

Hanger Name	Symbol	QTY
LUS24	▲	7
LJS26DS	■	4
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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TOWN OF EAST GWILLIMBURY  
Building Standards Branch



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			



CONVENTIONAL  
FRAMING BY OTHERS

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

JOB INFORMATION

Customer	GREENPARK HOMES
Job #	T20-00761
Address	TRINAR HALL EAST GWILLIMBURY,ON
Model	GLENWAY 2A ELEV 2
Sales Rep	RALPH MIRIGELLO
Designer	DM
Date	12/16/2020
Path	C:\DATA\JOBS\GREENPARK\TRINAR HALL\MODELS\GLENWAY 2A\ELEV 2\T-GLENWAY2A-2\

DESIGN INFORMATION

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

IMPORTANT INFORMATION

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

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

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

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

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

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

KOTT Inc.  
14 Anderson Blvd.  
Uxbridge, ON  
905.642.4400

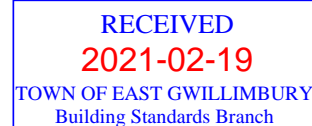






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Sewage System			
Zoning			



NE1220-107  
GREENPARK - TRINAR  
HALL - GLENWAY 2A ELE 2

## **ENGINEERING NOTE PAGE (ENP-1)** **PLEASE READ PRIOR TO INSTALLATION**

### **RESPONSIBILITIES**

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

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

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

### **USE AND OCCUPANCY**

- The building is of the type indicated on the drawing

### **LOADING**

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

### **HANDLING, INSTALLATION AND BRACING**

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

### **SUPPORTS**

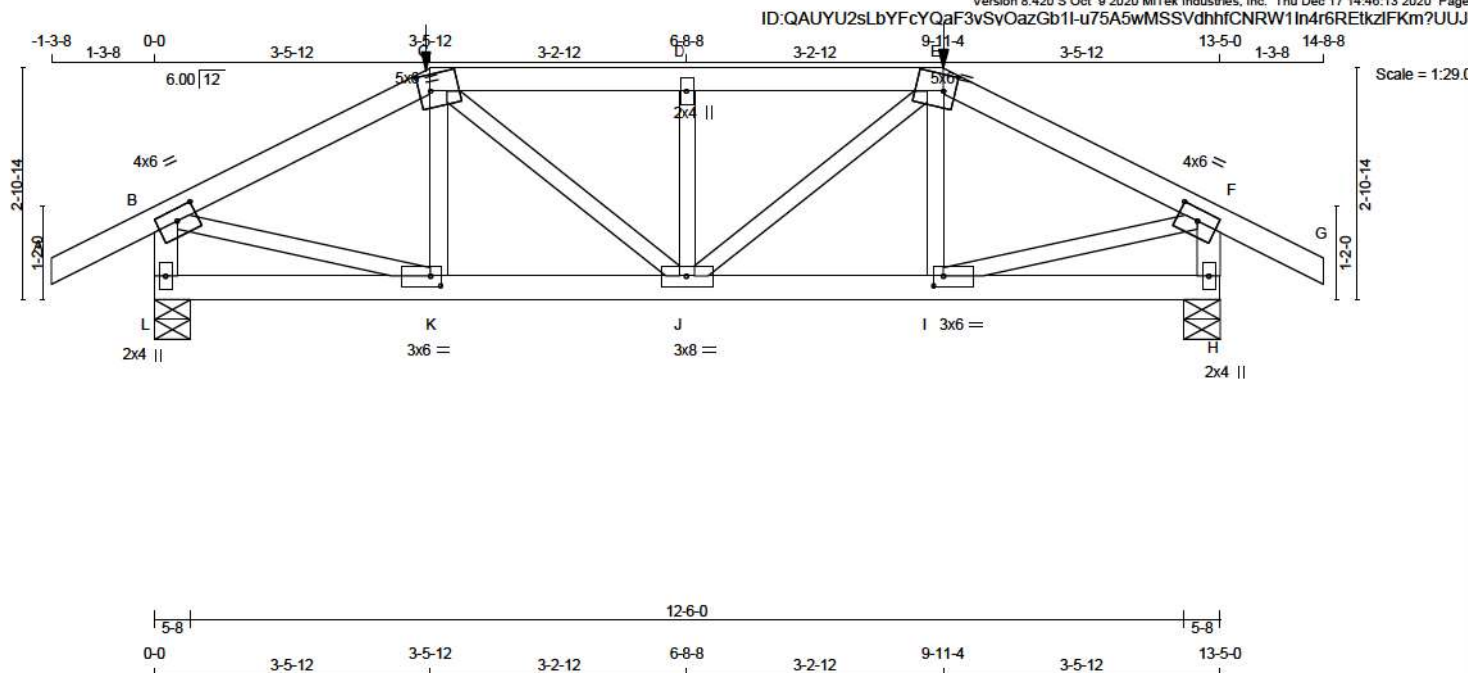
- The trusses are to be supported at the bearing points indicated and anchored to the supports where considered necessary by the designer of the overall structure
- Bearing sizes shown are the minimum required to prevent crushing of the truss members and do not necessarily take into account stability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

### **DIMENSIONS**

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







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 - G	2x4	DRY	No.2	SPF	
L - B	2x4	DRY	No.2	SPF	
H - F	2x4	DRY	No.2	SPF	
L - 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	6.0	1.75	3.00
C	TTWW-m	MT20	5.0	6.0	2.50	1.75
D	TMVW-w	MT20	2.0	4.0		
E	TTWW-m	MT20	5.0	6.0	2.50	1.75
F	TMVW-t	MT20	4.0	6.0	1.75	3.00
H	BMV1+p	MT20	2.0	4.0		
I	BMWW-t	MT20	3.0	6.0	1.50	1.50
J	BMWWW-t	MT20	3.0	8.0		
K	BMWW-t	MT20	3.0	6.0	1.50	1.50
L	BMV1+p	MT20	2.0	4.0		

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
L	1813	0	1813	0	0	5-8	2-6	2-6	
H	1813	0	1813	0	0	5-8	2-6	2-6	

UNFACTORED REACTIONS							
	1ST LCASE	MAX/MIN COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	1334	793 / 0	211 / 0	0 / 0	0 / 0	329 / 0	0 / 0
H	1334	793 / 0	211 / 0	0 / 0	0 / 0	329 / 0	0 / 0

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

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.01 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

**LOADING**  
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM	TO	LENGTH	FR-TO		
A-B	0 / 38	-124.4	-124.4	0.18 (1)	10.00	K-C	-201 / 112
B-C	-2021 / 0	-124.4	-124.4	0.36 (1)	4.34	C-J	0 / 692
C-D	-2336 / 0	-186.6	-186.6	0.36 (1)	4.01	J-D	-718 / 0
D-E	-2336 / 0	-186.6	-186.6	0.36 (1)	4.01	J-E	0 / 692
E-F	-2021 / 0	-124.4	-124.4	0.36 (1)	4.34	I-E	-201 / 112
F-G	0 / 38	-124.4	-124.4	0.18 (1)	10.00	B-K	0 / 1856
L-B	-1724 / 0	0.0	0.0	0.19 (1)	6.29	I-F	0 / 1856
H-F	-1724 / 0	0.0	0.0	0.19 (1)	6.29		
L-K	0 / 0	-58.9	-58.9	0.14 (3)	10.00		
K-J	0 / 1798	-58.9	-58.9	0.41 (1)	10.00		
J-I	0 / 1798	-58.9	-58.9	0.41 (1)	10.00		
I-H	0 / 0	-58.9	-58.9	0.14 (3)	10.00		

FACTORED CONCENTRATED LOADS (LBS)							
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	HEEL
C	3-5-12	-213	-213	---	FRONT	VERT	TOTAL
E	9-11-4	-213	-213	---	FRONT	VERT	TOTAL

#### CONNECTION REQUIREMENTS

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

#### DESIGN CRITERIA

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

**SPACING = 24.0 IN. C/C**

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

GIRDER TYPE: CPrimeHip  
SIDE SETBACK = 3-5-12  
END SETBACK = 4-5-8  
END WALL WIDTH = 5-8  
CORNER FRAMING TYPE: CONVENTIONAL  
END JACK TYPE: CONVENTIONAL  
APPLIED TO FRONT SIDE  
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL. (LL) = L/360 (0.45")  
CALCULATED VERT. DEFL. (LL) = L/999 (0.05")  
ALLOWABLE DEFL. (TL) = L/360 (0.45")  
CALCULATED VERT. DEFL. (TL) = L/999 (0.08")

CSI: TC=0.39/1.00 (C-D:1), BC=0.41/1.00 (J-K:1), WB=0.46/1.00 (B-K:1), SSI=0.31/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (B) (INPUT = 0.90 )  
JSI METAL = 0.52 (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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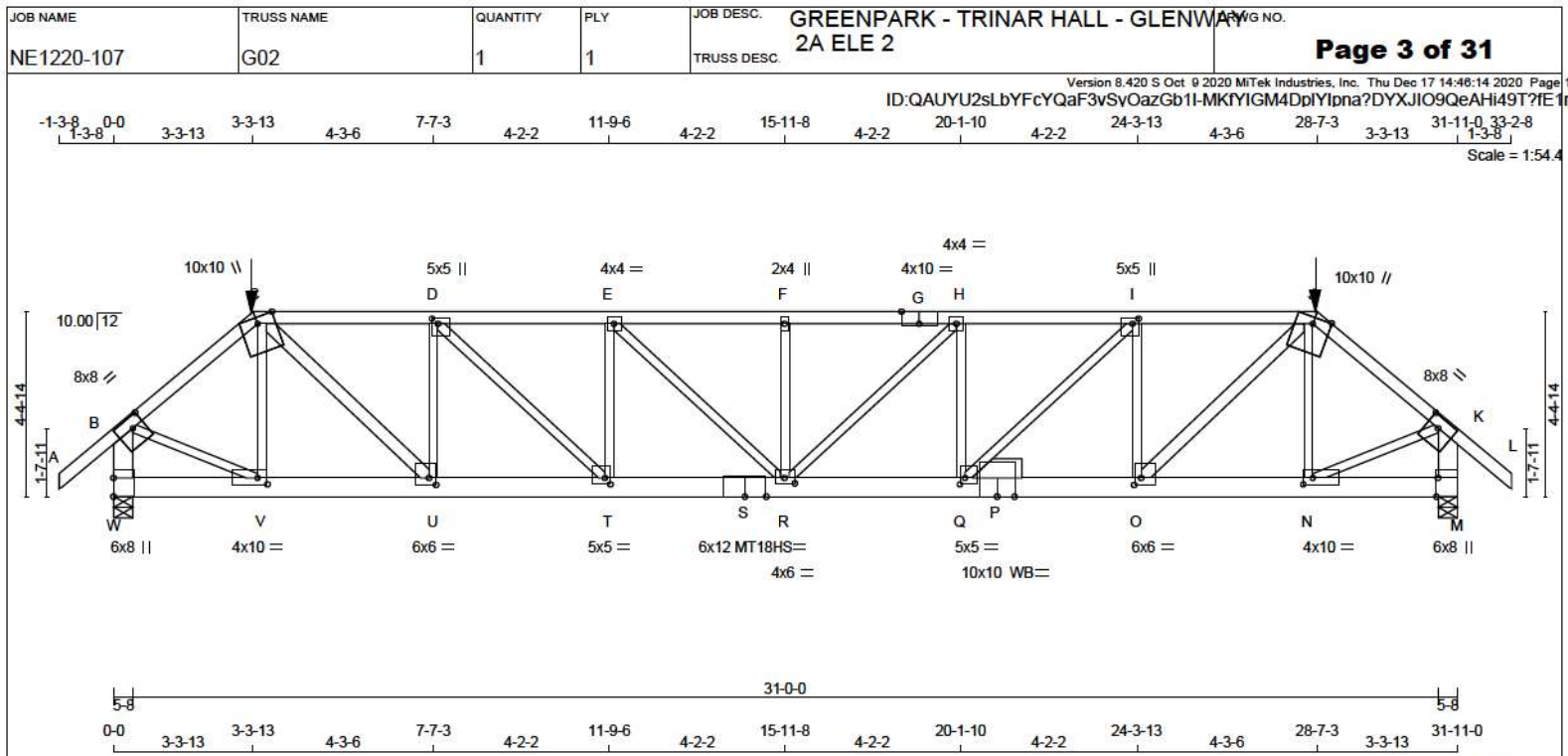


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Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			







**LUMBER**  
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY No.2	SPF
C - G	2x4	DRY 2100F 1.8E	SPF
G - J	2x4	DRY 2100F 1.8E	SPF
J - L	2x4	DRY No.2	SPF
W - B	2x6	DRY No.2	SPF
M - K	2x6	DRY 2100F 1.8E	SPF
W - S	2x6	DRY 2100F 1.8E	SPF
S - P	2x6	DRY 2100F 1.8E	SPF
P - M	2x6	DRY 2100F 1.8E	SPF
ALL WEBS EXCEPT	2x3	DRY No.2	SPF
C - U	2x4	DRY No.2	SPF
O - J	2x4	DRY No.2	SPF

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	8.0	8.0	3.00 3.25
C	TTWW+m	MT20	10.0	10.0	Edge
D	TMWW-t	MT20	5.0	5.0	1.50 1.75
E	TMWW-t	MT20	4.0	4.0	
F	TMWW-t	MT20	2.0	4.0	
G	TS-t	MT20	4.0	10.0	Edge 5.00
H	TMWW-t	MT20	4.0	4.0	
I	TMWW-t	MT20	5.0	5.0	1.50 1.75
J	TTWW+m	MT20	10.0	10.0	Edge
K	TMVW-t	MT20	8.0	8.0	3.00 3.25
M	BMV1-t	MT20	6.0	8.0	Edge 0.50
N	BMVW-t	MT20	4.0	10.0	1.75 2.75
O	BMVW-t	MT20	6.0	8.0	2.00 2.00
P	BS-t	MT20	10.0	10.0	
Q	BMVW-t	MT20	5.0	5.0	1.75 1.50
R	BMVW-t	MT20	4.0	8.0	1.50 3.00
S	BS-t	MT18HS	6.0	12.0	
T	BMVW-t	MT20	5.0	5.0	1.75 1.50
U	BMVW-t	MT20	6.0	6.0	2.00 2.00
V	BMVW-t	MT20	4.0	10.0	1.75 2.75
W	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	4958	0	4958	0
W HORZ	4958	0	4958	0
M UPLIFT	4958	0	4958	0

