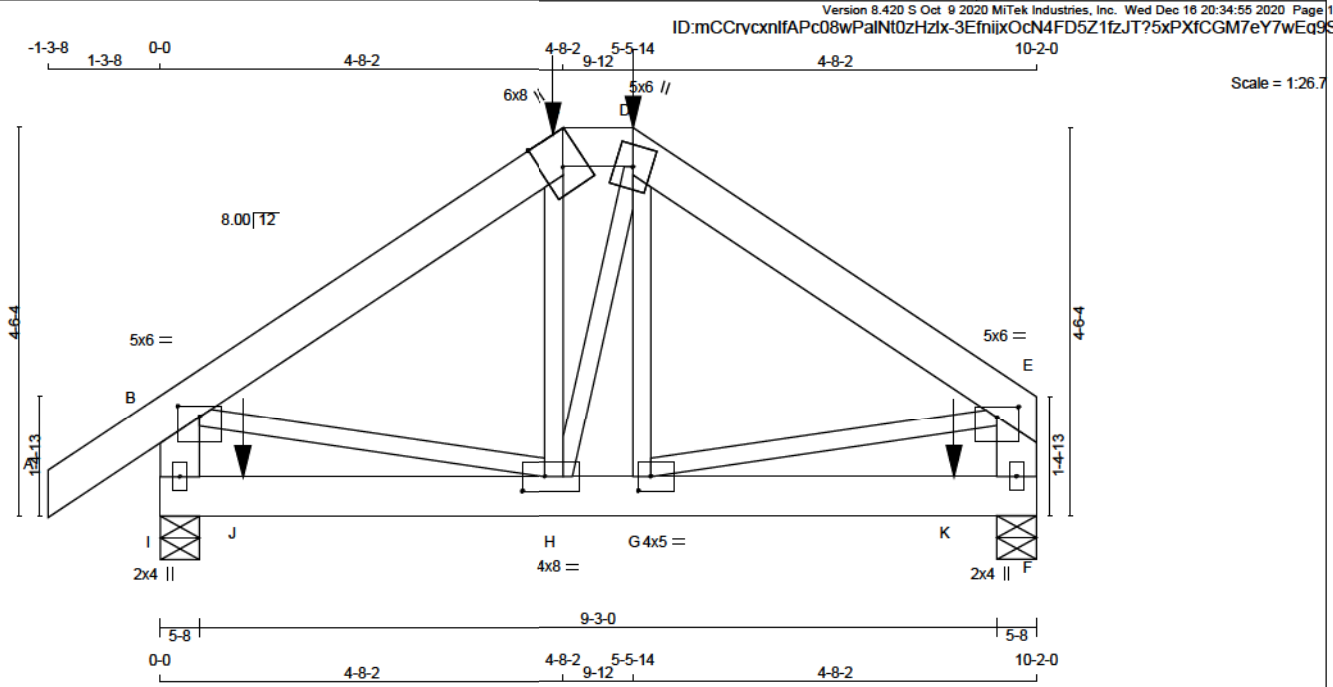
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-24
Sewage System			
Zoning			





LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x6	DRY	No.2
C - D	2x6	DRY	No.2
D - E	2x6	DRY	No.2
I - B	2x6	DRY	No.2
F - E	2x6	DRY	No.2
I - F	2x6	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	6.0	1.50	3.00
C	TTW+H	MT20	6.0	8.0	Edge	3.00
D	TTWW+m	MT20	5.0	6.0		
E	TMVW-p	MT20	5.0	6.0	1.50	3.00
F	BMV1+p	MT20	2.0	4.0		
G	BMWW-l	MT20	4.0	5.0	2.00	1.75
H	BMWWW-l	MT20	4.0	8.0	2.00	3.25
I	BMV1+p	MT20	2.0	4.0		

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	3089	0	0
I 3089	0	0	0
F 2913	0	0	0

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	2279	1336 / 0	376 / 0
I	2158	1237 / 0	376 / 0
F			

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.54 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		FROM	TO	LENGTH	FR-TO		
A-B	0 / 49	-124.4	-124.4	0.10 (1)	10.00	H-C	0 / 382
B-C	-1844 / 0	-124.4	-124.4	0.28 (1)	5.54	H-D	0 / 59
C-D	-1526 / 0	-193.4	-193.4	0.02 (1)	6.25	G-D	0 / 318
D-E	-1834 / 0	-124.4	-124.4	0.28 (1)	5.55	B-H	0 / 1559
I-B	-1792 / 0	0.0	0.0	0.13 (1)	7.41	G-E	0 / 1551
F-E	-1612 / 0	0.0	0.0	0.11 (1)	7.71		
I-J	0 / 0	-61.0	-61.0	0.89 (1)	10.00		
J-H	0 / 0	-61.0	-61.0	0.89 (1)	10.00		
H-G	0 / 1515	-61.0	-61.0	0.87 (1)	10.00		
G-K	0 / 0	-61.0	-61.0	0.90 (1)	10.00		
K-F	0 / 0	-61.0	-61.0	0.90 (1)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	4-8-2	-308	-308		FRONT	VERT	TOTAL		C1
D	5-5-14	-308	-308		FRONT	VERT	TOTAL		C1
J	11-8	-1634	-1634		FRONT	VERT	TOTAL		C1
K	9-2-8	-1634	-1634		FRONT	VERT	TOTAL		C1

CONNECTION REQUIREMENTS

- 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 = 4-8-2
END SETBACK = 4-8-2
END WALL WIDTH = 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
-ADDTL LOADS BASED ON 55 % OF GSL.

*** 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 DEFL.(LL)= L/360 (0.34")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.34")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CSI, TC=0.28/1.00 (B-G.1), BC=0.80/1.00 (F-G.1), WB=0.39/1.00 (B-H.1), SSI=0.86/1.00 (F-G.1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

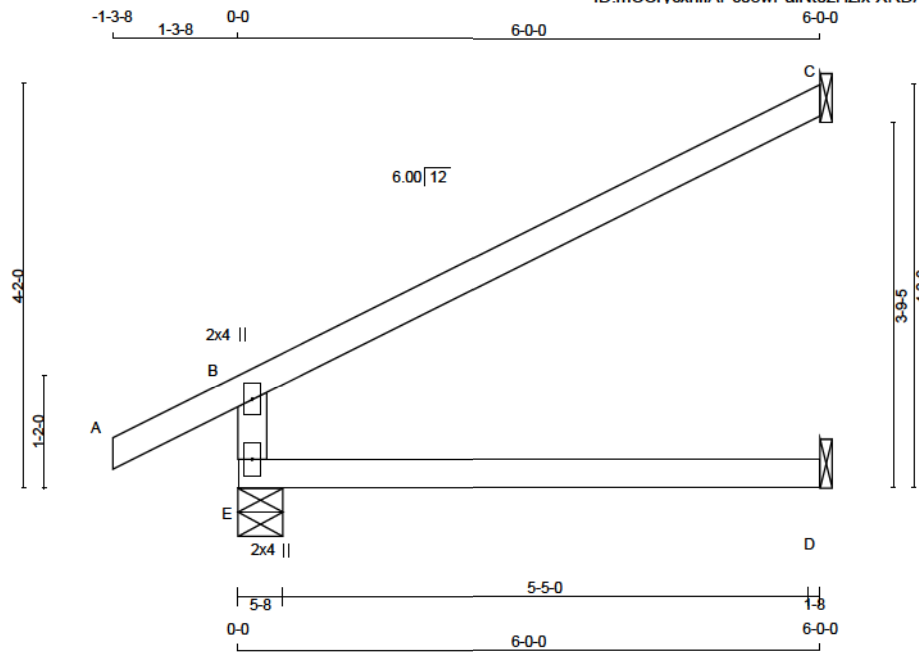
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-24
Sewage System			
Zoning			





Scale = 1:23.7

TOTAL WEIGHT = 13 X 17 = 222 lb

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

DRY: SEASONED LUMBER.

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

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

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

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

UNFACTORED REACTIONS

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

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO	LENGTH
E-B	-635 / 0	0.0 0.0 0.24 (3)	7.81
A-B	0 / 38	-124.4 -124.4 0.16 (1)	10.00
B-C	-42 / 0	-124.4 -124.4 0.76 (1)	6.25
E-D	0 / 0	-39.2 -39.2 0.24 (3)	10.00

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

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

CSI: TC=0.76/1.00 (B-C:1) , BC=0.24/1.00 (D-E:3) ,
WB=0.00/1.00 (n/a:0) , SSI=0.33/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



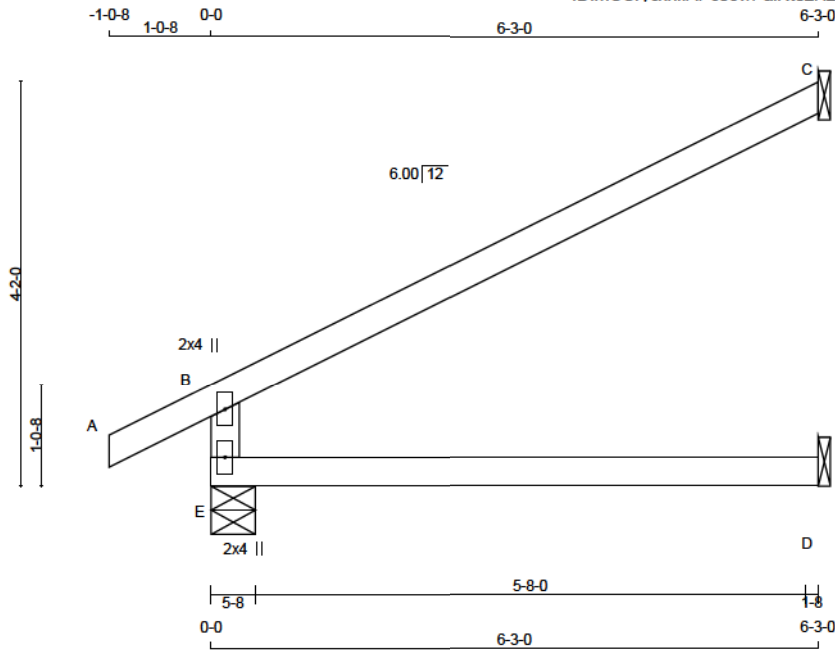
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-24
Sewage System			
Zoning			





Scale = 1:23.7

TOTAL WEIGHT = 3 X 17 = 52 LB

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

DESCR. SPF
SPF
SPF

DRY: SEASONED LUMBER.

