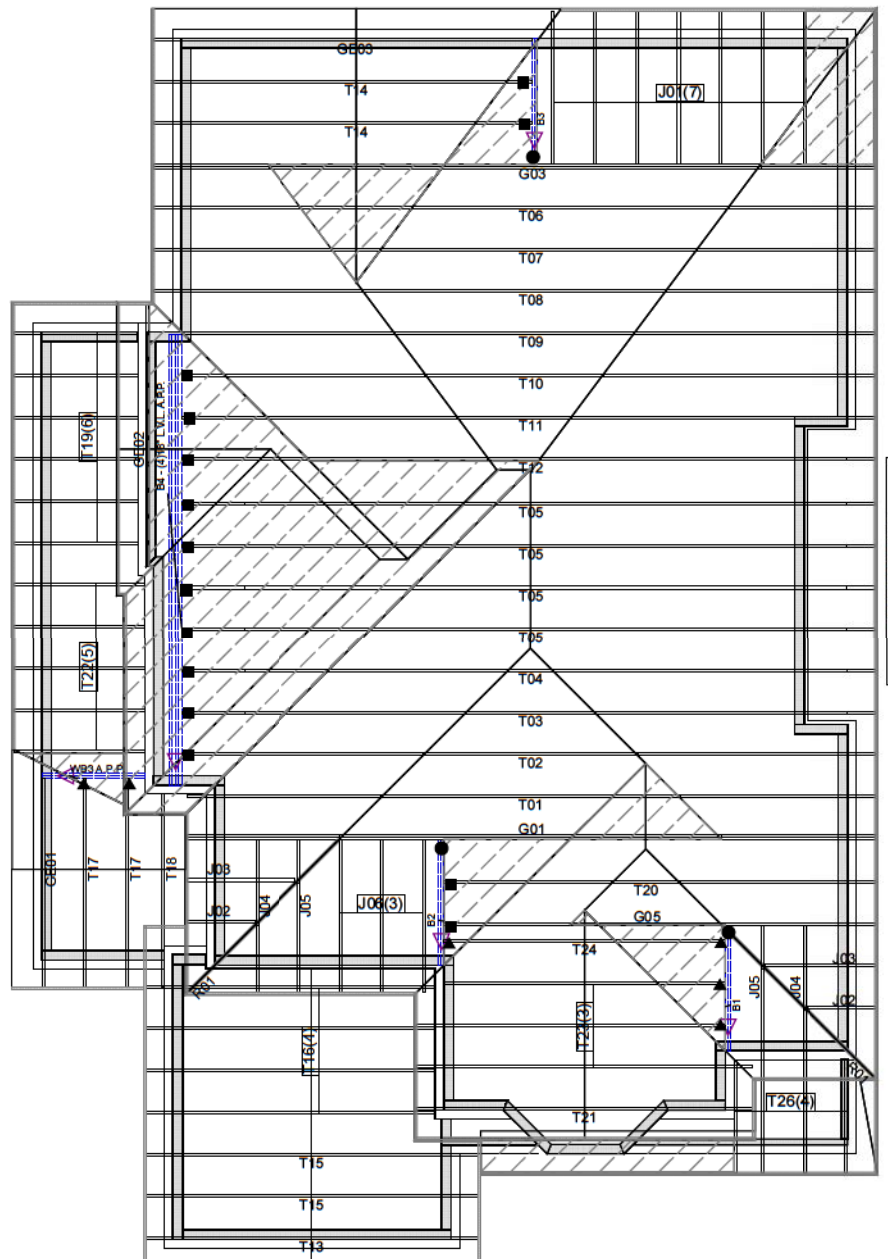




Hanger Name	Symbol	QTY
LUS24	▲	6
LJS26DS	■	14
HGUS26-2	●	3

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



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
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 #	T20-00774
Address	LOT 36 TRINAR HALL EAST GWILLIMBURY, ON
Model	GLENWAY 12A ELEV 2
Sales Rep	RALPH MIRIGELLO
Designer	DM
Date	12/17/2020
Path	C:\DATA\JOBS\GREENPARK\TRINAR HALL\MODELS\LOT 36\T-4-OT36\

DESIGN INFORMATION

Code	NBCC 2015
Bldg	Residential - HSB (NBCC Part 9)
TC LL	34.8 lb/ft ²
TC DL	8.0 lb/ft ²
BC LL	10.5 lb/ft ²
BC DL	7.3 lb/ft ²
Deflection	LL=L/360 TL=L/360
Spacing	24" O/C unless otherwise noted
Complies With	OBC 2012 (2019 Amendment) CSA O86-14 and TPIC 2014

IMPORTANT INFORMATION

Refer to truss drawings in the Truss Engineering Package for ply-to-ply attachment notes

For site-framed valleys: top chords of all roof trusses must be laterally supported using 2x4 continuous bracing @24 O/C - all bracing must be anchored at ends as per TPIC Installation Guidelines

Read all notes on this page in addition to those shown on the KOTT Truss Engineering package

Field erection, handling and bracing are not the responsibility of KOTT, or KOTT Engineering

Unless noted otherwise, hurricane ties are to be installed at the bearings of all trusses > 40 ft clear span, and any girder or beam supporting trusses with a clear span >40 ft. See hanger legend for type.

Unless noted otherwise, for Part 9 bldgs, all trusses are to be anchored to the top of supporting walls as follows: trusses with a clear span <40 ft use 3-1/4" nails @ each bearing; trusses with a clear span >40 ft use 3-1/4" nails @ each bearing in addition to the appropriate hurricane tie.

KOTT Inc.
14 Anderson Blvd.
Uxbridge, ON
905.642.4400

NE1220-134
GREENPARK - TRINAR
HALL - LOT 36

ENGINEERING NOTE PAGE (ENP-1)

PLEASE READ PRIOR TO INSTALLATION



East Gwillimbury
Building Standards Branch BCIN #15487

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

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

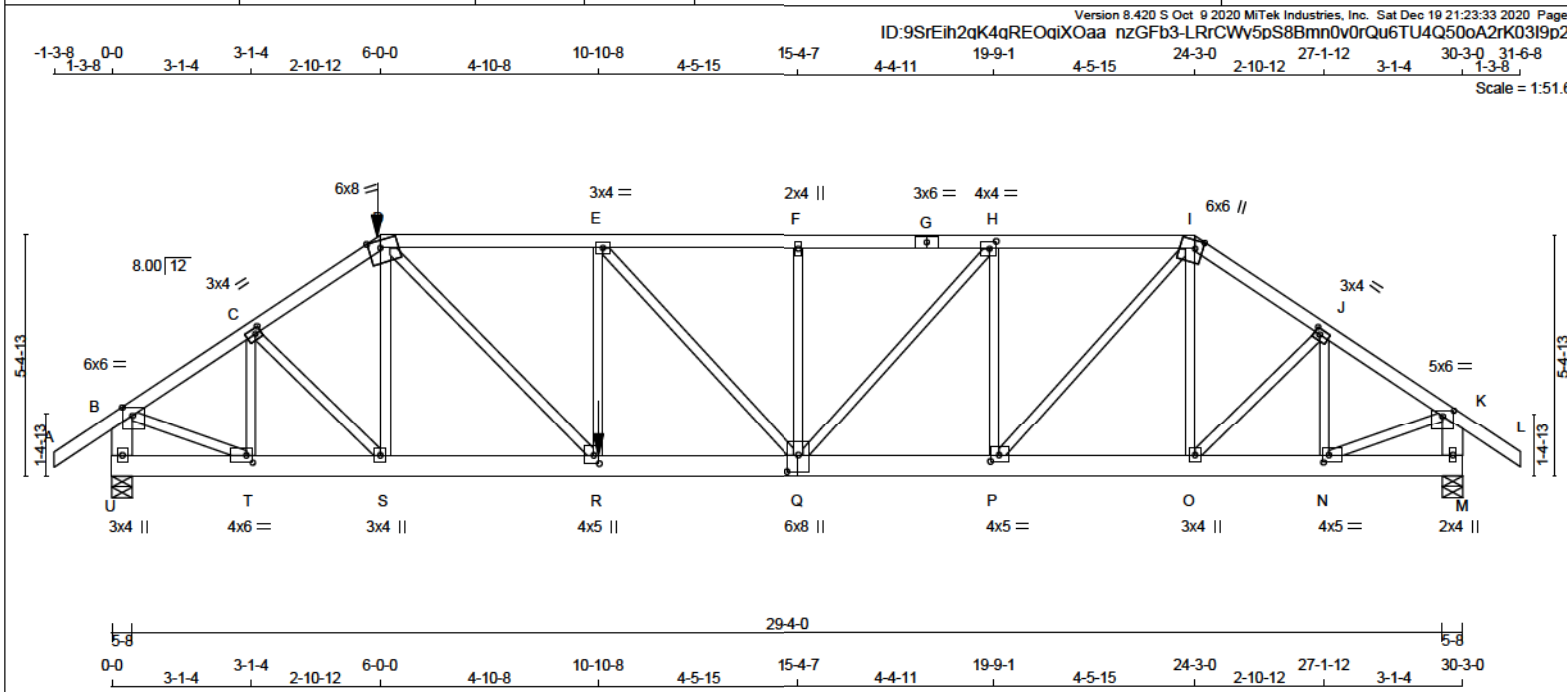
- The trusses must be handled and installed by a qualified professional as per the supplied document titled *Information for Truss Installers* and the BCSI-B1 and BCSI-B3 Summary Sheets
- The compression chords are laterally braced by continuous rigid diaphragm sheathing or as specified on the drawing
- 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.



LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - D	2x4	DRY	No.2
D - G	2x4	DRY	No.2
G - I	2x4	DRY	No.2
I - L	2x4	DRY	No.2
U - B	2x6	DRY	No.2
M - K	2x6	DRY	No.2
U - Q	2x6	DRY	No.2
Q - M	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-D	12	SIDE(0.0)
D-G	12	SIDE(55.1)
G-I	12	TOP
I-L	12	TOP
U-B	12	TOP
M-K	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
U-Q	12	SIDE(22.0)
Q-M	12	TOP
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

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.



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

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

BEARINGS					
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	
JT	VERT	HORZ	DOWN	UPLIFT	IN-SX
U	5050	0	5050	0	5-8
M	3681	0	3681	0	5-8

UNFACTORED REACTIONS							
1ST LCASE MAX/MIN COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
U	3739	2151 / 0	645 / 0	0 / 0	0 / 0	943 / 0	0 / 0
M	2715	1595 / 0	445 / 0	0 / 0	0 / 0	676 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX. UNBRAC. (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM	TO	LENGTH	FR-TO		
A-B	0 / 47	-124.4	-124.4	0.09 (1)	10.00	T-C	-1420 / 0
B-C	-5522 / 0	-124.4	-124.4	0.19 (1)	4.00	C-S	0 / 813
C-D	-8254 / 0	-124.4	-124.4	0.20 (1)	3.77	S-D	-112 / 245
D-E	-7485 / 0	-234.6	-234.6	0.68 (1)	2.57	D-R	0 / 3314
E-F	-6807 / 0	-124.4	-124.4	0.58 (1)	3.24	R-E	-235 / 164
F-G	-6807 / 0	-124.4	-124.4	0.40 (1)	3.45	E-Q	-1018 / 0
G-H	-6807 / 0	-124.4	-124.4	0.40 (1)	3.45	Q-F	-442 / 0
H-I	-5584 / 0	-124.4	-124.4	0.34 (1)	3.84	Q-H	0 / 1859
I-J	-4406 / 0	-124.4	-124.4	0.15 (1)	4.44	P-H	-2026 / 0
J-K	-3939 / 0	-124.4	-124.4	0.14 (1)	4.67	P-I	0 / 2914
K-L	0 / 47	-124.4	-124.4	0.09 (1)	10.00	O-I	-110 / 62
U-B	-4887 / 0	0.0	0.0	0.17 (1)	6.56	O-J	0 / 498
M-K	-3582 / 0	0.0	0.0	0.13 (1)	7.42	N-J	-1050 / 0
						B-T	0 / 4840
						N-K	0 / 3458
U-T	0 / 0	-74.0	-74.0	0.07 (1)	10.00		
T-S	0 / 4808	-74.0	-74.0	0.37 (1)	10.00		
S-R	0 / 5174	-74.0	-74.0	0.41 (1)	10.00		
R-Q	0 / 7485	-39.2	-39.2	0.54 (1)	10.00		
Q-P	0 / 5584	-39.2	-39.2	0.40 (1)	10.00		
P-O	0 / 3939	-39.2	-39.2	0.28 (1)	10.00		
O-N	0 / 3293	-39.2	-39.2	0.26 (1)	10.00		
N-M	0 / 0	-39.2	-39.2	0.05 (1)	10.00		

FACTORED CONCENTRATED LOADS (LBS)									
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
D	6-0-0	-560	-560	—	FRONT	VERT	TOTAL	—	C1
R	10-10-8	-1963	-1963	—	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

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

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 6-0-0
END SETBACK = 6-0-0
END WALL WIDTH = 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL
LOADS APPLIED TO FIRST 10-10-8 OF SPAN MEASURED FROM THE LEFT.

*** 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 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 (1.01")
CALCULATED VERT. DEFL.(LL) = U/999 (0.14")
ALLOWABLE DEFL.(TL) = L/360 (1.01")
CALCULATED VERT. DEFL.(TL) = U/999 (0.24")

CSI: TC=0.68/1.00 (D-E-1), BC=0.54/1.00 (Q-R-1),
WB=0.60/1.00 (B-T-1), SSI=0.28/1.00 (D-E-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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



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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Sanitary Systems			
Zoning			

CONTINUED ON PAGE 2



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	TMWW-t	MT20	3.0	4.0	1.50 1.50
D	TTWW-m	MT20	6.0	8.0	2.00 3.25
E	TMWW-t	MT20	3.0	4.0	
F	TMW+w	MT20	2.0	4.0	
G	TS-t	MT20	3.0	6.0	
H	TMWW-t	MT20	4.0	4.0	2.00 1.75
I	TTWW+m	MT20	6.0	6.0	2.25 2.00
J	TMWW-t	MT20	3.0	4.0	1.50 1.50
K	TMVW-p	MT20	5.0	6.0	1.50 3.00
M	BMV1+p	MT20	2.0	4.0	
N	BMWW-t	MT20	4.0	5.0	2.00 1.50
O	BMWW+t	MT20	3.0	4.0	
P	BMWW-t	MT20	4.0	5.0	1.75 2.25
Q	BSWWW+H	MT20	6.0	8.0	4.50 3.00
R	BMWW+t	MT20	4.0	5.0	2.25 1.50
S	BMWW+t	MT20	3.0	4.0	
T	BMWW-t	MT20	4.0	6.0	2.00 1.75
U	BMV1+p	MT20	3.0	4.0	

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90)

JSI METAL= 0.58 (Q) (INPUT = 1.00)

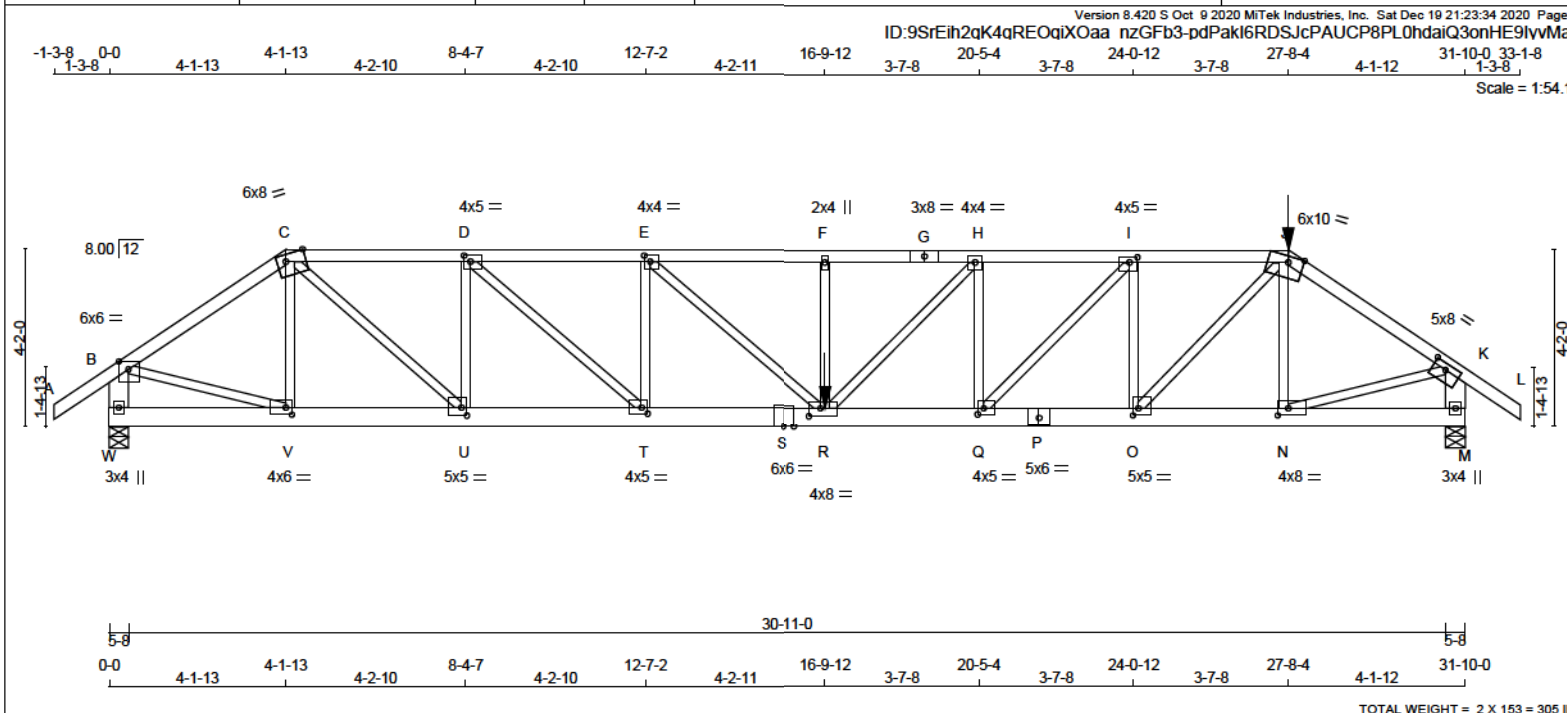
READ ALL NOTES ON THIS PAGE AND ON
ENGINEERING NOTE PAGE ENP-1. THIS
NOTE PAGE IS AN INTEGRAL PART OF
THIS DRAWING AS IT CONTAINS
SPECIFICATIONS AND CRITERIA USED IN
THE DESIGN OF THIS COMPONENT.



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times. The building permit must be clearly
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Discipline	Reviewer	BCN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			





LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.
CHORDS			
A - C	2x4	DRY	No.2
C - G	2x4	DRY	No.2
G - J	2x4	DRY	No.2
J - L	2x4	DRY	No.2
W - B	2x6	DRY	No.2
M - K	2x6	DRY	No.2
W - S	2x6	DRY	No.2
S - P	2x6	DRY	No.2
P - M	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(P/LF)	
TOP CHORDS : (0.122"x3") SPIRAL NAILS			
A - C	12	TOP	
C - G	12	SIDE(55.1)	
G - J	12	SIDE(55.1)	
J - L	12	SIDE(0.0)	
W - B	2	TOP	
M - K	2	TOP	
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS			
W - S	2	TOP	
S - P	2	SIDE(22.0)	
P - M	2	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. 3-0 INCH NAILS.			
TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.			

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG						
JT VERT	4289	0	4289	0	0	5-8	2-5		
W	5444	0	5444	0	0	5-8	3-6		
UNFACTORED REACTIONS									
1ST LCASE	MAX/MIN COMPONENT REACTIONS								
JT COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL			
W	3166	1850 / 0	526 / 0	0 / 0	0 / 0	791 / 0	0 / 0		
M	4027	2326 / 0	688 / 0	0 / 0	0 / 0	1013 / 0	0 / 0		
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) W, M									
BRACING									
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.23 FT.									
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.									
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.									
LOADING									
TOTAL LOAD CASES: (4)									
CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	LC1 MAX (LBS)	MAX. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)		
FR-TO		FROM	TO		FR-TO		FROM	TO	
A-B	0 / 47	-124.4	-124.4	0.09 (1)	10.00	V-C	-771 / 0	0.10 (1)	
B-C	-5047 / 0	-124.4	-124.4	0.33 (1)	4.02	C-U	0 / 4620	0.57 (1)	
C-D	-7614 / 0	-124.4	-124.4	0.41 (1)	3.28	U-D	-2954 / 0	0.38 (1)	
D-E	-10277 / 0	-124.4	-124.4	0.62 (1)	2.65	D-T	0 / 3580	0.44 (1)	
E-F	-12112 / 0	-124.4	-124.4	0.74 (1)	2.32	T-E	-2156 / 0	0.28 (1)	
F-G	-12112 / 0	-234.6	-234.6	0.76 (1)	2.23	E-R	0 / 2465	0.31 (1)	
G-H	-12112 / 0	-234.6	-234.6	0.76 (1)	2.23	R-F	-869 / 0	0.09 (1)	
H-I	-10960 / 0	-234.6	-234.6	0.71 (1)	2.40	R-H	0 / 1624	0.20 (1)	
I-J	-8724 / 0	-234.6	-234.6	0.53 (1)	2.92	Q-H	2027 / 0	0.28 (1)	
J-K	-6490 / 0	-124.4	-124.4	0.41 (1)	3.53	Q-I	0 / 3279	0.41 (1)	
K-L	0 / 47	-124.4	-124.4	0.09 (1)	10.00	O-I	-3278 / 0	0.43 (1)	
W-B	-4221 / 0	0.0	0.0	0.15 (1)	6.96	O-J	0 / 4850	0.60 (1)	
M-K	-5306 / 0	0.0	0.0	0.19 (1)	6.35	N-J	-916 / 0	0.12 (1)	
W-V	0 / 0	-39.2	-39.2	0.03 (3)	10.00	B-V	0 / 4306	0.53 (1)	
V-U	0 / 4171	-39.2	-39.2	0.31 (1)	10.00	N-K	0 / 5538	0.69 (1)	
U-T	0 / 7614	-39.2	-39.2	0.55 (1)	10.00				
T-S	0 / 10277	-39.2	-39.2	0.79 (1)	10.00				
S-R	0 / 10277	-39.2	-39.2	0.79 (1)	10.00				
R-Q	0 / 10960	-74.0	-74.0	0.84 (1)	10.00				
Q-P	0 / 8724	-74.0	-74.0	0.63 (1)	10.00				
P-O	0 / 8724	-74.0	-74.0	0.63 (1)	10.00				
O-N	0 / 5366	-74.0	-74.0	0.39 (1)	10.00				
N-M	0 / 0	-74.0	-74.0	0.06 (3)	10.00				
FACTORED CONCENTRATED LOADS (LBS)									
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
J	27-8-4	-387	-387	-	FRONT	VERT	TOTAL	-	C1
R	16-9-12	-2074	-2074	-	FRONT	VERT	TOTAL	-	C1

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
LEFT SETBACK = 4-1-13
RIGHT 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 G.S.L.
LOADS APPLIED TO FIRST 15-0-4 OF PLAN 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 (1.08")
CALCULATED VERT. DEFL(LL) = L/999 (0.31")
ALLOWABLE DEFL(TL) = L/300 (1.00")
CALCULATED VERT. DEFL(TL) = L/746 (0.51")

CSI: TC=0.76/1.00 (F-H:1), BC=0.84/1.00 (Q-R:1),
WB=0.69/1.00 (K-N:1), SSI=0.21/1.00 (I-J: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

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.

CONNECTION REQUIREMENTS

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

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

DISCIPLINE

Building Code

Reviewers

H. Author

42236

2021-02-03

Sewage System

Zoning

East Gwillimbury

Building Standards Branch BCN #15487

Continued on Page 2

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 5.50
D	TMWW-t	MT20	4.0	5.0	1.75 1.75
E	TMWW-t	MT20	4.0	4.0	1.75 1.75
F	TMW+w	MT20	2.0	4.0	
G	TS-t	MT20	3.0	8.0	
H	TMWW-t	MT20	4.0	4.0	
I	TMWW-t	MT20	4.0	5.0	1.50 2.25
J	TTWW-m	MT20	6.0	10.0	Edge 4.25
K	TMVW-t	MT20	5.0	8.0	1.75 3.75
M	BMV1+p	MT20	3.0	4.0	
N	BMWW-t	MT20	4.0	8.0	2.00 3.00
O	BMWW-t	MT20	5.0	5.0	2.00 1.50
P	BS-t	MT20	5.0	6.0	
Q	BMWW-t	MT20	4.0	5.0	1.75 1.75
R	BMWW-t	MT20	4.0	8.0	2.25 3.25
S	BS-t	MT20	6.0	6.0	
T	BMWW-t	MT20	4.0	5.0	1.75 1.75
U	BMWW-t	MT20	5.0	5.0	2.25 1.50
V	BMWW-t	MT20	4.0	6.0	2.00 1.75
W	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= 0.89 (J) (INPUT = 0.90)

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

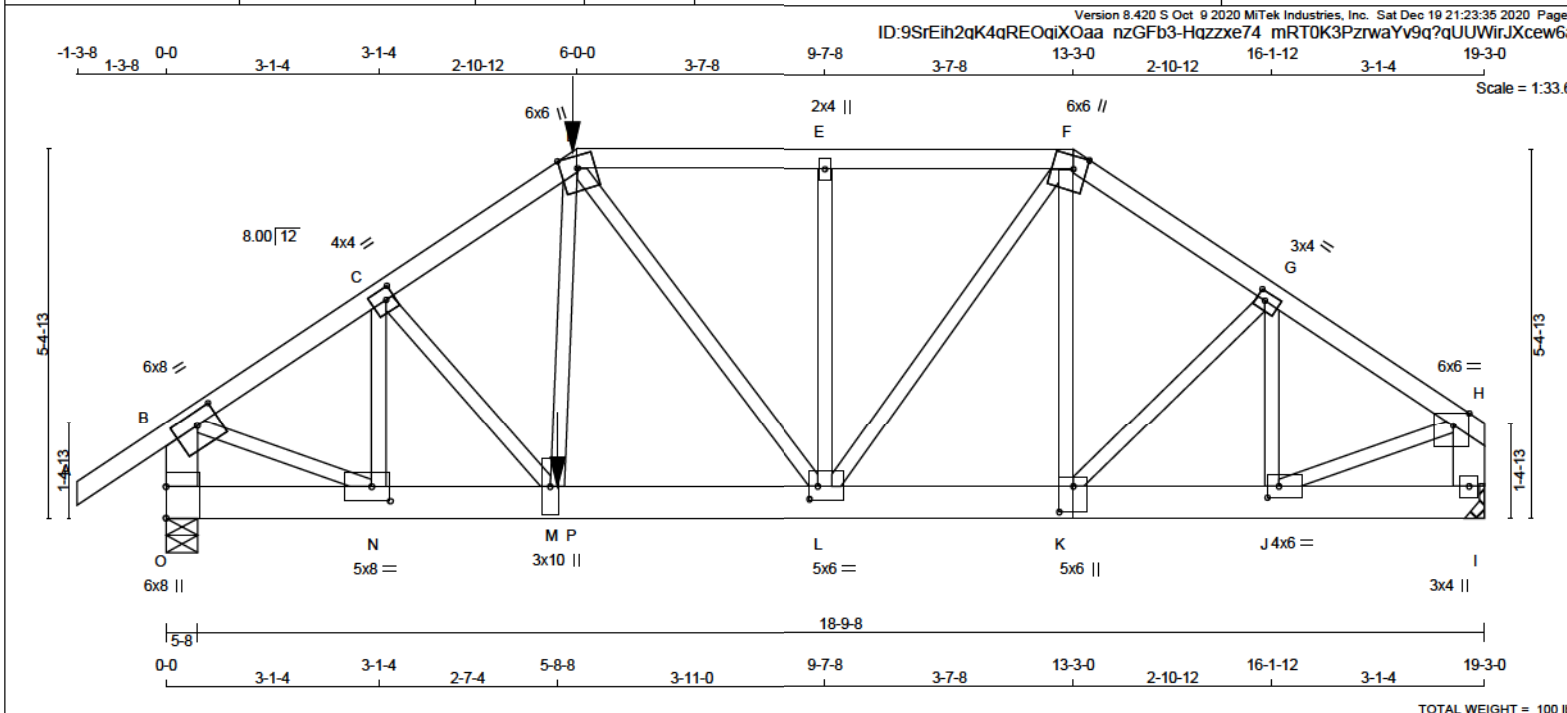
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correctness as noted. No other changes may be
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Standards Branch. All work must comply with
Zoning By-Law 2018-043, as amended, and the
Ontario Building Code, as amended. These
approved documents must 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			





LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
O - B	2x6	DRY	No.2	SPF
I - H	2x6	DRY	No.2	SPF
O - K	2x6	DRY	No.2	SPF
K - I	2x6	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	8.0	2.25	3.75
C TMVW-t	MT20	4.0	4.0	2.00	1.50
D TTWW+m	MT20	6.0	6.0	Edge	
E TMVW+m	MT20	2.0	4.0		
F TTWW+m	MT20	6.0	8.0	2.25	2.25
G TMVW-t	MT20	3.0	4.0	1.50	1.50
H TMVW-p	MT20	6.0	6.0	2.25	2.75
I BMV1+p	MT20	3.0	4.0		
J BMVW-t	MT20	4.0	6.0	2.00	2.00
K BSWW+t	MT20	3.0	4.0	1.50	2.50
L BMVW-t	MT20	5.0	6.0	2.25	1.50
M BMVW-t	MT20	3.0	10.0		
N BMVW-t	MT20	5.0	8.0	2.50	3.25
O BMV1+t	MT20	6.0	8.0	5.50	

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



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

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

BEARINGS

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT VERT	3486	0	5-8
O	3486	0	5-8
I	2270	0	MECHANICAL

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

UNFACTORED REACTIONS

1ST CASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	2587	1474 / 0	445 / 0
O	1677	975 / 0	282 / 0
I			0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (PLF)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (PLF)
FR-TO	0 / 47	-124.4	-124.4 0.18 (1)	10.00	N-C	-785 / 0	0.18 (1)
A-B	-3637 / 0	-124.4	-124.4 0.38 (1)	3.38	C-M	0 / 283	0.07 (1)
B-C	-3884 / 0	-124.4	-124.4 0.38 (1)	3.25	M-D	0 / 1583	0.39 (1)
C-D	-2883 / 0	-124.4	-124.4 0.40 (1)	3.66	D-L	-395 / 0	0.27 (1)
D-E	-2883 / 0	-124.4	-124.4 0.40 (1)	3.66	L-E	-526 / 0	0.22 (1)
E-F	-2588 / 0	-124.4	-124.4 0.27 (1)	4.01	F-G	0 / 1283	0.32 (1)
F-G	-2458 / 0	-124.4	-124.4 0.27 (1)	4.11	G-H	0 / 111	0.03 (3)
G-H	-3336 / 0	0.0	0.0 0.24 (1)	5.77	H-I	0 / 96	0.02 (1)
H-I	-2193 / 0	0.0	0.0 0.18 (1)	6.85	I-J	-575 / 0	0.12 (1)
					J-K	0 / 3192	0.79 (1)
					K-L	0 / 2166	0.54 (1)
O-N	0 / 0	-74.0	-74.0 0.09 (2)	10.00			
N-M	0 / 3040	-74.0	-74.0 0.49 (1)	10.00			
M-P	0 / 3114	-74.0	-74.0 0.49 (1)	10.00			
P-L	0 / 3114	-39.2	-39.2 0.49 (1)	10.00			
L-K	0 / 2131	-39.2	-39.2 0.32 (1)	10.00			
K-J	0 / 2062	-39.2	-39.2 0.32 (1)	10.00			
J-I	0 / 0	-39.2	-39.2 0.06 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
D	6-0-0	-560	-560	---	FRONT	VERT	TOTAL	---	C1
M	5-8-8	-1646	-1646	---	FRONT	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

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

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 6-0-0
END SETBACK = 6-0-0
END WALL WIDTH = 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 6-2-0 OF SPAN MEASURED FROM THE LEFT.

*** 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 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 DEF. (LL) = L/360 (0.84")
CALCULATED VERT. DEF. (LL) = L/999 (0.07")
ALLOWABLE DEF. (TL) = L/360 (0.84")
CALCULATED VERT. DEF. (TL) = L/999 (0.12")

CSI: TC=0.40/1.00 (D-E-1), BC=0.49/1.00 (M-N-1), WB=0.79/1.00 (B-N-1), SSI=0.24/1.00 (D-E-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
MT20	650	371	1747	788	1987	1873

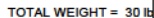


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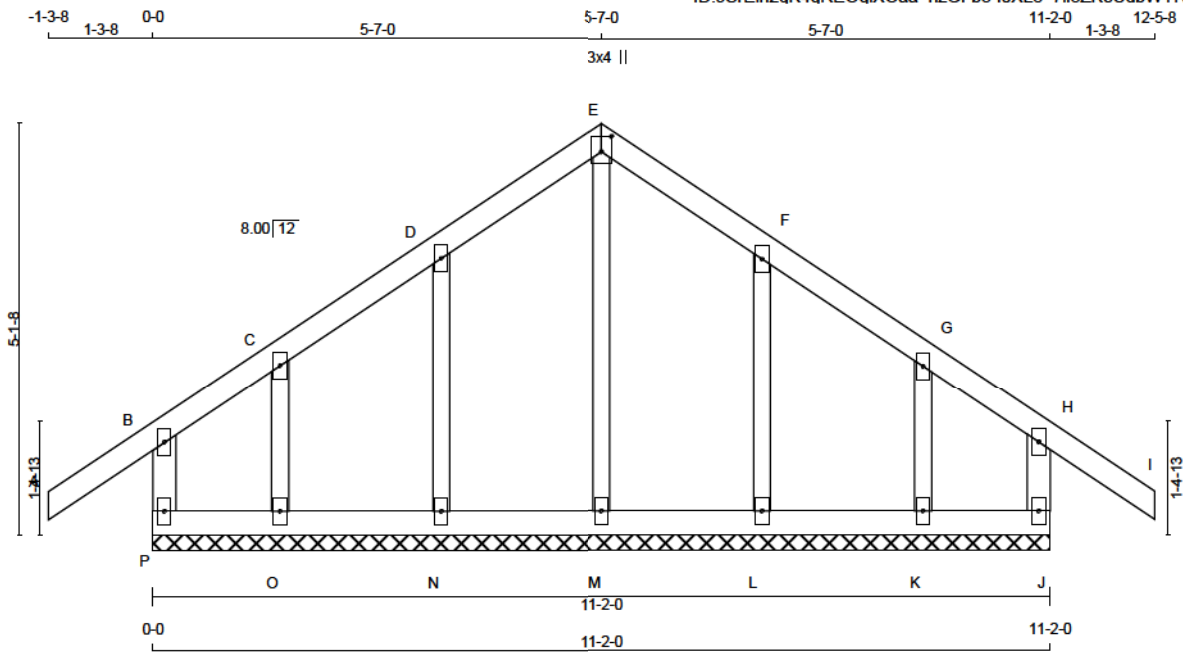
Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			

CONTINUED ON PAGE 2





Version 8.420 S Oct 9 2020 MiTek Industries, Inc. Sat Dec 10 21:23:36 2020 Page 1
ID:9SrEih2qK4qREOqIXOaa nzGFb3-I0XL8 7II3ZKeUdbWYRp56i3PExzFKdSmGOT10y7



Scale = 1:28.7

TOTAL WEIGHT = 46 lb

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
P - B	2x4	DRY	No.2		SPF
A - E	2x4	DRY	No.2		SPF
E - I	2x4	DRY	No.2		SPF
J - H	2x4	DRY	No.2		SPF
P - J	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" OC.					

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
C, D, F, G						
C	TMW+w	MT20	2.0	4.0		
E	TTW+p	MT20	3.0	4.0	2.25	1.50
H	TMV+p	MT20	2.0	4.0		
J	BMV1+p	MT20	2.0	4.0		
K, L, M, N, O						
K	BMW1+w	MT20	2.0	4.0		
P	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 = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 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 MAX. UNBRACED LENGTH (FT)	FACTORED MAX. CSI (LC)
FR-TO		FROM TO		FR-TO			
P-B	-277 / 0	0.0	0.0 0.06 (1)	M-E	-309 / 0	7.81	0.12 (1)
A-B	0 / 47	-124.4	-124.4 0.17 (1)	N-D	-288 / 0	10.00	0.06 (1)
B-C	-1 / 20	-124.4	-124.4 0.10 (1)	O-C	-165 / 0	10.00	0.03 (1)
C-D	0 / 54	-124.4	-124.4 0.08 (1)	L-F	-288 / 0	10.00	0.06 (1)
D-E	0 / 52	-124.4	-124.4 0.08 (1)	K-G	-165 / 0	10.00	0.03 (1)
E-F	0 / 52	-124.4	-124.4 0.08 (1)				
F-G	0 / 54	-124.4	-124.4 0.08 (1)				
G-H	-1 / 20	-124.4	-124.4 0.10 (1)				
H-I	0 / 47	-124.4	-124.4 0.17 (1)				
J-H	-277 / 0	0.0	0.0 0.06 (1)				
P-O	-32 / 0	-39.2	-39.2 0.02 (3)				
O-N	-39 / 0	-39.2	-39.2 0.03 (3)				
N-M	-45 / 0	-39.2	-39.2 0.03 (3)				
M-L	-45 / 0	-39.2	-39.2 0.03 (3)				
L-K	-39 / 0	-39.2	-39.2 0.03 (3)				
K-J	-32 / 0	-39.2	-39.2 0.02 (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

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 (H-I:1) , BC=0.03/1.00 (L-M:3) ,
WB=0.12/1.00 (E-M:1) , SSI=0.11/1.00 (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 GRIF= 0.20 (E) (INPUT = 0.80)
JSI METAL= 0.14 (D) (INPUT = 1.00)



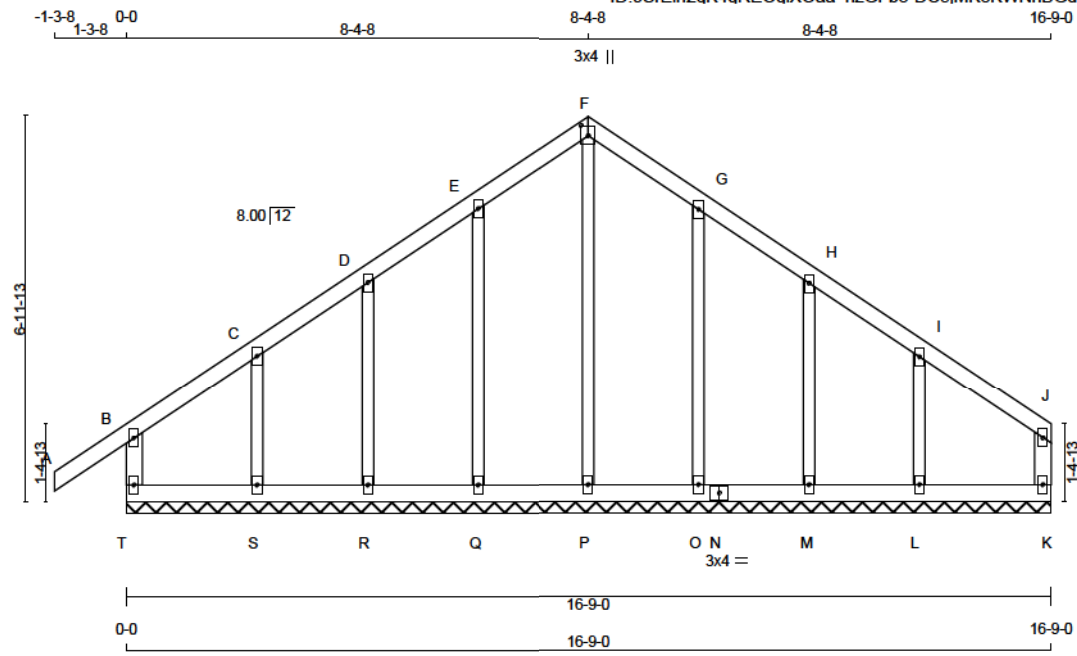
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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			





TOTAL WEIGHT = 70 lb

LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
T - B	2x4	DRY	No.2	SPF	
A - F	2x4	DRY	No.2	SPF	
F - J	2x4	DRY	No.2	SPF	
K - J	2x4	DRY	No.2	SPF	
T - N	2x4	DRY	No.2	SPF	
N - K	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
ALL GABLE WEBS	2x3	DRY	No.2	SPF	
GABLE STUDS SPACED AT 2-0-0 OC.					

PLATES (table is in inches)					
JT TYPE	PLATES	W	LEN	Y	X
B TMV+p	MT20	2.0	4.0		
C, D, E, G, H, I					
C TMW+w	MT20	2.0	4.0		
F TTV+p	MT20	3.0	4.0	2.25	1.50
J TMV+p	MT20	2.0	4.0		
K BMV1+p	MT20	2.0	4.0		
L, M, O, P, Q, R, S					
L BMW1+w	MT20	2.0	4.0		
N BS-t	MT20	3.0	4.0		
T 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)	LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		FR-TO			
T-B	-354 / 0	0.0	0.0 0.04 (1)	P-F	-215 / 0	0.18 (1)	
A-B	0 / 47	-124.4	-124.4 0.17 (1)	Q-E	-251 / 0	0.12 (1)	
B-C	-65 / 0	-124.4	-124.4 0.08 (1)	R-D	-241 / 0	0.07 (1)	
C-D	-54 / 0	-124.4	-124.4 0.08 (1)	S-C	-280 / 0	0.05 (1)	
D-E	-46 / 0	-124.4	-124.4 0.08 (1)	O-G	-252 / 0	0.12 (1)	
E-F	-41 / 0	-124.4	-124.4 0.08 (1)	M-H	-237 / 0	0.07 (1)	
F-G	-41 / 0	-124.4	-124.4 0.08 (1)	L-I	-273 / 0	0.05 (1)	
G-H	-46 / 0	-124.4	-124.4 0.08 (1)				
H-I	-56 / 0	-124.4	-124.4 0.07 (1)				
I-J	-60 / 0	-124.4	-124.4 0.07 (1)				
K-J	-173 / 0	0.0	0.0 0.06 (1)				
T-S	0 / 52	-39.2	-39.2 0.04 (1)				
S-R	0 / 44	-39.2	-39.2 0.04 (3)				
R-Q	0 / 39	-39.2	-39.2 0.03 (3)				
Q-P	0 / 35	-39.2	-39.2 0.03 (3)				
P-O	0 / 35	-39.2	-39.2 0.03 (3)				
O-N	0 / 39	-39.2	-39.2 0.03 (3)				
N-M	0 / 39	-39.2	-39.2 0.03 (3)				
M-L	0 / 44	-39.2	-39.2 0.04 (3)				
L-K	0 / 52	-39.2	-39.2 0.04 (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

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=0.04/1.00 (S-T:1),
WB=0.18/1.00 (F-P:1), SSI=0.11/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.02 (F) (INPUT = 0.80)
JSI METAL= 0.22 (B) (INPUT = 1.00)



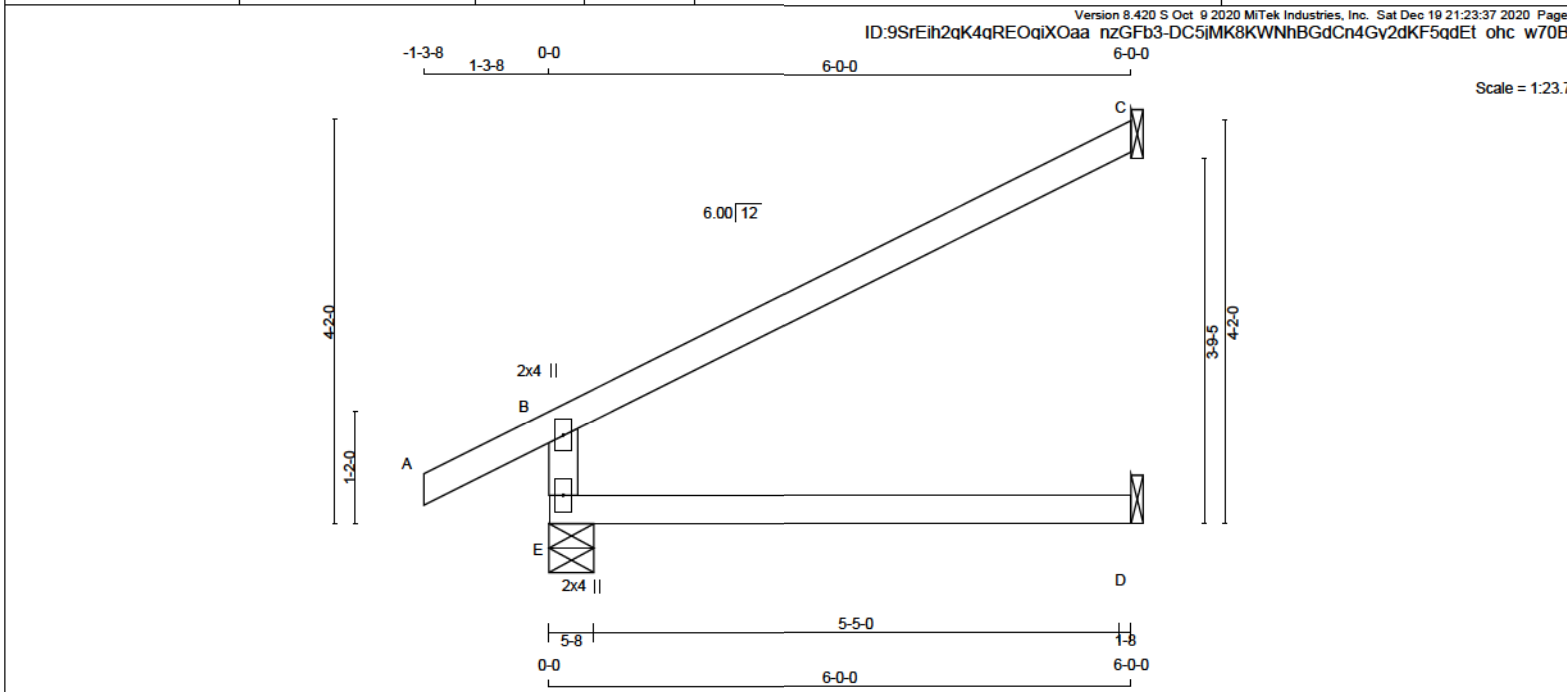
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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			





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

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	BMV+p	MT20	2.0	4.0		

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	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
JT	COMBINED	SNOW	LIVE	PERM. LIVE
E	563	355 / 0	74 / 0	0 / 0
C	193	157 / 0	0 / 0	0 / 0
D	88	0 / 0	52 / 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)

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		FROM TO	LENGTH	FR-TO			
E-B	-835 / 0	0.0	0.0 0.24 (3)	E-B	-835 / 0	0.0	0.0 0.24 (3)
A-B	0 / 38	-124.4	-124.4 0.18 (1)	A-B	0 / 38	-124.4	-124.4 0.18 (1)
B-C	-42 / 0	-124.4	-124.4 0.78 (1)	B-C	-42 / 0	-124.4	-124.4 0.78 (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, 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)
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)



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.

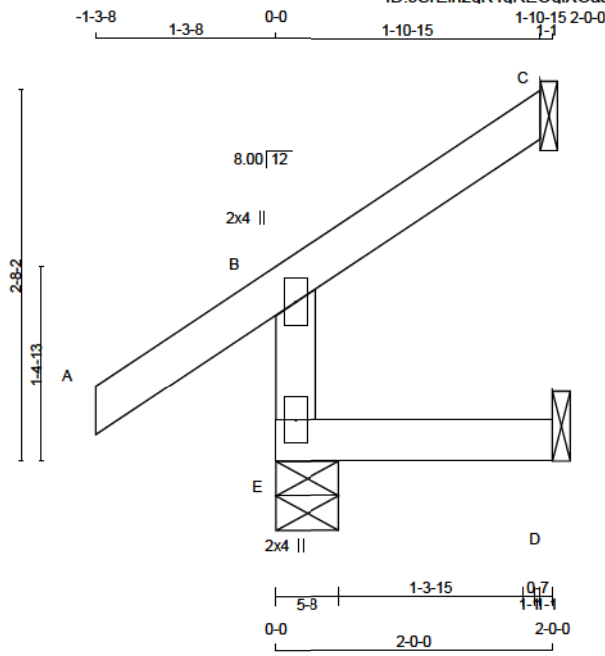


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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			



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TOTAL WEIGHT = 2 X 8 = 16 LB

LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
E	390	0	390	0	5-8	1-8
C	70	0	70	0	-29	1-8
D	27	0	45	0	-5	1-8

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

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

UNFACTORED REACTIONS							
	1ST LCASE	MAX / MIN COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	277	196 / 0	21 / 0	0 / 0	0 / 0	60 / 0	0 / 0
C	49	38 / -24	1 / 0	0 / 0	0 / 0	10 / 0	0 / 0
D	27	0 / -10	20 / 0	0 / 0	0 / 0	12 / 0	0 / 0

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

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

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

LOADING

TOTAL LOAD CASES: (5)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX. (LC) UNBRACED LENGTH (FR-TO)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. (LC) UNBRACED LENGTH (FR-TO)	
E-B	-338 / 0	0.0	0.0 (5)	7.81			
A-B	0 / 47	-124.4	-124.4 (1)	10.00			
B-C	-27 / 0	-124.4	-124.4 (1)	6.25			
E-D	0 / 0	-39.2	-39.2 (5)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.17/1.00 (A-B:1) , BC=0.05/1.00 (D-E:5) ,
WB=0.00/1.00 (n/a:0) , SSI=0.11/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



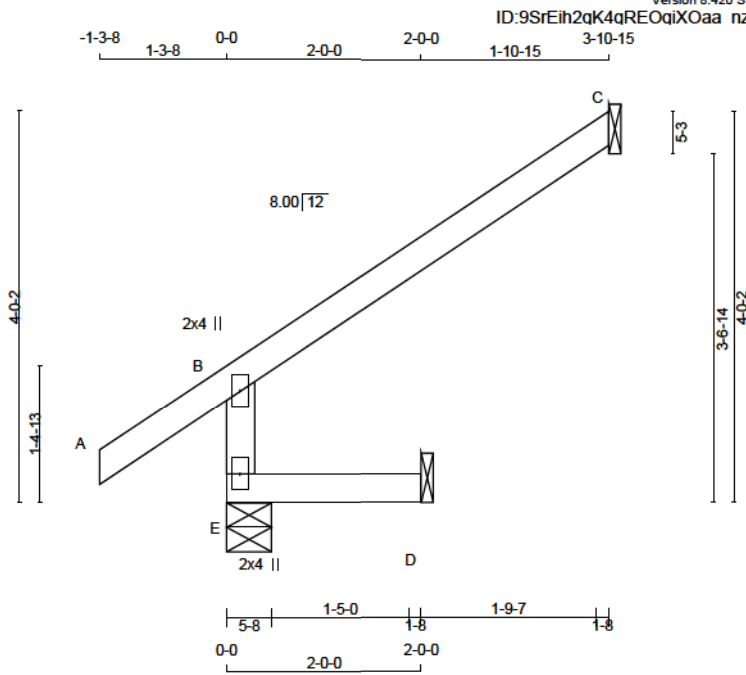
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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			





Scale = 1:23.5

TOTAL WEIGHT = 2 X 11 = 21 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	GROSS REACTION	HORZ	GROSS REACTION	DOWN	HORZ	UPLIFT IN-SX	BRG	IN-SX
E	518	0	0	518	0	0	5-8	1-8	1-8
C	183	0	0	183	0	0	1-8	1-8	1-8
D	36	0	0	45	0	0	1-8	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST CASE	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	366	266 / 0	23 / 0	0 / 0	0 / 0	77 / 0	0 / 0
C	126	102 / 0	0 / 0	0 / 0	0 / 0	23 / 0	0 / 0
D	32	0 / 0	19 / 0	0 / 0	0 / 0	13 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED HORZ. LOAD (LBS)
FR-TO			
E-B	-475 / 0	0.0	0.0
A-B	0 / 47	-124.4	-124.4
B-C	-34 / 0	-124.4	-124.4
E-D	0 / 0	-39.2	-39.2

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

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

CSI: TC=0.32/1.00 (B-C:1) , BC=0.04/1.00 (D-E:3) ,
WB=0.00/1.00 (n/a:0) , SSI=0.20/1.00 (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)	(PSI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	650	371	1747

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.29 (B) (INPUT = 0.90)
JSI METAL= 0.24 (B) (INPUT = 1.00)



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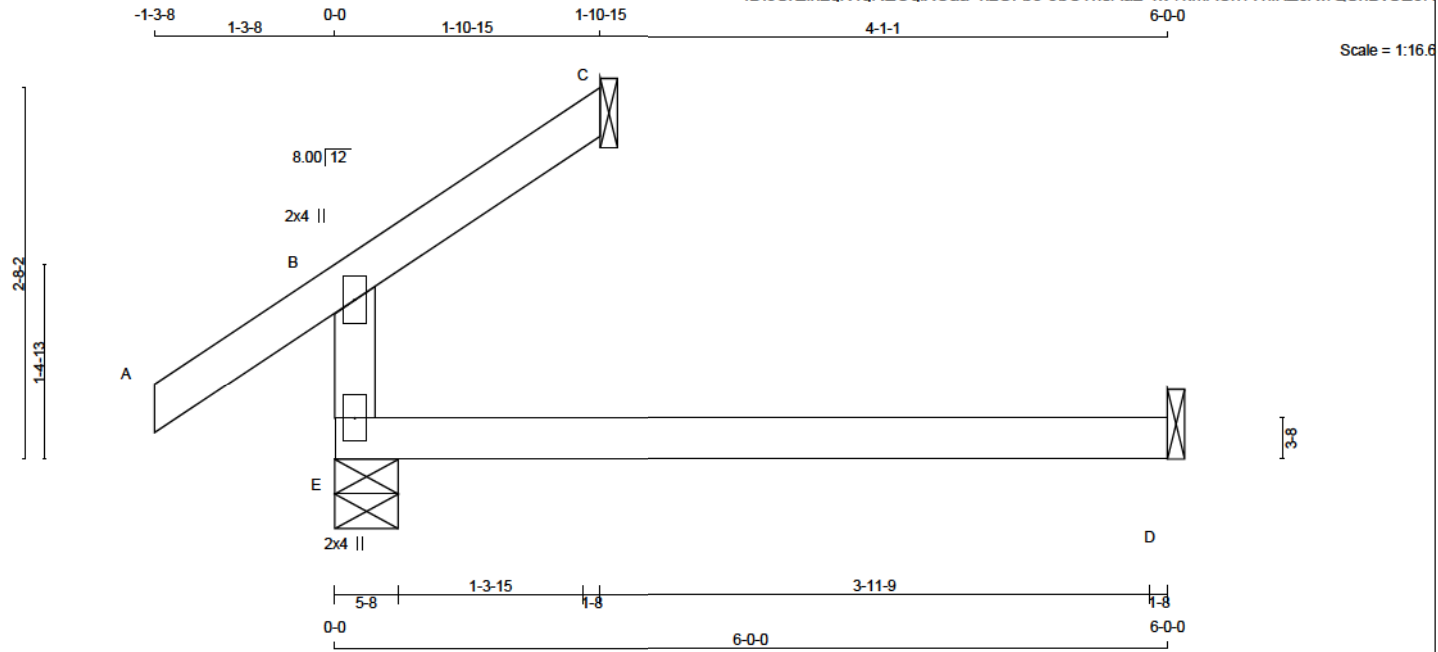