**UNFACTORED REACTIONS**

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	3668	2124 / 0	821 / 0
W SNOW	3668	2124 / 0	821 / 0
M LIVE	3668	2124 / 0	821 / 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 = 2.06 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)	FACTORED VERT. LOAD (PLF)
FR-TO	0 / 55	-124.4 -124.4 0.19 (1)	10.00	V-C -999 / 0
A-B	-4935 / 0	-124.4 -124.4 0.69 (1)	2.45	C-U 0 / 4715
B-C	-7165 / 0	-230.7 -230.7 0.76 (1)	2.42	U-D -2946 / 0
C-D	-9085 / 0	-230.7 -230.7 0.96 (1)	2.06	D-T 0 / 2667
D-E	-9728 / 0	-230.7 -230.7 0.90 (1)	2.11	T-E -1550 / 0
E-F	-9728 / 0	-230.7 -230.7 0.90 (1)	2.11	E-R 0 / 894
F-G	-9728 / 0	-230.7 -230.7 0.90 (1)	2.11	R-F -972 / 0
G-H	-9085 / 0	-230.7 -230.7 0.96 (1)	2.06	H-R 0 / 894
H-I	-7165 / 0	-124.4 -124.4 0.69 (1)	2.45	Q-I 0 / 2667
I-J	-4935 / 0	-124.4 -124.4 0.19 (1)	10.00	O-I -2946 / 0
J-K	0 / 55	0.0 0.0 0.36 (1)	4.84	O-J 0 / 4715
K-L	-4854 / 0	0.0 0.0 0.36 (1)	4.84	N-J -999 / 0
L-M	-4854 / 0	0.0 0.0 0.36 (1)	4.84	B-V 0 / 4012
M-N	0 / 0	-72.8 -72.8 0.05 (3)	10.00	N-K 0 / 4012
N-O	0 / 0	-72.8 -72.8 0.05 (3)	10.00	
O-P	0 / 0	-72.8 -72.8 0.05 (3)	10.00	
P-Q	0 / 0	-72.8 -72.8 0.05 (3)	10.00	
Q-R	0 / 0	-72.8 -72.8 0.05 (3)	10.00	
R-S	0 / 0	-72.8 -72.8 0.05 (3)	10.00	
S-T	0 / 0	-72.8 -72.8 0.05 (3)	10.00	
T-U	0 / 0	-72.8 -72.8 0.05 (3)	10.00	
U-V	0 / 0	-72.8 -72.8 0.05 (3)	10.00	
V-W	0 / 0	-72.8 -72.8 0.05 (3)	10.00	

**FACTORED CONCENTRATED LOADS (LBS)**

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	3-4-7	-301	-301	—	FRONT	VERT	TOTAL	—	C1
J	28-6-9	-301	-301	—	FRONT	VERT	TOTAL	—	C1

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

**DESIGN CRITERIA**

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

**SPACING = 24.0 IN. C/C**

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

**GIRDER TYPE:** CPrimeHip  
**SIDE SETBACK =** 3-3-13  
**END SETBACK =** 5-10-8  
**END WALL WIDTH =** 5-8  
**CORNER FRAMING TYPE:** CONVENTIONAL  
**END JACK TYPE:** CONVENTIONAL  
**APPLIED TO FRONT SIDE**  
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

**ALLOWABLE DEFL. (LL) = L/360 (1.06")**  
**CALCULATED VERT. DEFL. (LL) = L/948 (0.40")**  
**ALLOWABLE DEFL. (TL) = L/360 (1.06")**  
**CALCULATED VERT. DEFL. (TL) = L/569 (0.67")**

**CSI: TC=0.96/1.00 (D-E-1), BC=0.58/1.00 (R-T-1), WB=0.99/1.00 (K-N-1), SSI=0.50/1.00 (C-D-1)**

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

**COMPANION LIVE LOAD FACTOR = 1.00**

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

**NAIL VALUES**

PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	650	371	1747
MT18HS	588	403	2455

**PLATE PLACEMENT TOL. = 0.250 inches**

**PLATE ROTATION TOL. = 5.0 Deg.**

**JSI GRIP= 0.90 (O) (INPUT = 0.90 )**  
**JSI METAL = 0.96 (P) (INPUT = 1.00 )**

**RECEIVED**  
**2021-02-19**  
**TOWN OF EAST GWILLIMBURY**  
**Building Standards Branch**



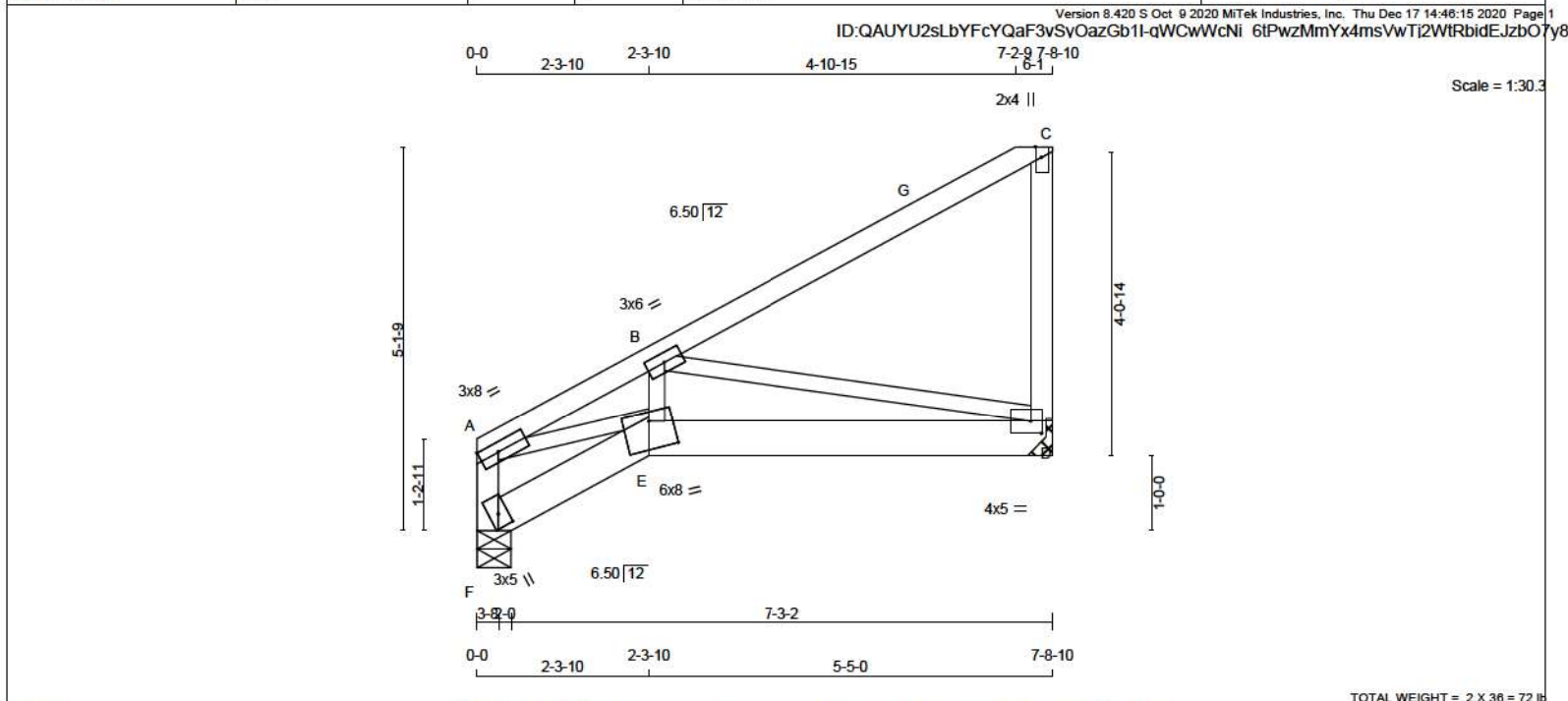
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			



CONTINUED ON PAGE 2





**LUMBER**  
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
F - A	2x4	DRY No.2	SPF
A - C	2x4	DRY No.2	SPF
D - C	2x4	DRY No.2	SPF
F - E	2x6	DRY No.2	SPF
E - D	2x6	DRY No.2	SPF

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

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

CHORDS#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
F - A 1	12	TOP
A - C 1	12	SIDE(24.6)
C - D 1	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
F - E 2	12	TOP
E - D 2	12	SIDE(139.8)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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.

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	8.0		Edge
B	TMVW-t	MT20	3.0	6.0		
C	TMV+p	MT20	2.0	4.0		Edge
D	BMVW1-t	MT20	4.0	5.0	2.00	1.75
E	BBWW-m	MT20	6.0	8.0	4.50	3.75
F	BVM1-H	MT20	3.0	5.0	2.25	1.50

**Dec 16, 2020**

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

**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
F	1858	0	1858	0
D	1781	0	1781	0

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

**UNFACTORED REACTIONS**

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
F	1382	743 / 0	224 / 0
D	1307	733 / 0	221 / 0

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

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.78 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 CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	UNBRACED LENGTH
FR-TO				FR-TO			
F-A	-1813 / 0	0.0	0.0 0.10 (1)	A-E	0 / 3041	0.38 (1)	7.81
A-B	-3398 / 0	-461.7	-441.6 0.28 (1)	E-B	0 / 1168	0.14 (1)	4.78
B-G	-35 / 0	-154.4	-124.4 0.24 (1)	B-D	-2988 / 0	0.72 (1)	8.25
G-C	-35 / 0	-124.4	-124.4 0.24 (1)				8.25
D-C	-283 / 0	0.0	0.0 0.04 (1)				7.81
F-E	0 / 0	-39.2	-39.2 0.01 (3)				10.00
E-D	0 / 2922	-318.9	-318.9 0.62 (1)				10.00

**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**

GIRDER TYPE: CStdGirder  
START DISTANCE = 0-0  
START SPAN CARRIED = 9-4-4  
END DISTANCE = 2-3-10  
END SPAN CARRIED = 9-4-4  
END WALL WIDTH = 4-0  
APPLIED TO TOP EDGE OF TOP CHORD.  
- ADDTL LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CStdGirder  
START DISTANCE = 2-3-10  
START SPAN CARRIED = 8-10-0  
END DISTANCE = 7-8-10  
END SPAN CARRIED = 8-10-0  
END WALL WIDTH = 0-0  
APPLIED TO FRONT SIDE OF BOTTOM CHORD.  
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.26")  
CALCULATED VERT. DEFL.(LL)= L/999 (0.07")  
ALLOWABLE DEFL.(TL)= L/360 (0.26")  
CALCULATED VERT. DEFL.(TL)= L/803 (0.12")

CSI: TC=0.28/1.00 (A-B:1) , BC=0.62/1.00 (D-E:1) ,  
WB=0.72/1.00 (B-D:1) , SSI=0.29/1.00 (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 .



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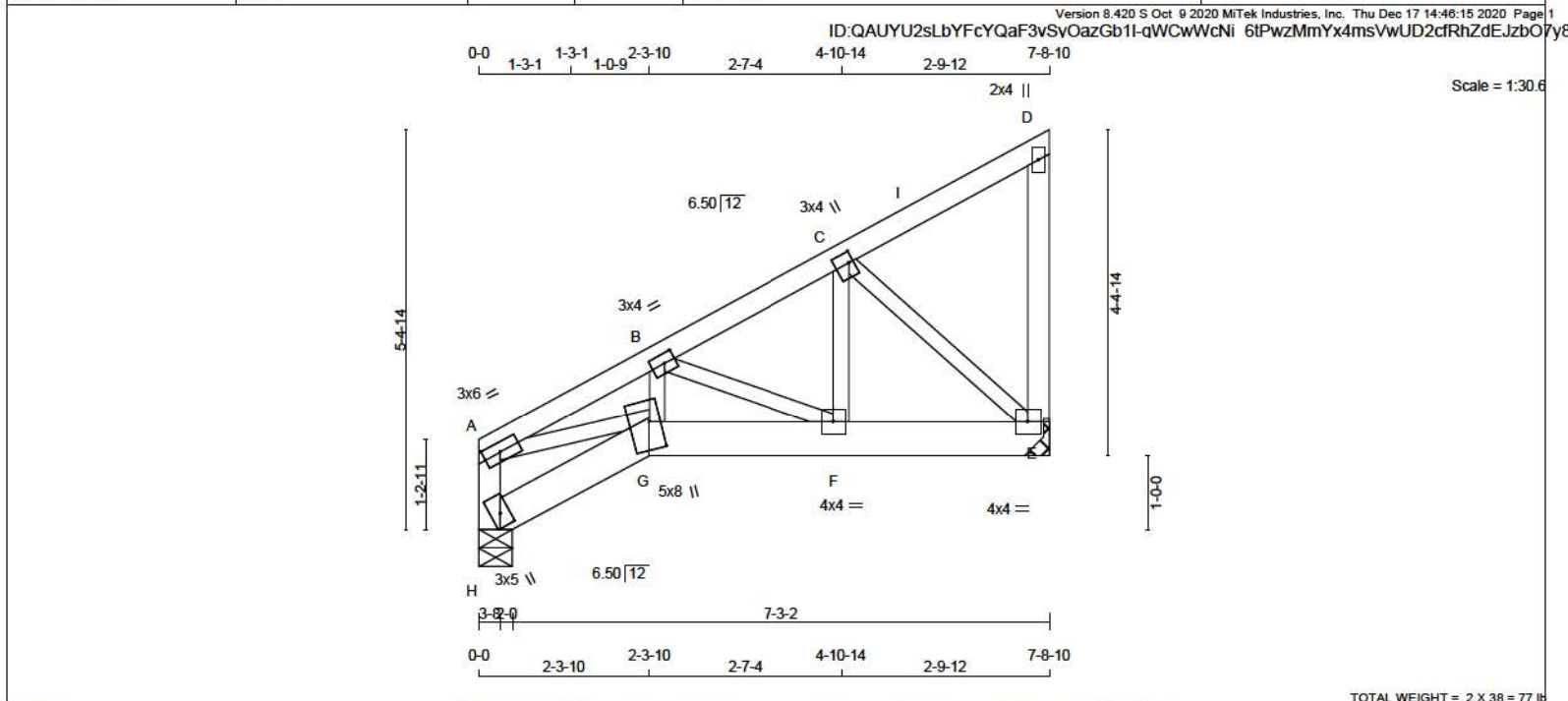
Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			

CONTINUED ON PAGE 2



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**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
H - A	2x4	DRY	No.2
A - D	2x4	DRY	No.2
H - G	2x6	DRY	No.2
G - E	2x6	DRY	No.2

ALL WEBS 2x3 DRY No.2 SPF

EXCEPT E - D 2x4 DRY No.2 SPF

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		
H-A 1 12		TOP
A-D 1 12		SIDE(24.6)
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
H-G 2 12		TOP
G-E 2 12		SIDE(139.8)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1 6		
2x4 1 6		

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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.