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

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

BEARINGS							
FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
E	769	0	769	0	0	5-8	1-8
C	292	0	292	0	0	1-8	1-8
D	100	0	127	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	WIND	DEAD	SOIL
E	561	349 / 0	78 / 0	0 / 0	0 / 0	134 / 0	0 / 0
C	201	163 / 0	0 / 0	0 / 0	0 / 0	38 / 0	0 / 0
D	91	0 / 0	53 / 0	0 / 0	0 / 0	37 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD LC1 MAX (LC)
FR-TO		FROM TO	LENGTH	FR-TO		FROM TO	LENGTH
E-B	-624 / 0	0.0	0.0 0.22 (3)	7.81			
A-B	0 / 31	-124.4	-124.4 0.11 (1)	10.00			
B-C	-43 / 0	-124.4	-124.4 0.64 (1)	6.25			
E-D	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

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 (0.21")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.21")
CALCULATED VERT. DEFL.(TL) = L/ 805 (0.09")

CSI: TC=0.84/1.00 (B-C:1) , BC=0.27/1.00 (D-E:3) ,
WB=0.00/1.00 (n/a:0) , SSI=0.34/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.35 (B) (INPUT = 0.90)
JSI METAL = 0.26 (B) (INPUT = 1.00)



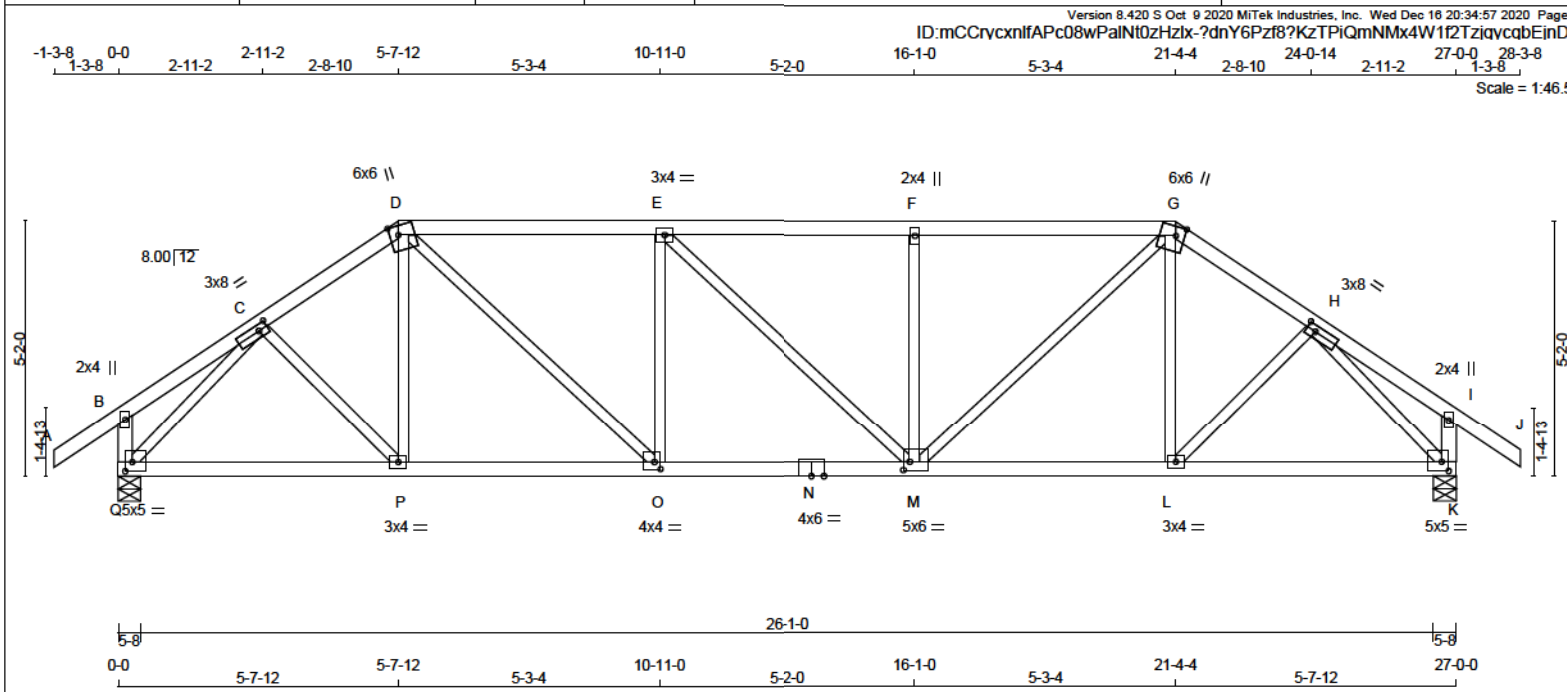
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-24
Sewage System			
Zoning			





LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY No.2	SPF
D - G	2x4	DRY No.2	SPF
G - J	2x4	DRY No.2	SPF
Q - B	2x4	DRY No.2	SPF
K - I	2x4	DRY No.2	SPF
Q - N	2x4	DRY No.2	SPF
N - K	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	8.0	1.50	2.25
D - TTWW+m	MT20	6.0	6.0	2.25	2.00
E - TMWW-t	MT20	3.0	4.0		
F - TMW+w	MT20	2.0	4.0		
G - TTWW+m	MT20	6.0	6.0	2.25	2.00
H - TMWW-t	MT20	3.0	8.0	1.50	2.25
I - TMV+p	MT20	2.0	4.0		
K - BMVW1-t	MT20	5.0	5.0	2.25	1.75
L - BMWW-t	MT20	3.0	4.0		
M - BMWW-t	MT20	5.0	6.0	2.00	1.50
N - BS-t	MT20	4.0	6.0		
O - BMWW-t	MT20	4.0	4.0	1.75	1.50
P - BMWW-t	MT20	3.0	4.0		
Q - BMVW1-t	MT20	5.0	5.0	2.25	1.75



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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	REQRD BRG
JT VERT	DOWN	UPLIFT	IN-SX
Q 2380	0	2380	0
K 2380	0	2380	0

UNFACTORED REACTIONS

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

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.34 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC) UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LC)	MAX. FACTORED FORCE (LC)	
FR-TO		FROM TO	LENGTH	FR-TO				
A-B	0 / 47	-124.4 -124.4	0.17 (1)	10.00	C-P	0 / 256	0.06 (2)	
B-C	0 / 17	-124.4 -124.4	0.12 (1)	10.00	P-D	0 / 174	0.04 (3)	
C-D	-2494 / 0	-124.4 -124.4	0.19 (1)	4.21	D-O	0 / 1320	0.30 (1)	
D-E	-3028 / 0	-124.4 -124.4	0.66 (1)	3.34	O-E	-701 / 0	0.28 (1)	
E-F	-3026 / 0	-124.4 -124.4	0.65 (1)	3.34	E-M	-3 / 0	0.00 (1)	
F-G	-3025 / 0	-124.4 -124.4	0.65 (1)	3.36	M-F	-700 / 0	0.28 (1)	
G-H	-2495 / 0	-124.4 -124.4	0.19 (1)	4.21	M-G	0 / 1316	0.30 (1)	
H-I	0 / 17	-124.4 -124.4	0.12 (1)	10.00	L-G	0 / 175	0.04 (3)	
I-J	0 / 47	-124.4 -124.4	0.17 (1)	10.00	L-H	0 / 256	0.08 (2)	
Q-B	-316 / 0	0.0	0.0	0.03 (1)	7.81	Q-C	-2725 / 0	0.74 (1)
K-I	-316 / 0	0.0	0.0	0.03 (1)	7.81	H-K	-2725 / 0	0.74 (1)
Q-P	0 / 1880	-39.2	-39.2	0.46 (2)	10.00			
P-O	0 / 2058	-39.2	-39.2	0.49 (2)	10.00			
O-N	0 / 3028	-39.2	-39.2	0.58 (1)	10.00			
N-M	0 / 3028	-39.2	-39.2	0.58 (1)	10.00			
M-L	0 / 2058	-39.2	-39.2	0.50 (2)	10.00			
L-K	0 / 1880	-39.2	-39.2	0.47 (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 (0.90")
CALCULATED VERT. DEFL.(LL)= L/999 (0.13")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL)= L/999 (0.22")