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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			



Version 8.420 S Oct 9 2020 Mitek Industries, Inc. Sat Dec 19 21:23:39 2020 Page 1
ID:9SrEih2qK4qREOqiXOaa nzGFb3-9bCTn0Aa2 xvVxMACH?WIKZcRwQShBvSec7FLy



TOTAL WEIGHT = 2 X 13 = 25 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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
E	432	0	432	0	0	5-8	1-8	
C	112	0	112	0	0	1-8	1-8	
D	100	0	130	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
	COMBINED	SNOW	LIVE	PERM. LIVE					
E	316	194 / 0	45 / 0	0 / 0	0 / 0	78 / 0	0 / 0	0 / 0	0 / 0
C	88	36 / 0	26 / 0	0 / 0	0 / 0	26 / 0	0 / 0	0 / 0	0 / 0
D	92	0 / -1	55 / 0	0 / 0	0 / 0	38 / 0	0 / 0	0 / 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 = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		WEBS	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO		LENGTH
E-B	-297 / 5	0.0 0.0 0.17 (2)	7.81	
A-B	0 / 47	-124.4 -124.4 0.17 (1)	10.00	
B-C	-4 / 29	-124.4 -124.4 0.14 (3)	10.00	
E-D	0 / 0	-39.2 -39.2 0.23 (3)	10.00	

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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- TPIC 2014

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL)= L/ 747 (0.10")

CSI: TC=0.17/1.00 (B-E:2) , BC=0.23/1.00 (D-E:3) ,
WB=0.00/1.00 (n/a:0) , SSI=0.13/1.00 (D-E:3)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.18 (B) (INPUT = 0.90)
JSI METAL= 0.15 (B) (INPUT = 1.00)



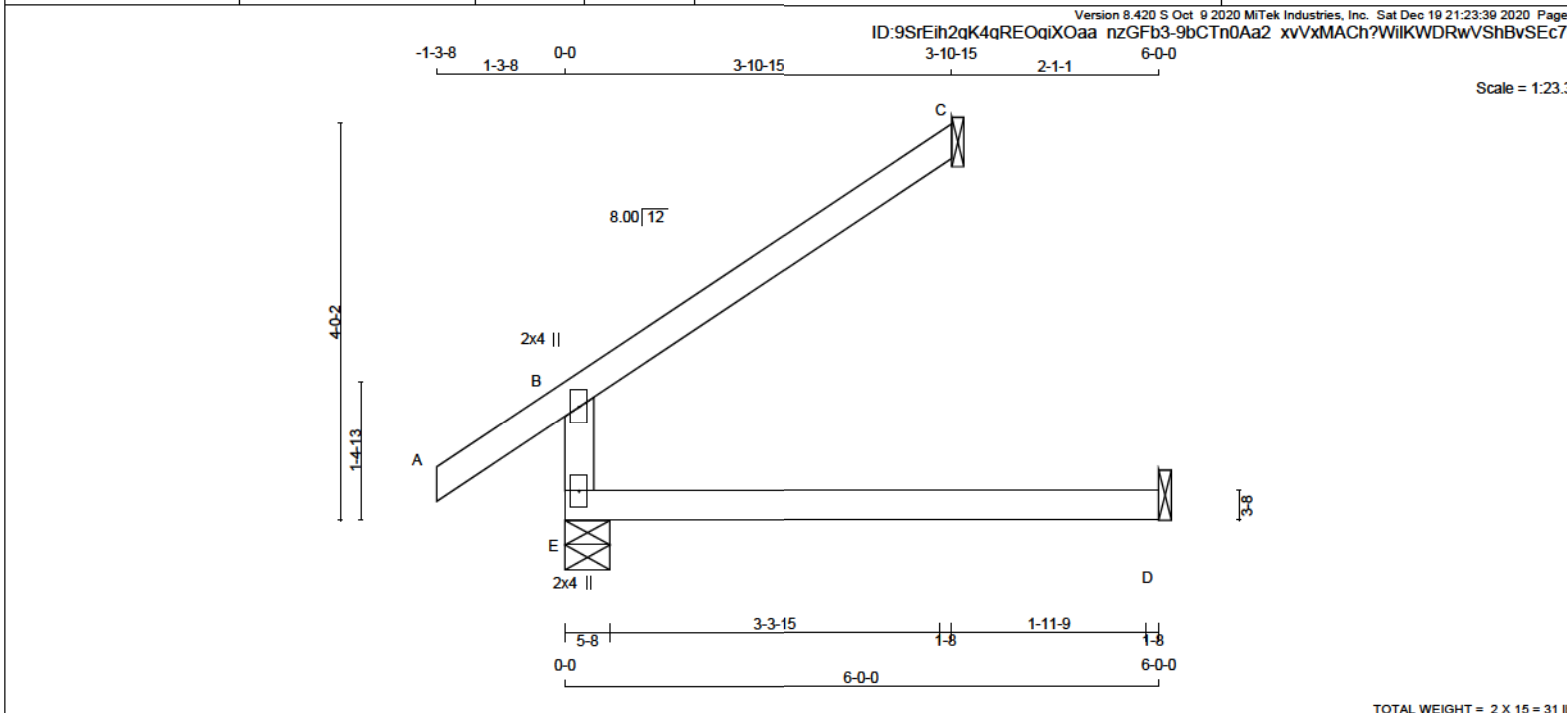
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Seismic System			
Zoning			





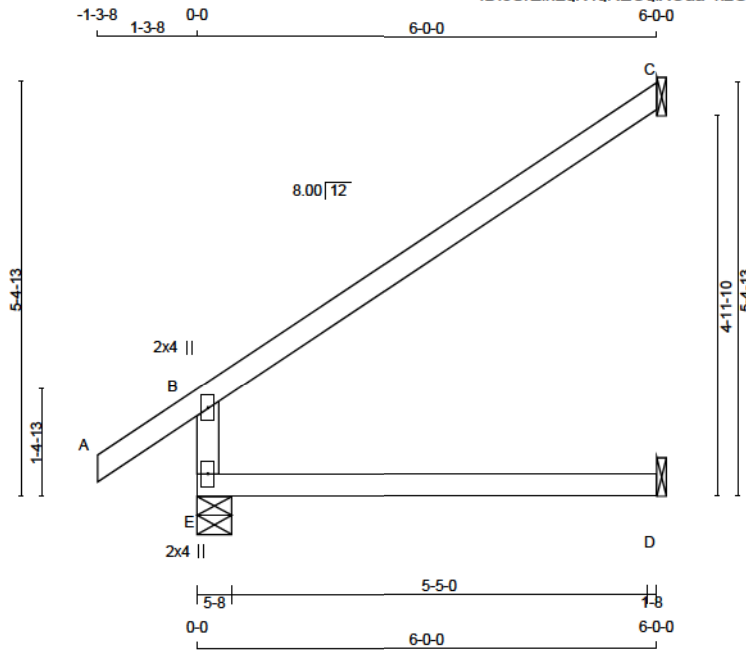
LUMBER										DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA									
N. L. G. A. RULES										BEARINGS										DESIGN CRITERIA									
CHORDS SIZE LUMBER										FACTORED MAXIMUM FACTORED INPUT REQD										SPECIFIED LOADS:									
E - B 2x4 DRY No.2										GROSS REACTION GROSS REACTION BRG BRG										TOP CH. LL = 34.8 PSF									
DESCR. SPF										JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX										DL = 8.0 PSF									
A - C 2x4 DRY No.2										E 612 0 612 0 0 5-8 1-8										BOT CH. LL = 10.5 PSF									
SPF										C 183 0 183 0 0 1-8 1-8										DL = 7.3 PSF									
SPF										D 99 0 125 0 0 1-8 1-8										TOTAL LOAD = 60.6 PSF									
DRY: SEASONED LUMBER.										SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D										SPACING = 24.0 IN. C/C									
PLATES (table is in inches)										UNFACTORED REACTIONS										THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015									
JT TYPE PLATES W LEN Y X										1ST LCASE MAX MIN COMPONENT REACTIONS										THIS DESIGN COMPLIES WITH:									
B TMV+p MT20 2.0 4.0										JT COMBINED SNOW LIVE PERM. LIVE WIND DEAD SOIL										- PART 9 OF BCBC 2018, ABC 2019									
E BMV1+p MT20 2.0 4.0										E 451 266 / 0 73 / 0 0 / 0 0 / 0 112 / 0 0 / 0										- PART 9 OF OBC 2012 (2019 AMENDMENT)									
										C 126 102 / 0 0 / 0 0 / 0 0 / 0 23 / 0 0 / 0										- CSA 086-14									
										D 89 0 / 0 53 / 0 0 / 0 0 / 0 37 / 0 0 / 0										- TPIC 2014									
										BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, C										DESIGN ASSUMPTIONS									
										BRACING										- OVERHANG NOT TO BE ALTERED OR CUT OFF.									
										TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.										(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)									
										MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.										EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD									
										ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.										ALLOWABLE DEFL.(LL)= L/360 (0.20")									
										LOADING										CALCULATED VERT. DEFL.(LL) = L/999 (0.05")									
										TOTAL LOAD CASES: (4)										ALLOWABLE DEFL.(TL)= L/360 (0.20")									
										CHORDS WEBS										CALCULATED VERT. DEFL.(TL) = L/832 (0.09")									
										MEMB. FORCE VERT. LOAD LC1 MAX MAX. MEMB. FORCE MAX										CSI: TC=0.32/1.00 (B-C:1) , BC=0.23/1.00 (D-E:3) ,									
										(LBS) (PLF) CSI (LC) UNBRAC LENGTHFR-TO (LBS) CSI (LC)										WB=0.00/1.00 (n/a:0) , SSI=0.20/1.00 (B-C:1)									
										FR-TO FROM TO										DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10									
										E-B -475 / 0 0.0 0.0 0.21 (3) 7.81										SHEAR=1.10 TENS=1.10									
										A-B 0 / 47 -124.4 -124.4 0.17 (1) 10.00										COMPANION LIVE LOAD FACTOR = 1.00									
										B-C -34 / 0 -124.4 -124.4 0.32 (1) 6.25										TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .									
										E-D 0 / 0 -39.2 -39.2 0.23 (3) 10.00										NAIL VALUES									
																				PLATE GRIP(DRY) SHEAR SECTION									
																				(PSI) (PLI) (PLI)									
																				MAX MIN MAX MIN MAX MIN									

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. Author	43236	2021-02-03
Seismic System			
Zoning			

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

Scale = 1:30.0



TOTAL WEIGHT = 3 X 18 = 54 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	GROSS REACTION	HORZ	GROSS REACTION	HORZ	BRG	IN-SX	BRG	IN-SX
E	774	0	0	774	0	0	5-8	1-8	1-8
C	280	0	0	280	0	0	1-8	1-8	1-8
D	99	0	0	125	0	0	1-8	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	357 / 0	73 / 0	0 / 0	0 / 0	133 / 0	0 / 0
C	193	157 / 0	0 / 0	0 / 0	0 / 0	38 / 0	0 / 0
D	89	0 / 0	53 / 0	0 / 0	0 / 0	37 / 0	0 / 0

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

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 FORCE (LBS)
FR-TO			
E-B	-637 / 0	0.0 0.0 0.22 (3)	7.81
A-B	0 / 47	-124.4 -124.4 0.17 (1)	10.00
B-C	-52 / 0	-124.4 -124.4 0.77 (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/ 832 (0.09")

CSI: TC=0.77/1.00 (B-C:1) , BC=0.24/1.00 (D-E:3) ,
WB=0.00/1.00 (n/a:0) , SSI=0.30/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.39 (B) (INPUT = 0.90)
JSI METAL= 0.33 (B) (INPUT = 1.00)



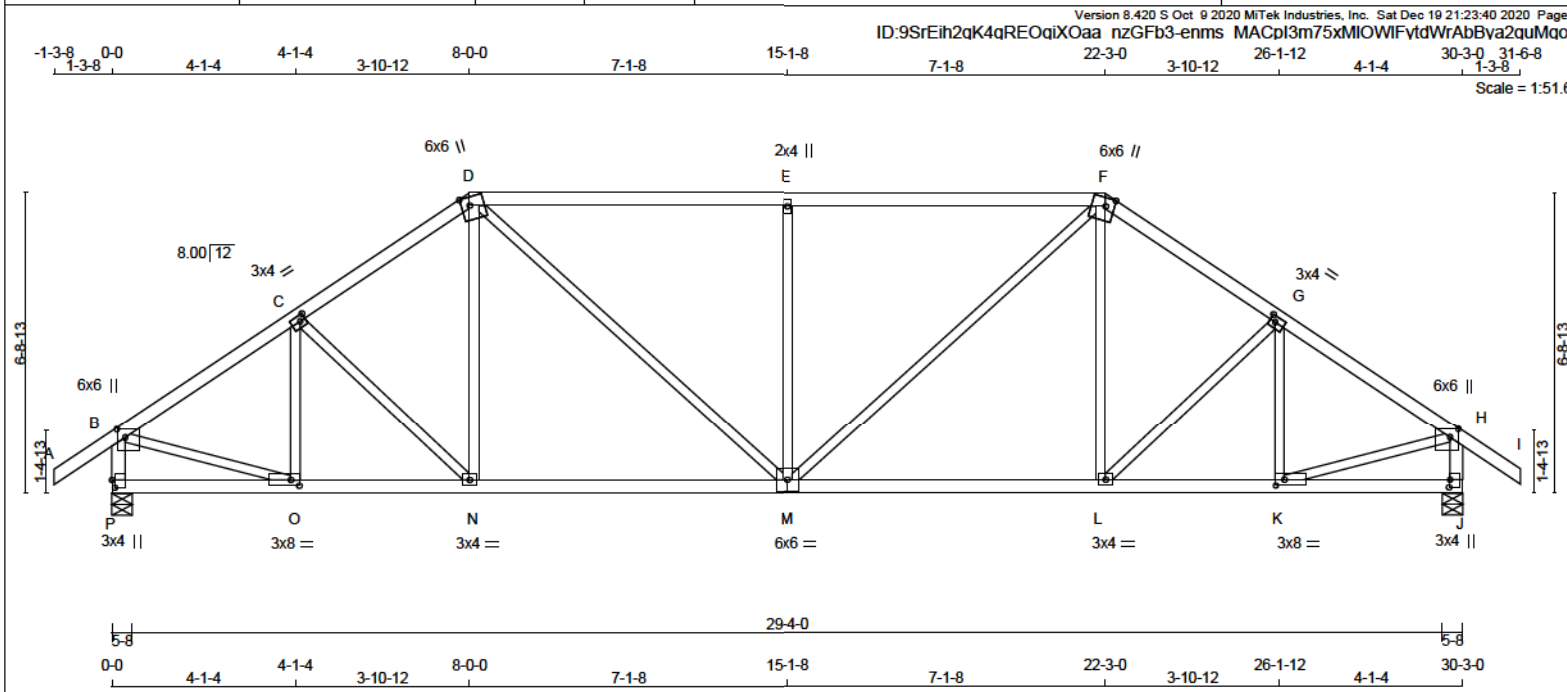
READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



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Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			





LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	6.0	6.0	2.25	2.25
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	TMVW-t	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+p	MT20	6.0	6.0	2.25	2.25
J	BMV1+p	MT20	3.0	4.0	2.00	0.25
K	BMVW-t	MT20	3.0	8.0	1.50	2.25
L	BMVW-t	MT20	3.0	4.0		
M	BSVWV-t	MT20	6.0	6.0		
N	BMVW-t	MT20	3.0	4.0		
O	BMVW-t	MT20	3.0	8.0	1.50	2.25
P	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	HORZ	DOWN	HORZ
P	2646	0	2646	0
J	2646	0	2646	0

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
P	1951	1149 / 0	318 / 0
J	1951	1149 / 0	318 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.88 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX CSI (LC)
FR-TO		FROM	TO	LENGTH	FR-TO		
A-B	0 / 47	-124.4	-124.4	0.17 (1)	10.00	O-C	-501 / 0 0.13 (1)
B-C	-2809 / 0	-124.4	-124.4	0.34 (1)	3.88	C-N	-99 / 0 0.05 (1)
C-D	-2789 / 0	-124.4	-124.4	0.34 (1)	3.88	N-D	0 / 399 0.09 (2)
D-E	-3024 / 0	-124.4	-124.4	0.61 (1)	4.16	D-M	0 / 981 0.22 (1)
E-F	-3024 / 0	-124.4	-124.4	0.61 (1)	4.16	M-E	-1088 / 0 0.22 (1)
F-G	-2789 / 0	-124.4	-124.4	0.34 (1)	3.88	M-F	0 / 981 0.22 (1)
G-H	-2809 / 0	-124.4	-124.4	0.34 (1)	3.88	L-F	0 / 399 0.09 (2)
H-I	0 / 47	-124.4	-124.4	0.17 (1)	10.00	L-G	-99 / 0 0.05 (1)
P-B	-2568 / 0	0.0	0.0	0.26 (1)	5.36	K-G	-501 / 0 0.13 (1)
J-H	-2568 / 0	0.0	0.0	0.26 (1)	5.36	B-O	0 / 2443 0.55 (1)
						K-H	0 / 2443 0.55 (1)
P-O	0 / 0	-39.2	-39.2	0.13 (3)	10.00		
O-N	0 / 2362	-39.2	-39.2	0.62 (2)	10.00		
N-M	0 / 2296	-39.2	-39.2	0.62 (2)	10.00		
M-L	0 / 2296	-39.2	-39.2	0.62 (2)	10.00		
L-K	0 / 2362	-39.2	-39.2	0.62 (2)	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 (1.01")
CALCULATED VERT. DEFL.(LL)= L/999 (0.16")
ALLOWABLE DEFL.(TL)= L/360 (1.01")
CALCULATED VERT. DEFL.(TL)= L/999 (0.28")

CSI: TC=0.61/1.00 (E-F:1) , BC=0.62/1.00 (N-O:2) ,
WB=0.82/1.00 (E-M:1) , SSI=0.43/1.00 (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 (B) (INPUT = 0.80)
JSI METAL = 0.72 (M) (INPUT = 1.00)



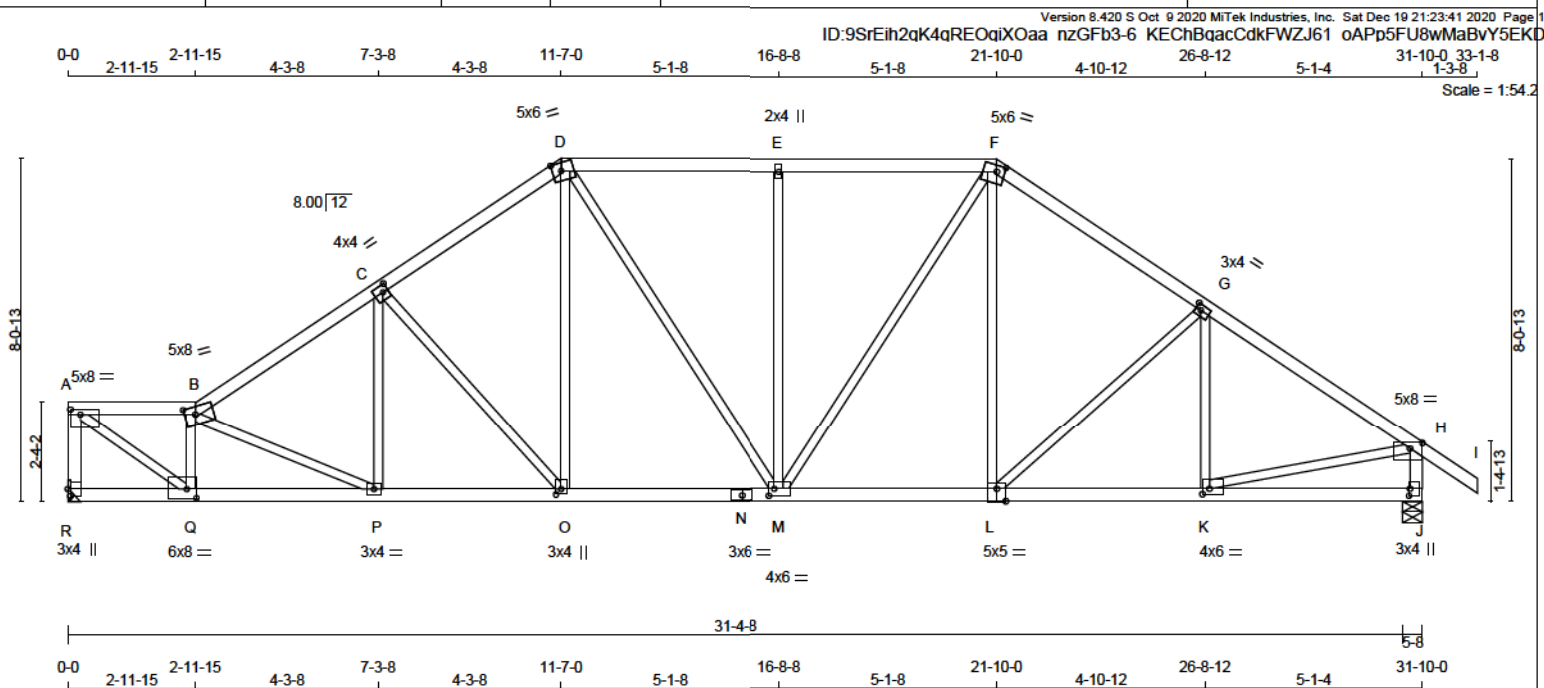
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Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			





TOTAL WEIGHT = 144 lb

LUMBER		LUMBER		DESCR.
CHORDS	SIZE			
R - A	2x4	DRY	No.2	SPF
A - B	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - I	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
H - N	2x4	DRY	No.2	SPF
N - L	2x4	DRY	No.2	SPF
L - J	2x4	DRY	No.2	SPF

ALL WEBS 2x3 DRY
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
PLATES	JT TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	5.0	8.0	1.50	2.75
B	TMVW-m	MT20	5.0	8.0	2.25	3.00
C	TMWW-t	MT20	4.0	4.0	2.00	1.50
D	TMWW-m	MT20	5.0	6.0	Edge	2.50
E	TMW+w	MT20	2.0	4.0		
F	TTWW-m	MT20	5.0	6.0	1.75	2.25
G	TMWW-t	MT20	3.0	4.0	1.50	1.50
H	TMVW-p	MT20	6.0	8.0	1.50	3.50
J	BMV1P-t	MT20	3.0	4.0	2.00	0.25
K	BMWW-t	MT20	4.0	6.0	1.50	2.00
L	BSWW-t	MT20	5.0	5.0	Edge	2.50
M	BSWW-m	MT20	4.0	6.0	Edge	2.50
N	BS-t	MT20	3.0	6.0		
O	BMWW+t	MT20	3.0	4.0	1.50	1.50
P	BMWW-t	MT20	3.0	4.0		
Q	BMWW-t	MT20	6.0	8.0	2.50	2.75
R	BMV1P-t	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	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
R	2605	0	2605	0	0	MECHANICAL	
J	2776	0	2776	0	0	5-8	5-8

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT R. MINIMUM BEARING LENGTH AT JOINT R = 5'-0".

UNFACTORED REACTIONS							
	1ST LCASE	MAX/MIN COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	1929	1108 / 0	334 / 0	0 / 0	0 / 0	487 / 0	0 / 0
J	2047	1204 / 0	334 / 0	0 / 0	0 / 0	509 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.31 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. LCI CS1 (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CS1 (LC)		
FR-TO		FROM TO		LENGTH	FR-TO				
R-A	-2541 /0	0.0	0.0 0.30 (1)	5.38	A-Q	0 /4069	0.92 (1)		
A-B	-3444 /0	-124.4 -124.4 0.26 (1)	3.84	Q-B	-2555 /0		0.35 (1)		
B-C	-3642 /0	-124.4 -124.4 0.47 (1)	3.31	B-P	-438 /0		0.17 (1)		
C-D	-3010 /0	-124.4 -124.4 0.41 (1)	3.88	P-C	0 /398		0.09 (2)		
D-E	-2722 /0	-124.4 -124.4 0.51 (1)	3.69	C-O	-884 /0		0.69 (1)		
E-F	-2722 /0	-124.4 -124.4 0.51 (1)	3.69	O-D	0 /837		0.10 (1)		
F-G	-2807 /0	-124.4 -124.4 0.51 (1)	3.67	D-M	0 /434		0.10 (1)		
G-H	-3878 /0	-124.4 -124.4 0.55 (1)	3.49	M-E	-773 /0		0.97 (1)		
H-I	0 /47	-124.4 -124.4 0.17 (1)	10.00	M-F	0 /760		0.17 (1)		
J-H	-2695 /0	0.0	0.0 0.28 (1)	5.24	L-F	0 /423	0.10 (2)		
					L-G	-398 /0	0.33 (1)		
R-Q	0 /0	-39.2 -39.2 0.07 (1)	10.00	K-G	-312 /75		0.11 (1)		
Q-P	0 /3459	-39.2 -39.2 0.07 (1)	10.00	K-H	0 /2651		0.80 (1)		
P-O	0 /3063	-39.2 -39.2 0.58 (1)	10.00						
O-N	0 /2483	-39.2 -39.2 0.53 (1)	10.00						
N-M	0 /2483	-39.2 -39.2 0.53 (1)	10.00						
M-L	0 /2303	-39.2 -39.2 0.50 (1)	10.00						
L-K	0 /2594	-39.2 -39.2 0.55 (1)	10.00						
K-J	0 /0	-39.2 -39.2 0.22 (3)	10.00						

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

LOADING IN ALL FLAT SECTIONS 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 (0.15")
ALLOWABLE DEFL(TL)= L/360 (1.06")
CALCULATED VERT. DEFL(TL) = L/ 999 (0.26")

CSI: TC=0.55/1.00 (G-H:1) , BC=0.67/1.00 (P-Q:1) ,
WB=0.97/1.00 (E-M:1) , SSI=0.31/1.00 (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= 0.90 (J) (INPUT = 0.90)
JSI METAL= 0.75 (N) (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.**



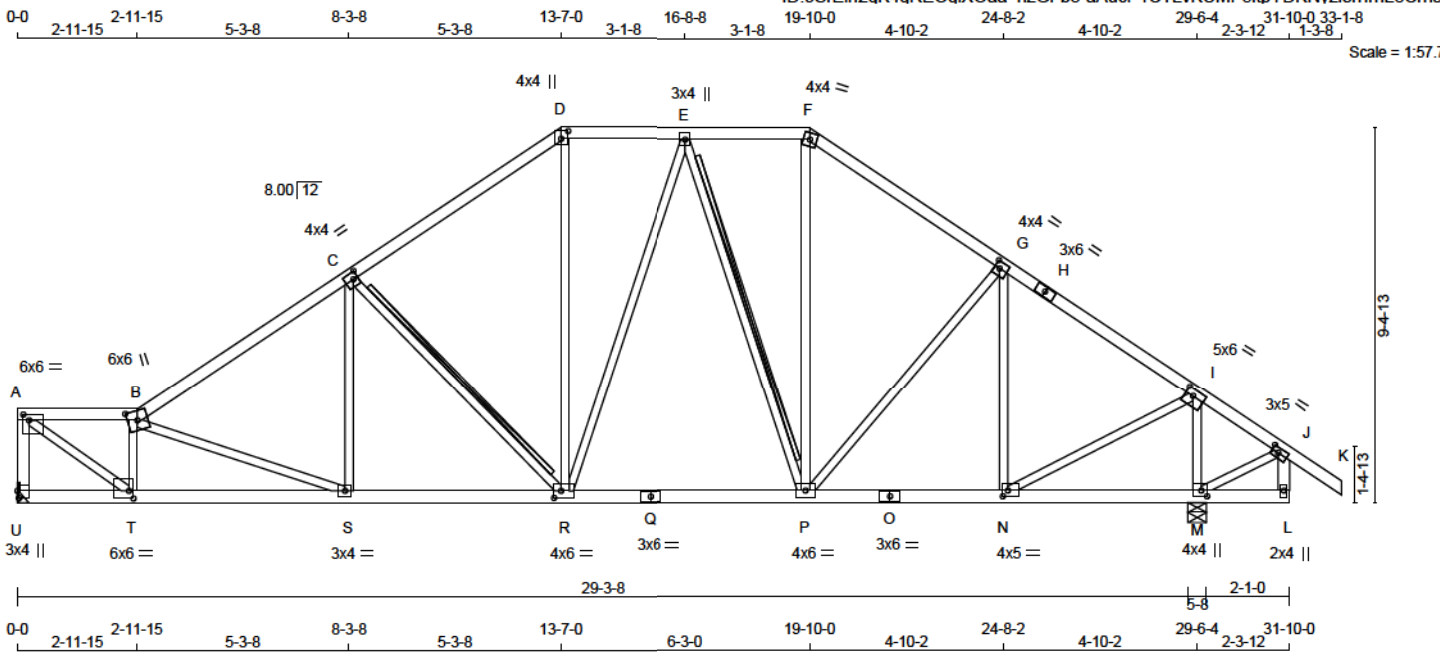
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-0
Sewage System			
Zoning			



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ID:9SrEih2qK4qReOaiXOaa nzGfb3-aAucP1CTLVKUMP5itpYDKNyzlerrfmL8Cmsgy7f



LUMBER

N. L. G. A. RULES

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

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	6.0	6.0	1.75	1.75
B	TTWW+m	MT20	6.0	6.0	3.00	2.75
C	CTMW-t	MT20	4.0	4.0	2.00	1.50
D	TTW+p	MT20	4.0	4.0	2.25	2.25
E	TMWW+t	MT20	3.0	4.0		
F	TTW-m	MT20	4.0	4.0		
G	TMWW-t	MT20	4.0	4.0	2.00	1.50
H	TS-t	MT20	3.0	6.0		
I	TMWW-t	MT20	5.0	6.0	2.00	2.50
J	TMVW-t	MT20	3.0	5.0	1.50	2.00
L	BMV+p	MT20	2.0	4.0		
M	BMWW+t	MT20	4.0	4.0	1.75	1.75
N	BMWW-t	MT20	4.0	5.0	1.75	1.50
O	BS-t	MT20	3.0	6.0		
P	BMWW-t	MT20	4.0	6.0		
Q	BS-t	MT20	3.0	6.0		
R	BMWW-t	MT20	4.0	6.0	2.00	2.00
S	BMWW-t	MT20	3.0	4.0		
T	BMWW-t	MT20	6.0	6.0	2.25	1.50
U	BMV+p	MT20	3.0	4.0	2.00	0.50

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
U	2388	0	2388	0
M	2993	0	2993	0

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT U. MINIMUM BEARING LENGTH AT JOINT U = 4-4.