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	6.0	1.50	2.75
B	TMVW-t	MT20	3.0	4.0	1.50	1.75
C	TMVW-t	MT20	3.0	4.0	1.75	0.75
D	TMVW-t	MT20	2.0	4.0		
E	BMVW-t	MT20	4.0	4.0		
F	BMVW-t	MT20	4.0	4.0		

**Dec 16, 2020**

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

**BEARINGS**

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	UPLIFT
H	1824	0	1824	0
E	1722	0	1722	0

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

**UNFACTORED REACTIONS**

	1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE	PERM.LIVE
H	1358	729 / 0	220 / 0	0 / 0
E	1278	714 / 0	217 / 0	0 / 0

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

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.97 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)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM		FR-TO			
H-A	-1779 / 0	0.0	0.0 0.10 (1)	A-G	0 / 2766	0.34 (1)	
A-B	-3119 / 0	-461.7	-441.6 0.25 (1)	G-B	0 / 847	0.08 (1)	
B-C	-1493 / 0	-154.4	-133.5 0.08 (1)	C-E	-1786 / 0	0.22 (1)	
C-I	-17 / 0	-133.5	-124.4 0.06 (1)	E-F	0 / 1563	0.19 (1)	
I-D	-17 / 0	-124.4	-124.4 0.06 (1)	D-F	-132 / 0	0.01 (1)	
				F-E	-1525 / 0	0.15 (1)	
H-G	0 / 0	-39.2	-39.2 0.01 (3)				
G-F	0 / 2696	-318.9	-318.9 0.25 (1)				
F-E	0 / 1308	-318.9	-318.9 0.16 (1)				

**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**

GIRDER TYPE: CStdGirder  
START DISTANCE = 0-0  
START SPAN CARRIED = 9-4-4  
END DISTANCE = 2-3-10  
END SPAN CARRIED = 9-4-4  
END WALL WIDTH = 4-0  
APPLIED TO TOP EDGE OF TOP CHORD.  
- ADDTL LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CStdGirder  
START DISTANCE = 2-3-10  
START SPAN CARRIED = 8-10-0  
END DISTANCE = 7-8-10  
END SPAN CARRIED = 8-10-0  
END WALL WIDTH = 0-0  
APPLIED TO FRONT SIDE OF BOTTOM CHORD.  
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.25")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")  
ALLOWABLE DEFL.(TL)= L/360 (0.25")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.25/1.00 (A-B:1) , BC=0.25/1.00 (F-G:1) ,  
WB=0.34/1.00 (A-G:1) , SSI=0.22/1.00 (A-B: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 .

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Building Standards Branch BCIN #16487

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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			

CONTINUED ON PAGE 2



PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
G	BBWW+m	MT20	5.0	8.0	4.50	1.75
H	BVM1+H	MT20	3.0	5.0	2.25	1.50

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 (A) (INPUT = 0.90 )

JSI METAL= 0.46 (G) (INPUT = 1.00 )

READ ALL NOTES ON THIS PAGE AND ON  
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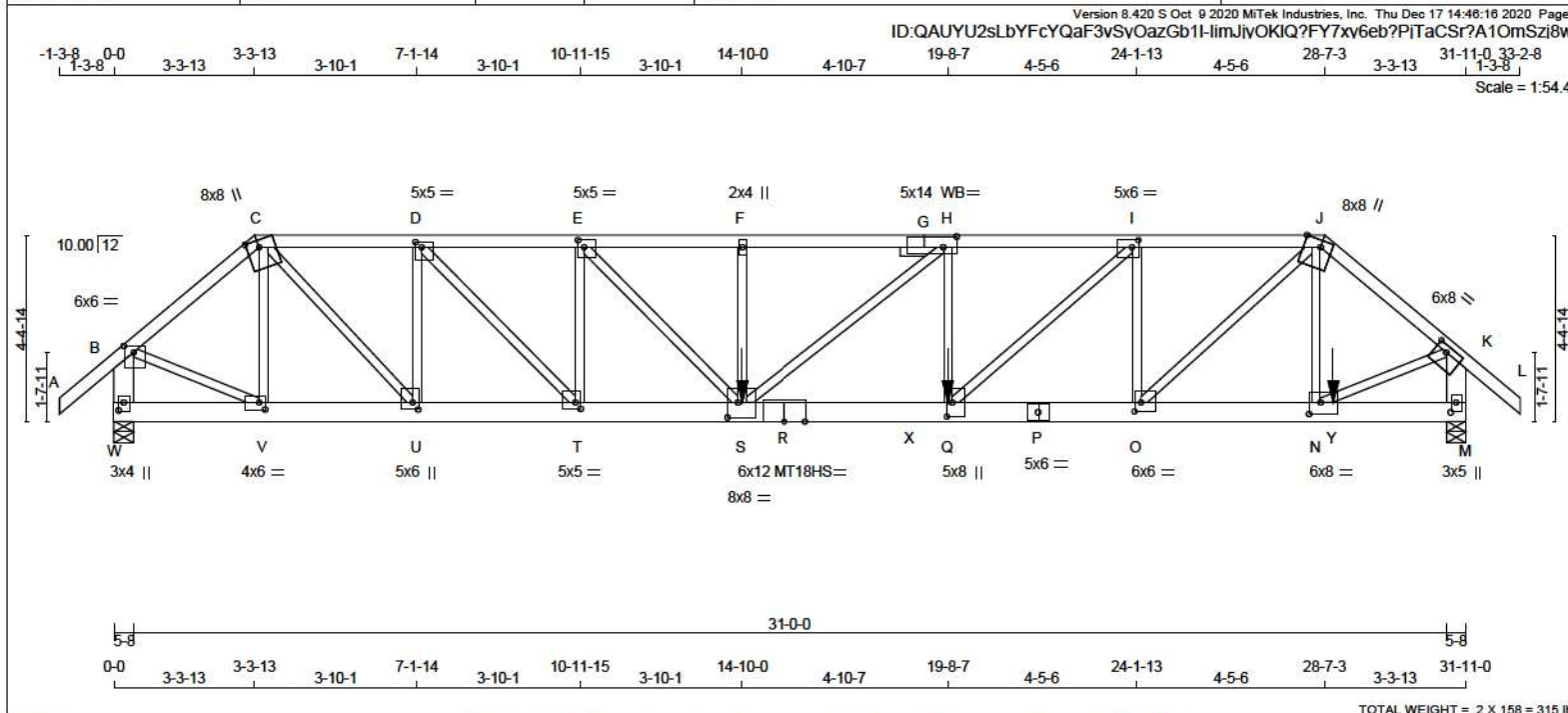


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			







LUMBER										DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA									
N. L. G. A. RULES										BEARINGS										*** SPECIAL LOADS ANALYSIS ***									
CHORDS SIZE LUMBER DESCR. SPF										FACTORED GROSS REACTION MAXIMUM FACTORED GROSS REACTION INPUT BRG REQD										GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.									
A - C 2x4 DRY No.2 2100F 1.8E										JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX										LOADS WERE DERIVED FROM USER INPUT									
C - G 2x4 DRY No.2 2100F 1.8E										W 5695 0 5695 0 0 5-8 3-1										NO FURTHER MODIFICATIONS WERE MADE									
G - J 2x4 DRY No.2 2100F 1.8E										M 8111 0 8111 0 0 5-8 5-4																			
J - L 2x4 DRY No.2 2100F 1.8E										UNFACTORED REACTIONS										SPECIFIED LOADS:									
W - B 2x6 DRY No.2 2100F 1.8E										1ST LCASE MAX/MIN COMPONENT REACTIONS										TOP CH. LL = 34.8 PSF									
M - K 2x6 DRY No.2 2100F 1.8E										JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL										DL = 8.0 PSF									
W - R 2x6 DRY 2100F 1.8E										W 4209 2445 / 0 709 / 0 0 / 0 0 / 0 1055 / 0 0 / 0										BOT CH. LL = 10.5 PSF									
R - P 2x6 DRY 2100F 1.8E										M 5698 3473 / 0 1019 / 0 0 / 0 0 / 0 1506 / 0 0 / 0										DL = 7.3 PSF									
P - M 2x6 DRY 2100F 1.8E																				TOTAL LOAD = 60.6 PSF									
ALL WEBS 2x3 DRY No.2 SPF										BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) W, M										SPACING = 24.0 IN/C									
EXCEPT																													
DRY: SEASONED LUMBER.										BRACING										LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM									
DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:										TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.84 FT.										GIRDER TYPE: CStdGirder									
										MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.										START DISTANCE = 14-10-0									
										ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.										START SPAN CARRIED = 7-8-10									
																				END DISTANCE = 19-8-7									
																				END SPAN CARRIED = 7-8-10									
																				END WALL WIDTH = 5-8									
																				APPLIED TO FRONT SIDE OF BOTTOM CHORD.									
																				-ADDTL LOADS BASED ON 55 % OF GSL.									
																				GIRDER TYPE: CStdGirder									
																				START DISTANCE = 28-9-9									
																				START SPAN CARRIED = 7-8-10									
																				END DISTANCE = 31-11-0									
																				END SPAN CARRIED = 7-8-10									
																				END WALL WIDTH = 5-8									
																				APPLIED TO FRONT SIDE OF BOTTOM CHORD.									
																				-ADDTL LOADS BASED ON 55 % OF GSL.									
																				GIRDER TYPE: CStdGirder									
																				START DISTANCE = 15-8-8									
																				START SPAN CARRIED = 7-8-10									
																				END DISTANCE = 18-10-0									
																				END SPAN CARRIED = 7-8-10									
																				END WALL WIDTH = 5-8									
																				APPLIED TO FRONT SIDE OF BOTTOM CHORD.									
																				-ADDTL LOADS BASED ON 55 % OF GSL.									
																				*** NON STANDARD GIRDER ***									

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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	6.0	6.0	1.75	2.75
C	TTWW+m	MT20	8.0	8.0	2.00	3.50
D	TMWW-t	MT20	5.0	5.0	1.50	1.75
E	TMWW-t	MT20	5.0	5.0	2.00	1.75
F	TMW+w	MT20	2.0	4.0		
G						
G	TSWW-l	MT20	5.0	14.0	3.00	3.75
H						
I	TMWW-t	MT20	5.0	6.0	2.00	1.75
J	TTWW+m	MT20	8.0	8.0	Edge	4.75
K	TMVW-t	MT20	6.0	8.0	1.75	3.25
M	BMV1+p	MT20	3.0	5.0	2.75	1.50
N	BMWW-t	MT20	6.0	8.0	3.25	3.25
O	BMWW-t	MT20	6.0	6.0	2.50	1.75
P	BS-t	MT20	5.0	6.0		
Q	BMWW-t	MT20	5.0	8.0	4.00	1.50
R	BS-t	MT18HS	6.0	12.0		
S	BMWW-t	MT20	8.0	8.0	4.25	3.00
T	BMWW-t	MT20	5.0	5.0	1.75	1.50
U	BMWW-t	MT20	5.0	6.0	2.00	1.50
V	BMWW-t	MT20	4.0	6.0	2.00	1.75
W	BMV1+p	MT20	3.0	4.0	2.25	1.50

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

WB - INDICATES BLOCKING REQUIRED

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	650 371	1747 788	1987 1873
MT18HS	598 403	2455 1382	3163 3004

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (T) (INPUT = 0.90 )  
JSI METAL= 0.96 (P) (INPUT = 1.00 )

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Discipline

Building Code

Sewage System

Zoning

Reviewer

H. Authier

BCIN

43236

Date

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Sewage System

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2021-02-19

Discipline

Building Code

Sewage System

Zoning

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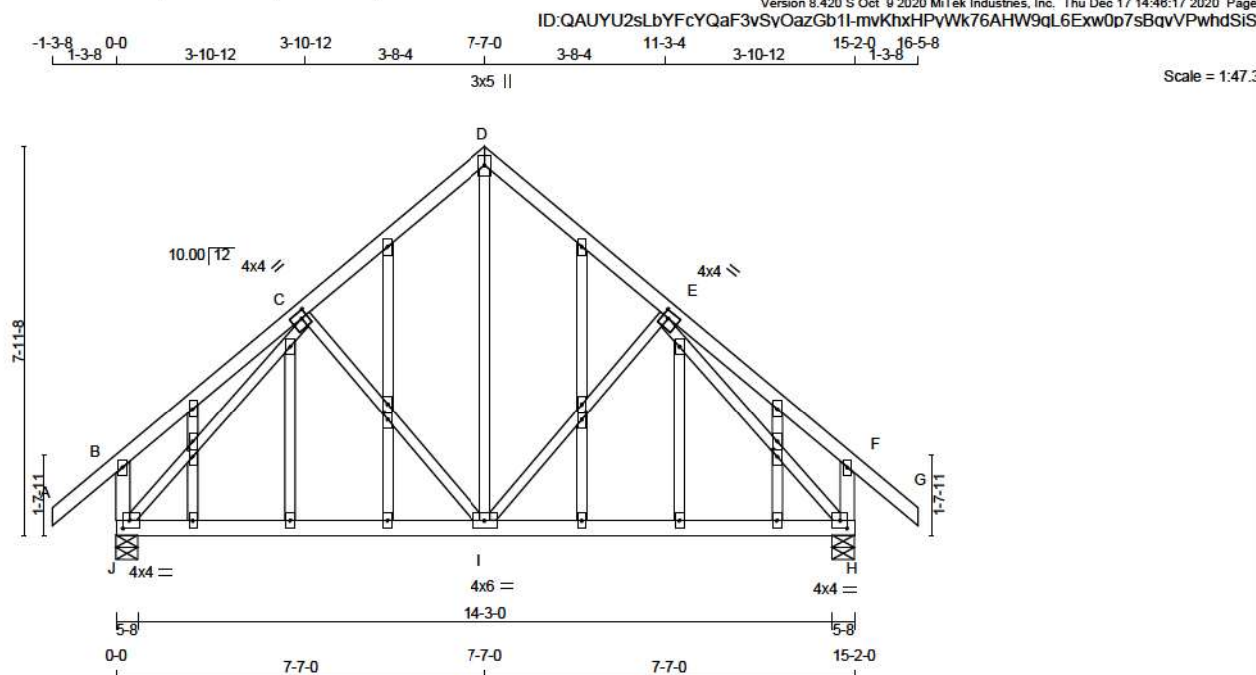
2021-02-19

Discipline

Building Code

Sewage System





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

ALL WEBS	2x3	DRY	No.2
EXCEPT			

ALL GABLE WEBS	2x3	DRY	No.2
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 TMWW-t	MT20	4.0	4.0	1.75	1.50
D TTW+p	MT20	3.0	5.0		
E TMWW-t	MT20	4.0	4.0	1.75	1.50
F TMV+p	MT20	2.0	4.0		
H BMVW1-t	MT20	4.0	4.0	2.00	1.75
I BMWW-t	MT20	4.0	6.0		
J BMVW1-t	MT20	4.0	4.0	2.00	1.75
K NP+w	MT20	2.0	4.0	2.00	1.00
K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z					
K NP+w	MT20	2.0	4.0		
P NP+w	MT20	2.0	4.0	1.75	1.00
U NP+w	MT20	2.0	4.0	2.00	1.00
Z NP+w	MT20	2.0	4.0	1.75	1.00