CSI: TC=0.66/1.00 (D-E-1), BC=0.58/1.00 (M-O-1),
WB=0.74/1.00 (H-K-1), SSI=0.30/1.00 (D-E-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

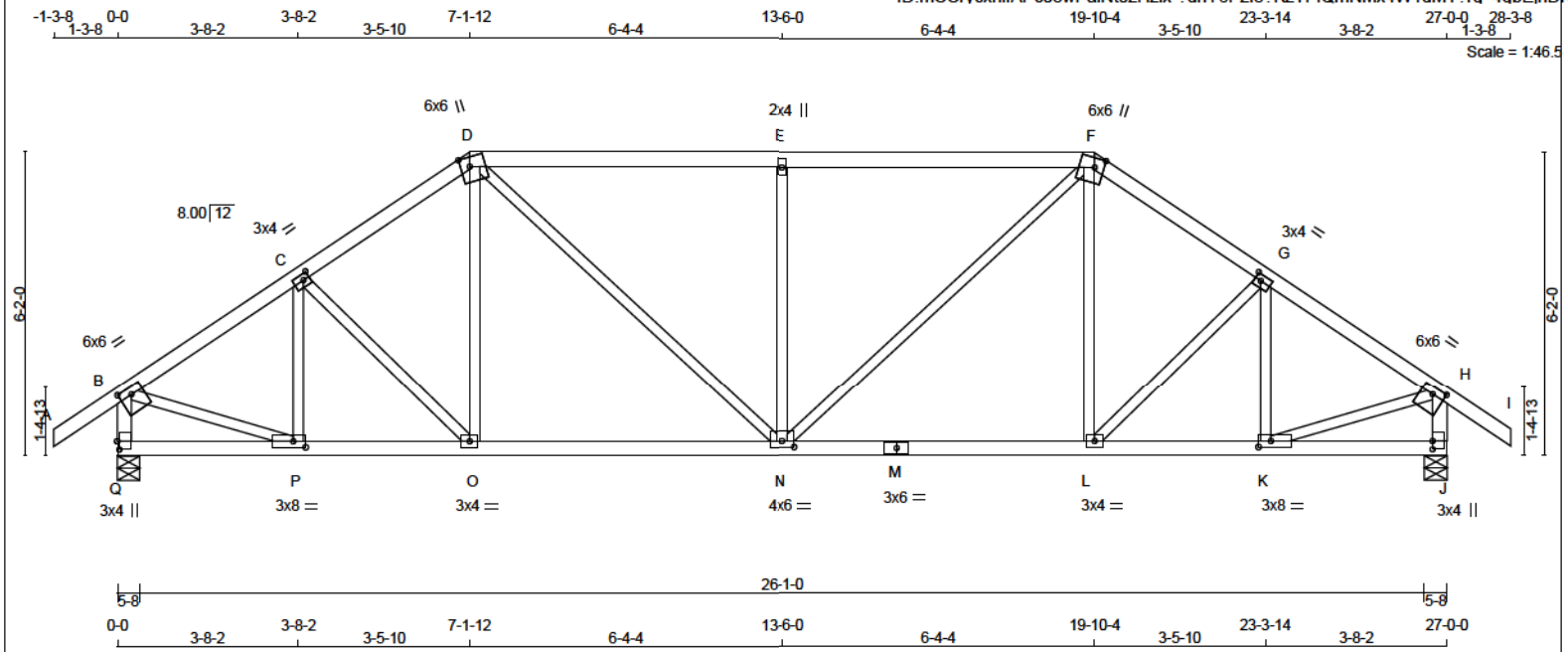
JSI GRIP= 0.90 (H) (INPUT = 0.90)
JSI METAL = 0.74 (N) (INPUT = 1.00)



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-24
Sewage System			
Zoning			





LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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



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

UNFACTORED REACTIONS

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

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.27 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 FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO		FROM	TO	LENGTH	FR-TO		
A-B	0 / 47	-124.4	-124.4	0.17 (1)	10.00	P-C	-475 / 0 0.11 (1)
B-C	-2427 / 0	-124.4	-124.4	0.26 (1)	4.20	C-O	-64 / 0 0.03 (1)
C-D	-2431 / 0	-124.4	-124.4	0.25 (1)	4.20	O-D	0 / 291 0.07 (2)
D-E	-2663 / 0	-124.4	-124.4	0.77 (1)	3.27	D-N	0 / 902 0.20 (1)
E-F	-2663 / 0	-124.4	-124.4	0.77 (1)	3.27	N-E	-969 / 0 0.58 (1)
F-G	-2431 / 0	-124.4	-124.4	0.25 (1)	4.20	N-F	0 / 902 0.20 (1)
G-H	-2427 / 0	-124.4	-124.4	0.26 (1)	4.20	L-F	0 / 291 0.07 (2)
H-I	0 / 47	-124.4	-124.4	0.17 (1)	10.00	L-G	-64 / 0 0.03 (1)
Q-B	-2312 / 0	0.0	0.0	0.24 (1)	5.61	K-G	-475 / 0 0.11 (1)
J-H	-2312 / 0	0.0	0.0	0.24 (1)	5.61	B-P	0 / 2127 0.48 (1)
						K-H	0 / 2127 0.48 (1)
Q-P	0 / 0	-39.2	-39.2	0.10 (3)	10.00		
P-O	0 / 2041	-39.2	-39.2	0.46 (1)	10.00		
O-N	0 / 2000	-39.2	-39.2	0.51 (2)	10.00		
N-M	0 / 2000	-39.2	-39.2	0.51 (2)	10.00		
M-L	0 / 2000	-39.2	-39.2	0.51 (2)	10.00		
L-K	0 / 2041	-39.2	-39.2	0.46 (1)	10.00		
K-J	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 (0.90")
CALCULATED VERT. DEFL.(LL)= L/999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL)= L/999 (0.18")

CSI: TC=0.77/1.00 (D-E-1) , BC=0.51/1.00 (L-N-2) ,
WB=0.58/1.00 (E-N-1) , SSI=0.38/1.00 (D-E-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

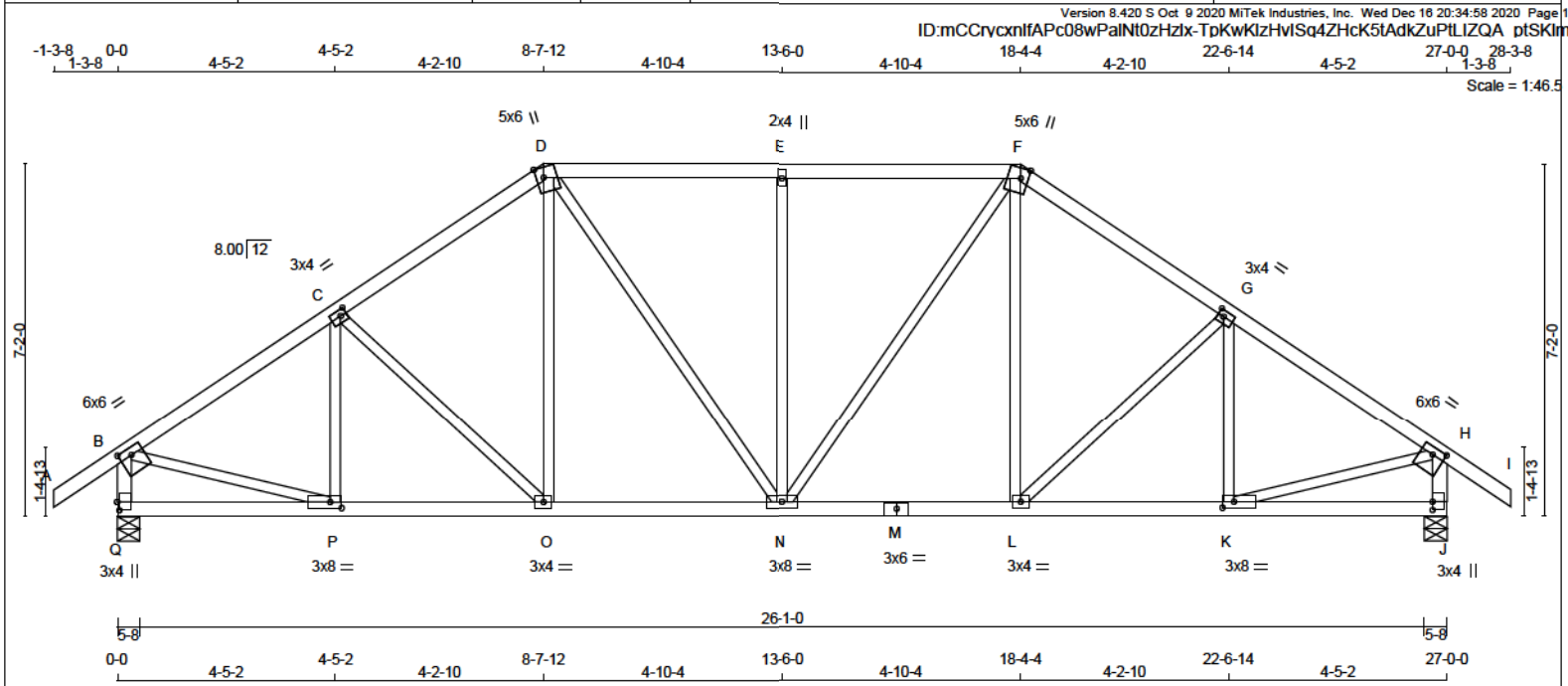
JSI GRIP= 0.90 (B) (INPUT = 0.90)
JSI METAL = 0.73 (M) (INPUT = 1.00)