UNFACTORED REACTIONS

1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT	COMBINED					
U	1769	1014 / 0	308 / 0	0 / 0	447 / 0	0 / 0
M	2207	1298 / 0	360 / 0	0 / 0	549 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.37 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 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 C-R, E-P

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX. (CSI (LC) UNBRAC)	MEMB.	MAX. FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO				FR-TO			
U-A	-2334 / 0	0.0	0.0 0.28 (1)	5.58	A-T	0 / 3738	0.84 (1)
A-B	-3049 / 0	-124.4	-124.4 0.24 (1)	3.81	T-B	-2015 / 0	0.31 (1)
B-C	-3131 / 0	-124.4	-124.4 0.62 (1)	3.37	B-S	-544 / 0	0.31 (1)
C-D	-2340 / 0	-124.4	-124.4 0.54 (1)	3.92	S-C	0 / 452	0.10 (2)
D-E	-1917 / 0	-124.4	-124.4 0.16 (1)	4.72	C-R	-1057 / 0	0.48 (1)
E-F	-1687 / 0	-124.4	-124.4 0.15 (1)	4.98	R-D	0 / 981	0.19 (1)
F-G	-2055 / 0	-124.4	-124.4 0.40 (1)	4.33	R-E	0 / 144	0.03 (2)
G-H	-1926 / 0	-124.4	-124.4 0.38 (1)	4.48	E-P	-802 / 0	0.45 (1)
H-I	-1926 / 0	-124.4	-124.4 0.38 (1)	4.48	P-F	0 / 721	0.10 (1)
I-J	0 / 292	-124.4	-124.4 0.30 (1)	10.00	F-G	0 / 101	0.02 (1)
J-K	0 / 47	-124.4	-124.4 0.17 (1)	10.00	N-G	-815 / 0	0.49 (1)
L-J	0 / 17	0.0	0.0 0.00 (3)	7.81	N-I	0 / 2068	0.47 (1)
U-T	0 / 0	-39.2	-39.2 0.10 (3)	10.00	M-I	-2699 / 0	0.47 (1)
T-S	0 / 3152	-39.2	-39.2 0.64 (1)	10.00	M-J	-227 / 0	0.04 (1)
S-R	0 / 2645	-39.2	-39.2 0.57 (1)	10.00			
R-Q	0 / 1876	-39.2	-39.2 0.45 (1)	10.00			
Q-P	0 / 1876	-39.2	-39.2 0.45 (1)	10.00			
P-O	0 / 1613	-39.2	-39.2 0.40 (2)	10.00			
O-N	0 / 1613	-39.2	-39.2 0.40 (2)	10.00			
N-M	-206 / 0	-39.2	-39.2 0.12 (2)	6.25			
M-L	0 / 0	-39.2	-39.2 0.16 (2)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.98")
CALCULATED VERT. DEFL.(LL) = L/999 (0.13")
ALLOWABLE DEFL.(TL)= L/360 (0.98")
CALCULATED VERT. DEFL.(TL) = L/999 (0.22")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(L)= L/120 (0.23")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/120 (0.23")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.62/1.00 (B-C:1), BC=0.64/1.00 (S-T:1),
WB=0.84/1.00 (A-T:1), SSI=0.27/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.90 (A) (INPUT = 0.90)
JSI METAL = 0.73 (A) (INPUT = 1.00)

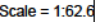


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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seepage System			
Zoning			

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





TOTAL WEIGHT = 181 lb

DRY: SEASONED LUMBER.

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

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT S. MINIMUM BEARING LENGTH AT JOINT S = 4'-4".

UNFACTORED REACTIONS

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.02 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 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 C-P, G-O

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 8" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

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

LOADING

TOTAL LOAD CASES: (4)

DESIGN CRITERIA

SPECIFIED LOADS:

SPACING = 24.0 IN. C/C

LOADING IN ALL FLAT SECTIONS 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:

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(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 (0.98")
CALCULATED VERT. DEFL(LL) = L/ 999 (0.14")
ALLOWABLE DEFL(TL)= L/360 (0.98")
CALCULATED VERT. DEFL(TL) = L/ 999 (0.26")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= $L/120$ (0.23")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.00")
ALLOWABLE DEFL.(TL)= $L/120$ (0.23")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.01")

CSI: TC=0.89/1.00 (B-C:1), BC=0.75/1.00 (Q-R:1), WB=0.84/1.00 (A-R:1), SSI=0.32/1.00 (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

	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.

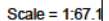
JSI GRIP= 0.90 (A) (INPUT = 0.90)
JSI METAL= 0.73 (A) (INPUT = 1.00)



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





TOTAL WEIGHT = $4 \times 141 = 564$ lb

DRY: SEASONED LUMBER.

J	T	PLATES	W	LEN	Y	X
A	TMWV-t	MT20	5.0	8.0	1.75	3.00
B	TTWV+m	MT20	6.0	6.0	3.00	2.75
C	TS-t	MT20	3.0	6.0		
D	TMWV-t	MT20	4.0	4.0	2.00	1.50
E	TTW+p	MT20	3.0	5.0	2.75	1.50
F	TMWV-t	MT20	3.0	4.0	1.50	1.50
G	TS-t	MT20	3.0	6.0		
H	TMWV-t	MT20	5.0	8.0	2.00	2.50
I	TMWV-t	MT20	3.0	5.0	1.50	2.00
K	BMV+p	MT20	2.0	4.0		
L	BMWV+1t	MT20	4.0	4.0	1.75	1.75
N	BMWV-t	MT20	4.0	5.0	1.75	1.50
O	BS-t	MT20	3.0	6.0		
Q	BMWV-t	MT20	4.0	8.0		
P	BS-t	MT20	3.0	6.0		
Q	BMWV-t	MT20	3.0	5.0		
R	BMWV-t	MT20	6.0	6.0	2.25	1.50
S	BMV+1p	MT20	3.0	4.0	2.00	0.50

BEARINGS

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT S. MINIMUM BEARING LENGTH AT JOINT S = 4'-4".

1ST LCASE MAX./MIN. COMPONENT REACTIONS

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

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.80 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 8.25 FT OR RIGID CEILING DIRECTLY APPLIED.

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

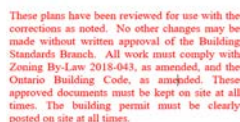
1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF D-O, F-O. DBS = 20-0-0 . CBF = 166 LBS.

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

TOTAL LOAD CASES: (4)

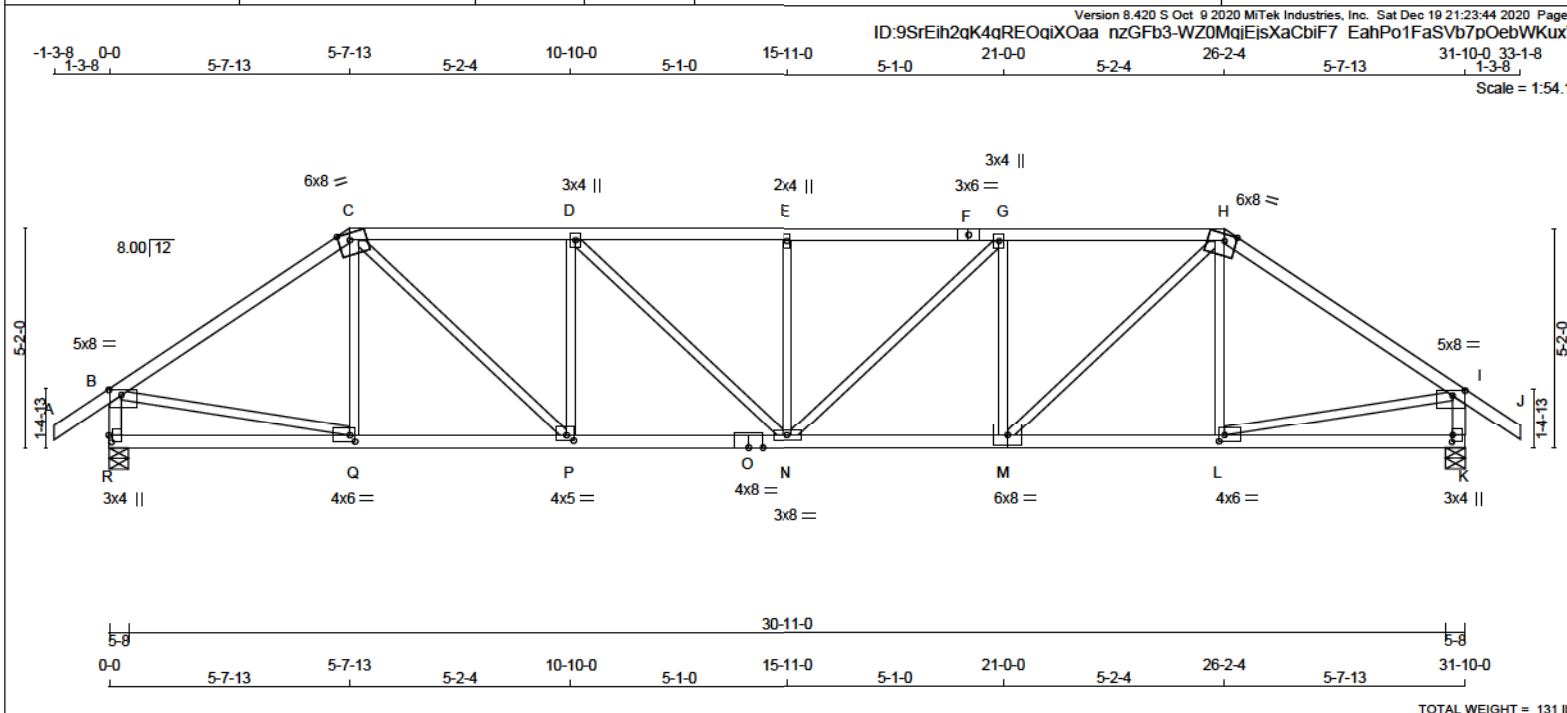
S-R	0/0	-39.2	-39.2	0.18 (3)	10.00
R-Q	0/3172	-39.2	-39.2	0.74 (1)	10.00
Q-P	0/2498	-39.2	-39.2	0.63 (2)	10.00
P-O	0/2498	-39.2	-39.2	0.63 (2)	10.00
O-N	0/1759	-39.2	-39.2	0.48 (2)	10.00
N-M	0/1759	-39.2	-39.2	0.48 (2)	10.00
M-L	-135/0	-39.2	-39.2	0.19 (3)	6.25
L-K	0/0	-39.2	-39.2	0.22 (2)	10.00



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

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





LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY 2100F 1.8E	SPF
C - F	2x4	DRY No.2	SPF
F - H	2x4	DRY No.2	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
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	TTWW-m	MT20	6.0	8.0	2.00	3.25
D	TMVW-t	MT20	3.0	4.0		
E	TMVW-w	MT20	2.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	TMVW-t	MT20	3.0	4.0		
H	TTWW-m	MT20	6.0	8.0	2.00	3.25
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	1.50
M	BSWW-t	MT20	6.0	8.0		
N	BMVW-w	MT20	3.0	8.0		
O	BS-t	MT20	4.0	8.0		
P	BMVW-t	MT20	4.0	5.0	1.50	2.00
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	DOWN	5-8	5-8
R	HORZ	UPLIFT	5-8	5-8
K	HORZ	UPLIFT	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
R	2047	1204 / 0	334 / 0
K	2047	1204 / 0	334 / 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 = 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)	LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)
FR-TO				FR-TO			
A-B	0 / 47	-124.4	-124.4 0.11 (1)	Q-C	-226 / 108	0.09 (1)	
B-C	-3036 / 0	-124.4	-124.4 0.60 (1)	C-P	0 / 1892	0.43 (1)	
C-D	-3898 / 0	-124.4	-124.4 0.80 (1)	P-D	-1113 / 0	0.44 (1)	
D-E	-4312 / 0	-124.4	-124.4 0.86 (1)	D-N	0 / 573	0.13 (1)	
E-F	-4312 / 0	-124.4	-124.4 0.86 (1)	N-E	-562 / 0	0.23 (1)	
F-G	-4312 / 0	-124.4	-124.4 0.86 (1)	N-G	0 / 588	0.13 (1)	
G-H	-3888 / 0	-124.4	-124.4 0.80 (1)	M-G	-1124 / 0	0.44 (1)	
H-I	-3039 / 0	-124.4	-124.4 0.60 (1)	M-H	0 / 1873	0.42 (1)	
I-J	0 / 47	-124.4	-124.4 0.11 (1)	L-H	-212 / 129	0.08 (1)	
R-B	-2684 / 0	0.0	0.0 0.28 (1)	B-Q	0 / 2567	0.58 (1)	
K-I	-2687 / 0	0.0	0.0 0.28 (1)	L-I	0 / 2570	0.58 (1)	
R-Q	0 / 0	-39.2	-39.2 0.24 (3)				
Q-P	0 / 2518	-39.2	-39.2 0.57 (1)				
P-O	0 / 3899	-39.2	-39.2 0.74 (1)				
O-N	0 / 3899	-39.2	-39.2 0.74 (1)				
N-M	0 / 3888	-39.2	-39.2 0.75 (1)				
M-L	0 / 2521	-39.2	-39.2 0.59 (1)				
L-K	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 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 (0.37")

CSI: TC=0.86/1.00 (E-G:1), BC=0.75/1.00 (M-N:1),
WB=0.58/1.00 (I-L:1), SSI=0.30/1.00 (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 (D) (INPUT = 0.90)
JSI METAL = 0.83 (O) (INPUT = 1.00)



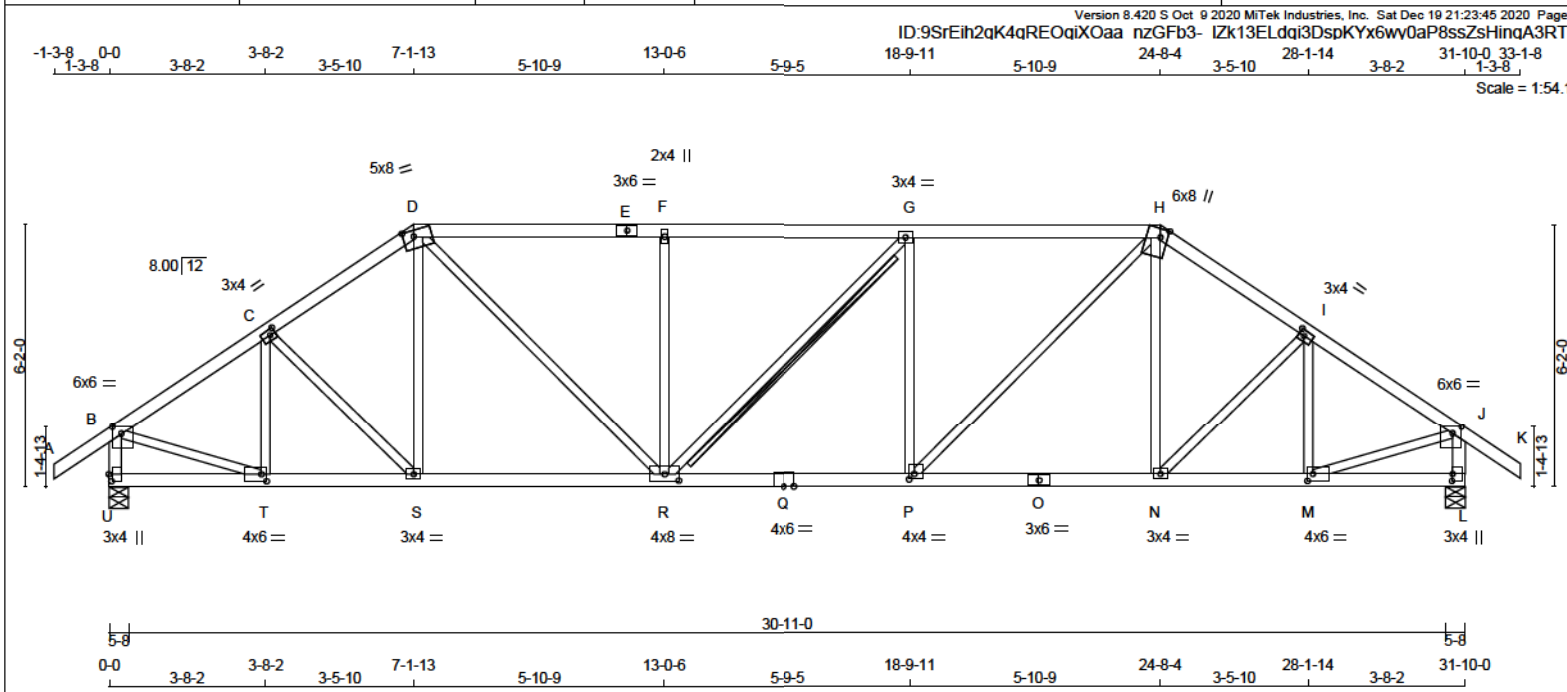
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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			





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	2x3	DRY No.2	SPF

EXCEPT
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	6.0	6.0	2.00	2.50
C	TMVW-t	MT20	3.0	4.0	1.50	1.50
D	TTWW-m	MT20	5.0	8.0	1.75	3.00
E	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 DOWN	REQD BRG UPLIFT	REQD BRG IN-SX
JT	VERT	HORZ			
U	2776	0	2776	0	5-8
L	2776	0	2776	0	5-8

UNFACTORED REACTIONS

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

PERM. LIVE WIND DEAD SOIL
0 / 0 509 / 0 0 / 0 509 / 0 0 / 0

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. FACTORED UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED 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	-2921 / 0	-124.4 -124.4 0.37 (1)	3.75	C-S	0 / 42	0.01 (2)	
C-D	-3012 / 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	-3500 / 0	-124.4 -124.4 0.94 (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 / 2452	-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 / 3500	-39.2 -39.2 0.70 (1)	10.00				
Q-P	0 / 3500	-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 / 2452	-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

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- 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=0.94/1.00 (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)



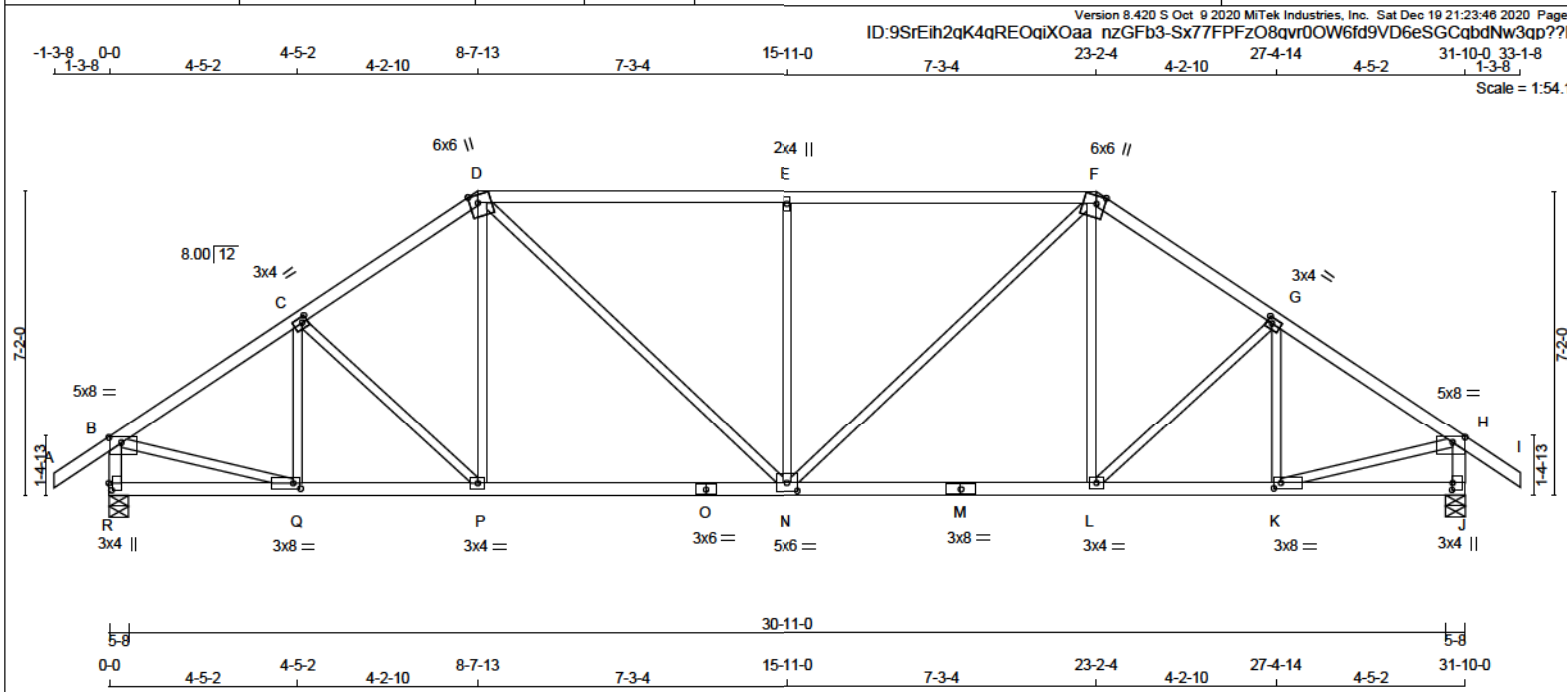
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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			





LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY No.2	SPF
D - F	2x4	DRY 2100F 1.8E	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	6.0	8.0	2.25	2.25
E TMW+w	MT20	2.0	4.0		
F TTWW+m	MT20	6.0	8.0	2.25	2.25
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	3.0	8.0	1.50	2.00
L BMVW-t	MT20	3.0	4.0		
M BS-t	MT20	3.0	8.0		
N BMVW-t	MT20	5.0	8.0	2.25	3.00
O BS-t	MT20	3.0	4.0		
P BMVW-t	MT20	3.0	4.0		
Q BMVW-t	MT20	3.0	8.0	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	REQRD BRG
JT VERT	2776	2776	5-8	5-8
R VERT	2776	2776	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX MIN COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
JT COMBINED	1204 / 0	334 / 0	0 / 0	509 / 0	0 / 0
R	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 = 3.67 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX FACTORED CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 47	-124.4 -124.4	0.17 (1)	10.00	Q-C	-460 / 0	0.13 (1)
B-C	-3016 / 0	-124.4 -124.4	0.41 (1)	3.67	C-P	-179 / 0	0.11 (1)
C-D	-2932 / 0	-124.4 -124.4	0.40 (1)	3.73	P-D	0 / 393	0.09 (2)
D-E	-3157 / 0	-124.4 -124.4	0.64 (1)	4.04	D-N	0 / 1024	0.23 (1)
E-F	-3157 / 0	-124.4 -124.4	0.64 (1)	4.04	N-E	-1110 / 0	0.98 (1)
F-G	-2932 / 0	-124.4 -124.4	0.40 (1)	3.73	N-F	0 / 1024	0.23 (1)
G-H	-3016 / 0	-124.4 -124.4	0.41 (1)	3.67	L-F	0 / 393	0.09 (2)
H-I	0 / 47	-124.4 -124.4	0.17 (1)	10.00	L-G	-179 / 0	0.11 (1)
R-B	-2697 / 0	0.0	0.0 0.28 (1)	5.24	K-G	-460 / 0	0.13 (1)
J-H	-2697 / 0	0.0	0.0 0.28 (1)	5.24	B-Q	0 / 2612	0.56 (1)
					K-H	0 / 2612	0.56 (1)
R-Q	0 / 0	-39.2	-39.2 0.13 (3)	10.00			
Q-P	0 / 2537	-39.2	-39.2 0.58 (1)	10.00			
P-O	0 / 2412	-39.2	-39.2 0.64 (2)	10.00			
O-N	0 / 2412	-39.2	-39.2 0.64 (2)	10.00			
N-M	0 / 2412	-39.2	-39.2 0.64 (2)	10.00			
M-L	0 / 2412	-39.2	-39.2 0.64 (2)	10.00			
L-K	0 / 2537	-39.2	-39.2 0.58 (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

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- 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 (0.25")

CSI: TC=0.64/1.00 (D-E-1), BC=0.64/1.00 (N-P-2),
WB=0.99/1.00 (E-N-1), SSI=0.44/1.00 (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 (R) (INPUT = 0.90)
JSI METAL = 0.94 (M) (INPUT = 1.00)