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

##### BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT VERT	1414	1414	0	5-8
JT HORZ	0	0	0	1-9
H VERT	1414	1414	0	5-8
H HORZ	0	0	0	1-9

##### UNFACTORED REACTIONS

1ST CASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	1038	824 / 0	159 / 0
JT SNOW	1038	824 / 0	159 / 0
JT LIVE	1038	824 / 0	159 / 0
JT PERM. LIVE	0 / 0	0 / 0	254 / 0
JT WIND	0 / 0	0 / 0	254 / 0
JT DEAD	0 / 0	0 / 0	254 / 0
JT SOIL	0 / 0	0 / 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. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)
FR-TO		FROM TO	LENGTH	FR-TO		FROM TO	LENGTH
A-B	0 / 55	-124.4 -124.4	0.17 (1)	10.00	I-D	0 / 720	0.16 (1)
B-C	0 / 35	-124.4 -124.4	0.29 (1)	10.00	I-E	-232 / 11	0.14 (1)
C-D	-884 / 0	-124.4 -124.4	0.23 (1)	8.25	G-I	-232 / 11	0.14 (1)
D-E	-884 / 0	-124.4 -124.4	0.23 (1)	8.25	J-C	-1244 / 0	0.70 (1)
E-F	0 / 35	-124.4 -124.4	0.29 (1)	10.00	E-H	-1244 / 0	0.70 (1)
F-G	0 / 55	-124.4 -124.4	0.17 (1)	10.00			
J-B	-352 / 0	0.0	0.0	0.04 (1)	7.81		
H-F	-352 / 0	0.0	0.0	0.04 (1)	7.81		
J-I	0 / 804	-39.2	-39.2	0.59 (3)	10.00		
I-H	0 / 804	-39.2	-39.2	0.59 (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 (0.51")  
CALCULATED VERT. DEFL. (LL) = L/999 (0.10")  
ALLOWABLE DEFL. (TL) = L/360 (0.51")  
CALCULATED VERT. DEFL. (TL) = L/999 (0.17")

CSI: TC=0.29/1.00 (B-C-1), BC=0.59/1.00 (H-I-3),  
WB=0.70/1.00 (C-J-1), SSI=0.20/1.00 (I-J-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 (PSI)	SECTION (PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	650	371	1747
	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.83 (H) (INPUT = 0.90 )  
JSI METAL = 0.42 (C) (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.**

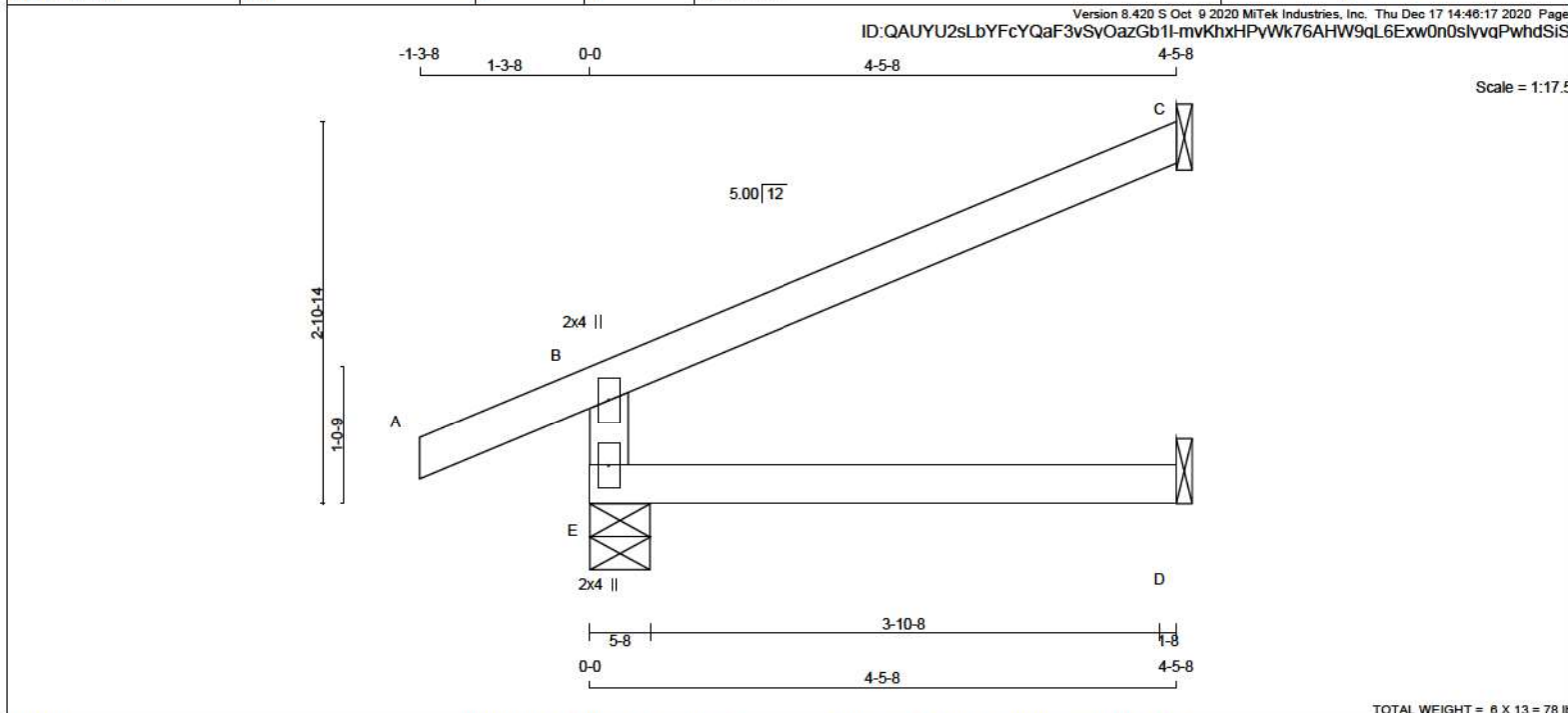
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**2021-02-19**  
**TOWN OF EAST GWILLIMBURY**  
Building Standards Branch



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

Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			





LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX
E	616	0	616	0	0	5-8	1-8	1-8
C	208	0	208	0	0	1-8	1-8	1-8
D	73	0	92	0	0	1-8	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN COMPONENT REACTIONS		WIND	DEAD	SOIL	
		SNOW	LIVE				PERM. LIVE
E	446	288 / 0	55 / 0	0 / 0	0 / 0	104 / 0	0 / 0
C	143	116 / 0	0 / 0	0 / 0	0 / 0	27 / 0	0 / 0
D	66	0 / 0	39 / 0	0 / 0	0 / 0	27 / 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: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	MEMB.
FR-TO		FROM TO	LENGTH	FR-TO			
E- B	-514 / 0	0.0	0.0 0.13 (3)	7.81			
A- B	0 / 32	-124.4	-124.4 0.16 (1)	10.00			
B- C	-27 / 0	-124.4	-124.4 0.42 (1)	6.25			
E- D	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

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 (0.02")

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

CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

CSI: TC=0.42/1.00 (B-C:1) , BC=0.13/1.00 (D-E:3) , WB=0.00/1.00 (n/a:0) , SSI=0.25/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.28 (B) (INPUT = 0.90 )

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

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**2021-02-19**

TOWN OF EAST GWILLIMBURY

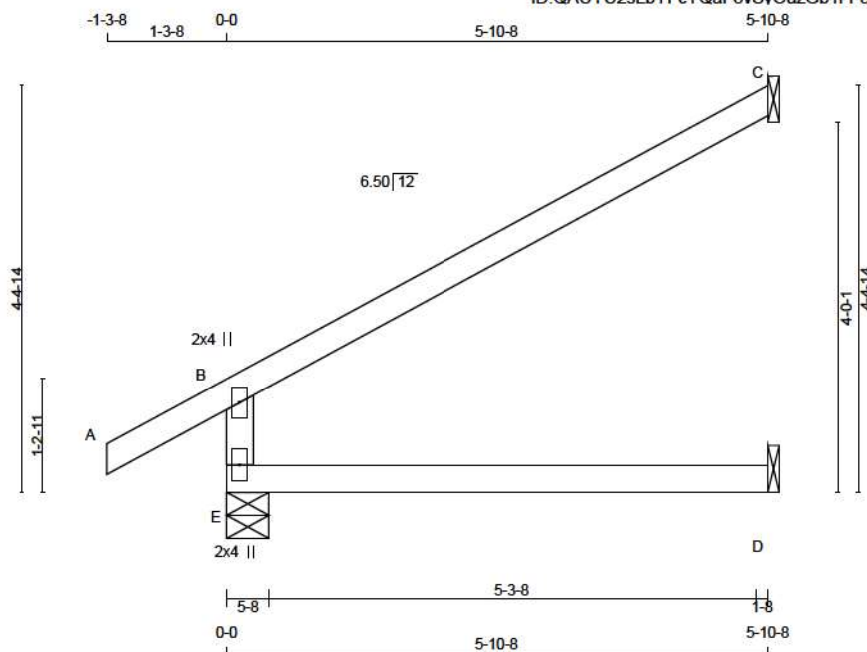
Building Standards Branch

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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			

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TOTAL WEIGHT = 15 X 17 = 256 lb

**LUMBER**  
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

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

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

**BEARINGS**

JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
E	761	0	761	0	0	5-8	1-8
C	274	0	274	0	0	1-8	1-8
D	96	0	121	0	0	1-8	1-8

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

**UNFACTORED REACTIONS**

JT	1ST LCASE	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	553	350 / 0	72 / 0	0 / 0	0 / 0	131 / 0	0 / 0
C	189	153 / 0	0 / 0	0 / 0	0 / 0	35 / 0	0 / 0
D	87	0 / 0	51 / 0	0 / 0	0 / 0	36 / 0	0 / 0

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

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

MEMB.	CHORDS		WEBS	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO				
E-B	-626 / 0	0.0	0.0	0.22 (3)
A-B	0 / 40	-124.4	-124.4	0.16 (1)
B-C	-43 / 0	-124.4	-124.4	0.73 (1)
E-D	0 / 0	-39.2	-39.2	0.23 (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/915 (0.08")

CSI: TC=0.73/1.00 (B-C:1), BC=0.23/1.00 (D-E:3), WB=0.00/1.00 (n/a:0), SSI=0.31/1.00 (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= 0.28 (B) (INPUT = 1.00 )



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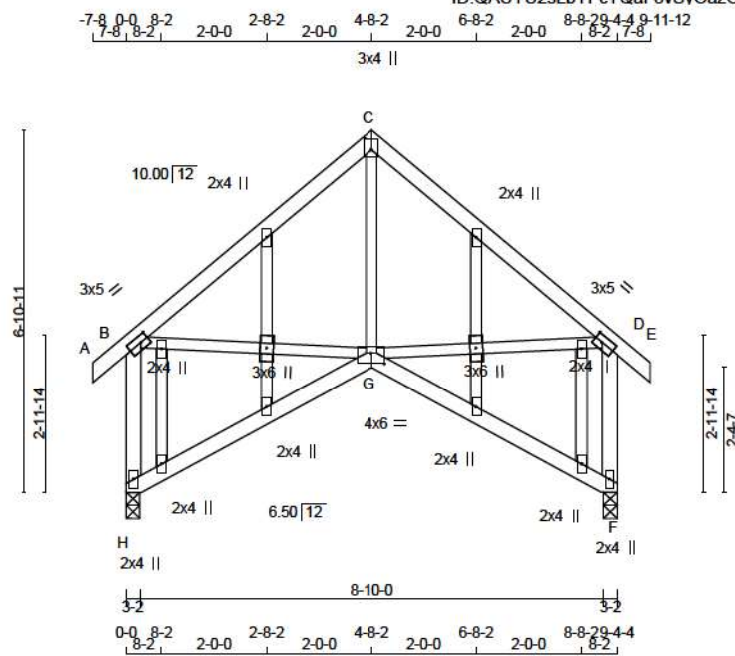
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TOWN OF EAST GWILLIMBURY  
Building Standards Branch



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			





Scale = 1:43.8

TOTAL WEIGHT = 54 lb

LUMBER				DESCR.
N. L. G. A. RULES	SIZE	LUMBER		
CHORDS				
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
H - B	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
H - G	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
ALL WEBS 2x3 DRY No.2				SPF
EXCEPT				
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	TMVW-t	MT20	3.0	5.0	1.50 1.75
C	TTW+p	MT20	3.0	4.0	2.50 1.50
D	TMVW-t	MT20	3.0	5.0	1.50 1.75
F	BMV1+p	MT20	2.0	4.0	
G	BBWW-p	MT20	4.0	6.0	2.50 3.00
H	BMV1+p	MT20	2.0	4.0	
I, I, P, P					
I	WMWW-t	MT20	3.0	6.0	
J, K, L, M, N, O, Q, R	NP+w	MT20	2.0	4.0	
P	WMWW-t	MT20	3.0	6.0	

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS	REACTION	GROSS	REACTION	BRG		BRG	
H	855	0	855	0	0	3-2	1-8		
F	855	0	855	0	0	3-2	1-8		

UNFACTORED REACTIONS		1ST CASE		MAX/MIN COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND DEAD SOIL
H	628	376 / 0	98 / 0	0 / 0	155 / 0 0 / 0
F	628	376 / 0	98 / 0	0 / 0	155 / 0 0 / 0

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

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLINE 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.		MEMB.	
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC) UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO	LENGTH	FR-TO		FROM TO	LENGTH
A-B	0 / 29	-124.4 -124.4	0.05 (1)	10.00	G-C	0 / 212	0.05 (3)
B-C	-560 / 0	-124.4 -124.4	0.35 (1)	8.25	B-G	0 / 431	0.10 (1)
C-D	-560 / 0	-124.4 -124.4	0.35 (1)	8.25	G-D	0 / 431	0.10 (1)
D-E	0 / 29	-124.4 -124.4	0.05 (1)	10.00			
H-B	-763 / 0	0.0 0.0	0.13 (1)	7.81			
F-D	-763 / 0	0.0 0.0	0.13 (1)	7.81			
H-G	0 / 0	-39.2 -39.2	0.21 (3)	10.00			
G-F	0 / 0	-39.2 -39.2	0.21 (3)	10.00			

#### DESIGN CRITERIA

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

**SPACING = 24.0 IN. C/C**

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.31")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")  
ALLOWABLE DEFL.(TL) = L/360 (0.31")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.06")

CSI: TC=0.35/1.00 (C-D-1), BC=0.21/1.00 (F-G-3),  
WB=0.10/1.00 (B-G-1), SSI=0.17/1.00 (C-D-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.65 (D) (INPUT = 0.90 )  
JSI METAL= 0.34 (H) (INPUT = 1.00 )