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-24
Sewage System			
Zoning			





LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMVW-t	MT20	6.0	4.0	1.75	3.00
C TMVW-t	MT20	3.0	4.0	1.50	1.50
D TTWW+m	MT20	5.0	6.0	Edge	1.75
E TMW+w	MT20	2.0	4.0		
F TTWW+m	MT20	5.0	6.0	Edge	1.75
G TMVW-t	MT20	3.0	4.0	1.50	1.50
H TMVW-t	MT20	6.0	6.0	1.75	3.00
J BMV1+p	MT20	3.0	4.0	2.00	
K BMVW-t	MT20	3.0	8.0	1.50	2.75
L BMVW-t	MT20	3.0	4.0		
M BS-t	MT20	3.0	6.0		
N BMVW-t	MT20	3.0	8.0		
O BMVW-t	MT20	3.0	4.0		
P BMVW-t	MT20	3.0	8.0	1.50	2.75
Q BMV1+p	MT20	3.0	4.0	2.00	0.50

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

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

BEARINGS

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

UNFACTORED REACTIONS

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

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.03 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO					FR-TO		
A-B	0 / 47	-124.4	-124.4 0.17 (1)	10.00	P-C	-333 / 21	0.09 (1)
B-C	-2500 / 0	-124.4	-124.4 0.37 (1)	4.03	C-O	-287 / 0	0.17 (1)
C-D	-2321 / 0	-124.4	-124.4 0.36 (1)	4.17	O-D	0 / 386	0.09 (2)
D-E	-2228 / 0	-124.4	-124.4 0.43 (1)	4.13	D-N	0 / 563	0.13 (1)
E-F	-2228 / 0	-124.4	-124.4 0.43 (1)	4.13	N-E	-733 / 0	0.08 (1)
F-G	-2321 / 0	-124.4	-124.4 0.36 (1)	4.17	N-F	0 / 563	0.13 (1)
G-H	-2500 / 0	-124.4	-124.4 0.37 (1)	4.03	L-F	0 / 386	0.09 (2)
H-I	0 / 47	-124.4	-124.4 0.17 (1)	10.00	L-G	-287 / 0	0.17 (1)
Q-B	-2305 / 0	0.0	0.0 0.24 (1)	5.82	K-G	-333 / 21	0.08 (1)
J-H	-2305 / 0	0.0	0.0 0.24 (1)	5.82	B-P	0 / 2170	0.49 (1)
					K-H	0 / 2170	0.49 (1)
Q-P	0 / 0	-39.2	-39.2 0.13 (3)	10.00			
P-O	0 / 2108	-39.2	-39.2 0.43 (1)	10.00			
O-N	0 / 1904	-39.2	-39.2 0.40 (1)	10.00			
N-M	0 / 1904	-39.2	-39.2 0.40 (1)	10.00			
M-L	0 / 1904	-39.2	-39.2 0.40 (1)	10.00			
L-K	0 / 2108	-39.2	-39.2 0.43 (1)	10.00			
K-J	0 / 0	-39.2	-39.2 0.13 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.90")
CALCULATED VERT. DEFL.(LL)= L/999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL)= L/999 (0.15")

CSI: TC=0.43/1.00 (D-E-1), BC=0.43/1.00 (K-L-1),
WB=0.66/1.00 (E-N-1), SSI=0.29/1.00 (D-E-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90)
JSI METAL = 0.65 (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	2021-02-24
Sewage System			
Zoning			





TOTAL WEIGHT = 2 X 130 = 259 lb

DRY: SEASONED LUMBER.

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

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.83 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)

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)= $L/360$ (0.90")
 CALCULATED VERT. DEFL.(LL) = $L/999$ (0.08")
 ALLOWABLE DEFL.(TL)= $L/360$ (0.90")
 CALCULATED VERT. DEFL.(TL) = $L/999$ (0.14")

CSI: TC=0.52/1.00 (G-H:1) , BC=0.47/1.00 (K-L:1) ,
WB=0.64/1.00 (E-N:1) , SSI=0.26/1.00 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg

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



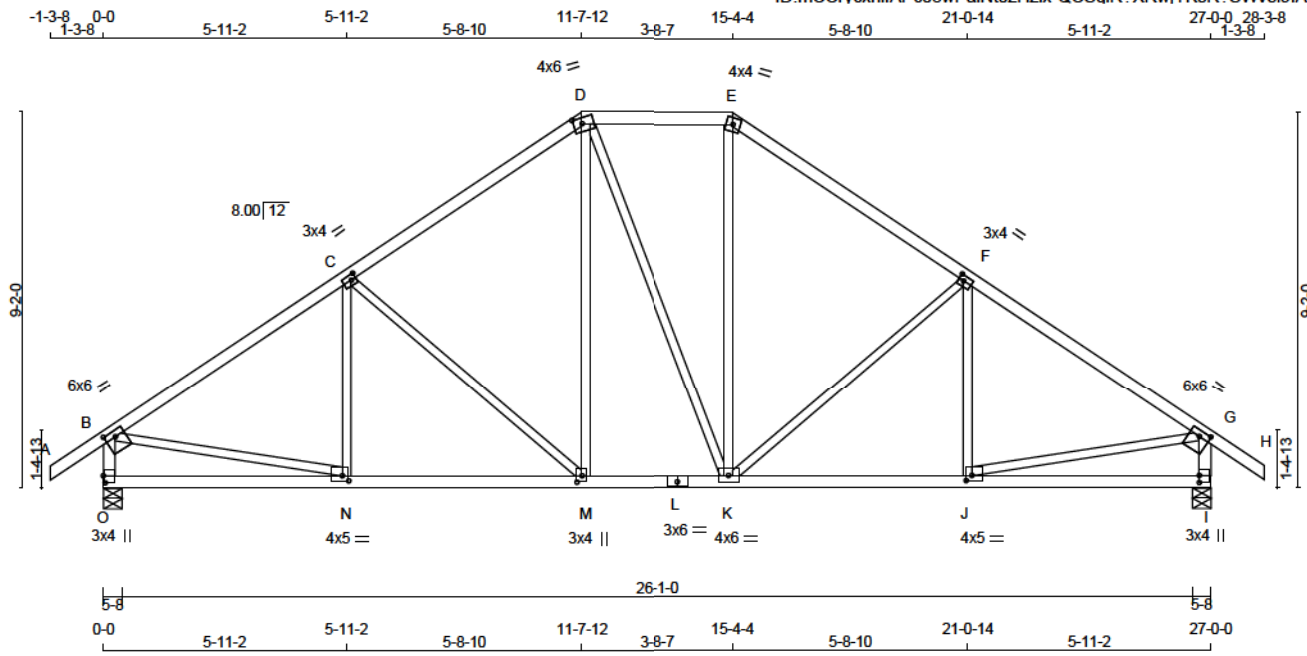
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-2
Sewage System			
Zoning			



**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. Wed Dec 16 20:35:00 2020 Page 1
ID: mCCrvcxnlfAPc08wPaiNt0zHzlx-QCSolR?XRwYKsR?SWwei9fAlq?61HKHbXrqf8



TOTAL WEIGHT = 2 X 124 = 247 lb

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW-t	MT20	6.0	6.0	1.75 3.00
C	TMVW-t	MT20	3.0	4.0	1.50 1.50
D	TTWW-m	MT20	4.0	6.0	1.75 2.50
E	TTW-m	MT20	4.0	4.0	
F	TMVW-t	MT20	3.0	4.0	1.50 1.50
G	TMVW-t	MT20	6.0	6.0	1.75 3.00
I	BMV1+p	MT20	3.0	4.0	2.00
J	BMVW-t	MT20	4.0	5.0	1.50 1.75
K	BMVW-t	MT20	4.0	6.0	
L	BS-t	MT20	3.0	6.0	
M	BMVW-t	MT20	3.0	4.0	1.75 1.50
N	BMVW-t	MT20	4.0	5.0	1.50 1.75
O	BMV1+p	MT20	3.0	4.0	2.00 0.50

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

BEARINGS							
JT	FACTORED GROSS REACTION	VERT	HORZ	MAXIMUM FACTORED GROSS REACTION	DOWN	HORZ	INPUT BRG
O	2380	0	2380	0	0	0	5-8
I	2380	0	2380	0	0	0	5-8