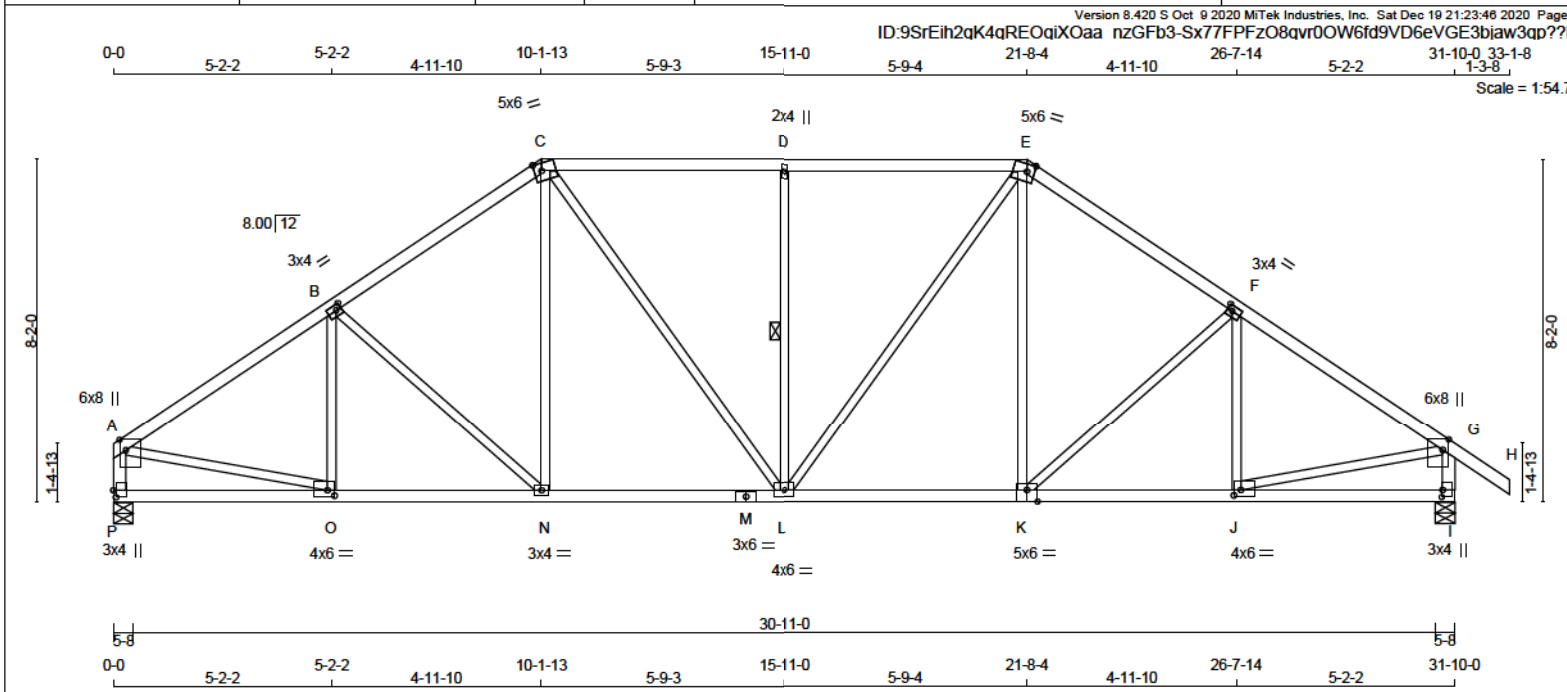
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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			





LUMBER				N. L. G. A. RULES	
CHORDS	SIZE	LUMBER	DESCR.	SPF	
A - C	2x4	DRY	No.2	SPF	
C - E	2x4	DRY	No.2	SPF	
E - H	2x4	DRY	No.2	SPF	
P - A	2x4	DRY	No.2	SPF	
I - G	2x4	DRY	No.2	SPF	
J - M	2x4	DRY	No.2	SPF	
M - K	2x4	DRY	No.2	SPF	
K - 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
A	TMVW+p	MT20	6.0	8.0	Edge 1.75
B	TMVW-t	MT20	3.0	4.0	1.50 1.50
C	TTWW-m	MT20	5.0	8.0	2.25 2.00
D	TMVW+w	MT20	2.0	4.0	
E	TTWW-m	MT20	5.0	8.0	2.25 2.00
F	TMVW-t	MT20	3.0	4.0	1.50 1.50
G	TMVW+p	MT20	6.0	8.0	Edge 1.75
I	BMVW-t	MT20	3.0	4.0	2.00 0.25
J	BMVW-t	MT20	4.0	6.0	1.50 2.00
K	BSWW-t	MT20	5.0	6.0	3.25 3.00
L	BMVW-t	MT20	4.0	6.0	
M	BS-t	MT20	3.0	4.0	
N	BMVW-t	MT20	3.0	4.0	
O	BMVW-t	MT20	4.0	6.0	1.50 2.00
P	BMVW-t	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	REQD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
P	2605	0	2605	0	0
I	2776	0	2776	0	0

UNFACTORED REACTIONS					
1ST CASE	MAX	MIN	COMPONENT REACTIONS		
JT	COMBINED	SNOW	LIVE	PERM	LIVE
P	1929	1108 / 0	334 / 0	0 / 0	0 / 0
I	2047	1204 / 0	334 / 0	0 / 0	0 / 0

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

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 D-L 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

CHORDS				WEBS			
MEMB.	FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	FACTORED L1 MAX CSI (LC)	MEMB.	FACTORED FORCE (LBS)	FACTORED MAX CSI (LC)	
FR-TO				FR-TO			
A-B	-3076 / 0	-124.4 -124.4	0.57 (1)	3.47	O-B	-325 / 54	0.11 (1)
B-C	-2807 / 0	-124.4 -124.4	0.53 (1)	3.85	B-N	-397 / 0	0.34 (1)
C-D	-2711 / 0	-124.4 -124.4	0.64 (1)	3.49	N-C	0 / 475	0.11 (2)
D-E	-2711 / 0	-124.4 -124.4	0.64 (1)	3.49	C-L	0 / 690	0.16 (1)
E-F	-2794 / 0	-124.4 -124.4	0.53 (1)	3.66	L-D	-876 / 0	0.37 (1)
F-G	-3082 / 0	-124.4 -124.4	0.57 (1)	3.47	L-E	0 / 708	0.16 (1)
G-H	0 / 47	-124.4 -124.4	0.17 (1)	10.00	K-E	0 / 448	0.10 (2)
P-A	-2519 / 0	0.0	0.26 (1)	5.40	K-F	-417 / 0	0.36 (1)
I-G	-2694 / 0	0.0	0.28 (1)	5.24	J-F	-301 / 83	0.10 (1)
					A-O	0 / 2649	0.60 (1)
					J-G	0 / 2653	0.60 (1)
P-O	0 / 0	-39.2 -39.2	0.19 (3)	10.00			
O-N	0 / 2593	-39.2 -39.2	0.53 (1)	10.00			
N-M	0 / 2303	-39.2 -39.2	0.54 (1)	10.00			
M-L	0 / 2303	-39.2 -39.2	0.54 (1)	10.00			
L-K	0 / 2292	-39.2 -39.2	0.54 (1)	10.00			
K-J	0 / 2598	-39.2 -39.2	0.55 (1)	10.00			
J-I	0 / 0	-39.2 -39.2	0.23 (3)	10.00			

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

SPACING = 24.0 IN. C/C

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 (0.14")
ALLOWABLE DEFL.(TL)= L/360 (1.06")
CALCULATED VERT. DEFL.(TL)= L/999 (0.24")

CSI: TC=0.84/1.00 (D-E-1) , BC=0.55/1.00 (J-K-1) , WB=0.60/1.00 (G-J-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) (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 (N) (INPUT = 0.90)
JSI METAL = 0.73 (M) (INPUT = 1.00)



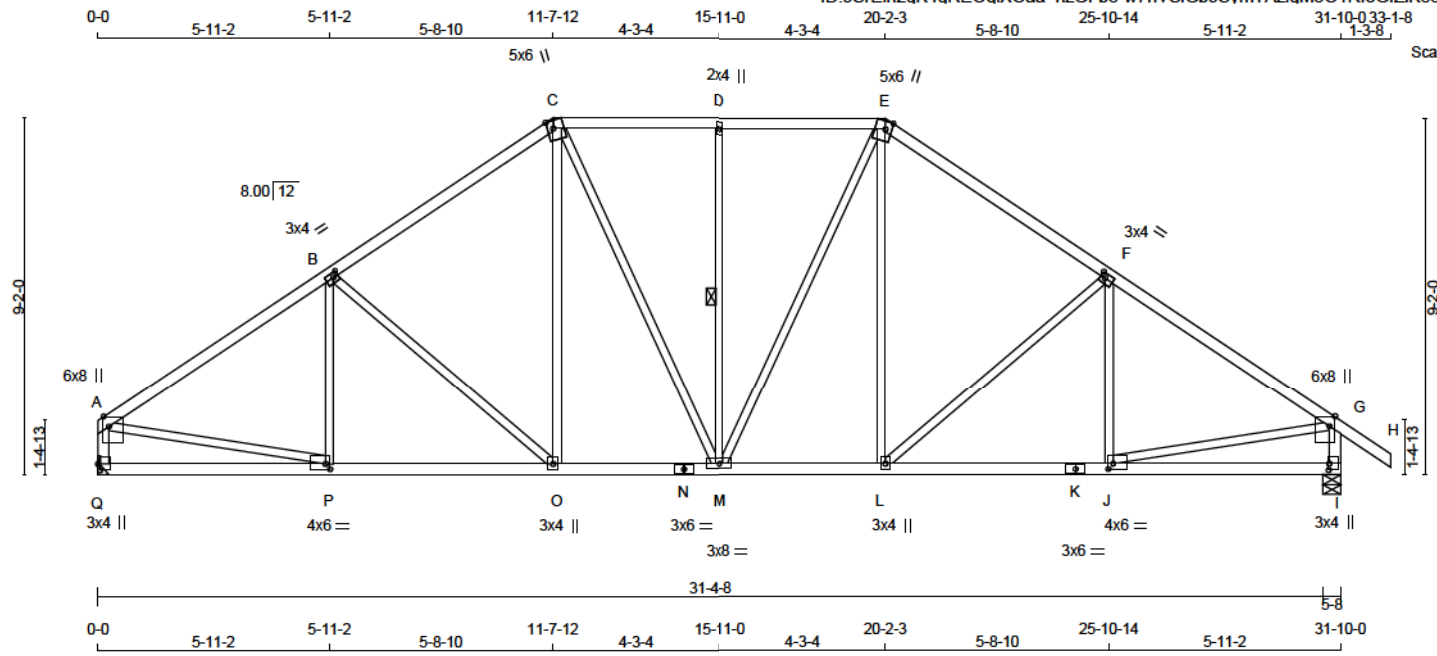
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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			

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 = 148 lb

LUMBER				N. L. G. A. RULES	
CHORDS	SIZE	LUMBER	DESCR.	SPF	
A - C	2x4	DRY	No.2	SPF	
C - E	2x4	DRY	No.2	SPF	
E - H	2x4	DRY	No.2	SPF	
Q - A	2x4	DRY	No.2	SPF	
I - G	2x4	DRY	No.2	SPF	
Q - N	2x4	DRY	No.2	SPF	
N - K	2x4	DRY	No.2	SPF	
K - 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
A	TMVW+p	MT20	6.0	8.0	Edge 1.75
B	TMVW-t	MT20	3.0	4.0	1.50 1.50
C	TTWW+m	MT20	5.0	8.0	Edge 1.75
D	TMVW-t	MT20	2.0	4.0	
E	TTWW+m	MT20	5.0	8.0	Edge 1.75
F	TMVW-t	MT20	3.0	4.0	1.50 1.50
G	TMVW+p	MT20	6.0	8.0	Edge 1.75
I	BMVW-t	MT20	3.0	4.0	2.00 0.25
J	BMVW-t	MT20	4.0	6.0	1.75 1.50
K	BS-t	MT20	3.0	6.0	
L	BMVW-t	MT20	3.0	4.0	
M	BMVW-t	MT20	3.0	8.0	
N	BS-t	MT20	3.0	6.0	
O	BMVW-t	MT20	3.0	4.0	
P	BMVW-t	MT20	4.0	6.0	1.75 1.50
Q	BMVW-t	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	HORZ	DOWN	HORZ	UPLIFT IN-SX
Q	2805	0	2805	0	MECHANICAL
I	2778	0	2778	0	5-8

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT Q. MINIMUM BEARING LENGTH AT JOINT Q = 5-0.

UNFACTORED REACTIONS						
1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT	COMBINED					
Q	1929	1108 / 0	334 / 0	0 / 0	487 / 0	0 / 0
I	2047	1204 / 0	334 / 0	0 / 0	509 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.20 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 D-M. 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)	MAX. FACTORED HORZ. LOAD (LC1 MAX)	MAX. FACTORED UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORZ. LOAD (LC)
FR-TO					FR-TO		
A-B	-3104 / 0	-124.4	-124.4	0.77 (1)	3.20	P-B	-219 / 133
B-C	-2868 / 0	-124.4	-124.4	0.68 (1)	3.51	B-O	-591 / 0
C-D	-2370 / 0	-124.4	-124.4	0.34 (1)	4.14	O-C	0 / 585
D-E	-2370 / 0	-124.4	-124.4	0.34 (1)	4.14	C-M	0 / 433
E-F	-2868 / 0	-124.4	-124.4	0.68 (1)	3.51	M-D	-837 / 0
F-G	-3104 / 0	-124.4	-124.4	0.77 (1)	3.20	M-E	0 / 433
G-H	0 / 47	-124.4	-124.4	0.17 (1)	10.00	L-E	0 / 585
Q-A	-2510 / 0	0.0	0.0	0.26 (1)	5.41	L-F	-591 / 0
I-G	-2880 / 0	0.0	0.0	0.28 (1)	5.26	J-F	-219 / 133
Q-P	0 / 0	-39.2	-39.2	0.27 (3)	10.00	A-P	0 / 2665
P-O	0 / 2622	-39.2	-39.2	0.59 (1)	10.00	J-G	0 / 2665
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 / 2182	-39.2	-39.2	0.46 (1)	10.00		
L-K	0 / 2622	-39.2	-39.2	0.59 (1)	10.00		
K-J	0 / 2622	-39.2	-39.2	0.59 (1)	10.00		
J-I	0 / 0	-39.2	-39.2	0.27 (3)	10.00		

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 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 (A-B-1), BC=0.59/1.00 (O-P-1), WB=0.71/1.00 (B-O-1), SSI=0.29/1.00 (F-G-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (P) (INPUT = 0.80)
JSI METAL = 0.82 (K) (INPUT = 1.00)



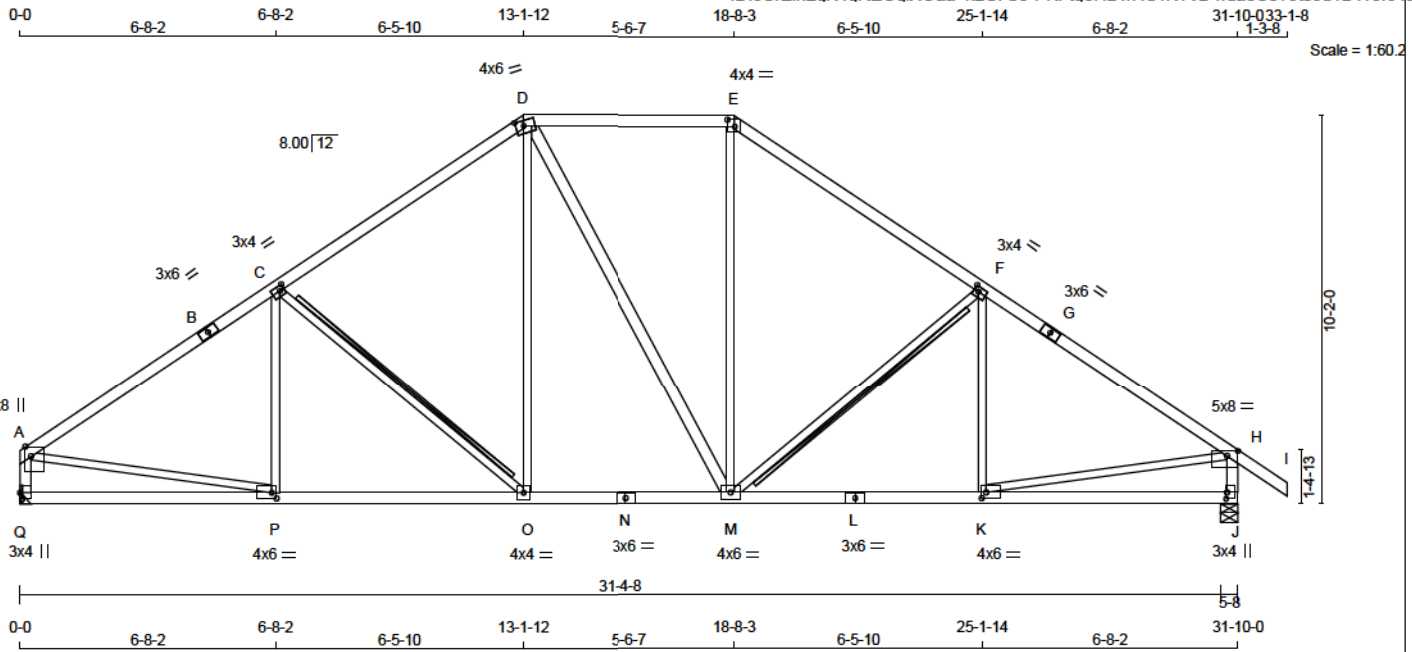
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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			





TOTAL WEIGHT = 143 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT TYPE	PLATES	W	LEN	Y X
A - TMVW+p	MT20	6.0	8.0	Edge 1.75
B - TS-t	MT20	3.0	6.0	
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-t	MT20	4.0	4.0	2.25 2.25
F - TMVW-t	MT20	3.0	4.0	1.50 1.50
G - TS-t	MT20	3.0	6.0	
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	4.0	6.0	
N - BS-t	MT20	3.0	6.0	
O - BMVW-t	MT20	4.0	4.0	
P - BMVW-t	MT20	4.0	6.0	1.75 1.50
Q - 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	2805	2805	0	0
Q	2805	2805	0	0
J	2776	2776	0	0

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT Q. MINIMUM BEARING LENGTH AT JOINT Q = 5'-0."

UNFACTORED REACTIONS

1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT COMBINED	1108 / 0	334 / 0	0 / 0	0 / 0	487 / 0	0 / 0
Q	1204 / 0	334 / 0	0 / 0	0 / 0	509 / 0	0 / 0

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

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 C-O, F-M

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. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 MAX. (LC)	MEMB.	MAX. FORCE (LBS)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 MAX. (LC)
FR-TO				FR-TO			
A-B	-3110 / 0	-124.4	-124.4 0.58 (1)	P-C	-130 / 199	0.07 (1)	0.44 (1)
B-C	-3110 / 0	-124.4	-124.4 0.58 (1)	C-O	-770 / 0	0.16 (1)	0.16 (1)
C-D	-2513 / 0	-124.4	-124.4 0.52 (1)	O-D	0 / 718	0.00 (1)	0.16 (1)
D-E	-2051 / 0	-124.4	-124.4 0.55 (1)	D-M	0 / 2	0.00 (1)	0.16 (1)
E-F	-2514 / 0	-124.4	-124.4 0.52 (1)	M-E	0 / 720	0.16 (1)	0.16 (1)
F-G	-3108 / 0	-124.4	-124.4 0.58 (1)	M-F	-769 / 0	0.44 (1)	0.07 (1)
G-H	-3108 / 0	-124.4	-124.4 0.58 (1)	K-F	-132 / 187	0.07 (1)	0.80 (1)
H-I	0 / 47	-124.4	-124.4 0.11 (1)	A-P	0 / 2868	0.80 (1)	0.00 (1)
Q-A	-2498 / 0	0.0	0.0 0.26 (1)	K-H	0 / 2000	0.00 (1)	
J-H	-2670 / 0	0.0	0.0 0.28 (1)				
Q-P	0 / 0	-39.2	-39.2 0.34 (3)				
P-O	0 / 2632	-39.2	-39.2 0.66 (2)				
O-N	0 / 2050	-39.2	-39.2 0.48 (1)				
N-M	0 / 2050	-39.2	-39.2 0.48 (1)				
M-L	0 / 2632	-39.2	-39.2 0.66 (2)				
L-K	0 / 2632	-39.2	-39.2 0.66 (2)				
K-J	0 / 0	-39.2	-39.2 0.34 (3)				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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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 (0.21")

CSI: TC=0.58/1.00 (A-C:1) , BC=0.66/1.00 (O-P:2) ,
WB=0.60/1.00 (A-P:1) , SSI=0.33/1.00 (A-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (J) (INPUT = 0.90)
JSI METAL = 0.93 (L) (INPUT = 1.00)



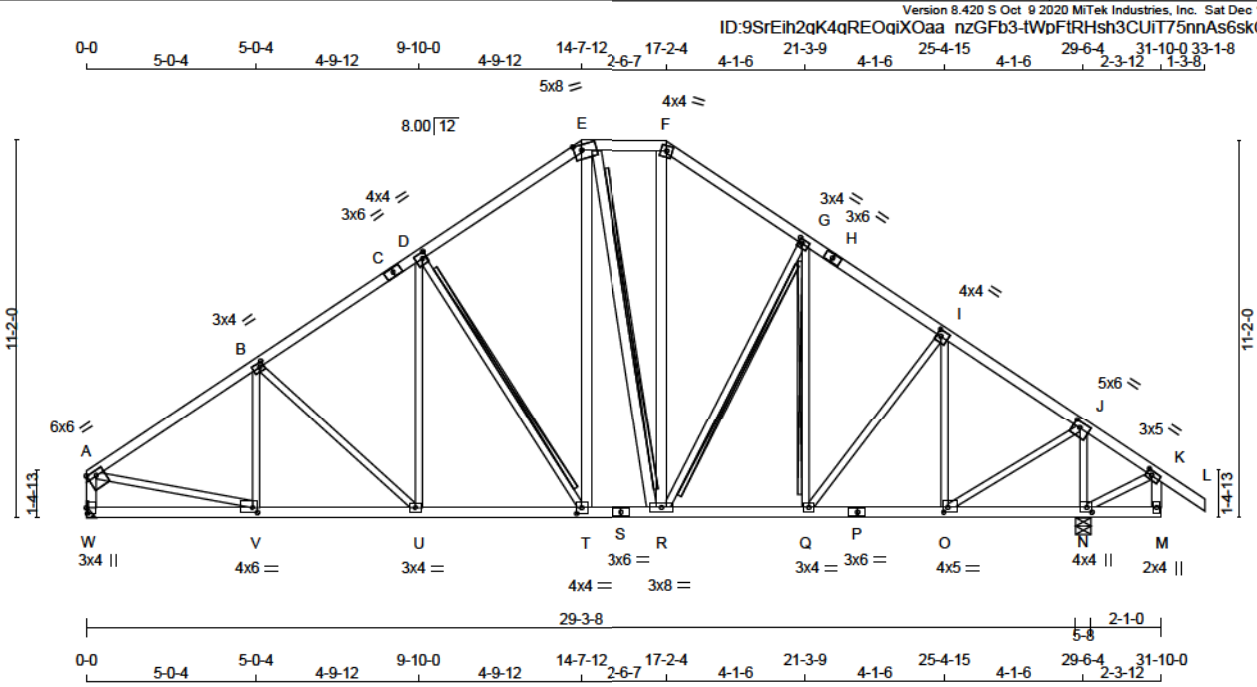
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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			





LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY No.2	SPF
C - E	2x4	DRY No.2	SPF
E - F	2x4	DRY No.2	SPF
F - H	2x4	DRY No.2	SPF
H - L	2x4	DRY No.2	SPF
W - A	2x4	DRY No.2	SPF
M - K	2x4	DRY No.2	SPF
W - S	2x4	DRY No.2	SPF
S - P	2x4	DRY No.2	SPF
P - M	2x4	DRY No.2	SPF
ALL WEBS	2x3	DRY No.2	SPF
EXCEPT			
T - E	2x4	DRY No.2	SPF
E - R	2x4	DRY No.2	SPF
R - F	2x4	DRY No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A TMVW-t	MT20	6.0	6.0	1.75	Edge
B TMVW-t	MT20	3.0	4.0	1.50	1.50
C TS-t	MT20	3.0	6.0		
D TMVW-t	MT20	4.0	4.0	2.00	1.50
E TTW-m	MT20	5.0	8.0	2.00	2.75
F TTW-m	MT20	4.0	4.0		
G TMVW-t	MT20	3.0	4.0	1.50	1.50
H TS-t	MT20	3.0	6.0		
I TMVW-t	MT20	4.0	4.0	2.00	1.50
J TMVW-t	MT20	5.0	6.0	2.00	2.50
K TMVW-t	MT20	3.0	5.0	1.50	2.00
M BMV+tp	MT20	2.0	4.0		
N BMVW1+tp	MT20	4.0	4.0	1.75	1.75
O BMVW-t	MT20	4.0	5.0	1.75	1.50
P BS-t	MT20	3.0	6.0		
Q BMVW-t	MT20	3.0	4.0		
R BMVW-t	MT20	3.0	8.0		
S BS-t	MT20	3.0	6.0		
T BMVW-t	MT20	4.0	4.0	2.00	1.75
U BMVW-t	MT20	3.0	4.0		
V BMVW-t	MT20	4.0	6.0	1.75	1.75
W BMV1+tp	MT20	3.0	4.0	2.00	0.50

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

BEARINGS

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT VERT	2388	0	2388
W	2993	0	2993
N	2993	0	2993

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT W. MINIMUM BEARING LENGTH AT JOINT W = 4'-4".

UNFACTORED REACTIONS

1ST CASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	1014	0	308
W	1298	0	380
N	1298	0	380

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.74 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 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-T, E-R, G-R, G-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. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED L1 MAX. CSI (LC)	MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED L1 MAX. CSI (LC)
FR-TO				FR-TO			
A-B	-2781 / 0	-124.4	-124.4 0.49 (1)	3.74	V-B	-291 / 58	0.10 (1)
B-C	-2506 / 0	-124.4	-124.4 0.41 (1)	4.00	B-U	-326 / 0	0.25 (1)
C-D	-2506 / 0	-124.4	-124.4 0.41 (1)	4.00	U-D	0 / 435	0.10 (2)
D-E	-1953 / 0	-124.4	-124.4 0.39 (1)	4.44	D-T	-895 / 0	0.58 (1)
E-F	-1562 / 0	-124.4	-124.4 0.13 (1)	5.18	T-E	0 / 881	0.14 (1)
F-G	-1897 / 0	-124.4	-124.4 0.28 (1)	4.62	E-R	-217 / 0	0.19 (1)
G-H	-2086 / 0	-124.4	-124.4 0.28 (1)	4.47	R-F	0 / 878	0.11 (1)
H-I	-2086 / 0	-124.4	-124.4 0.28 (1)	4.47	R-G	-374 / 0	0.25 (1)
I-J	-1800 / 0	-124.4	-124.4 0.22 (1)	4.60	Q-I	-134 / 97	0.07 (1)
J-K	0 / 304	-124.4	-124.4 0.27 (1)	10.00	Q-I	0 / 378	0.09 (1)
K-L	0 / 47	-124.4	-124.4 0.17 (1)	10.00	O-I	-950 / 0	0.47 (1)
W-A	-2304 / 0	0.0	0.0 0.24 (1)	5.82	O-J	0 / 2035	0.46 (1)
M-K	0 / 25	0.0	0.0 0.00 (3)	10.00	N-J	-2711 / 0	0.47 (1)
W-V	0 / 0	-39.2	-39.2 0.17 (3)	10.00	A-V	0 / 2377	0.53 (1)
V-U	0 / 2324	-39.2	-39.2 0.48 (1)	10.00	N-K	-242 / 0	0.04 (1)
U-T	0 / 2084	-39.2	-39.2 0.43 (1)	10.00			
T-S	0 / 1608	-39.2	-39.2 0.34 (1)	10.00			
S-R	0 / 1608	-39.2	-39.2 0.34 (1)	10.00			
R-Q	0 / 1728	-39.2	-39.2 0.35 (1)	10.00			
Q-P	0 / 1497	-39.2	-39.2 0.31 (1)	10.00			
P-O	0 / 1497	-39.2	-39.2 0.31 (1)	10.00			
O-N	-220 / 0	-39.2	-39.2 0.10 (2)	6.25			
N-M	0 / 0	-39.2	-39.2 0.13 (2)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.98")
CALCULATED VERT. DEFL.(LL)= L/999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (0.98")
CALCULATED VERT. DEFL.(TL)= L/999 (0.17")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.23")
CALCULATED VERT. DEFL.(LL)= L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/120 (0.23")
CALCULATED VERT. DEFL.(TL)= L/999 (0.00")

CSI: TC=0.48/1.00 (A-B:1), BC=0.48/1.00 (U-V:1), WB=0.58/1.00 (D-T:1), SS=0.24/1.00 (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 850 371 1747 788 1987 1873

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.90 (J) (INPUT = 0.90)
JSI METAL= 0.70 (A) (INPUT = 1.00)



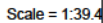
These plans have been reviewed for use with the correction as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as amended. These approved documents must be kept on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

Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seismic 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.