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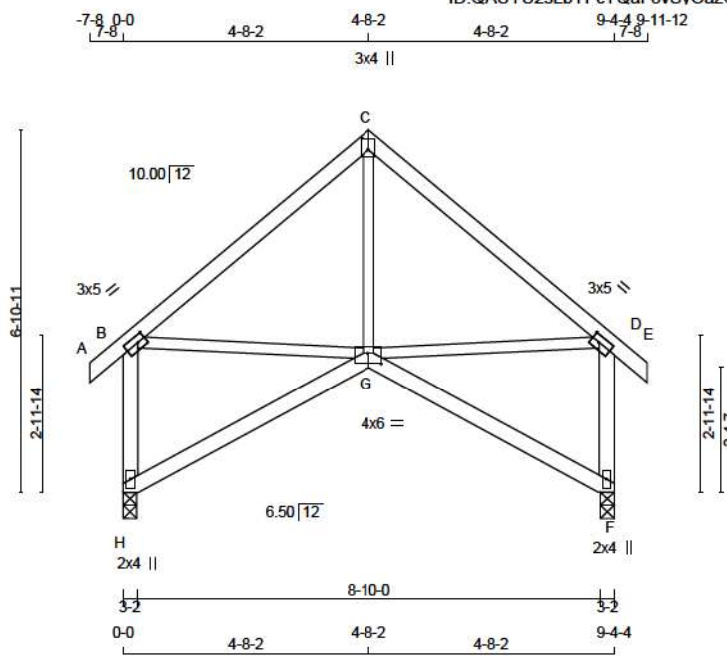


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			







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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW-I	MT20	3.0	5.0	1.50 1.75
C	TTW+p	MT20	3.0	4.0	2.50 1.50
D	TMVW-I	MT20	3.0	5.0	1.50 1.75
F	BMV1+p	MT20	2.0	4.0	
G	BBWW+p	MT20	4.0	8.0	2.50 3.00
H	BMV1+p	MT20	2.0	4.0	

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

##### BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
H	855	0	855	0
F	855	0	855	0

##### UNFACTORED REACTIONS

1ST CASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
H	628	376 / 0	98 / 0
F	628	376 / 0	98 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) H, 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)	LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM	TO	LENGTH	FR-TO		
A-B	0 / 29	-124.4	-124.4	0.05 (1)	10.00	G-C	0 / 212
B-C	-560 / 0	-124.4	-124.4	0.35 (1)	8.25	B-G	0 / 431
C-D	-560 / 0	-124.4	-124.4	0.35 (1)	8.25	G-D	0 / 431
D-E	0 / 29	-124.4	-124.4	0.05 (1)	10.00		
H-B	-763 / 0	0.0	0.0	0.13 (1)	7.81		
F-D	-763 / 0	0.0	0.0	0.13 (1)	7.81		
H-G	0 / 0	-39.2	-39.2	0.21 (3)	10.00		
G-F	0 / 0	-39.2	-39.2	0.21 (3)	10.00		

##### DESIGN CRITERIA

###### SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.31")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")  
ALLOWABLE DEFL.(TL) = L/360 (0.31")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.35/1.00 (C-D-1), BC=0.21/1.00 (F-G-3),  
WB=0.10/1.00 (B-G-1), SSI=0.17/1.00 (C-D-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

##### NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.65 (D) (INPUT = 0.90 )  
JSI METAL = 0.34 (H) (INPUT = 1.00 )



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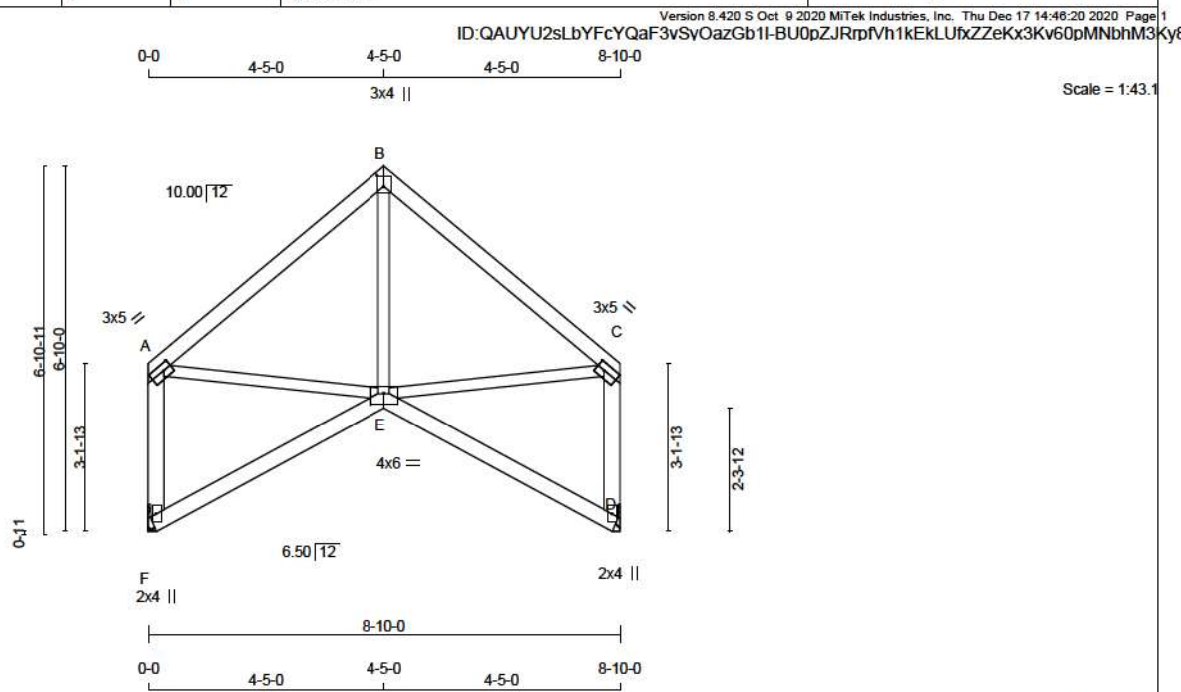
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			





TOTAL WEIGHT = 41 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	5.0	1.50	1.75
B	TTW+p	MT20	3.0	4.0	2.50	1.50
C	TMVW-t	MT20	3.0	5.0	1.50	1.75
D	BMV1+p	MT20	2.0	4.0		
E	BBWWW-p	MT20	4.0	6.0	2.50	3.00
F	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
F	723	0	723	0	0	MECHANICAL	
D	723	0	723	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT F. D. MINIMUM BEARING LENGTH AT JOINT F = 1'-12". JOINT D = 1'-12".

### UNFACTORED REACTIONS

1ST LCASE		MAX/MIN COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	535	307 / 0	93 / 0	0 / 0	0 / 0	135 / 0	0 / 0
D	535	307 / 0	93 / 0	0 / 0	0 / 0	135 / 0	0 / 0

## 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

**LOADING**  
TOTAL LOAD CASES: (4)

CHORDS					WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CS1 (LC)	MAX. UNBRAC LENGTH-TO	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CS1 (LC)	
FR-TO								
A-B	-499 / 0	-124.4	-124.4	0.31 (1)	0.25	E-B	0 / 184	0.05 (3)
B-C	-499 / 0	-124.4	-124.4	0.31 (1)	0.25	A-E	0 / 386	0.09 (1)
F-A	-636 / 0	0.0	0.0	0.11 (1)	7.81	E-C	0 / 386	0.09 (1)
D-C	-636 / 0	0.0	0.0	0.11 (1)	7.81			
F-E	0 / 0	-39.2	-39.2	0.18 (3)	10.00			
F-D	0 / 0	-39.2	-39.2	0.18 (3)	10.00			

## DESIGN CRITERIA

**SPECIFIED LOADS:**

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

SPACING = 24.0 IN. C/C

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

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- 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) =  $L/999$  (0.03")  
 ALLOWABLE DEFL.(TL)=  $L/360$  (0.29")  
 CALCULATED VERT. DEFL.(TL) =  $L/999$  (0.05")

CSI: TC=0.31/1.00 (B-C:1) , BC=0.18/1.00 (D-E:3) ,  
WB=0.09/1.00 (A-E:1) , SSI=0.16/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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= 0.55 (C) (INPUT = 0.90 )  
JSI METAL= 0.28 (F) (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  
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TOWN OF EAST GWILLIMBURY  
Building Standards Branch

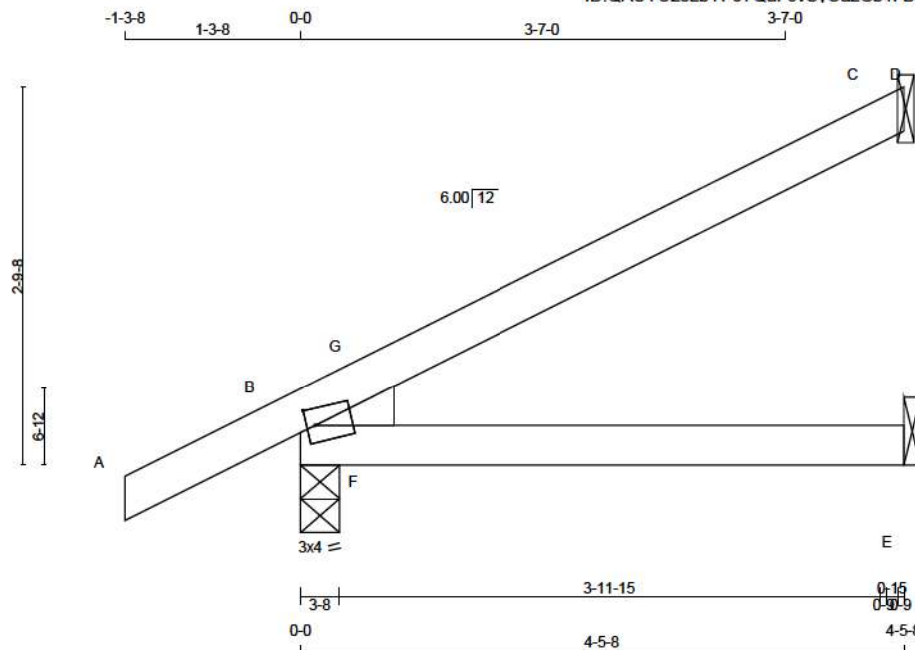


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-18
Sewage System			
Zoning			







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

**PLATES** (table is in inches)  
JT TYPE PLATES W LEN Y X  
B TMBH1-m MT20 3.0 4.0 1.50 0.75

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG		HEEL WEDGE
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
B	528	0	528	0	0	3-8	1-8		2x4 L
E	117	0	125	0	0	1-8	1-8		
C	243	0	243	0	0	1-8	1-8		

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

**UNFACTORED REACTIONS**

JT	COMBINED	1ST LCASE		MAX / MIN		COMPONENT REACTIONS		WIND	DEAD	SOIL
		SNOW	LIVE	PERM.	LIVE					
B	382	246 / 0	47 / 0	0 / 0	0 / 0	89 / 0	0 / 0	0 / 0	0 / 0	0 / 0
E	97	24 / 0	40 / 0	0 / 0	0 / 0	33 / 0	0 / 0	0 / 0	0 / 0	0 / 0
C	171	127 / 0	7 / 0	0 / 0	0 / 0	37 / 0	0 / 0	0 / 0	0 / 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 (PLF)	FACTORED LC1 MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	0 / 25	-124.4 -124.4	0.16 (1)	10.00	F-G	-258 / 80	0.00 (1)
B-G	-77 / 0	-124.4 -124.4	0.09 (3)	6.25			
G-C	0 / 7	-124.4 -124.4	0.31 (1)	10.00			
C-D	0 / 0	-20.0 -20.0	0.00 (4)	10.00			
B-F	0 / 0	-39.2 -39.2	0.21 (1)	10.00			
F-E	0 / 0	-39.2 -39.2	0.24 (1)	10.00			

**DESIGN CRITERIA**

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

**SPACING = 24.0 IN. C/C**

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")  
ALLOWABLE DEFL.(TL)= L/360 (0.19")  
CALCULATED VERT. DEFL.(TL) = L/790 (0.07")

CSI: TC=0.31/1.00 (C-G-1), BC=0.24/1.00 (E-F-1),  
WB=0.00/1.00 (F-G-1), SSI=0.24/1.00 (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**  
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= 0.77 (B) (INPUT = 0.90 )  
JSI METAL= 0.08 (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.**

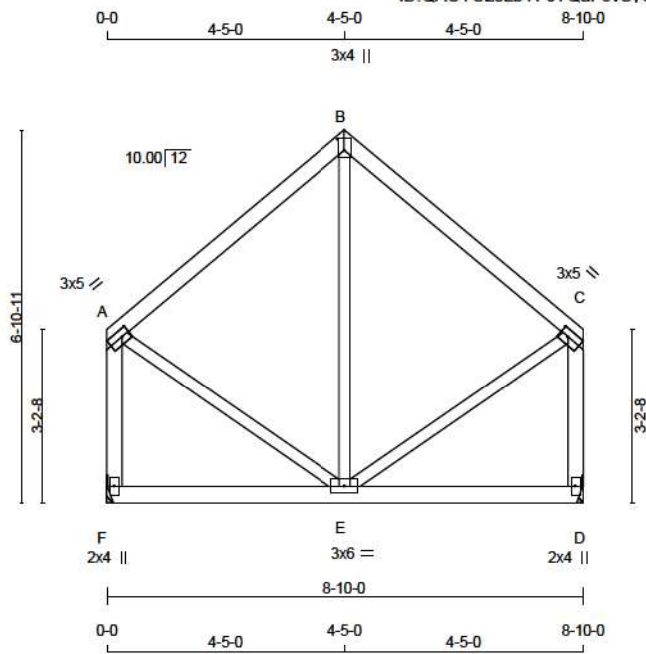
**RECEIVED**  
**2021-02-19**  
TOWN OF EAST GWILLIMBURY  
Building Standards Branch



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			





Scale = 1:42.6

TOTAL WEIGHT = 43 lb

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
A - B	2x4	DRY	No.2		SPF
B - C	2x4	DRY	No.2		SPF
F - A	2x4	DRY	No.2		SPF
D - C	2x4	DRY	No.2		SPF
F - D	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	3.0	5.0	1.50	1.75
B	TTW+p	MT20	3.0	4.0	2.50	1.50
C	TMVW-t	MT20	3.0	5.0	1.50	1.75
D	BMV1+p	MT20	2.0	4.0		
E	BMVWW-t	MT20	3.0	6.0		
F	BMV1+p	MT20	2.0	4.0		

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

**BEARINGS**

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
F	723	0	723	0
D	723	0	723	0