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX	MIN	COMPONENT REACTIONS	PERM	LIVE	WIND
O	1754	1035	0	284	0	0	0
I	1754	1035	0	284	0	0	0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLINE SPACING = 3.57 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING				TOTAL LOAD CASES: (4)			
CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC1 MAX)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC1 MAX)
FR-TO				FR-TO			
A-B	0 / 47	-124.4	-124.4 0.17 (1)	N-C	-128 / 174	0.06 (1)	0.06 (1)
B-C	-2547 / 0	-124.4	-124.4 0.70 (1)	C-M	-869 / 0	0.80 (1)	0.80 (1)
C-D	-2038 / 0	-124.4	-124.4 0.62 (1)	M-D	0 / 605	0.14 (1)	0.14 (1)
D-E	-1661 / 0	-124.4	-124.4 0.25 (1)	D-K	0 / 4	0.00 (1)	0.00 (1)
E-F	-2038 / 0	-124.4	-124.4 0.62 (1)	K-E	0 / 609	0.14 (1)	0.14 (1)
F-G	-2546 / 0	-124.4	-124.4 0.70 (1)	K-F	-866 / 0	0.80 (1)	0.80 (1)
G-H	0 / 47	-124.4	-124.4 0.17 (1)	J-F	-132 / 172	0.06 (1)	0.06 (1)
O-B	-2286 / 0	0.0	0.0 0.24 (1)	B-N	0 / 2194	0.49 (1)	0.49 (1)
I-G	-2286 / 0	0.0	0.0 0.24 (1)	J-G	0 / 2193	0.49 (1)	0.49 (1)
O-N	0 / 0	-39.2	-39.2 0.28 (3)				
N-M	0 / 2159	-39.2	-39.2 0.53 (2)				
M-L	0 / 1659	-39.2	-39.2 0.37 (1)				
L-K	0 / 1659	-39.2	-39.2 0.37 (1)				
K-J	0 / 2158	-39.2	-39.2 0.53 (2)				
J-I	0 / 0	-39.2	-39.2 0.27 (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 (0.90")
CALCULATED VERT. DEFL.(LL) = L/999 (0.09")
ALLOWABLE DEFL.(TL) = L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

CSI: TC=0.70/1.00 (B-C-1), BC=0.53/1.00 (M-N-2),
WB=0.80/1.00 (C-M-1), SSI=0.30/1.00 (F-G-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (B) (INPUT = 0.80)
JSI METAL = 0.88 (B) (INPUT = 1.00)

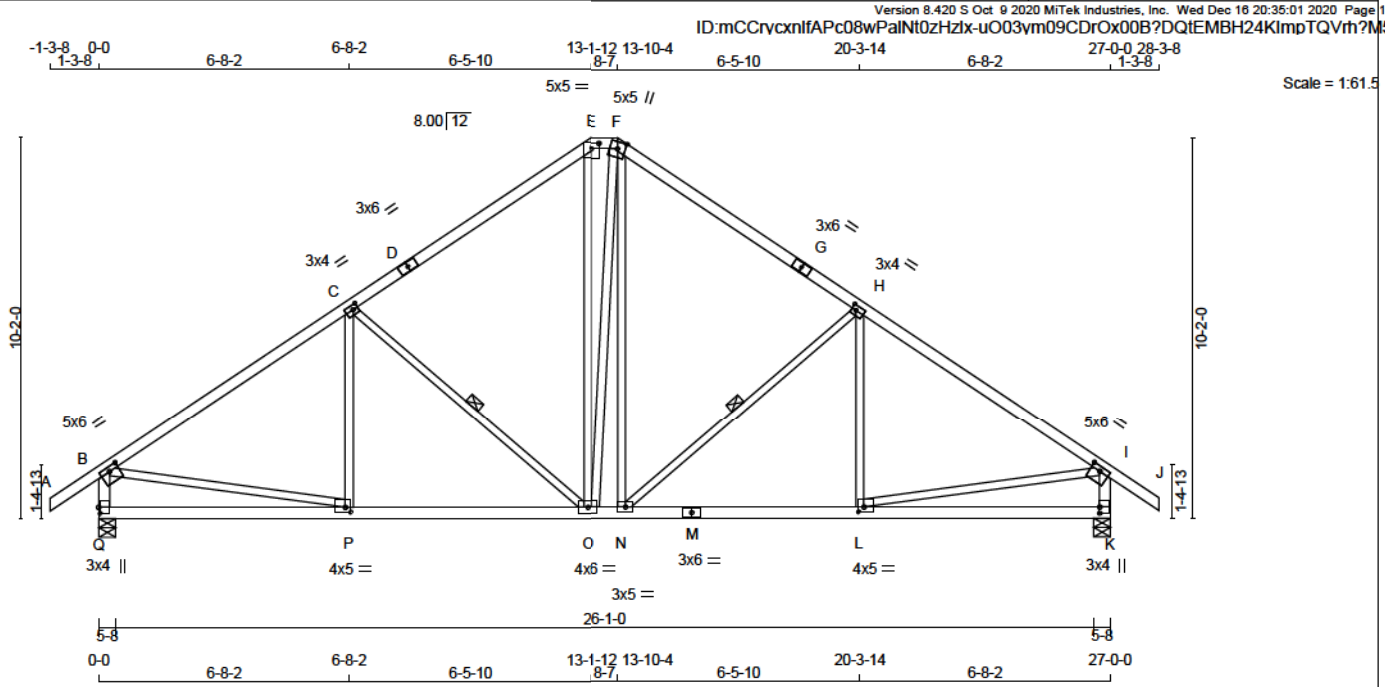


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-24
Sewage System			
Zoning			



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

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

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

BEARINGS					
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT IN-SX
Q	2380	0	2380	0	0
K	2380	0	2380	0	0

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

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.15 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.

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF C-O, H-N. DBS = 20-0-0. CBF = 105 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 (LBS)	FACTORED HORZ. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	FACTORED HORZ. LOAD (LBS)
FR-TO				FR-TO			
A-B	0 / 47	-124.4	-124.4 0.17 (1)	10.00	P-C	-63 / 225	0.06 (3)
B-C	-2535 / 0	-124.4	-124.4 0.91 (1)	3.15	C-O	-826 / 0	0.40 (1)
C-D	-1898 / 0	-124.4	-124.4 0.80 (1)	3.75	O-E	0 / 679	0.15 (1)
D-E	-1898 / 0	-124.4	-124.4 0.80 (1)	3.75	O-F	0 / 64	0.01 (1)
E-F	-1524 / 0	-124.4	-124.4 0.03 (1)	5.32	N-F	0 / 612	0.14 (1)
F-G	-1891 / 0	-124.4	-124.4 0.80 (1)	3.76	N-H	-838 / 0	0.41 (1)
G-H	-1891 / 0	-124.4	-124.4 0.80 (1)	3.76	L-H	-50 / 232	0.06 (3)
H-I	-2538 / 0	-124.4	-124.4 0.92 (1)	3.15	B-P	0 / 2183	0.49 (1)
I-J	0 / 47	-124.4	-124.4 0.17 (1)	10.00	L-I	0 / 2185	0.49 (1)
Q-B	-2273 / 0	0.0	0.0 0.23 (1)	5.85			
K-I	-2275 / 0	0.0	0.0 0.23 (1)	5.85			
Q-P	0 / 0	-39.2	-39.2 0.33 (3)	10.00			
P-O	0 / 2155	-39.2	-39.2 0.58 (2)	10.00			
O-N	0 / 1519	-39.2	-39.2 0.41 (1)	10.00			
N-M	0 / 2157	-39.2	-39.2 0.60 (2)	10.00			
M-L	0 / 2157	-39.2	-39.2 0.60 (2)	10.00			
L-K	0 / 0	-39.2	-39.2 0.35 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/999 (0.10")
ALLOWABLE DEFL.(TL) = L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/999 (0.18")

CSI: TC=0.92/1.00 (H-I-1), BC=0.60/1.00 (L-N-2),
WB=0.49/1.00 (H-I-1), SSI=0.33/1.00 (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 (I) (INPUT = 0.90)
JSI METAL = 0.79 (M) (INPUT = 1.00)

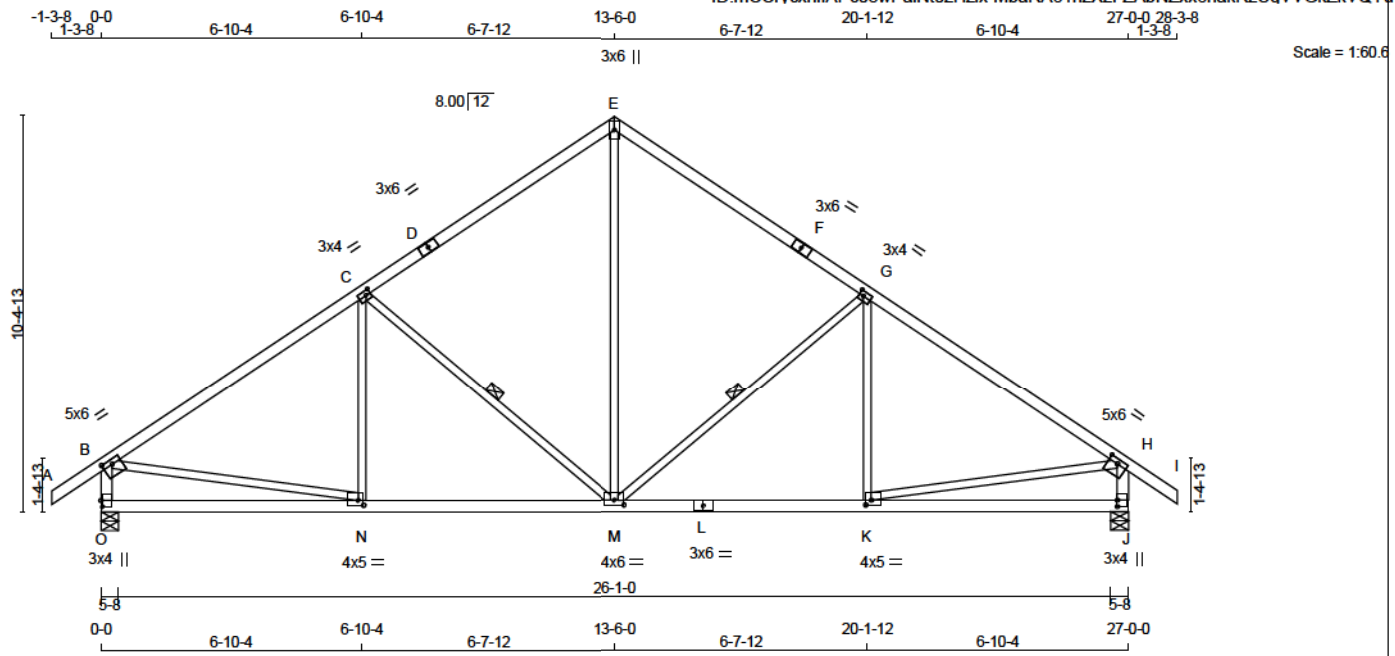


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-24
Sewage System			
Zoning			



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Scale = 1:60.0

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

DRY: SEASONED LUMBER.