CONTINUED ON PAGE 2



TOTAL WEIGHT = 73 lb

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

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)= $L/360$ (0.44")
 CALCULATED VERT. DEFL.(LL) = $L/999$ (0.02")
 ALLOWABLE DEFL.(TL)= $L/360$ (0.44")
 CALCULATED VERT. DEFL.(TL) = $L/999$ (0.04")

CSI: TC=0.18/1.00 (B-C:1) , BC=0.20/1.00 (J-K:2) ,
WB=0.21/1.00 (F-I:1) , 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

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 = 0.90)
JSI METAL= 0.72 (L) (INPUT = 1.00)



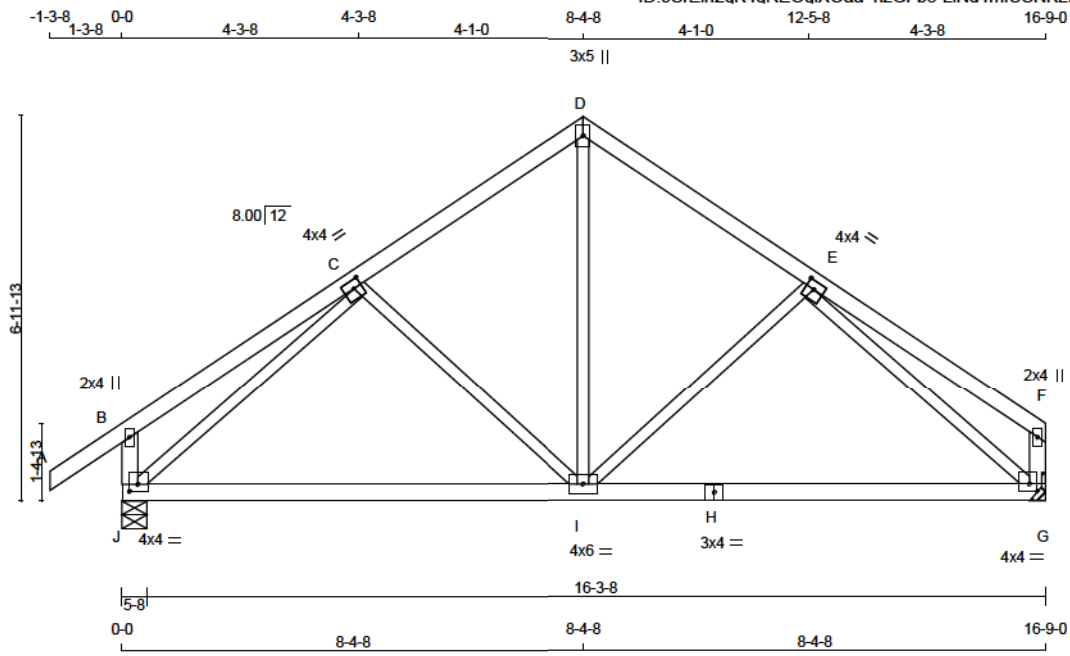
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			



**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 21:23:50 2020 Page 1
ID:9SrEih2qK4qREOqIXOaa nzGFb3-LiNd4mIUSNKLKdiiHLVh5f3HP3tYGXU W SnC8Cy7



Scale = 1:41.8

TOTAL WEIGHT = 2 X 69 = 138 lb

LUMBER					
N. L. G. A. RULES					
CHORDS		SIZE	LUMBER		DESCR.
A - D	2x4	DRY	No.2		SPF
D - F	2x4	DRY	No.2		SPF
J - B	2x4	DRY	No.2		SPF
G - F	2x4	DRY	No.2		SPF
J - H	2x4	DRY	No.2		SPF
H - 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	TMV+p	MT20	2.0	4.0		
C	TMWW-t	MT20	4.0	4.0	1.75	1.75
D	TTW+p	MT20	3.0	5.0		
E	TMWW-t	MT20	4.0	4.0	1.75	1.75
F	TMV+p	MT20	2.0	4.0		
G	BMVW1-t	MT20	4.0	4.0	1.50	1.75
H	BS-t	MT20	3.0	4.0		
I	BMWW-t	MT20	4.0	6.0		
J	BMVW1-t	MT20	4.0	4.0	1.50	1.75

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

BEARINGS					
FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG		
JT VERT	1542	0	1542	0	0
JT HORZ	1371	0	1371	0	0
G VERT	1371	0	1371	0	0
G HORZ	1371	0	1371	0	0

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

UNFACTORED REACTIONS						
1ST LCASE	MAX	MIN	COMPONENT REACTIONS			
JT COMBINED	879	0	176	0	0	0
JT SNOW	879	0	176	0	0	0
JT LIVE	879	0	176	0	0	0
JT PERM.LIVE	879	0	176	0	0	0
JT WIND	879	0	176	0	0	0
JT DEAD	879	0	176	0	0	0
JT SOIL	879	0	176	0	0	0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.65 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	0 / 47	-124.4	-124.4	0.17 (1)	10.00	0 / 813	0.17 (1)
A-B	0 / 33	-124.4	-124.4	0.35 (1)	10.00	0 / 813	0.18 (1)
B-C	-1129 / 0	-124.4	-124.4	0.28 (1)	5.85	-299 / 8	0.17 (1)
C-D	-1129 / 0	-124.4	-124.4	0.28 (1)	5.85	-1541 / 0	0.83 (1)
D-E	0 / 33	-124.4	-124.4	0.35 (1)	10.00	-1541 / 0	0.83 (1)
E-F	-371 / 0	0.0	0.0	0.04 (1)	7.81		
F-G	-200 / 0	0.0	0.0	0.02 (1)	7.81		
J-I	0 / 1131	-39.2	-39.2	0.73 (2)	10.00		
I-H	0 / 1132	-39.2	-39.2	0.73 (2)	10.00		
H-G	0 / 1132	-39.2	-39.2	0.73 (2)	10.00		

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.56")
CALCULATED VERT. DEFL.(LL) = L/969 (0.15")
ALLOWABLE DEFL.(TL) = L/360 (0.56")
CALCULATED VERT. DEFL.(TL) = L/810 (0.25")

CSI: TC=0.35/1.00 (E-F:1), BC=0.73/1.00 (G-I:2),
WB=0.83/1.00 (E-G:1), SSI=0.22/1.00 (G-I:3)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (E) (INPUT = 0.90)
JSI METAL = 0.49 (E) (INPUT = 1.00)



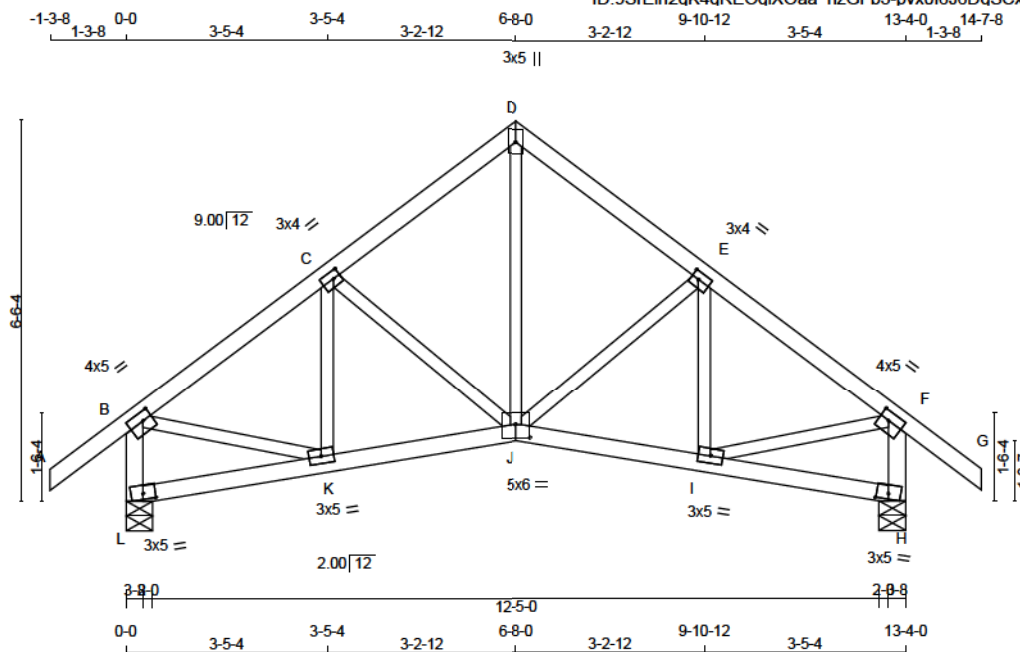
READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



These plans have been reviewed for use with the correction 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. Author	43236	2021-02-03
Seismic System			
Zoning			





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	1.75 2.00
C	TMVW-t	MT20	3.0	4.0	1.50 1.50
D	TTW+p	MT20	3.0	5.0	
E	TMVW-t	MT20	3.0	4.0	1.50 1.50
F	TMVW-t	MT20	4.0	5.0	1.75 2.00
H	BVM1-t	MT20	3.0	5.0	1.25 2.50
I	BMVW-t	MT20	3.0	5.0	
J	BMVW-p	MT20	5.0	6.0	2.75 3.00
K	BMVW-t	MT20	3.0	5.0	
L	BVM1-t	MT20	3.0	5.0	1.25 2.50

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	1283	1283	5-8	1-8
L H	1283	1283	5-8	1-8

UNFACTORED REACTIONS

1ST LCASE	MAX. MIN. COMPONENT REACTIONS
JT COMBINED	SNOW LIVE PERM. LIVE WIND DEAD SOIL
L 928	580 / 0 140 / 0 0 / 0 0 / 0 228 / 0 0 / 0
H 928	580 / 0 140 / 0 0 / 0 0 / 0 228 / 0 0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.82 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
A-B	0 / 51	-124.4 -124.4	0.17 (1)	10.00	J-D	0 / 754	0.17 (1)
B-C	-1111 / 0	-124.4 -124.4	0.18 (1)	5.82	J-E	-269 / 0	0.08 (1)
C-D	-911 / 0	-124.4 -124.4	0.17 (1)	6.25	I-E	-181 / 60	0.04 (1)
D-E	-911 / 0	-124.4 -124.4	0.17 (1)	6.25	C-J	-269 / 0	0.08 (1)
E-F	-1111 / 0	-124.4 -124.4	0.18 (1)	5.82	K-C	-181 / 60	0.04 (1)
F-G	0 / 51	-124.4 -124.4	0.17 (1)	10.00	B-K	0 / 929	0.21 (1)
L-B	-1207 / 0	0.0	0.0 0.13 (1)	7.29	I-F	0 / 929	0.21 (1)
H-F	-1207 / 0	0.0	0.0 0.13 (1)	7.29			
L-K	0 / 3	-39.2 -39.2	0.09 (3)	10.00			
K-J	0 / 921	-39.2 -39.2	0.20 (2)	10.00			
J-I	0 / 921	-39.2 -39.2	0.20 (2)	10.00			
I-H	0 / 3	-39.2 -39.2	0.09 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = $L/360$ (0.44")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.02")
ALLOWABLE DEFL.(TL) = $L/360$ (0.44")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.04")

CSI: TC=0.18/1.00 (B-C:1), BC=0.20/1.00 (J-K:2),
WB=0.21/1.00 (F-I:1), 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

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (K) (INPUT = 0.90)
JSI METAL = 0.72 (L) (INPUT = 1.00)



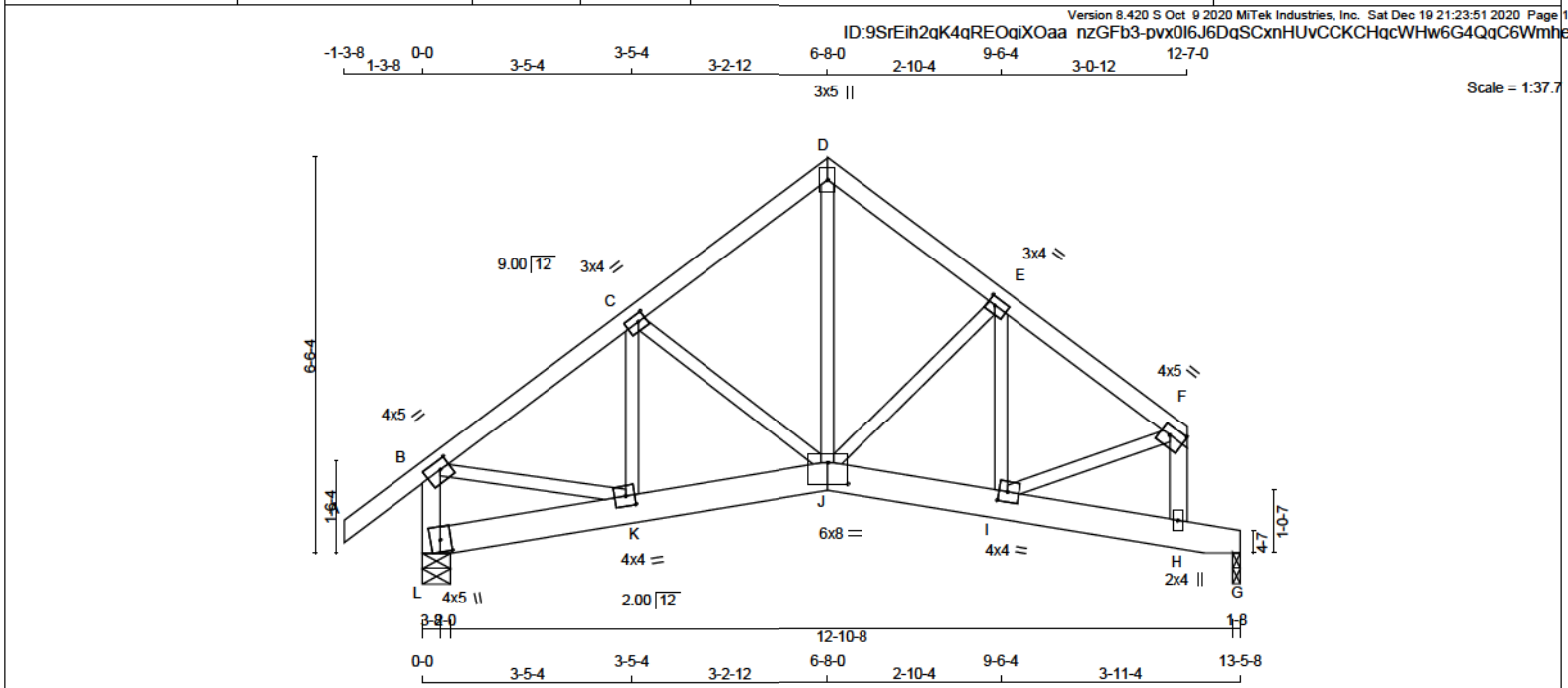
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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			





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

PLATES (table is in inches)							
JT	TYPE	PLATES	W	LEN	Y	X	
B	TMVW-t	MT20	4.0	5.0	1.75	2.00	
C	BMWW-t	MT20	3.0	4.0	1.50	1.50	
D	TTW+p	MT20	3.0	5.0			
E	TMWW-t	MT20	3.0	4.0	1.50	1.50	
F	TMVW-t	MT20	4.0	5.0	1.75	Edge	
H	BMV+p	MT20	2.0	4.0			
I	BMWW-t	MT20	4.0	4.0	2.00	1.75	
J	BMWW-p	MT20	6.0	8.0	4.25	4.00	
K	BMWW-t	MT20	4.0	4.0	2.00	1.75	
L	BVM1+H	MT20	4.0	5.0	2.25	2.00	

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
L	1275	0	1275	0	0
G	1103	0	1103	0	0

UNFACTORED REACTIONS							
1ST CASE	MAX/MIN COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
L	935	565 / 0	142 / 0	0 / 0	0 / 0	228 / 0	0 / 0
G	817	469 / 0	142 / 0	0 / 0	0 / 0	206 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.57 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 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)	UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	0 / 51	-124.4 -124.4	0.17 (1)	10.00	K-C	-191 / 55	0.04 (1)
B-C	-1142 / 0	-124.4 -124.4	0.24 (1)	5.65	C-J	-262 / 0	0.08 (1)
C-D	-945 / 0	-124.4 -124.4	0.23 (1)	8.07	J-D	0 / 811	0.18 (1)
D-E	-941 / 0	-124.4 -124.4	0.17 (1)	6.17	J-E	-364 / 0	0.11 (1)
E-F	-1228 / 0	-124.4 -124.4	0.18 (1)	5.57	I-E	0 / 133	0.03 (3)
L-B	-1207 / 0	0.0	0.0	0.13 (1)	B-K	0 / 950	0.21 (1)
H-F	-1266 / 0	0.0	0.0	0.14 (1)	I-F	0 / 1065	0.24 (1)
L-K	0 / 2	-39.2 -39.2	0.04 (2)	10.00			
K-J	0 / 948	-39.2 -39.2	0.15 (1)	10.00			
J-I	0 / 1003	-39.2 -39.2	0.26 (1)	10.00			
I-H	0 / 61	-39.2 -39.2	0.63 (1)	10.00			
H-G	-169 / 0	-164.0 -164.0	0.62 (1)	6.25			

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 (0.45")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL) = L/360 (0.45")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CSI: TC=0.24/1.00 (B-C:1), BC=0.63/1.00 (H-I:1), WB=0.24/1.00 (F-I:1), SSI=0.66/1.00 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (K) (INPUT = 0.90)
JSI METAL = 0.38 (F) (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.

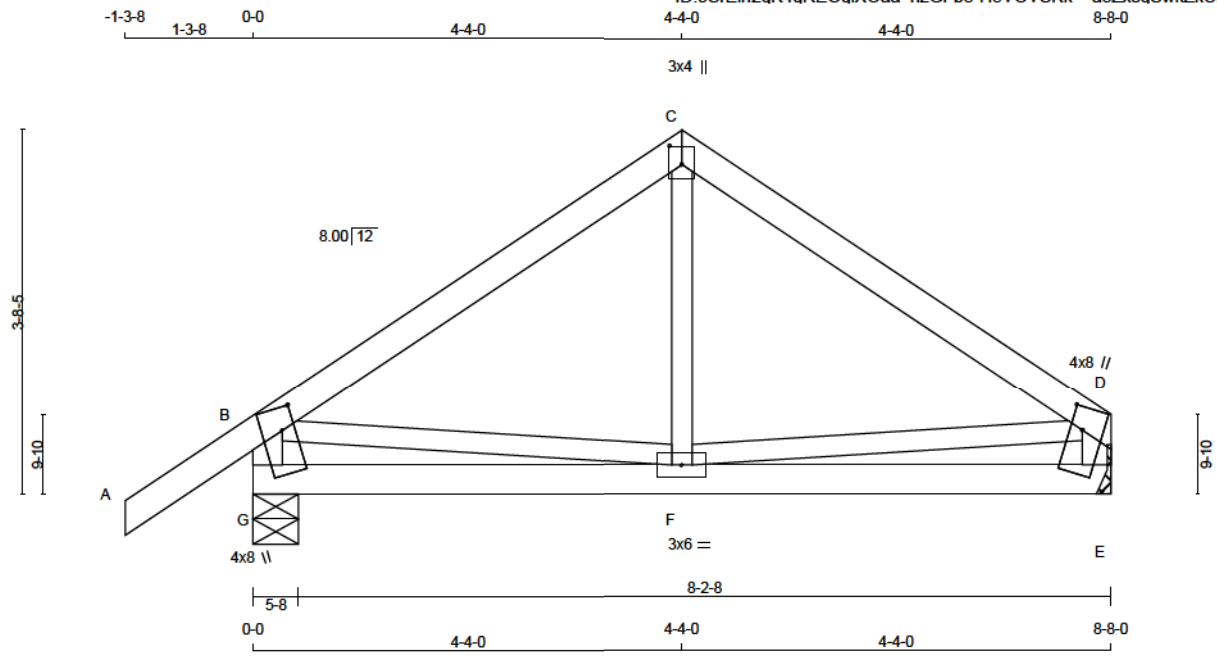


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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			



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TOTAL WEIGHT = 2 X 34 = 67 LB

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

PLATES (table is in inches)				
JT TYPE	PLATES	W	LEN	X
B, D, E, G				
C	TTW+p	MT20	3.0	4.0
D	TMBMW1**	MT20	4.0	8.0
F	BMWW1	MT20	3.0	6.0
G	TMBMW1**	MT20	4.0	8.0

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
G	880	0	880	0	0
E	709	0	709	0	0

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

UNFACTORED REACTIONS						
1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT	COMBINED					
G	843	397 / 0	91 / 0	0 / 0	155 / 0	0 / 0
E	525	302 / 0	91 / 0	0 / 0	133 / 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 HORZ. LOAD (LC1 MAX)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED HORZ. LOAD (LC1 MAX)	MEMB.
FR-TO		FROM TO		FR-TO			FR-TO
A-B	0 / 47	-124.4 -124.4	0.17 (1)	10.00	F-C	0 / 216	0.05 (3)
B-C	-577 / 0	-124.4 -124.4	0.30 (1)	6.25	B-F	0 / 483	0.11 (1)
C-D	-577 / 0	-124.4 -124.4	0.30 (1)	6.25	F-D	0 / 483	0.11 (1)
G-B	-814 / 0	0.0	0.0	0.08 (1)			
E-D	-843 / 0	0.0	0.0	0.08 (1)			
G-F	0 / 0	-39.2	-39.2	0.17 (3)	10.00		
F-E	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

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=0.30/1.00 (C-D:1), BC=0.17/1.00 (F-G:3),
WB=0.11/1.00 (B-F:1), SSI=0.18/1.00 (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= 0.89 (F) (INPUT = 0.80)
JSI METAL = 0.35 (G) (INPUT = 1.00)



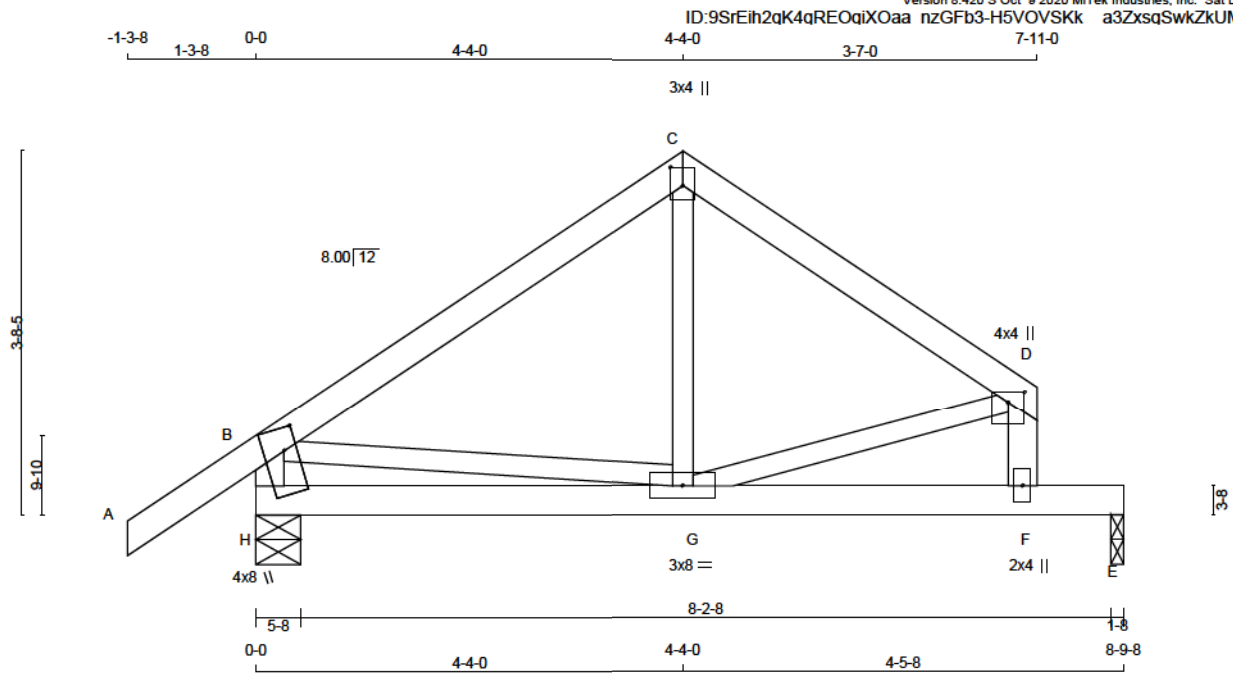
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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			





TOTAL WEIGHT = 33 lb

LUMBER				DESCR.
N. L. G. A. RULES	SIZE	LUMBER		
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
H - B	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
H - 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	X
B				
C	TTW+p	MT20	3.0	4.0 2.25 1.50
D	TMVW+p	MT20	4.0	4.0 1.25 2.00
F	BMVW+p	MT20	2.0	4.0
G	BMVWV-t	MT20	3.0	8.0
H	TMBMVW1+*	MT20	4.0	8.0 2.75 1.50

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

BEARINGS					
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	
JT	VERT	DOWN	UP	IN-SX	
H	890	0	0	5-8	1-8
E	719	0	0	1-8	1-8

UNFACTORED REACTIONS					
1ST CASE	MAX	MIN	COMPONENT REACTIONS		
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND
H	650	402 / 0	92 / 0	0 / 0	156 / 0
E	533	306 / 0	92 / 0	0 / 0	135 / 0

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

LOADING					
TOTAL LOAD CASES: (4)					
CHORDS			WEBS		
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1 MAX)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO	LENGTH	FR-TO	
A-B	0 / 47	-124.4 -124.4	0.17 (1)	10.00	G-C
B-C	-827 / 0	-124.4 -124.4	0.42 (1)	8.25	B-G
C-D	-842 / 0	-124.4 -124.4	0.28 (1)	8.25	G-D
H-B	-843 / 0	0.0	0.08 (1)	7.81	
F-D	-734 / 0	0.0	0.07 (1)	7.81	
H-G	0 / 0	-39.2 -39.2	0.27 (2)	10.00	
G-F	0 / 0	-39.2 -39.2	0.77 (1)	10.00	
F-E	0 / 0	-163.7 -163.7	0.77 (1)	10.00	

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.29")
CALCULATED VERT. DEFL.(LL) = L/969 (0.10")
ALLOWABLE DEFL.(TL) = L/360 (0.29")
CALCULATED VERT. DEFL.(TL) = L/615 (0.17")

CSI: TC=0.42/1.00 (B-C-1), BC=0.77/1.00 (F-G-1),
WB=0.13/1.00 (D-G-1), SSI=0.56/1.00 (E-F-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES			
PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
	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= 0.88 (H) (INPUT = 0.90)
JSI METAL = 0.37 (H) (INPUT = 1.00)