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

**UNFACTORED REACTIONS**

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
F	535	307 / 0	93 / 0
D	535	307 / 0	93 / 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.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC)	MEMB.	FORCE (LBS)	FACTORED MAX (LC)	
FR-TO		FROM	TO	FR-TO			
A-B	-335 / 0	-124.4	-124.4 0.31 (1)	E-B	-121 / 115	0.09 (1)	
B-C	-335 / 0	-124.4	-124.4 0.31 (1)	A-E	0 / 307	0.07 (1)	
F-A	-657 / 0	0.0	0.0 0.12 (1)	E-C	0 / 307	0.07 (1)	
D-C	-657 / 0	0.0	0.0 0.12 (1)				
F-E	0 / 0	-39.2	-39.2 0.17 (3)				
E-D	0 / 0	-39.2	-39.2 0.17 (3)				

**DESIGN CRITERIA**

**SPECIFIED LOADS:**

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

**SPACING = 24.0 IN. C/C**

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

**THIS DESIGN COMPLIES WITH:**

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

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

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

CSI: TC=0.31/1.00 (B-C:1) , BC=0.17/1.00 (D-E:3) ,  
WB=0.09/1.00 (B-E:1) , SSI=0.16/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

**NAIL VALUES**

PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	650	371	1747

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.56 (C) (INPUT = 0.90 )  
JSI METAL = 0.15 (C) (INPUT = 1.00 )



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**2021-02-19**  
**TOWN OF EAST GWILLIMBURY**  
**Building Standards Branch**

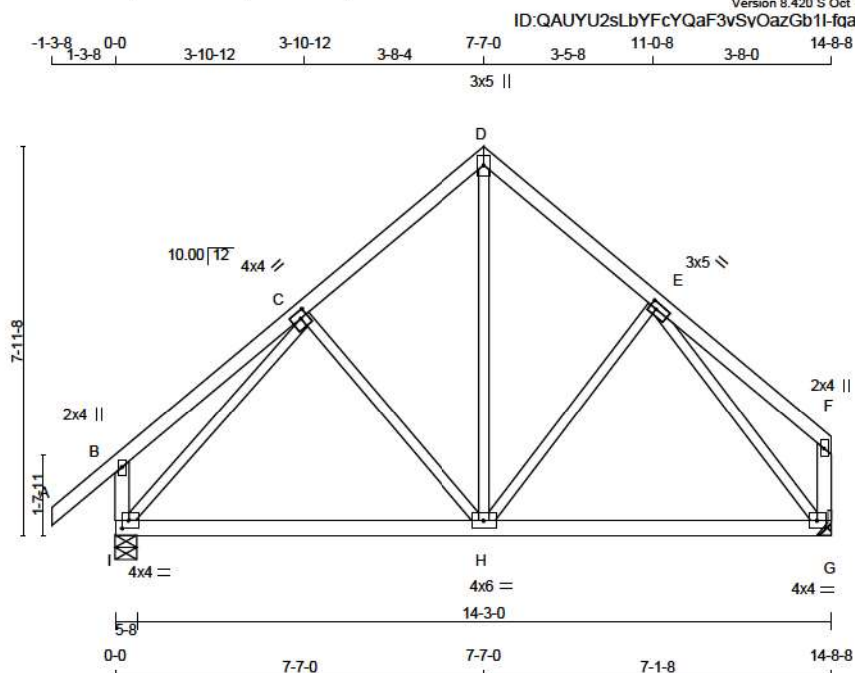


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			







TOTAL WEIGHT = 4 X 68 = 272 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-l	MT20	4.0	4.0	1.75	1.75
D	TTW+p	MT20	3.0	5.0		
E	TMWW-l	MT20	3.0	5.0	1.50	1.75
F	TMV+p	MT20	2.0	4.0		
G	BMVW1-l	MT20	4.0	4.0		
H	BMVWW-l	MT20	4.0	6.0		
I	BMVW1-l	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	1376	0	1376	0	5-8	1-8
G	1204	0	1204	0	MECHANICAL	

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

##### UNFACTORED REACTIONS

JT	1ST LCASE		MAX/MIN COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
I	1010	608 / 0	154 / 0	0 / 0	0 / 0	247 / 0	0 / 0
G	891	512 / 0	154 / 0	0 / 0	0 / 0	225 / 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 = 6.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

##### LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO				FR-TO			
A-B	0 / 55	-124.4 -124.4	0.17 (1)	10.00	C-H	-241 / 8	0.14 (1)
B-C	0 / 35	-124.4 -124.4	0.29 (1)	10.00	H-D	0 / 689	0.15 (1)
C-D	-833 / 0	-124.4 -124.4	0.23 (1)	6.25	H-E	-181 / 33	0.10 (1)
D-E	-831 / 0	-124.4 -124.4	0.20 (1)	6.25	I-C	-1192 / 0	0.68 (1)
E-F	0 / 32	-124.4 -124.4	0.25 (1)	10.00	E-G	-1168 / 0	0.68 (1)
I-B	-352 / 0	0.0	0.0	0.04 (1)			
G-F	-172 / 0	0.0	0.0	0.02 (1)			
I-H	0 / 771	-39.2	-39.2	0.55 (2)	10.00		
H-G	0 / 711	-39.2	-39.2	0.54 (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 (0.49")  
CALCULATED VERT. DEFL. (LL) = L/999 (0.10")  
ALLOWABLE DEFL. (TL) = L/360 (0.49")  
CALCULATED VERT. DEFL. (TL) = L/993 (0.18")

CSI: TC=0.29/1.00 (B-C:1), BC=0.55/1.00 (H-I:2),  
WB=0.68/1.00 (C-I:1), SSI=0.20/1.00 (H-I:3)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

##### NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (C) (INPUT = 0.90 )  
JSI METAL= 0.40 (C) (INPUT = 1.00 )



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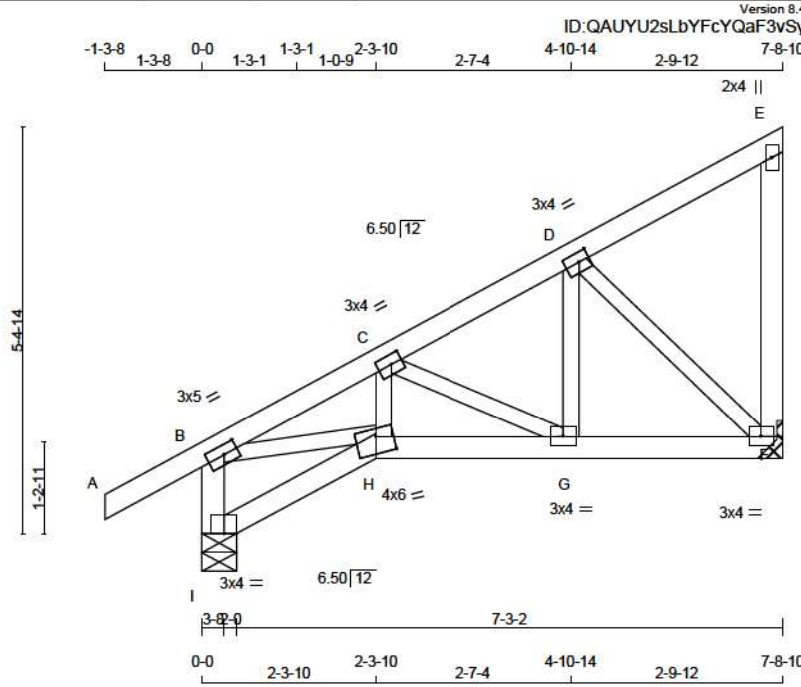
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			





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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW-t	MT20	3.0	5.0	1.50 2.25
C	TMWW-t	MT20	3.0	4.0	1.50 1.75
D	TMWW-t	MT20	3.0	4.0	1.50 1.75
E	TMWW-w	MT20	2.0	4.0	
F	BMWW-t	MT20	3.0	4.0	
G	BMWW-t	MT20	3.0	4.0	
H	BMWW-m	MT20	4.0	6.0	2.75 2.75
I	BVM1-p	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
I	789	0	789	0	0
F	611	0	611	0	0

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

UNFACTORED REACTIONS						
1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT	COMBINED					
I	575	358 / 0	80 / 0	0 / 0	138 / 0	0 / 0
F	453	259 / 0	80 / 0	0 / 0	115 / 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 = 8.16 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) (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC1) (LC)	
FR-TO		FROM TO		FR-TO			
I-B	-744 / 0	0.0	0.0 0.08 (1)	I-B	0 / 884	0.20 (1)	
A-B	0 / 40	-124.4	-124.4 0.16 (1)	H-C	0 / 144	0.03 (2)	
B-C	-906 / 0	-124.4	-124.4 0.10 (1)	D-F	-834 / 0	0.15 (1)	
C-D	-513 / 0	-124.4	-124.4 0.09 (1)	G-D	0 / 320	0.07 (2)	
D-E	-18 / 0	-124.4	-124.4 0.09 (1)	F-E	-127 / 0	0.03 (1)	
I-H	0 / 0	-39.2	-39.2 0.05 (3)	C-G	-459 / 0	0.08 (1)	
H-G	0 / 872	-39.2	-39.2 0.17 (1)				
G-F	0 / 459	-39.2	-39.2 0.11 (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 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 (0.25")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")  
ALLOWABLE DEFL.(TL)= L/360 (0.25")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.16/1.00 (A-B:1), BC=0.17/1.00 (G-H:1),  
WB=0.20/1.00 (B-H:1), SSI=0.13/1.00 (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)	
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 = 0.90 )  
JSI METAL = 0.44 (I) (INPUT = 1.00 )



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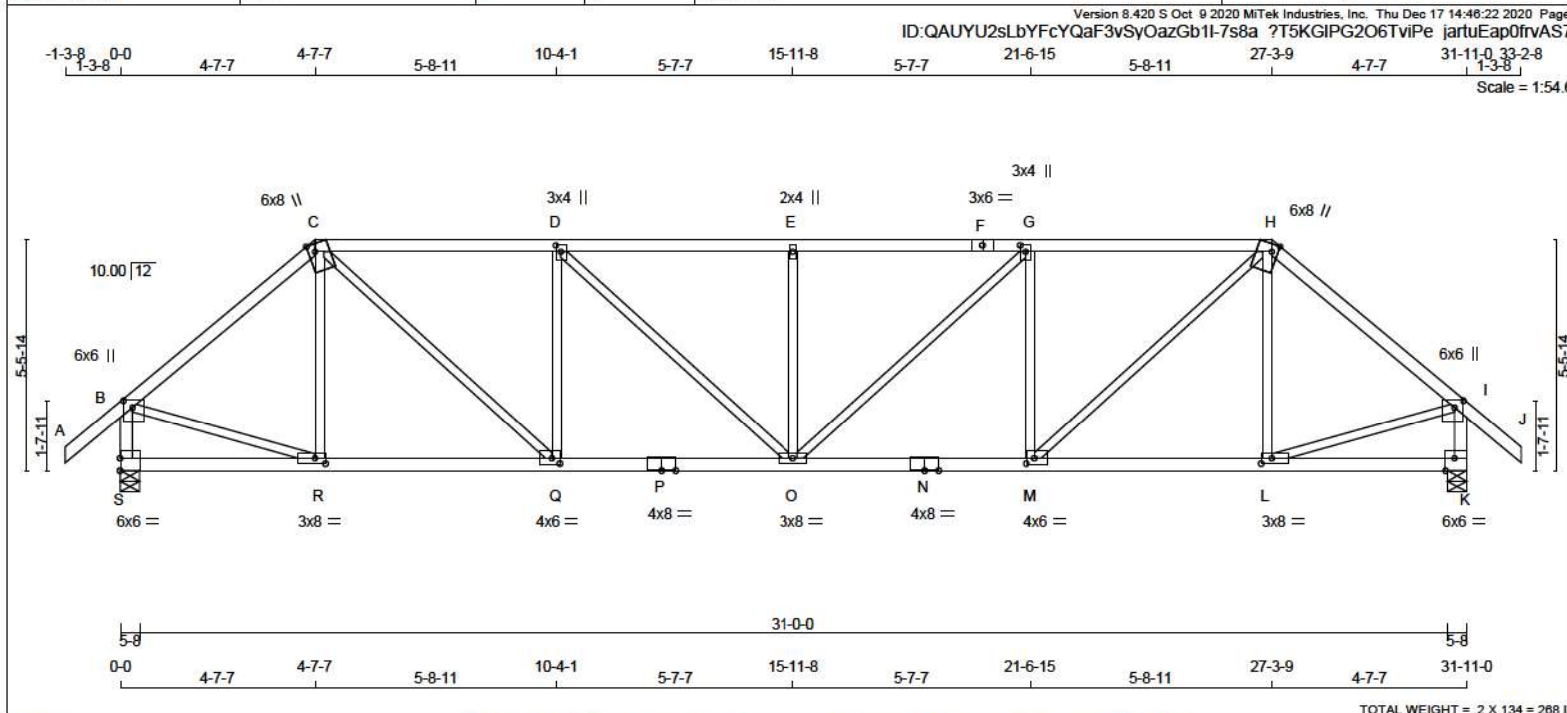
Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			

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**2021-02-19**  
TOWN OF EAST GWILLIMBURY  
Building Standards Branch