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

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

BEARINGS					
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT IN-SX
O	2380	0	2380	0	0
J	2380	0	2380	0	0

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

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.02 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.
1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF G-M, C-M. DBS = 20'-0" . CBF = 108 LBS.

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO	LENGTH	FR-TO		FROM TO	LENGTH
A-B	0 / 47	-124.4 -124.4	0.17 (1)	10.00	M-E	0 / 1370	0.31 (1)
B-C	-2531 / 0	-124.4 -124.4	0.97 (1)	3.02	M-G	-867 / 0	0.45 (1)
C-D	-1851 / 0	-124.4 -124.4	0.84 (1)	3.67	K-G	-42 / 239	0.06 (3)
D-E	-1851 / 0	-124.4 -124.4	0.84 (1)	3.67	C-M	-867 / 0	0.45 (1)
E-F	-1851 / 0	-124.4 -124.4	0.84 (1)	3.67	N-C	-42 / 239	0.06 (3)
F-G	-1851 / 0	-124.4 -124.4	0.84 (1)	3.67	B-N	0 / 2179	0.49 (1)
G-H	-2531 / 0	-124.4 -124.4	0.97 (1)	3.02	K-H	0 / 2179	0.49 (1)
H-I	0 / 47	-124.4 -124.4	0.17 (1)	10.00			
O-B	-2271 / 0	0.0	0.0 0.23 (1)	5.65			
J-H	-2271 / 0	0.0	0.0 0.23 (1)	5.65			
O-N	0 / 0	-39.2 -39.2	0.35 (3)	10.00			
N-M	0 / 2153	-39.2 -39.2	0.80 (2)	10.00			
M-L	0 / 2153	-39.2 -39.2	0.80 (2)	10.00			
L-K	0 / 2153	-39.2 -39.2	0.80 (2)	10.00			
K-J	0 / 0	-39.2 -39.2	0.35 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.90")
CALCULATED VERT. DEFL.(LL)= L/999 (0.11")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL)= L/999 (0.18")

CSI: TC=0.97/1.00 (G-H-1) , BC=0.60/1.00 (K-M-2) ,
WB=0.49/1.00 (H-K-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 850 371 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 = 0.75 (L) (INPUT = 1.00)

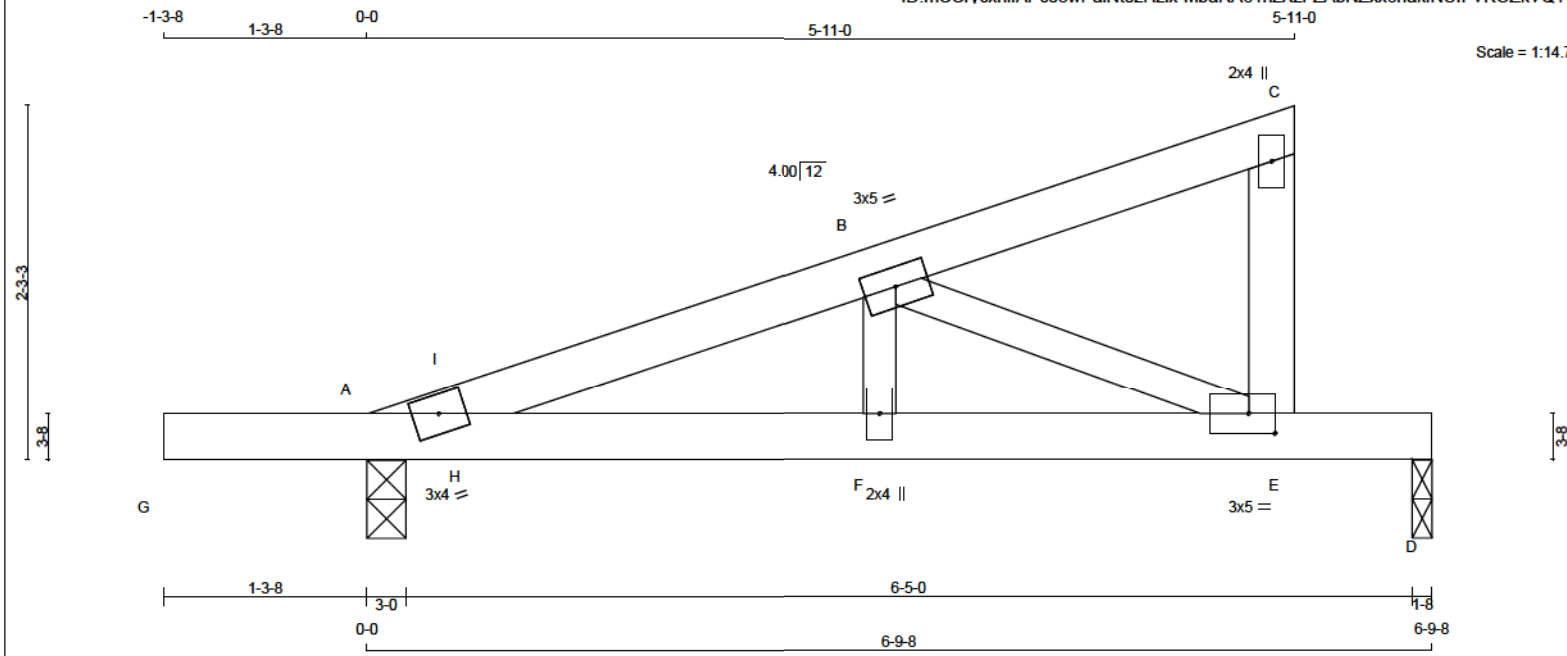


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Building Code	H. Authier	43236	2021-02-24
Sewage System			
Zoning			

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LUMBER
N. L. G. A. RULES

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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TBM1-h	MT20	3.0	4.0		
B	TMWW-t	MT20	3.0	5.0		
C	TMV+p	MT20	2.0	4.0		
E	BMV-w	MT20	3.0	5.0	1.50	2.00
F	BMW+w	MT20	2.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
A	760	760	3-0	1-8
D	454	454	0	1-8

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
A	563	322 / 0	98 / 0	0 / 0	0 / 0	143 / 0	0 / 0
D	342	179 / 0	71 / 0	0 / 0	0 / 0	91 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.01 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX (LC)
FR-TO		FROM	TO	LENGTH	FR-TO		
A-I	-1074 / 0	-124.4	-124.4	0.04 (1)	6.06	F-B	0 / 366
I-B	-1057 / 0	-124.4	-124.4	0.11 (1)	6.01	B-E	-1095 / 0
B-C	-8 / 0	-124.4	-124.4	0.09 (1)	10.00	H-I	-150 / 1
E-C	-138 / 0	0.0	0.0	0.02 (1)	7.81		
G-A	0 / 0	-163.7	-163.7	0.19 (1)	10.00		
A-H	0 / 1013	-39.2	-39.2	0.29 (1)	10.00		
H-F	0 / 1013	-39.2	-39.2	0.31 (1)	10.00		
F-E	0 / 1013	-39.2	-39.2	0.68 (1)	10.00		
E-D	0 / 0	-39.2	-39.2	0.52 (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 (0.23")
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/840 (0.10")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.11/1.00 (B-I:1), BC=0.88/1.00 (E-F:1), WB=0.19/1.00 (B-E:1), SSI=0.35/1.00 (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)
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= 0.82 (E) (INPUT = 0.90)
JSI METAL = 0.41 (A) (INPUT = 1.00)