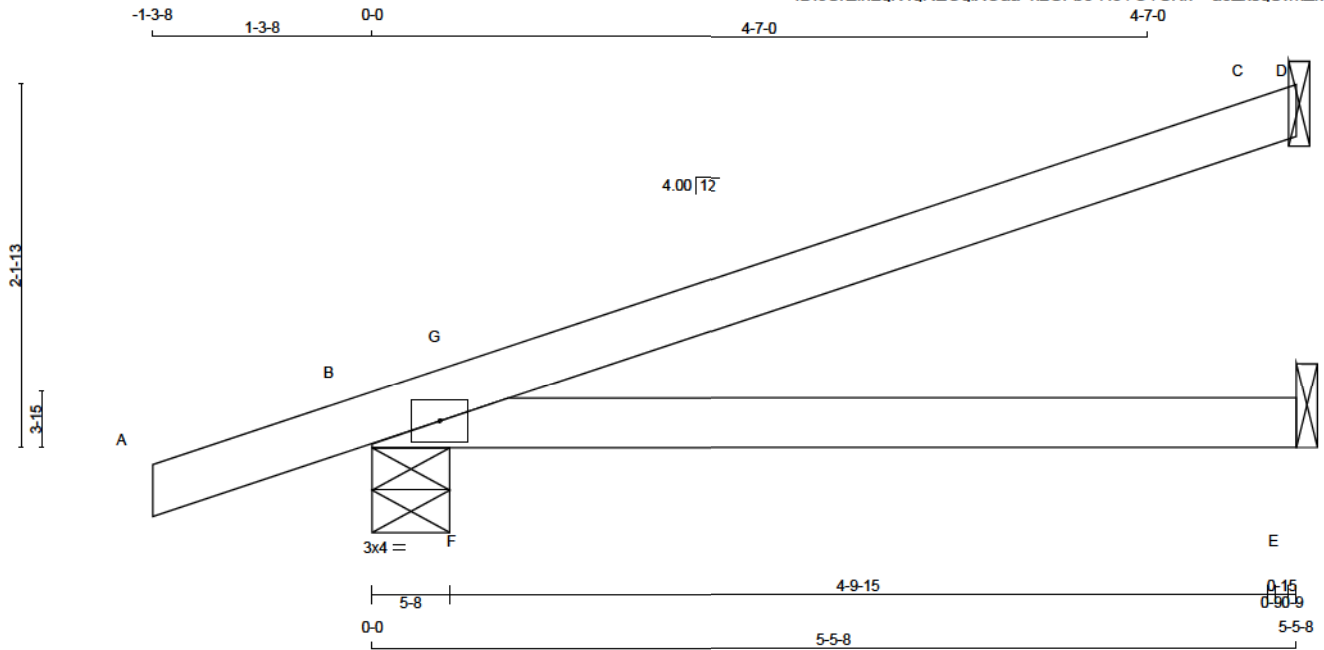
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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			





Scale = 1:13.6

TOTAL WEIGHT = 6 X 14 = 87 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMB1-I	MT20	3.0	4.0	

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

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
B	607	0	607	0	0	5-8	1-8
E	142	0	152	0	0	1-8	1-8
C	300	0	300	0	0	1-8	1-8

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

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	441	280 / 0	57 / 0	0 / 0	0 / 0	104 / 0	0 / 0
E	118	29 / 0	49 / 0	0 / 0	0 / 0	40 / 0	0 / 0
C	211	157 / 0	9 / 0	0 / 0	0 / 0	45 / 0	0 / 0

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

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 (K)	LC1 MAX (PLF)	MAX. CSI (LC)	UNBRAC. LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM	TO					
A-B	0 / 25	-124.4	-124.4	0.16 (1)	10.00	F-G	-315 / 112	0.00 (1)
B-G	-52 / 0	-124.4	-124.4	0.14 (3)	6.25			
G-C	0 / 0	-124.4	-124.4	0.48 (1)	10.00			
C-D	0 / 0	-20.0	-20.0	0.00 (4)	10.00			
B-F	0 / 0	-39.2	-39.2	0.31 (1)	10.00			
F-E	0 / 0	-39.2	-39.2	0.35 (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:

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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)= $L/360$ (0.19")
CALCULATED VERT. DEFL.(LL) = $L/780$ (0.09")
ALLOWABLE DEFL.(TL)= $L/360$ (0.19")
CALCULATED VERT. DEFL.(TL) = $L/439$ (0.15")

CSI: TC=0.48/1.00 (C-G:1) , BC=0.35/1.00 (E-F:1) ,
WB=0.00/1.00 (F-G:1) , SSI=0.30/1.00 (B-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

	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= 0.37 (B) (INPUT = 0.90)
JSI METAL= 0.09 (B) (INPUT = 1.00)



**READ ALL NOTES ON THIS PAGE AND ON
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SPECIFICATIONS AND CRITERIA USED IN
THE DESIGN OF THIS COMPONENT.**

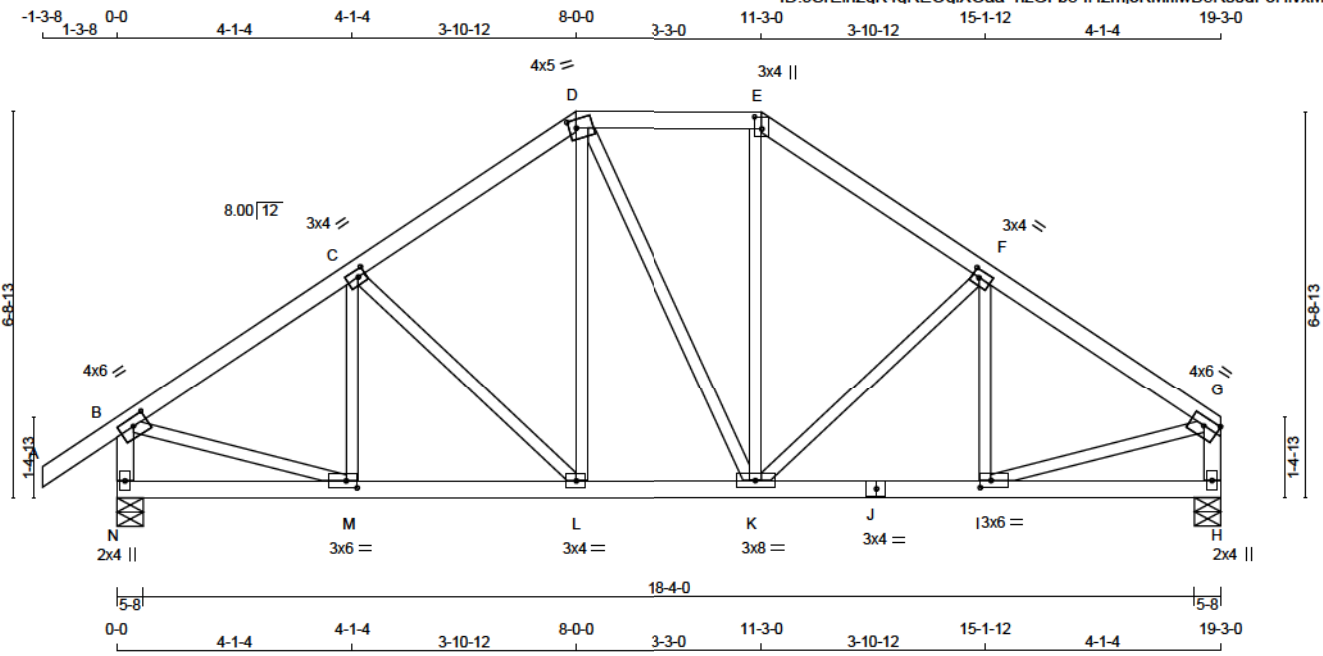


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-0
Sewage System			
Zoning			



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Scale = 1:40.2

TOTAL WEIGHT = 88 lb

LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - D	2x4	DRY	No.2
B - E	2x4	DRY	No.2
E - G	2x4	DRY	No.2
N - B	2x4	DRY	No.2
H - G	2x4	DRY	No.2
N - J	2x4	DRY	No.2
J - H	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-t	MT20	4.0	6.0	1.75	3.00
C	TMVW-t	MT20	3.0	4.0	1.50	1.50
D	TTWW-m	MT20	4.0	5.0	1.75	1.50
E	TTW+p	MT20	3.0	4.0	2.50	1.50
F	TMVW-t	MT20	3.0	4.0	1.50	1.50
G	TMVW-t	MT20	4.0	6.0	1.75	Edge
H	BMV1+p	MT20	2.0	4.0		
I	BMVW-t	MT20	3.0	6.0	1.50	2.25
J	BS-t	MT20	3.0	4.0		
K	BMVWW-t	MT20	3.0	8.0		
L	BMVW-t	MT20	3.0	4.0		
M	BMVW-t	MT20	3.0	6.0	1.50	2.25
N	BMV1+p	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 GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT IN-SX
N	1746	0	1746	0	0
H	1575	0	1575	0	0

UNFACTORED REACTIONS					
1ST LCASE	MAX/MIN COMPONENT REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND
N	1284	766 / 0	202 / 0	0 / 0	0 / 0
H	1187	670 / 0	202 / 0	0 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.87 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)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)
FR-TO					
A-B	0 / 47	-124.4	-124.4	0.17 (1)	10.00
B-C	-1061 / 0	-124.4	-124.4	0.28 (1)	4.87
C-D	-1412 / 0	-124.4	-124.4	0.27 (1)	5.20
D-E	-1153 / 0	-124.4	-124.4	0.18 (1)	5.73
E-F	-1414 / 0	-124.4	-124.4	0.27 (1)	5.19
F-G	-1680 / 0	-124.4	-124.4	0.28 (1)	4.87
N-B	-1679 / 0	0.0	0.0	0.17 (1)	6.41
H-G	-1507 / 0	0.0	0.0	0.16 (1)	6.88
N-M	0 / 0	-39.2	-39.2	0.12 (3)	10.00
M-L	0 / 1408	-39.2	-39.2	0.30 (1)	10.00
L-K	0 / 1152	-39.2	-39.2	0.24 (1)	10.00
K-J	0 / 1407	-39.2	-39.2	0.30 (1)	10.00
J-I	0 / 1407	-39.2	-39.2	0.30 (1)	10.00
I-H	0 / 0	-39.2	-39.2	0.12 (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 (0.64")
CALCULATED VERT. DEFL.(LL)= L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.64")
CALCULATED VERT. DEFL.(TL)= L/999 (0.07")

CSI: TC=0.28/1.00 (B-C:1) , BC=0.30/1.00 (L-M:1) , WB=0.33/1.00 (B-M:1) , SSI=0.20/1.00 (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	MAX MIN
MT20	650	371	1747

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.89 (B) (INPUT = 0.80)
JSI METAL= 0.48 (J) (INPUT = 1.00)

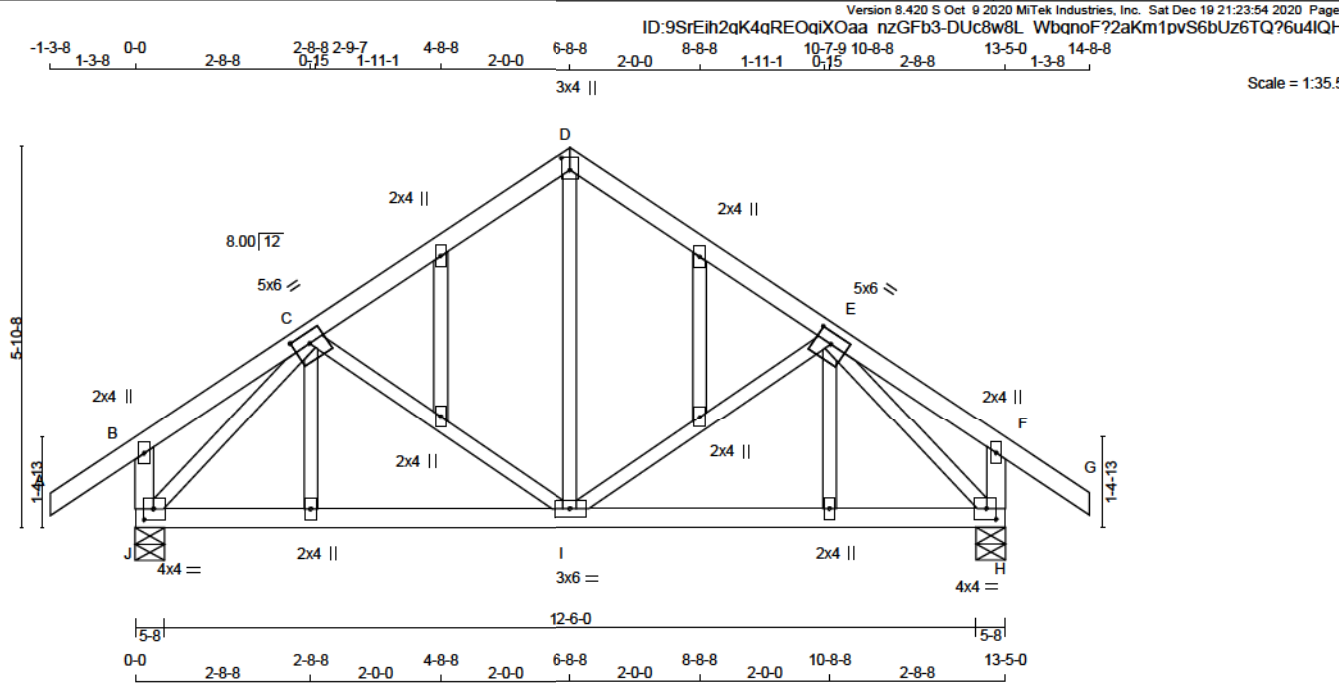


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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			

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		LUMBER		DESCR.	
CHORDS	SIZE	DRY	No.2	SPF					
A - D	2x4	DRY	No.2	SPF					
D - G	2x4	DRY	No.2	SPF					
J - B	2x4	DRY	No.2	SPF					
H - F	2x4	DRY	No.2	SPF					
J - H	2x4	DRY	No.2	SPF					
ALL WEBS	2x3	DRY	No.2	SPF					
EXCEPT									
ALL GABLE WEBS	2x3	DRY	No.2	SPF					
DRY: SEASONED LUMBER.									

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
C, C, E, E						
C						
C	TMWWW-t	MT20	5.0	6.0	2.00	3.00
D	TTW+p	MT20	3.0	4.0	2.25	1.50
E	TMWWW-t	MT20	5.0	6.0	2.00	3.00
F	TMV+p	MT20	2.0	4.0		
H	BMVW1-t	MT20	4.0	4.0	2.00	1.75
I	BMWW-t	MT20	3.0	6.0		
J	BMVW1-t	MT20	4.0	4.0	2.00	1.75
K, L, M, N, O, P						
K	NP+w	MT20	2.0	4.0		

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

BEARINGS					
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
J	1289	0	1289	0	0
H	1289	0	1289	0	0

UNFACTORED REACTIONS							
1ST CASE	MAX	MIN	COMPONENT REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	931	563 / 0	141 / 0	0 / 0	0 / 0	227 / 0	0 / 0
H	931	563 / 0	141 / 0	0 / 0	0 / 0	227 / 0	0 / 0

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

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. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FORCE (LBS)	FACTORED MAX (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 47	-124.4	-124.4	0.17 (1)	10.00	C-I	-167 / 36
B-C	0 / 37	-124.4	-124.4	0.25 (1)	10.00	I-D	0 / 518
C-D	-867 / 0	-124.4	-124.4	0.24 (1)	6.25	I-E	-167 / 36
D-E	-867 / 0	-124.4	-124.4	0.24 (1)	6.25	J-C	-1229 / 0
E-F	0 / 37	-124.4	-124.4	0.25 (1)	10.00	E-H	-1229 / 0
F-G	0 / 47	-124.4	-124.4	0.17 (1)	10.00		
J-B	-269 / 0	0.0	0.0	0.03 (1)	7.81		
H-F	-269 / 0	0.0	0.0	0.03 (1)	7.81		
J-I	0 / 838	-39.2	-39.2	0.48 (2)	10.00		
I-H	0 / 838	-39.2	-39.2	0.48 (2)	10.00		

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 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 (0.45")
CALCULATED VERT. DEFL.(LL) = L/999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (0.45")
CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

CSI: TC=0.25/1.00 (B-C:1), BC=0.48/1.00 (I-J:2),
WB=0.31/1.00 (C-J:1), SSI=0.19/1.00 (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 (PSI)	SECTION (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= 0.82 (H) (INPUT = 0.90)
JSI METAL = 0.29 (J) (INPUT = 1.00)



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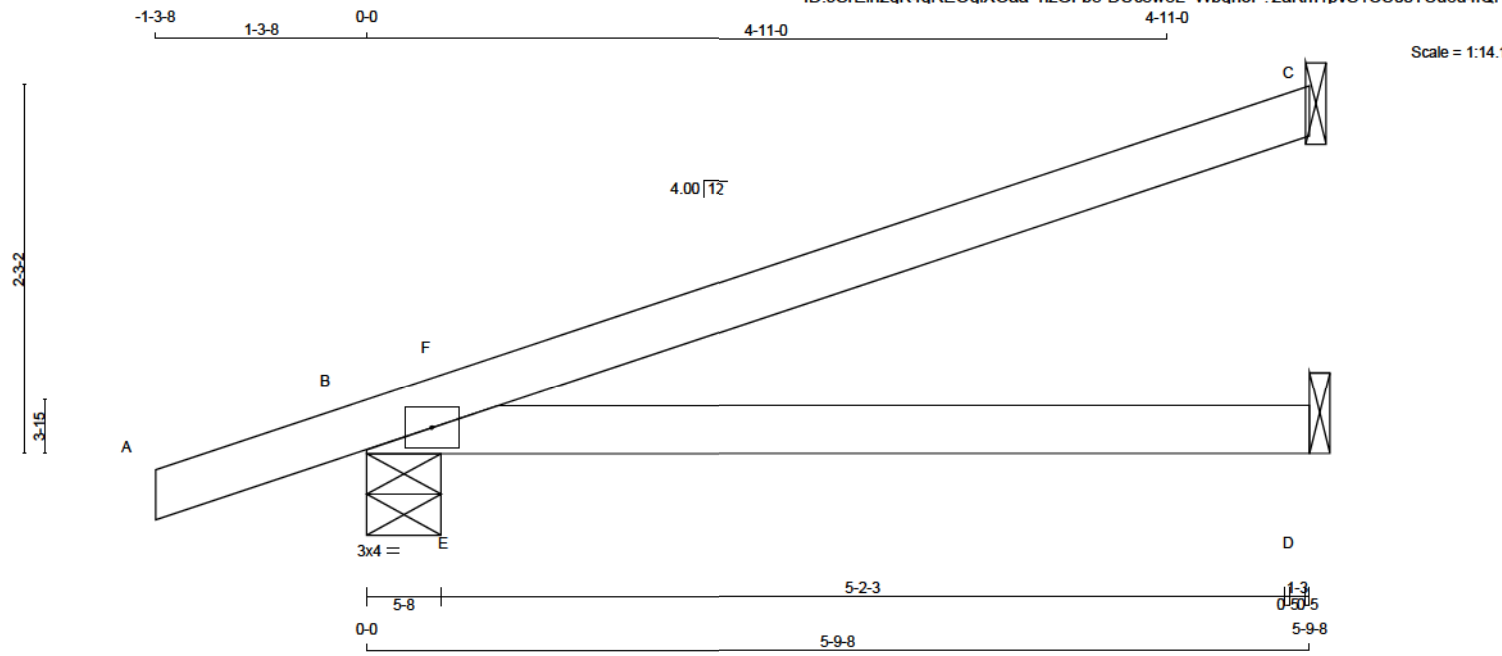


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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			



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ID:9SrEih2qK4qREOqiXOaa nzGFb3-DUC8w8L WbqnoF72aKm1pvS1CU0sTUu6u4IQHz7



TOTAL WEIGHT = 5 X 15 = 75 lb

LUMBER
N. L. G. A. RULES
CHORDS SIZE LUMBER DESCR.
A - C 2x4 DRY No.2 SPF
B - D 2x4 DRY 2100F 1.8E SPF
DRY: SEASONED LUMBER.

PLATES (table is in inches)
JT TYPE PLATES W LEN Y X
B TMB1-I MT20 3.0 4.0

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
C	311	0	311	0	0	1-8	1-8		
B	640	0	640	0	0	5-8	1-8		
D	163	0	171	0	0	1-8	1-8		

SEE MITTEK 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	217	166 / 0	8 / 0	0 / 0	0 / 0	44 / 0	0 / 0		
B	466	295 / 0	61 / 0	0 / 0	0 / 0	110 / 0	0 / 0		
D	134	36 / 0	53 / 0	0 / 0	0 / 0	45 / 0	0 / 0		

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS		MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD (PLF)		MAX. FACTORED VERT. LOAD (LC1 MAX)		MAX. FACTORED VERT. LOAD (LC1 MAX)		WEBS		MAX. FACTORED FORCE (LBS)		MAX. FACTORED VERT. LOAD (LC1 MAX)	
MEMB.	FR-TO									MEMB.	FR-TO				
A-B	0 / 25			-124.4	-124.4	0.16 (1)	10.00			E-F	-469 / 79			0.00 (1)	
B-F	-44 / 35			-124.4	-124.4	0.11 (3)	6.25								
F-C	-4 / 5			-124.4	-124.4	0.53 (1)	10.00								
B-E	0 / 0			-39.2	-39.2	0.28 (1)	10.00								
E-D	0 / 0			-39.2	-39.2	0.30 (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/719 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/417 (0.17")

CSI: TC=0.53/1.00 (C-F:1), BC=0.30/1.00 (D-E:1), WB=0.00/1.00 (E-F:1), SSI=0.42/1.00 (B-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.40 (B) (INPUT = 0.90)
JSI METAL= 0.10 (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.

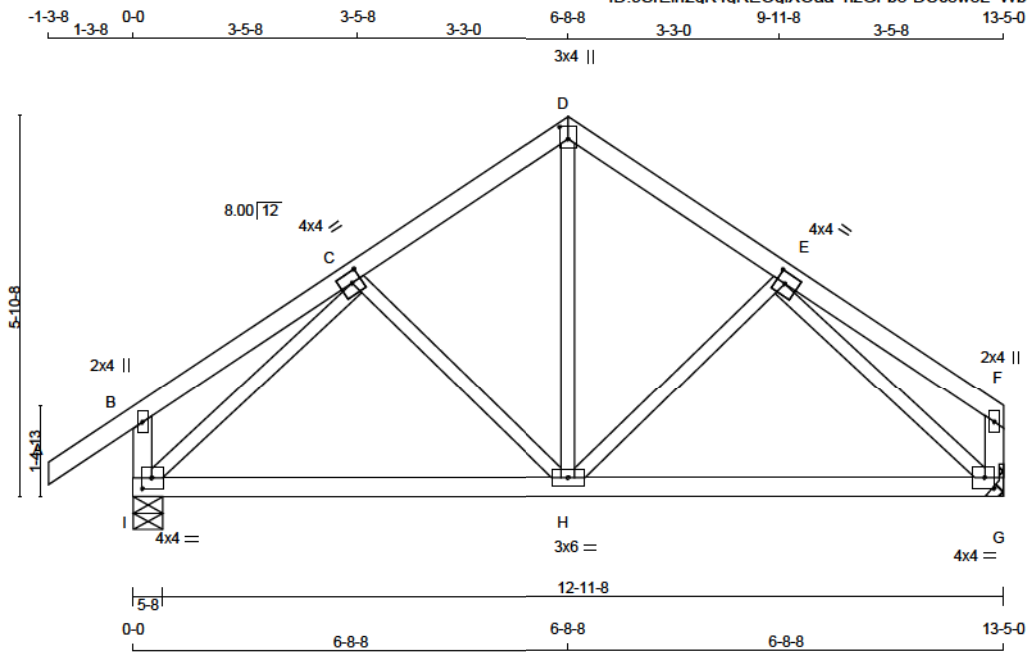


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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			



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TOTAL WEIGHT = 3 X 57 = 170 LB

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
I - B	2x4	DRY	No.2	SPF
G - F	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	TMV+p	MT20	2.0	4.0		
C	TMWW-I	MT20	4.0	4.0	2.00	1.75
D	TTW+p	MT20	3.0	4.0	2.25	1.50
E	TMWW-I	MT20	4.0	4.0	2.00	1.75
F	TMV+p	MT20	2.0	4.0		
G	BMVW1-I	MT20	4.0	4.0	2.00	1.75
H	BMWW-I	MT20	3.0	6.0		
I	BMVW1-I	MT20	4.0	4.0	2.00	1.75

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		
I	1269	0	1269	0	5-8	1-8
G	1098	0	1098	0	0	MECHANICAL

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

UNFACTORED REACTIONS

JT	COMBINED	MAX/MIN COMPONENT REACTIONS				
		SNOW	LIVE	PERM.LIVE	WIND	DEAD
I	931	563 / 0	141 / 0	0 / 0	0 / 0	227 / 0
G	813	467 / 0	141 / 0	0 / 0	0 / 0	205 / 0

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

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 LC1 MAX. (LC)	MEMB.
FR-TO				FR-TO			
A-B	0 / 47	-124.4	-124.4 0.17 (1)	10.00	H-D	0 / 898	0.14 (1)
B-C	0 / 26	-124.4	-124.4 0.22 (1)	10.00	H-E	-201 / 20	0.07 (1)
C-D	-868 / 0	-124.4	-124.4 0.17 (1)	6.25	C-H	-202 / 20	0.07 (1)
D-E	-868 / 0	-124.4	-124.4 0.17 (1)	6.25	I-C	-1188 / 0	0.42 (1)
E-F	0 / 26	-124.4	-124.4 0.22 (1)	10.00	E-G	-1188 / 0	0.42 (1)
I-B	-332 / 0	0.0	0.0 0.03 (1)	7.81			
G-F	-162 / 0	0.0	0.0 0.02 (1)	7.81			
I-H	0 / 845	-39.2	-39.2 0.48 (2)	10.00			
H-G	0 / 845	-39.2	-39.2 0.48 (2)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = $L/360$ (0.45")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.06")
ALLOWABLE DEFL.(TL) = $L/360$ (0.45")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.11")

CSI: TC=0.22/1.00 (B-C-1), BC=0.48/1.00 (H-I-2),
WB=0.42/1.00 (C-I-1), SSI=0.18/1.00 (G-H-3)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	850	371	1747

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (H) (INPUT = 0.90)
JSI METAL = 0.38 (E) (INPUT = 1.00)



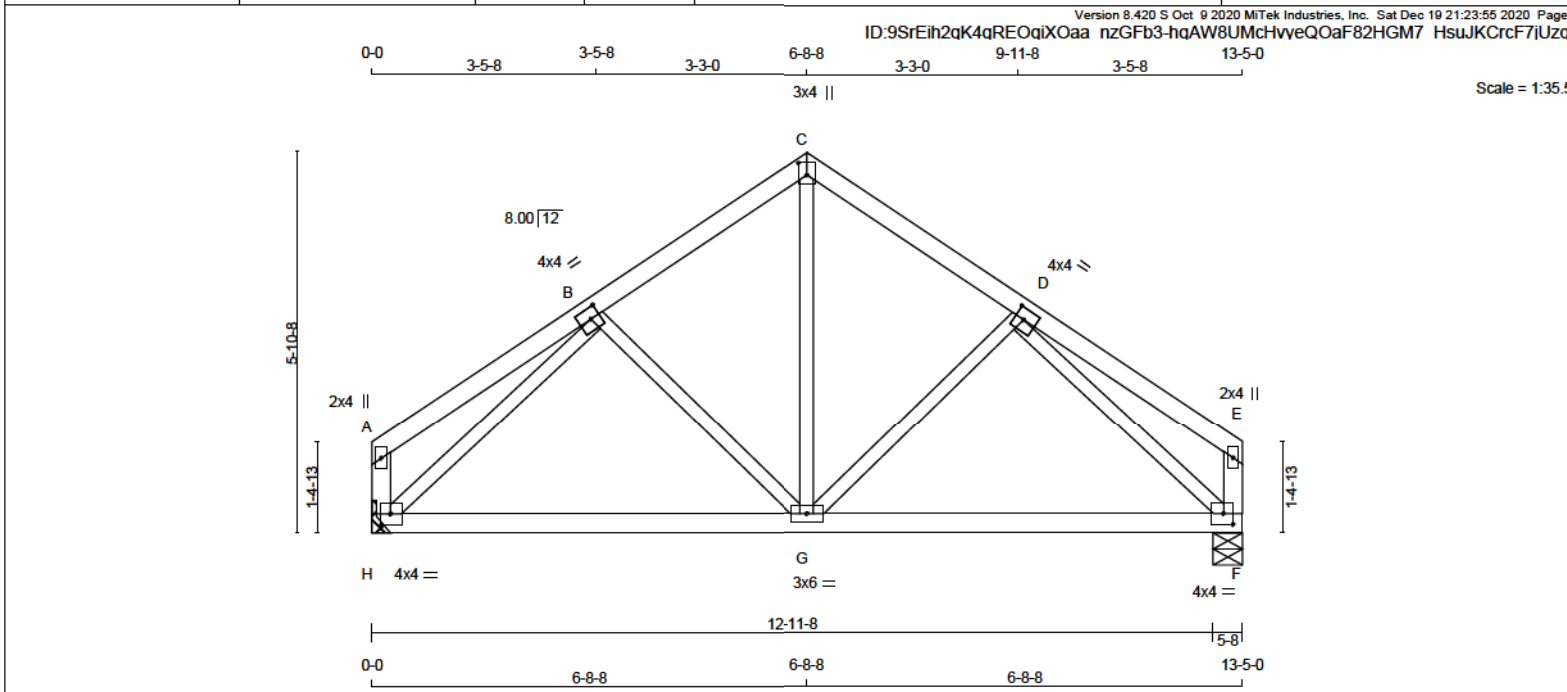
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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			





LUMBER

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

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

BEARINGS

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT VERT	DOWN	UPLIFT	IN-SX
H 1098	0	0	MECHANICAL
F 1098	0	0	5-8 1-8

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	SNOW	LIVE	PERM.LIVE
H 813	467 / 0	141 / 0	0 / 0
F 813	467 / 0	141 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC1 MAX)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC1 MAX)
FR-TO				FR-TO			
A-B	0 / 26	-124.4	-124.4 0.22 (1)	G-C	0 / 898	0.14 (1)	
B-C	-988 / 0	-124.4	-124.4 0.17 (1)	G-D	-201 / 20	0.07 (1)	
C-D	-988 / 0	-124.4	-124.4 0.17 (1)	B-G	-201 / 20	0.07 (1)	
D-E	0 / 26	-124.4	-124.4 0.22 (1)	H-B	-1188 / 0	0.42 (1)	
H-A	-162 / 0	0.0	0.0 0.02 (1)	D-F	-1188 / 0	0.42 (1)	
F-E	-162 / 0	0.0	0.0 0.02 (1)				
H-G	0 / 845	-39.2	-39.2 0.48 (2)				
G-F	0 / 845	-39.2	-39.2 0.48 (2)				

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF 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 (0.45")
CALCULATED VERT. DEFL.(LL) = L/999 (0.08")
ALLOWABLE DEFL.(TL) = L/360 (0.45")
CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

CSI: TC=0.22/1.00 (D-E-1), BC=0.48/1.00 (G-H-2),
WB=0.42/1.00 (D-F-1), SSI=0.18/1.00 (G-H-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 (G) (INPUT = 0.90)
JSI METAL = 0.38 (B) (INPUT = 1.00)



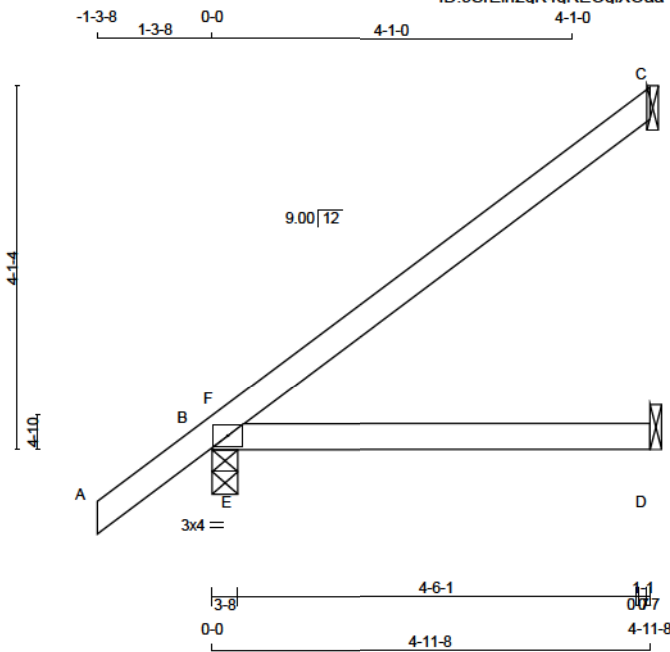
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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seismic System			
Zoning			





TOTAL WEIGHT = $4 \times 15 = 59$ lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMB1-I	MT20	3.0	4.0	

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
C	273	0	273	0	0	1-8	1-8
B	577	0	577	0	0	3-8	1-8
D	133	0	142	0	0	1-8	1-8

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

UNFACTORED REACTIONS

MAX/MIN COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
C	191	146 / 0	6 / 0	0 / 0	0 / 0	38 / 0	0 / 0
B	419	269 / 0	52 / 0	0 / 0	0 / 0	98 / 0	0 / 0
D	110	26 / 0	46 / 0	0 / 0	0 / 0	38 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
A-B	0 / 50	-124.4	-124.4 0.17 (1)	10.00	E-F	-845 / 136	0.00 (1)
B-F	-122 / 220	-124.4	-124.4 0.15 (1)	8.25			
F-C	-11 / 8	-124.4	-124.4 0.41 (1)	6.25			
B-E	0 / 0	-39.2	-39.2 0.26 (1)	10.00			
E-D	0 / 0	-39.2	-39.2 0.30 (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/ 973 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 558 (0.11")

CSI: TC=0.41/1.00 (C-F:1) , BC=0.30/1.00 (D-E:1) ,
WB=0.00/1.00 (E-F:1) , SSI=0.55/1.00 (B-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

	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= 0.44 (B) (INPUT = 0.90)
JSI METAL= 0.08 (B) (INPUT = 1.00)



**READ ALL NOTES ON THIS PAGE AND ON
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NOTE PAGE IS AN INTEGRAL PART OF
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SPECIFICATIONS AND CRITERIA USED IN
THE DESIGN OF THIS COMPONENT.**



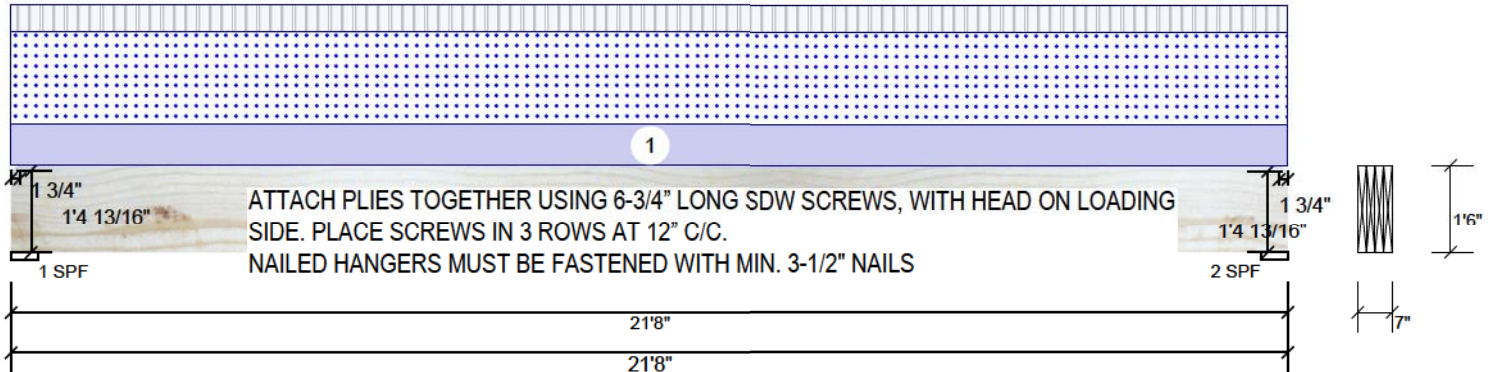
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-0
Sewage System			
Zoning			



B4 Forex 2.0E-3000Fb LVL 1.750" X 18.000" 4-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Roof (Residential)
Plies:	4	Slope:	0/12
Moisture Condition:	Dry	Design Method:	LSD
Deflection LL:	360	Building Code:	NBCC 2015 / OBC 2012
Deflection TL:	360	Load Sharing:	Yes
Importance:	Normal - II	Deck:	Not Checked
		Vibration:	Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	1811	2951	6001	0
2	1811	2951	6001	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.500"	61%	3689 / 10811	14500	L	1.25D+1.5S +L
2 - SPF	5.500"	61%	3689 / 10811	14500	L	1.25D+1.5S +L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	73053 ft-lb	10'10"	153192 ft-lb	0.477 (48%)	1.25D+1.5S +L	L
Unbraced	73053 ft-lb	10'10"	73531 ft-lb	0.994 (99%)	1.25D+1.5S +L	L
Shear	13930 lb	19'9 3/8"	35154 lb	0.396 (40%)	1.25D+1.5S +L	L
Lt. Scarf	171 psi, 13984 lb		419 psi	0.408 (41%)	1.25D+1.5S +L	L
Rt. Scarf	171 psi, 13984 lb		419 psi	0.408 (41%)	1.25D+1.5S +L	L
LL Defl inch	0.434 (L/578)	10'10 1/16"	0.697 (L/360)	0.620 (62%)	S+0.5L	L
TL Defl inch	0.619 (L/405)	10'10 1/16"	0.697 (L/360)	0.890 (89%)	D+S+0.5L	L



Design Notes

- Notches in LVL are in accordance with APA Form No. EWS G535, Figure 1.
- Girders are designed to be supported on the bottom edge only.
- Multiple plies must be fastened together as per manufacturer's details.
- Top must be laterally braced at a maximum of 3'5 5/8" o.c.
- Bottom braced at bearings.
- Lateral slenderness ratio based on single ply width.

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	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Uniform		15-11-0	Near Face	15.3 PSF	10.5 PSF	34.8 PSF	0 PSF	
	Self Weight				29 PLF				

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

- Dry service conditions, unless noted otherwise
- LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

- LVL beams must not be cut or drilled
- Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
- Damaged Beams must not be used
- Design assumes top edge is laterally restrained
- Provide lateral support at bearing points to avoid lateral displacement and rotation

- For flat roofs provide proper drainage to prevent ponding

This design is valid until 10/10/2023



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

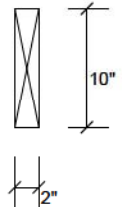
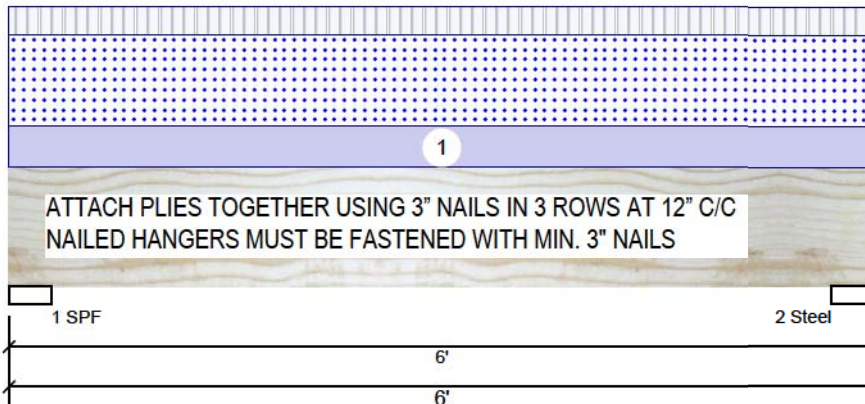
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14 Anderson Blvd., On
L4A7X4
905-642-4400



CSD | DRAW DESIGN BUILD

B3 Forex 2.0E-3000Fb LVL 2.000" X 10.000" - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Roof (Residential)
Plies:	1	Slope:	0/12
Moisture Condition:	Dry	Design Method:	LSD
Deflection LL:	360	Building Code:	NBCC 2015 / OBC 2012
Deflection TL:	360	Load Sharing:	No
Importance:	Normal - II	Deck:	Not Checked
		Vibration:	Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	264	398	874	0
2	264	398	874	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	48%	498 / 1575	2073	L	1.25D+1.5S +L
2 - Steel	3.500"	40%	498 / 1575	2073	L	1.25D+1.5S +L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2653 ft-lb	3'	14270 ft-lb	0.186 (19%)	1.25D+1.5S +L	L
Unbraced	2653 ft-lb	3'	10312 ft-lb	0.257 (26%)	1.25D+1.5S +L	L
Shear	1910 lb	4'11 1/4"	5580 lb	0.342 (34%)	1.25D+1.5S +L	L
LL Defl inch	0.029 (L/2312)	3'	0.185 (L/360)	0.160 (16%)	S+0.5L	L
TL Defl inch	0.040 (L/1656)	3'	0.185 (L/360)	0.220 (22%)	D+S+0.5L	L

Design Notes

- Girders are designed to be supported on the bottom edge only.
- Top braced at bearings.
- Bottom braced at bearings.



ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Uniform		8-4-8	Near Face	15.3 PSF	10.5 PSF	34.8 PSF	0 PSF	
	Self Weight				5 PLF				

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.

Notes

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Lumber

- Dry service conditions, unless noted otherwise
- LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

- LVL beams must not be cut or drilled
- Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
- Damaged Beams must not be used
- Design assumes top edge is laterally restrained
- Provide lateral support at bearing points to avoid lateral displacement and rotation

- For flat roofs provide proper drainage to prevent ponding

This design is valid until 10/10/2023



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

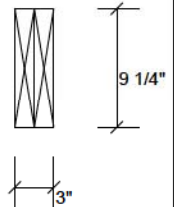
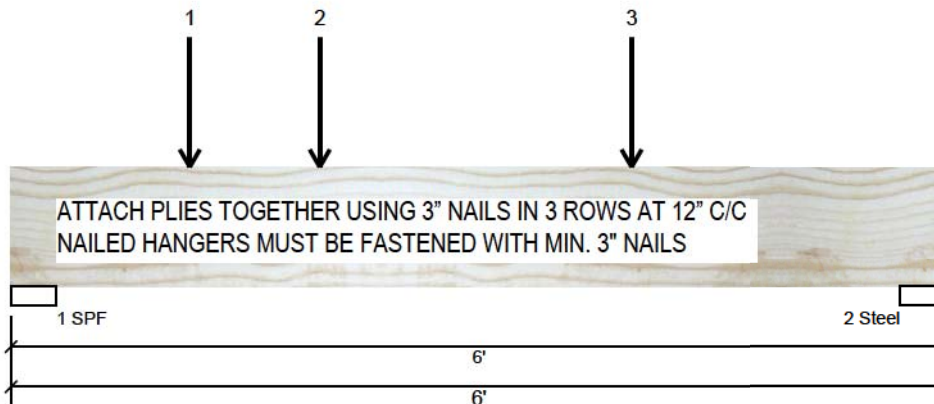
Kott Group
14 Anderson Blvd., On
L4A7X4
905-642-4400



CSD | DRAW DESIGN BUILD

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

Level: Level



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	376	554	1273	0
2	249	366	839	0

Bearings and Factored Reactions

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	46%	692 / 2286	2978	L	1.25D+1.5S +L
2 - Steel	3.500"	30%	458 / 1507	1965	L	1.25D+1.5S +L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4297 ft-lb	1'11 3/4"	6039 ft-lb	0.712 (71%)	1.25D+1.5S +L	L
Unbraced	4297 ft-lb	1'11 3/4"	5129 ft-lb	0.838 (84%)	1.25D+1.5S +L	L
Shear	2978 lb	1'	3984 lb	0.748 (75%)	1.25D+1.5S +L	L
LL Defl inch	0.041 (L/1626)	2'10 13/16"	0.185 (L/360)	0.220 (22%)	S+0.5L	L
TL Defl inch	0.056 (L/1179)	2'10 13/16"	0.185 (L/360)	0.310 (31%)	D+S+0.5L	L

Design Notes

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



ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Point	1-1-12		Near Face	205 lb	141 lb	467 lb	0 lb	
2	Point	1-11-12		Near Face	420 lb	282 lb	975 lb	0 lb	
3	Point	3-11-12		Near Face	295 lb	202 lb	670 lb	0 lb	

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

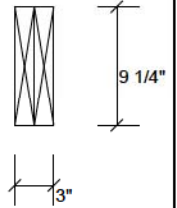
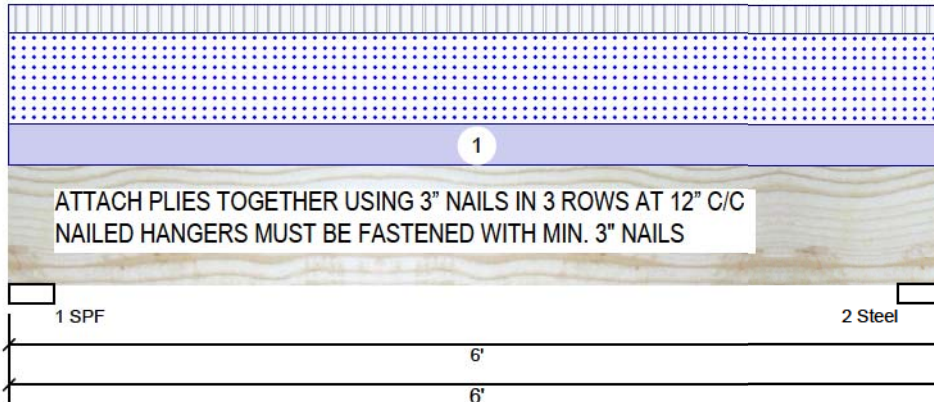


CSD | DRAW DESIGN BUILD

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

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

Level: Level



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	211	308	700	0
2	211	308	700	0

Bearings and Factored Reactions

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	26%	385 / 1262	1647	L	1.25D+1.5S +L
2 - Steel	3.500"	26%	385 / 1262	1647	L	1.25D+1.5S +L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2107 ft-lb	3'	6039 ft-lb	0.349 (35%)	1.25D+1.5S +L	L
Unbraced	2107 ft-lb	3'	5129 ft-lb	0.411 (41%)	1.25D+1.5S +L	L
Shear	1521 lb	5'	3984 lb	0.382 (38%)	1.25D+1.5S +L	L
LL Defl inch	0.021 (L/3179)	3'	0.185 (L/360)	0.110 (11%)	S+0.5L	L
TL Defl inch	0.029 (L/2300)	3'	0.185 (L/360)	0.160 (16%)	D+S+0.5L	L

Design Notes

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



ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Uniform		6-8-8	Near Face	15.3 PSF	10.5 PSF	34.8 PSF	0 PSF	

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



These plans have been reviewed for use with the correction as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with 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.

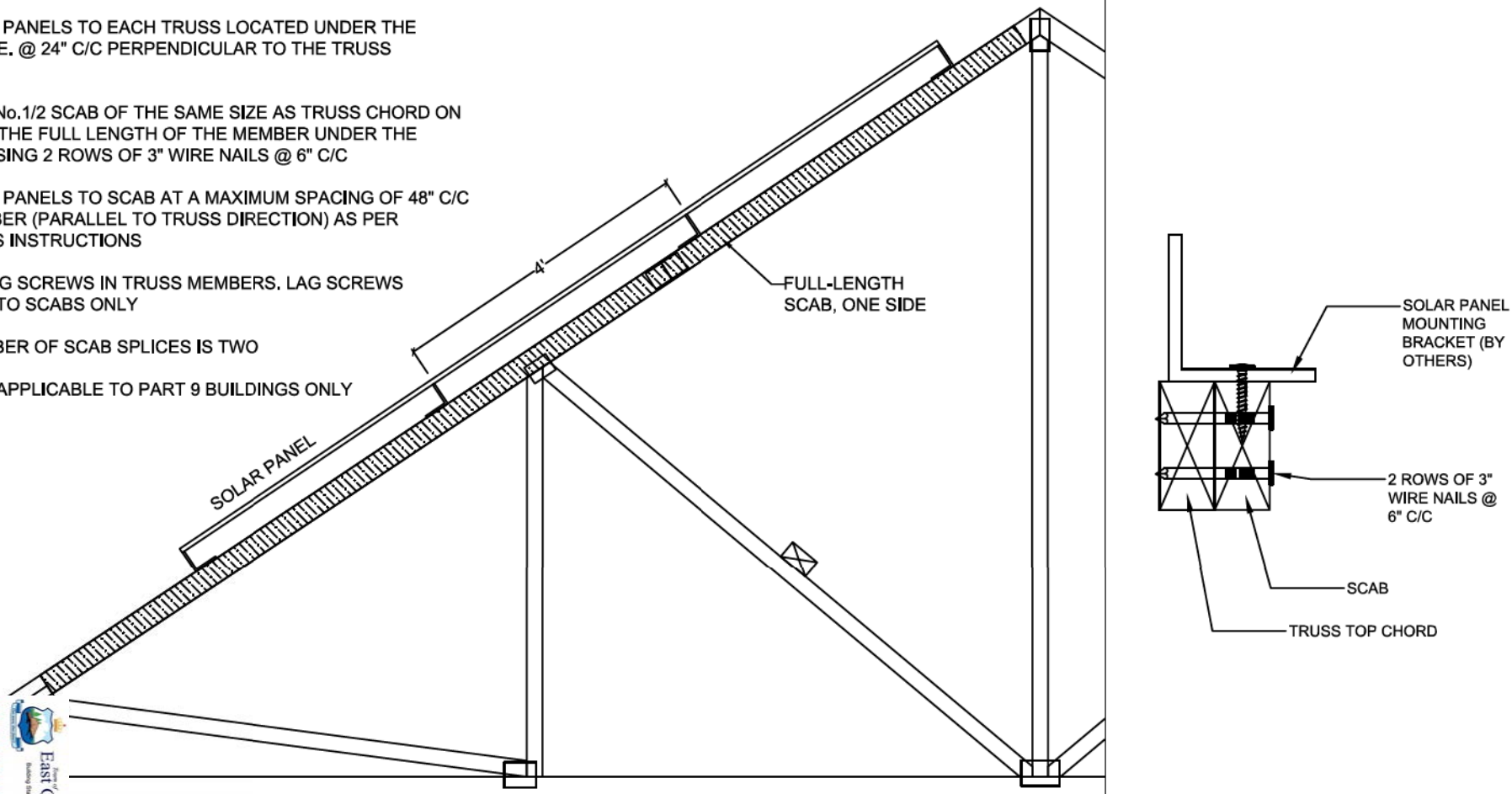
This design is valid until 10/10/2023

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



Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-03
Seepage 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



These plans have been reviewed for use with the Building Code of Ontario and the Building Standards Branch. All work must comply with the Ontario Building Code, as amended, and the Zoning By-Law 2018-043, as amended. These plans are subject to the Building Code and the Zoning By-Law. The building permit must be clearly posted on site at all times.

East Gwillimbury
Building Standards Branch (B379-61487)

Building Code	Reference	Notes
Building Code	H. Amdt 42250	2018 (0-01)
Zoning		

NE1220-134
GREENPARK - TRINAR HAL

Detail for Installation of Solar Panels - Scab Method

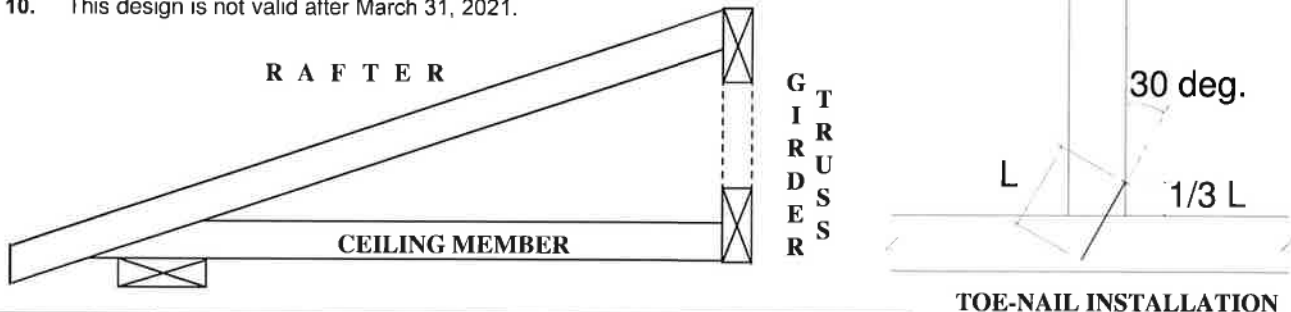
LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
N.A. El-Masri
PROVINCIAL ENGINEER
Dec 19, 2020



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

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.



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

PEO
Certificate No. 10889485

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



Town of
East Gwillimbury
Building Standards Branch BCIN #16487

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December

Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-4
Sewage System			
Zoning			

NE1220-134
GREENPARK - TRINAR
HALL - LOT 36

BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B97791H2

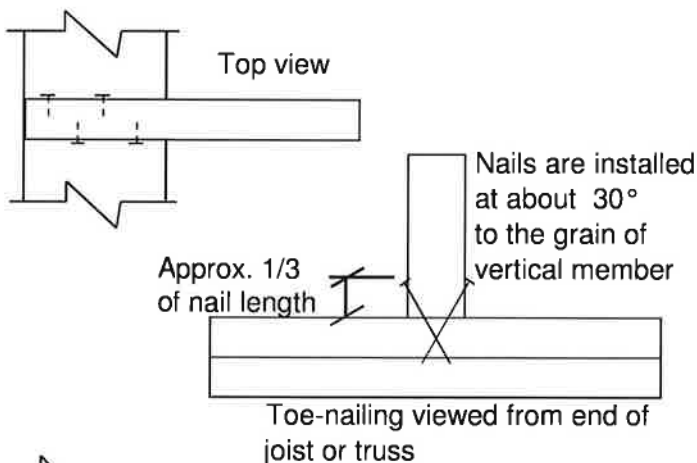
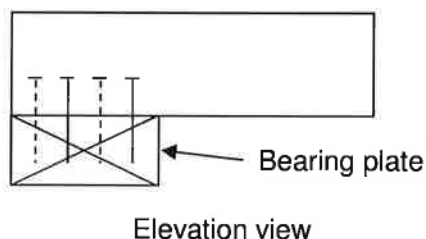
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52
COMMON SPIRAL	3.00	0.122	26	36
	3.25	0.122	28	40
	3.50	0.152	36	50

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

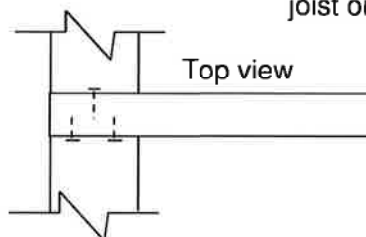
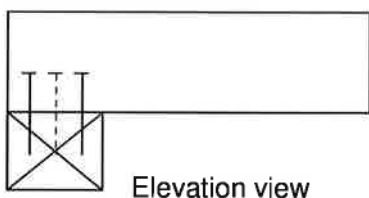
NOTES:

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

Toe-nailing on 2x6 Bearing Plate



Toe-nailing on 2x4 Bearing Plate



MiTek

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



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

PEO
Certificate No. 10889485