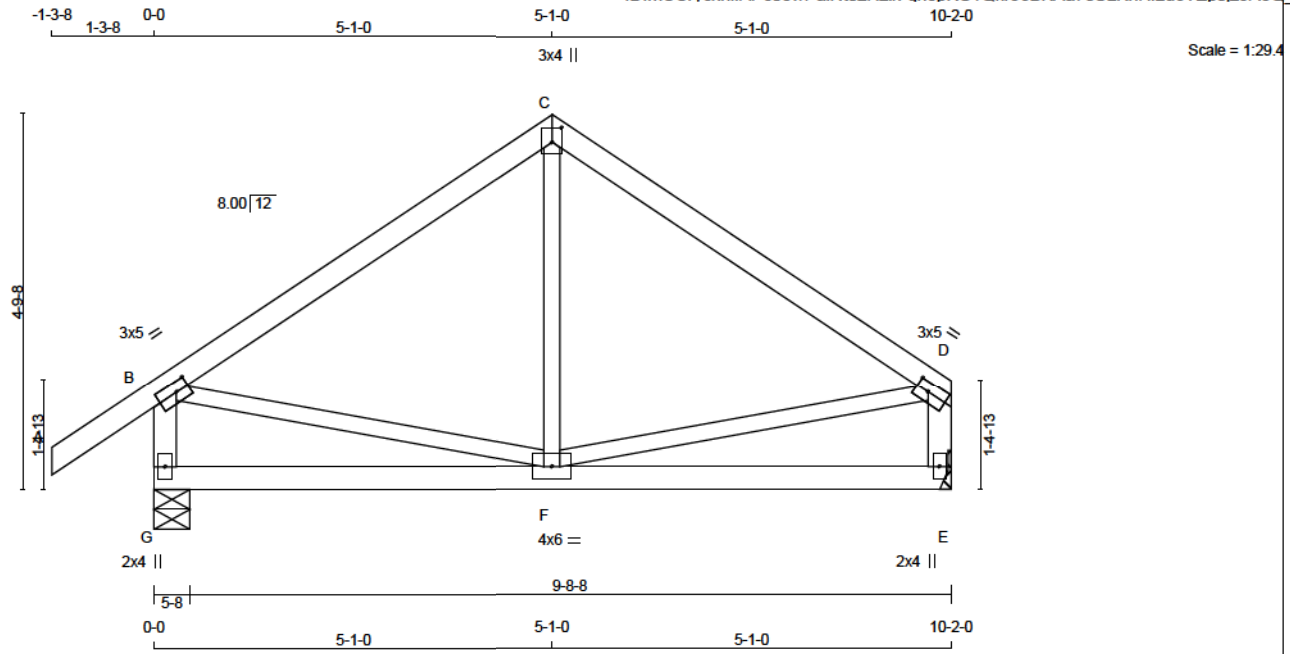
READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-24
Sewage System			
Zoning			





TOTAL WEIGHT = 2 X 41 = 82 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
G - B	2x4	DRY	No.2		SPF
E - D	2x4	DRY	No.2		SPF
G - E	2x4	DRY	No.2		SPF
ALL WEBS	2x3	DRY	No.2		SPF
EXCEPT					

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	3.0	5.0	1.50	2.00
C	TTW+p	MT20	3.0	4.0	2.25	1.50
D	TMVW-t	MT20	3.0	5.0	1.50	2.00
E	BMV1+p	MT20	2.0	4.0		
F	BMVWW-t	MT20	4.0	6.0		
G	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
G	1003	0	1003	0
E	832	0	832	0

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX	MIN	COMPONENT REACTIONS
		SNOW	LIVE	PERM.LIVE
G	734	449 / 0	107 / 0	0 / 0
E	616	354 / 0	107 / 0	0 / 0

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

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)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC)
FR-TO		FROM TO		FR-TO		FROM TO	
A-B	0 / 47	-124.4 -124.4	0.17 (1)	F-C	0 / 214	0.05 (3)	
B-C	-601 / 0	-124.4 -124.4	0.42 (1)	B-F	0 / 511	0.11 (1)	
C-D	-601 / 0	-124.4 -124.4	0.42 (1)	F-D	0 / 511	0.11 (1)	
G-B	-926 / 0	0.0	0.0				
E-D	-756 / 0	0.0	0.0				
G-F	0 / 0	-39.2 -39.2	0.24 (3)				
F-E	0 / 0	-39.2 -39.2	0.24 (3)				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.34")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.34")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.42/1.00 (C-D:1), BC=0.24/1.00 (F-G:3),
WB=0.11/1.00 (B-F:1), SSI=0.21/1.00 (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 (PSI)	SECTION (PLI)
MT20	850	371	1747

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (D) (INPUT = 0.90)
JSI METAL = 0.25 (D) (INPUT = 1.00)



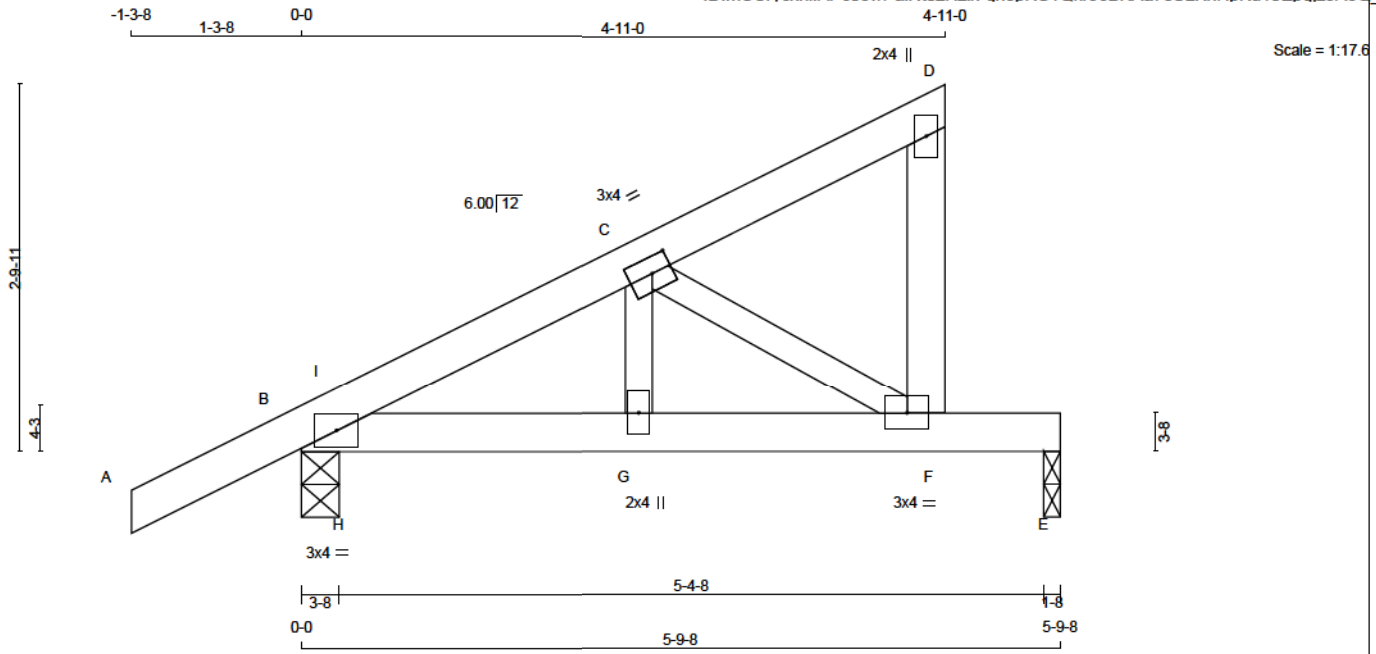
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-24
Sewage System			
Zoning			





Scale = 1:17.6

TOTAL WEIGHT = 9 X 20 = 179 lb

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TM81-I	MT20	3.0	4.0	
C	TMWW-I	MT20	3.0	4.0	1.50 1.75
D	TMV+p	MT20	2.0	4.0	
F	BMVW-I	MT20	3.0	4.0	
G	BMW+w	MT20	2.0	4.0	

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT IN-SX
B	635	0	635	0	3-8
E	373	0	373	0	1-8

UNFACTORED REACTIONS		1ST LCASE	MAX/MIN COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
B	462	291 / 0	61 / 0
E	282	145 / 0	61 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 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		MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRACED LENGTH	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH
FR-TO										
A-B	0 / 36			-124.4	-124.4	0.16 (1)	10.00	G-C	0 / 320	0.07 (1)
B-I	-883 / 0			-124.4	-124.4	0.02 (1)	6.25	C-F	-892 / 0	0.12 (1)
I-C	-864 / 0			-124.4	-124.4	0.08 (1)	6.25	H-I	-117 / 8	0.00 (1)
C-D	-11 / 0			-124.4	-124.4	0.08 (1)	6.25			
F-D	-122 / 0			0.0	0.0	0.02 (1)	7.81			
B-H	0 / 601			-39.2	-39.2	0.16 (1)	10.00			
H-G	0 / 601			-39.2	-39.2	0.22 (1)	10.00			
G-F	0 / 601			-39.2	-39.2	0.52 (1)	10.00			
F-E	0 / 0			-39.2	-39.2	0.42 (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/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.16/1.00 (A-B:1) , BC=0.52/1.00 (F-G:1) ,
WB=0.12/1.00 (C-F: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
(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 (F) (INPUT = 0.80)
JSI METAL = 0.22 (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	2021-02-24
Sewage System			
Zoning			



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

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

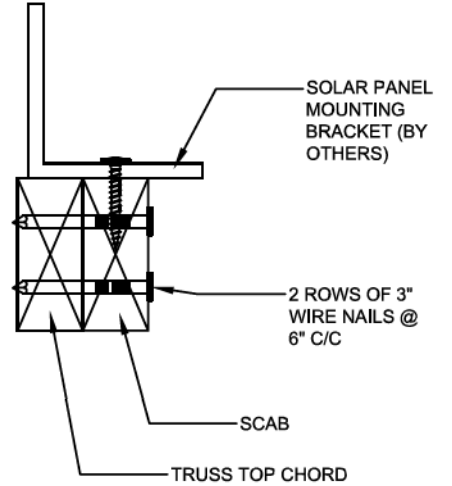
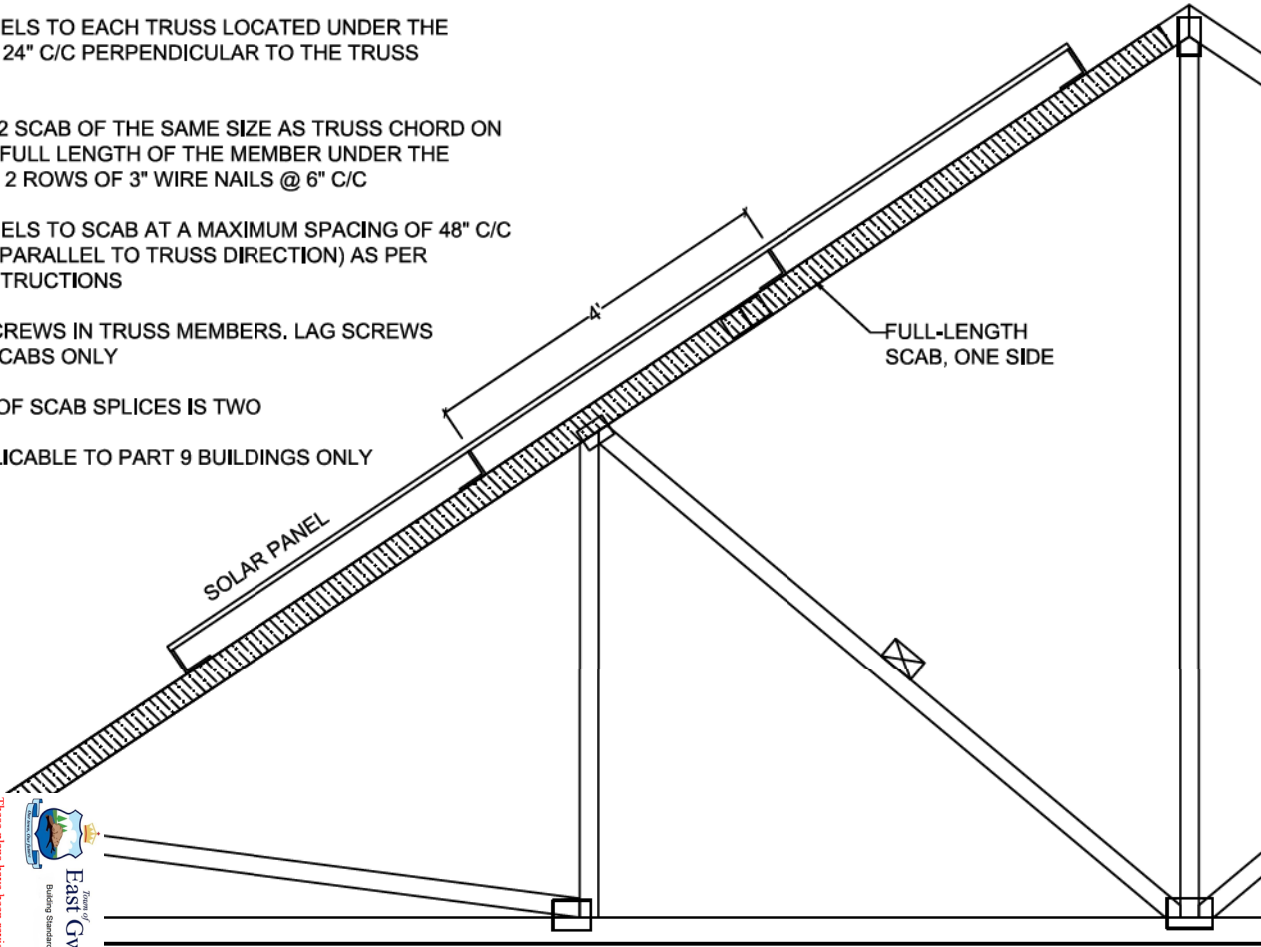
3) ATTACH A SPF No.1/2 SCAB OF THE SAME SIZE AS TRUSS CHORD ON ONE SIDE ALONG THE FULL LENGTH OF THE MEMBER UNDER THE SOLAR PANELS USING 2 ROWS OF 3" WIRE NAILS @ 6" C/C

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

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

6) MAXIMUM NUMBER OF SCAB SPLICES IS TWO

7) THIS DETAIL IS APPLICABLE TO PART 9 BUILDINGS ONLY



Province of
Ontario
Building Standards Branch BCN#16687
East Gwillimbury

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Discipline	Reviewer	BCN	Date
Building Code	H. Adler	44236	2021-02-24
Seismic System			
Zoning			

Detail for Installation of Solar Panels - Scab Method



NE1220-109
GREENPARK - TRINAR
HALL - BRENTWOOD 1
EL 3



NE1220-109
GREENPARK - TRINAR HALL
- BRENTWOOD 1 EL 3

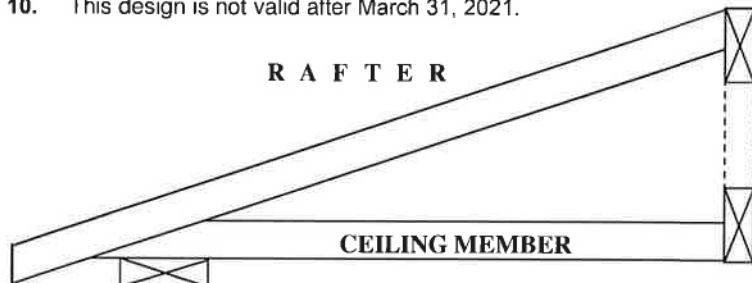
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B97791H1

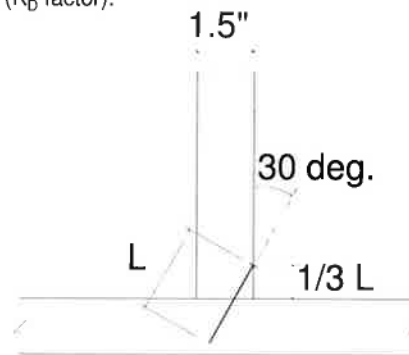
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL LATERAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	132	147
	3.25	0.144	132	147
	3.50	0.160	159	177
COMMON SPIRAL	3.00	0.122	97	108
	3.25	0.122	97	108
	3.50	0.152	145	162

NOTES:

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



G
I
R
D
E
R



TOE-NAIL INSTALLATION

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

MiTek

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

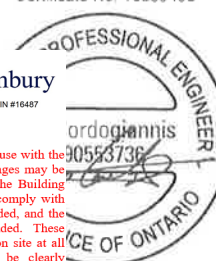


Town of
East Gwillimbury
Building Standards Branch BCIN #16487

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Decemb

PEO
Certificate No. 10889485



Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-24
Sewage System			
Zoning			

NE1220-109
GREENPARK - TRINAR HALL
- BRENTWOOD 1 EL 3

BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B97791H2

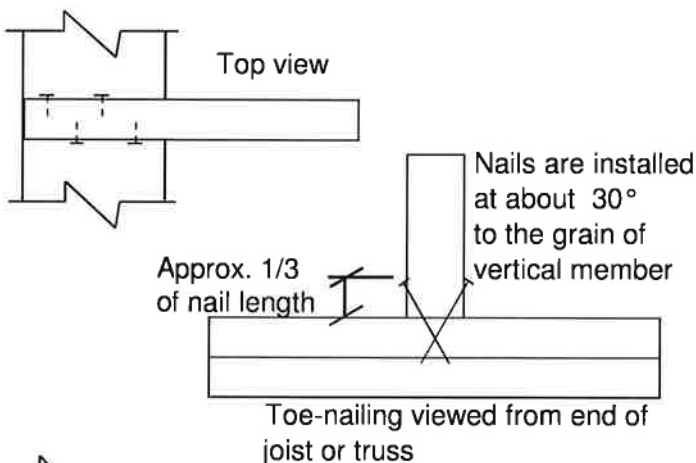
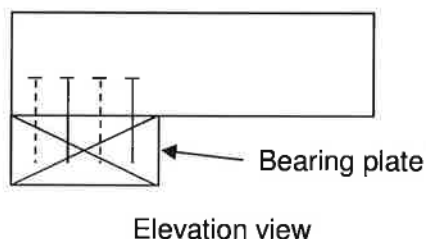
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52
COMMON SPIRAL	3.00	0.122	26	36
	3.25	0.122	28	40
	3.50	0.152	36	50

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

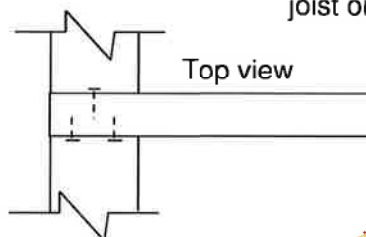
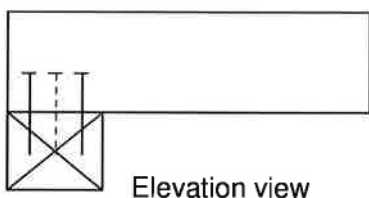
NOTES:

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



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	2021-02-24
Sewage System			
Zoning			

PEO
Certificate No. 10889485