LUMBER										DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA									
N. L. G. A. RULES										BEARINGS										SPECIFIED LOADS:									
CHORDS SIZE LUMBER DESCR.										FACTORED GROSS REACTION MAXIMUM FACTORED GROSS REACTION INPUT BRG REQRD BRG										TOP CH. LL = 34.8 PSF									
A - C 2x4 DRY No.2 SPF										JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX										DL = 8.0 PSF									
C - F 2x4 DRY 2100F 1.8E SPF										S 2784 0 2784 0 0 5-8 5-8										BOT CH. LL = 10.5 PSF									
F - H 2x4 DRY 2100F 1.8E SPF										K 2784 0 2784 0 0 5-8 5-8										DL = 7.3 PSF									
H - J 2x4 DRY No.2 SPF																				TOTAL LOAD = 60.6 PSF									
S - B 2x4 DRY No.2 SPF																													
K - I 2x4 DRY No.2 SPF																													
S - P 2x4 DRY No.2 SPF																													
P - N 2x4 DRY No.2 SPF																													
N - K 2x4 DRY No.2 SPF																													
ALL WEBS 2x3 DRY No.2 SPF																													
EXCEPT																													
DRY: SEASONED LUMBER.										BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) S, K										THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015									
										BRACING										THIS DESIGN COMPLIES WITH:									
										TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.58 FT.										- PART 9 OF BCBC 2018, ABC 2019									
										MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.										- PART 9 OF OBC 2012 (2019 AMENDMENT)									
										ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.										- 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									
PLATES (table is in inches)										LOADING										ALLOWABLE DEFL.(LL)= L/360 (1.06")									
JT TYPE PLATES W LEN Y X										TOTAL LOAD CASES: (4)										CALCULATED VERT. DEFL.(LL) = L/999 (0.19")									
B TMVW+p MT20 6.0 6.0 2.00 2.50										C H O R D S										ALLOWABLE DEFL.(TL)= L/360 (1.06")									
C TTWW+m MT20 6.0 8.0 Edge 1.75										MAX. FACTORED MAX. FACTORED W E B S										CALCULATED VERT. DEFL.(TL) = L/999 (0.31")									
D TMWW+t MT20 3.0 4.0 1.75 1.50										MEMB. FORCE VERT. LOAD LC1 MAX MAX. MEMB. MAX. FORCE MAX										CSI: TC=0.87/1.00 (B-C-1), BC=0.70/1.00 (O-Q-1),									
E TMW+w MT20 2.0 4.0										(LBS) (PLF) CSI (LC) UNBRAC CSI (LC)										WB=0.55/1.00 (D-Q-1), SSI=0.33/1.00 (C-D-1)									
F TS-t MT20 3.0 6.0										FR-TO FROM TO LENGTHFR-TO										DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10									
G TMWW+t MT20 3.0 4.0 1.75 1.50										A-B 0 / 55 -124.4 -124.4 0.17 (1) 10.00 R-C -331 / 44 0.15 (1)										SHEAR=1.10 TENS= 1.10									
H TTWW+m MT20 6.0 8.0 Edge 1.75										B-C -2639 / 0 -124.4 -124.4 0.67 (1) 3.58 C-Q 0 / 2147 0.48 (1)										COMPANION LIVE LOAD FACTOR = 1.00									
I TMVW+p MT20 6.0 6.0 2.00 2.50										C-D -3608 / 0 -124.4 -124.4 0.51 (1) 4.05 Q-D -1222 / 0 0.55 (1)										TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE									
K BMV1-t MT20 6.0 6.0 Edge 2.50										D-E -4076 / 0 -124.4 -124.4 0.53 (1) 3.82 D-O 0 / 837 0.14 (1)										FOR QUALITY CONTROL IN THE TRUSS									
L BMWW-t MT20 3.0 8.0 1.50 3.00										E-F -4076 / 0 -124.4 -124.4 0.53 (1) 3.82 O-E -846 / 0 0.29 (1)										MANUFACTURING PLANT .									
M BMWW-t MT20 4.0 6.0 1.50 2.25										F-G -4076 / 0 -124.4 -124.4 0.53 (1) 3.82 O-G 0 / 837 0.14 (1)										NAIL VALUES									
N BS-t MT20 4.0 8.0										G-H -3608 / 0 -124.4 -124.4 0.51 (1) 4.05 M-G -1222 / 0 0.55 (1)										PLATE GRIP(DRY) SHEAR SECTION									
O BMWWW-t MT20 3.0 8.0										H-I -2639 / 0 -124.4 -124.4 0.67 (1) 3.58 M-H 0 / 2147 0.48 (1)										(PSI) (PLI) (PLI)									
P BS-t MT20 4.0 8.0										I-J 0 / 55 -124.4 -124.4 0.17 (1) 10.00 L-H -331 / 44 0.15 (1)										MAX MIN MAX MIN MAX MIN									
Q BMWW-t MT20 4.0 6.0 1.50 2.25										S-B -2714 / 0 0.0 0.0 0.29 (1) 5.23 B-R 0 / 2098 0.47 (1)										MT20 650 371 1747 788 1987 1873									
R BMWW-t MT20 3.0 8.0 1.50 3.00										K-I -2714 / 0 0.0 0.0 0.29 (1) 5.23 L-I 0 / 2098 0.47 (1)																			
S BMV1-t MT20 6.0 6.0 3.50																													
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES																													
EDGE OF CHORD.																													
										S-R 0 / 0 -39.2 -39.2 0.20 (3) 10.00																			
										R-Q 0 / 2016 -39.2 -39.2 0.47 (1) 10.00																			
										Q-P 0 / 3608 -39.2 -39.2 0.70 (1) 10.00																			
										P-O 0 / 3608 -39.2 -39.2 0.70 (1) 10.00																			
										O-N 0 / 3608 -39.2 -39.2 0.70 (1) 10.00																			
										N-M 0 / 3608 -39.2 -39.2 0.70 (1) 10.00																			
										M-L 0 / 2016 -39.2 -39.2 0.47 (1) 10.00																			
										L-K 0 / 0 -39.2 -39.2 0.20 (3) 10.00																			

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

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 TOWN OF EAST GWILLIMBURY  
 Building Standards Branch

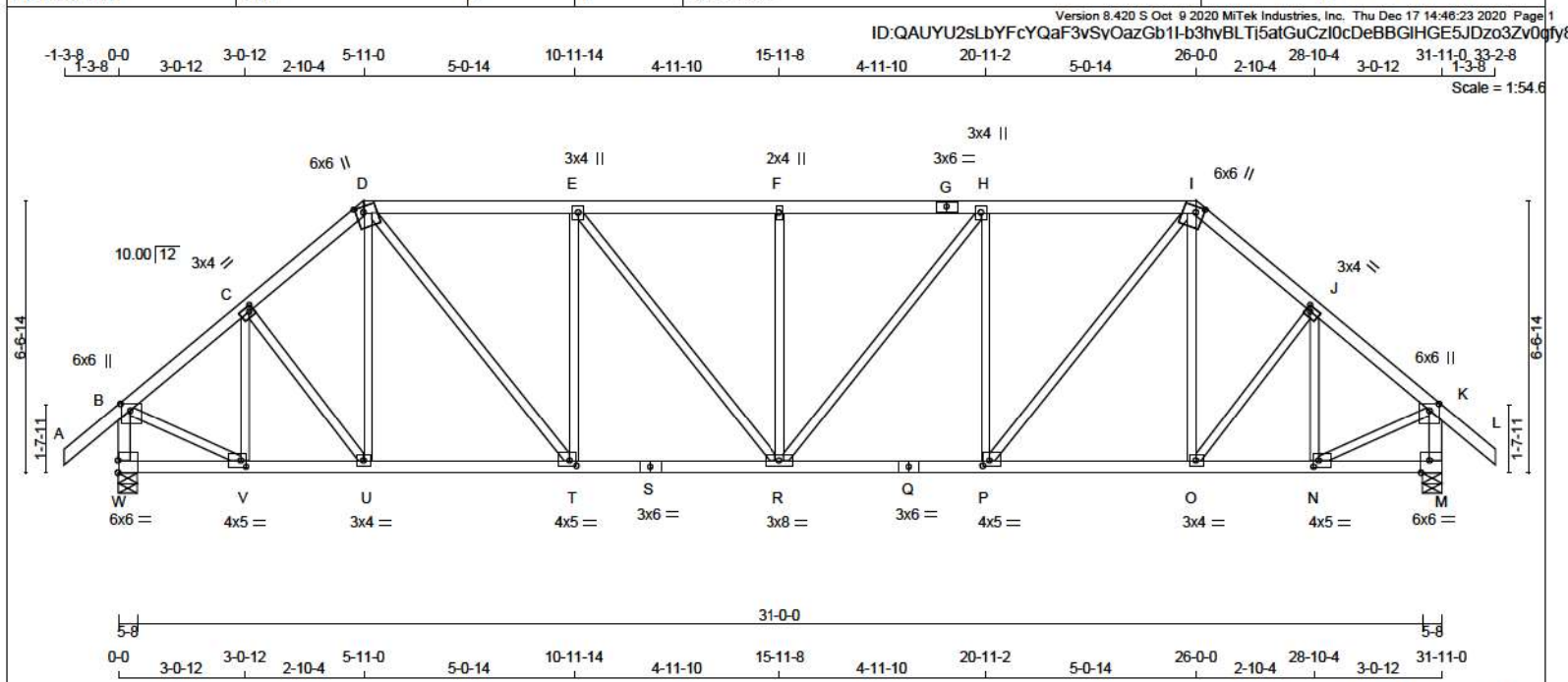
**East Gwillimbury**  
 Building Standards Branch BCIN #16487

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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			







LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - G	2x4	DRY	No.2
G - I	2x4	DRY	No.2
I - L	2x4	DRY	No.2
W - B	2x4	DRY	No.2
M - K	2x4	DRY	No.2
W - S	2x4	DRY	No.2
S - Q	2x4	DRY	No.2
Q - M	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
PLATES	JT TYPE	PLATES	W	LEN	Y	X
B	TMWV+p	MT20	6.0	6.0	2.00	2.75
C	TMWV-t	MT20	3.0	4.0	1.50	1.25
D	TTWV+m	MT20	6.0	6.0	1.75	2.25
E	TMWV+t	MT20	3.0	4.0		
F	TMV+W	MT20	2.0	4.0		
G	TS-t	MT20	3.0	6.0		
H	TMWV+t	MT20	3.0	4.0		
I	TTWV+m	MT20	6.0	6.0	1.75	2.25
J	TMWV-t	MT20	3.0	4.0	1.50	1.25
K	TMWV+p	MT20	6.0	6.0	2.00	2.75
M	BMV1-t	MT20	6.0	6.0	Edge 2.50	
N	BMWV-t	MT20	4.0	5.0	1.75	1.50
O	BMWV-t	MT20	3.0	4.0		
P	BMWV-t	MT20	4.0	5.0		
Q	BS-t	MT20	3.0	6.0		
R	BMWVWV-t	MT20	3.0	8.0		
S	BS-t	MT20	3.0	6.0		
T	BMWV-t	MT20	4.0	5.0	1.50	2.00
U	BMWV-t	MT20	3.0	4.0		
V	BMWV-t	MT20	4.0	5.0	1.75	1.50
W	BMV1-t	MT20	6.0	6.0	3.50	

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES  
EDGE OF CHORD

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

BEARINGS							
FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
W	2784	0	2784	0	0	5-8	5-8
M	2784	0	2784	0	0	5-8	5-8

### UNFACTORED REACTIONS

1ST LCASE		MAX/MIN COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
W	2053	1207 / 0	335 / 0	0 / 0	0 / 0	510 / 0	0 / 0
M	2053	1207 / 0	335 / 0	0 / 0	0 / 0	510 / 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 = 3.14 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

**LOADING**

**TOTAL LOAD CASES: (4)**

CHORDS						WEBS				
MAX. FACTORED		FACTORED		VERT. LOAD		CSCI MAX		MAX. FACTORED		
MEMB.	FORCE (LBS)		(PLF)	CS1 (LC)	MAX.	MEMB.	FORCE (LBS)	MAX	CSCI (LC)	
FR-TO		FROM	TO	LENGTH	FR-TO					
A-B	0 / 55	-124.4	-124.4	0.17 (1)	10.00	V-C	-711 / 0		0.19 (1)	
B-C	-2468 / 0	-124.4	-124.4	0.24 (1)	4.18	C-U	0 / 191		0.04 (1)	
C-D	-2670 / 0	-124.4	-124.4	0.25 (1)	4.02	U-D	0 / 130		0.03 (3)	
D-E	-3024 / 0	-124.4	-124.4	0.66 (1)	3.33	D-T	0 / 1646		0.37 (1)	
E-F	-3359 / 0	-124.4	-124.4	0.89 (1)	3.14	T-E	1078 / 0		0.78 (1)	
F-G	-3359 / 0	-124.4	-124.4	0.69 (1)	3.14	E-R	0 / 482		0.11 (1)	
G-H	-3359 / 0	-124.4	-124.4	0.69 (1)	3.14	R-F	-569 / 0		0.40 (1)	
H-I	-3060 / 0	-124.4	-124.4	0.66 (1)	3.33	R-H	0 / 482		0.11 (1)	
I-J	-2670 / 0	-124.4	-124.4	0.25 (1)	4.02	P-H	-1078 / 0		0.78 (1)	
J-K	-2468 / 0	-124.4	-124.4	0.24 (1)	4.18	P-I	0 / 1646		0.37 (1)	
K-L	0 / 55	-124.4	-124.4	0.17 (1)	10.00	O-I	0 / 130		0.03 (3)	
W-B	-2727 / 0	0.0	0.0	0.29 (1)	5.21	O-J	0 / 191		0.04 (1)	
M-K	-2727 / 0	0.0	0.0	0.29 (1)	5.21	N-J	-711 / 0		0.19 (1)	
						B-V	0 / 2073		0.47 (1)	
						N-K	0 / 2073		0.47 (1)	
W-V	0 / 0	-39.2	-39.2	0.07 (3)	10.00					
V-U	0 / 1907	-39.2	-39.2	0.39 (1)	10.00					
U-T	0 / 2024	-39.2	-39.2	0.43 (1)	10.00					
T-S	0 / 3060	-39.2	-39.2	0.60 (1)	10.00					
S-R	0 / 3060	-39.2	-39.2	0.60 (1)	10.00					
R-Q	0 / 3060	-39.2	-39.2	0.60 (1)	10.00					
Q-P	0 / 3060	-39.2	-39.2	0.60 (1)	10.00					
P-O	0 / 2024	-39.2	-39.2	0.43 (1)	10.00					
O-N	0 / 1907	-39.2	-39.2	0.39 (1)	10.00					
N-M	0 / 0	-39.2	-39.2	0.07 (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 (0.15")  
ALLOWABLE DEFL.(TL)= L/360 (1.06")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.26")

CSI: TC=0.69/1.00 (F-H:1), BC=0.60/1.00 (R-T:1),  
WB=0.76/1.00 (E-T:1), SSI=0.30/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

### NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (D) (INPUT = 0.90 )  
JSI METAL= 0.97 (S) (INPUT = 1.00 )



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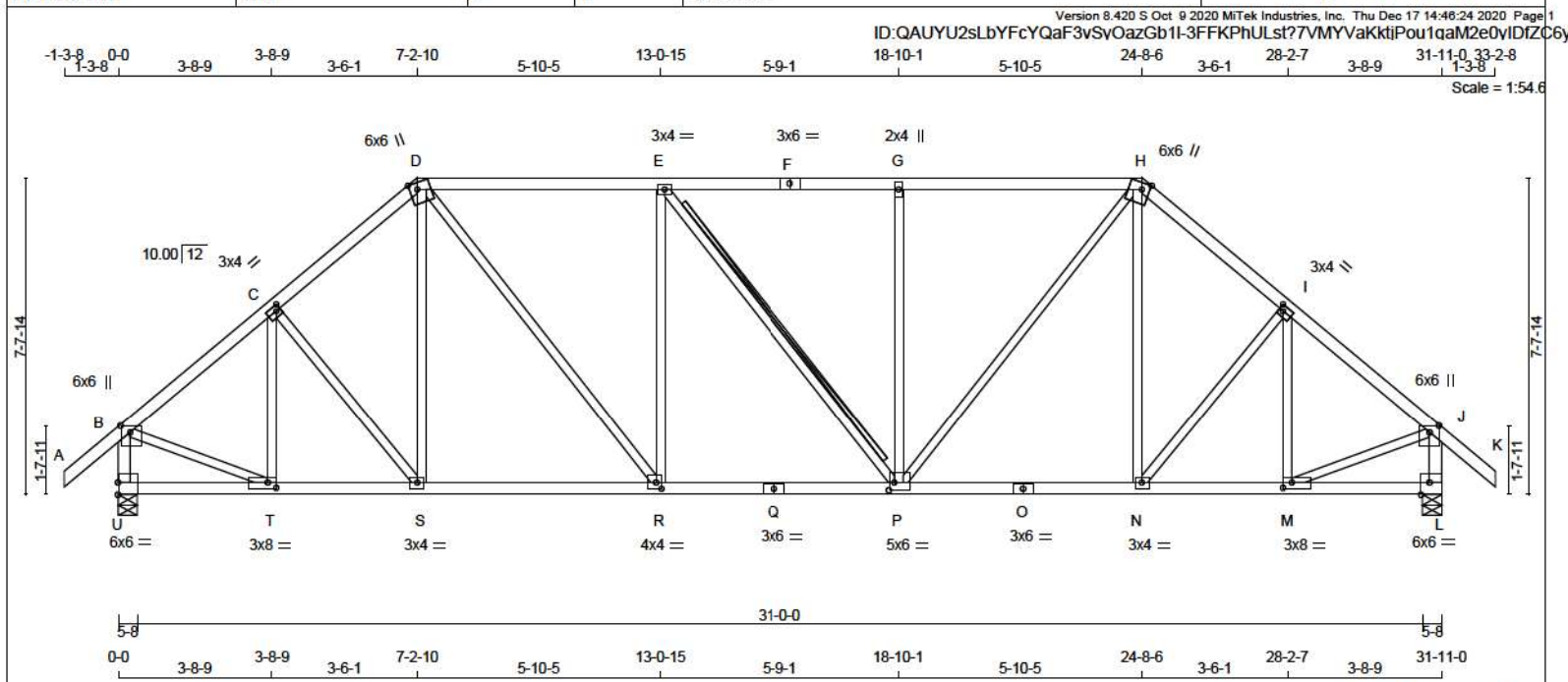


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-11
Sewage System			
Zoning			







LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE		
A - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
F - H	2x4	DRY	No.2
H - K	2x4	DRY	No.2
U - B	2x4	DRY	No.2
L - J	2x4	DRY	No.2
U - Q	2x4	DRY	No.2
Q - O	2x4	DRY	No.2
O - L	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2
DRY: SEASONED LUMBER.			

PLATES (table is in inches)						
PLATES	JT TYPE	PLATES	W	LEN	Y	X
C	TMWV+p	MT20	6.0	6.0	2.00	2.75
B	CTMWV-t	MT20	3.0	4.0	1.50	1.25
D	TTWV+m	MT20	6.0	6.0	2.00	2.25
E	TMWV-t	MT20	3.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	TMW+h	MT20	2.0	4.0		
H	TTWV+m	MT20	6.0	6.0	2.00	2.25
I	TMWV-t	MT20	3.0	4.0	1.50	1.25
J	TMWV+p	MT20	6.0	6.0	2.00	2.75
L	BMV1-t	MT20	6.0	6.0	Edge	2.50
N	BMWV-t	MT20	3.0	8.0	1.50	2.50
O	BS-t	MT20	3.0	6.0		
P	BMWVW-t	MT20	5.0	6.0	2.25	1.50
Q	BS-t	MT20	3.0	6.0		
R	BMWV-t	MT20	4.0	4.0	1.75	1.50
S	BMWV-t	MT20	3.0	4.0		
T	BMWV-t	MT20	3.0	8.0	1.50	2.50
U	BMV1-t	MT20	6.0	6.0	3.50	

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



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

BEARINGS							
FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
U	2784	0	2784	0	0	5-8	5-8
L	2784	0	2784	0	0	5-8	5-8

### UNFACTORED REACTIONS

1ST LCASE		MAX/MIN COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
U	2053	1207 / 0	335 / 0	0 / 0	0 / 0	510 / 0	0 / 0
L	2053	1207 / 0	335 / 0	0 / 0	0 / 0	510 / 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 = 3.23 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

2x4 DRY SPF No.2 T-BRACE AT E-P

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 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)**

CHORDS					WEBS				
MAX. FACTORED		FACTORED		MAX. FACTORED		MAX. FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD (LBS)	CS1 MAX (LBS)	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX. CS1 (LBS)		
FR-TO		FROM TO		LENGTH	FR-TO				
A-B	0 / 55	-124.4	-124.4	0.17 (1)	10.00	T-C	-568 / 0	0.19 (1)	
B-C	-2566 / 0	-124.4	-124.4	0.37 (1)	3.97	C-S	0 / 21	0.01 (3)	
C	-264 / 0	-124.4	-124.4	0.37 (1)	3.92	S-D	0 / 238	0.06 (3)	
D-E	-2806 / 0	-124.4	-124.4	0.82 (1)	3.23	D-R	0 / 1295	0.29 (1)	
E-F	-2806 / 0	-124.4	-124.4	0.81 (1)	3.23	R-E	-781 / 0	0.84 (1)	
F-G	-2806 / 0	-124.4	-124.4	0.81 (1)	3.23	E-P	-3 / 0	0.00 (1)	
G-H	-2806 / 0	-124.4	-124.4	0.81 (1)	3.25	P-G	-780 / 0	0.84 (1)	
H-I	-2642 / 0	-124.4	-124.4	0.37 (1)	3.92	P-H	0 / 1291	0.29 (1)	
I-J	-2565 / 0	-124.4	-124.4	0.37 (1)	3.97	N-H	0 / 238	0.06 (3)	
J-K	0 / 55	-124.4	-124.4	0.17 (1)	10.00	N-I	0 / 21	0.01 (3)	
U-B	-2718 / 0	0.0	0.0	0.29 (1)	5.22	M	-569 / 0	0.19 (1)	
L-J	-2718 / 0	0.0	0.0	0.29 (1)	5.22	B-T	0 / 2115	0.48 (1)	
						M-J	0 / 2115	0.48 (1)	
U-T	0 / 0	-39.2	-39.2	0.09 (3)	10.00				
T-S	0 / 1995	-39.2	-39.2	0.44 (1)	10.00				
S-R	0 / 2000	-39.2	-39.2	0.46 (1)	10.00				
R-Q	0 / 2808	-39.2	-39.2	2.59 (1)	10.00				
Q-P	0 / 2808	-39.2	-39.2	0.59 (1)	10.00				
P-O	0 / 2001	-39.2	-39.2	2.45 (1)	10.00				
O-N	0 / 2001	-39.2	-39.2	2.45 (1)	10.00				
N-M	0 / 1995	-39.2	-39.2	2.44 (1)	10.00				
M-L	0 / 0	-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

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.06")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.13")  
ALLOWABLE DEFL.(TL)= L/360 (1.06")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.21")

CSI: TC=0.82/1.00 (D-E:1) , BC=0.59/1.00 (P-R:1) ,  
WB=0.84/1.00 (E-R:1) , SSI=0.34/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

### NAIL VALUES

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

	(F1)		(F2)		(F3)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	650	371	1747	788	1987	187

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (I) (INPUT = 0.90 )  
JSI METAL= 0.95 (Q) (INPUT = 1.00 )

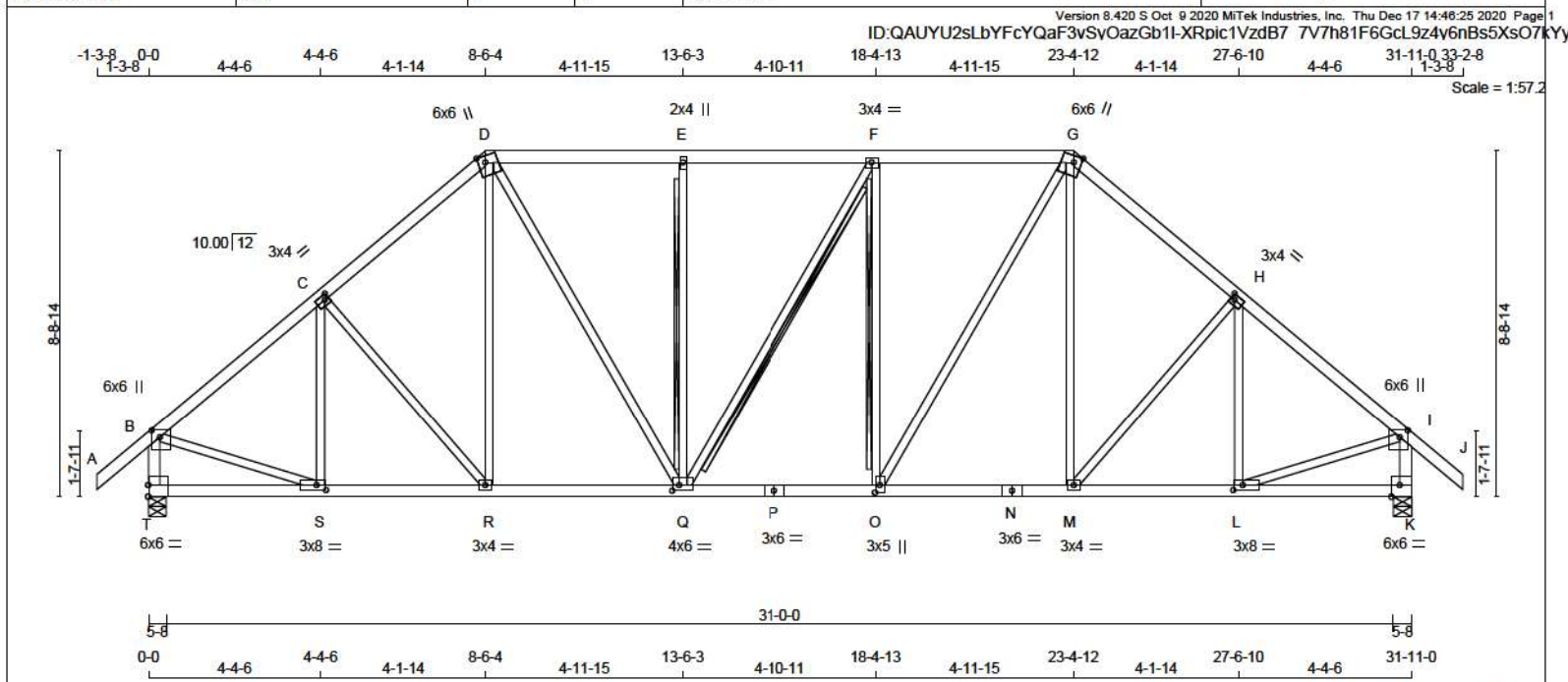


These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as amended. These approved documents must be kept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

Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			







**LUMBER**

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT TYPE	PLATES	W	LEN	Y	X
B TMVW+p	MT20	6.0	6.0	2.00	2.50
C TMVW-t	MT20	3.0	4.0	1.50	1.25
D TTWW+m	MT20	6.0	6.0	2.00	2.25
E TMVW+w	MT20	2.0	4.0		
F TMVW-t	MT20	3.0	4.0		
G TTWW+m	MT20	6.0	6.0	2.00	2.25
H TMVW-t	MT20	3.0	4.0	1.50	1.25
I TMVW+p	MT20	6.0	6.0	2.00	2.50
K BMV1-t	MT20	6.0	6.0	Edge 2.50	
L BMVW-t	MT20	3.0	8.0	1.50	2.75
M BMVW-t	MT20	3.0	4.0		
N BS-t	MT20	3.0	6.0		
O BMVW+t	MT20	3.0	5.0	2.25	1.50
P BS-t	MT20	3.0	6.0		
Q BMVW+t	MT20	4.0	6.0	1.75	2.00
R BMVW-t	MT20	3.0	4.0		
S BMVW-t	MT20	3.0	8.0	1.50	2.75
T BMV1-t	MT20	6.0	6.0	3.50	

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

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

**BEARINGS**

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT VERT	2784	2784	0	5-8
T	2784	2784	0	5-8
K	2784	2784	0	5-8

**UNFACTORED REACTIONS**

1ST CASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	1207	0	335 / 0
T	2053	1207	0 / 0
K	2053	1207	0 / 0

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

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.93 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

2x4 DRY SPF No.2 T-BRACE AT E-Q, F-Q, F-O

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 / 55	-124.4 -124.4	0.17 (1)	10.00	S-C	-438 / 0	0.18 (1)
B-C	-2637 / 0	-124.4 -124.4	0.39 (1)	3.93	C-R	-174 / 0	0.13 (1)
C-D	-2575 / 0	-124.4 -124.4	0.38 (1)	3.97	R-D	0 / 337	0.08 (2)
D-E	-2451 / 0	-124.4 -124.4	0.42 (1)	3.99	D-Q	0 / 991	0.22 (1)
E-F	-2451 / 0	-124.4 -124.4	0.39 (1)	4.02	Q-E	-860 / 0	0.36 (1)
F-G	-2453 / 0	-124.4 -124.4	0.42 (1)	3.99	Q-F	-4 / 0	0.00 (1)
G-H	-2574 / 0	-124.4 -124.4	0.38 (1)	3.97	O-F	-861 / 0	0.37 (1)
H-I	-2637 / 0	-124.4 -124.4	0.39 (1)	3.93	O-G	0 / 996	0.22 (1)
I-J	0 / 55	-124.4 -124.4	0.17 (1)	10.00	M-G	0 / 335	0.08 (2)
T-B	-2711 / 0	0.0	0.0	5.23	M-H	-175 / 0	0.13 (1)
K-I	-2711 / 0	0.0	0.0	5.23	L-H	-437 / 0	0.18 (1)
					B-S	0 / 2145	0.48 (1)
					L-I	0 / 2145	0.48 (1)
T-S	0 / 0	-39.2	-39.2	0.13 (3)	10.00		
S-R	0 / 2055	-39.2	-39.2	0.43 (1)	10.00		
R-Q	0 / 1946	-39.2	-39.2	0.41 (1)	10.00		
Q-P	0 / 2453	-39.2	-39.2	0.50 (1)	10.00		
P-O	0 / 2453	-39.2	-39.2	0.50 (1)	10.00		
O-N	0 / 1945	-39.2	-39.2	0.42 (1)	10.00		
N-M	0 / 1945	-39.2	-39.2	0.42 (1)	10.00		
M-L	0 / 2055	-39.2	-39.2	0.42 (1)	10.00		
L-K	0 / 0	-39.2	-39.2	0.13 (3)	10.00		

**DESIGN CRITERIA**

SPECIFIED LOADS:

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

**SPACING = 24.0 IN. C/C**

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

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

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, ABC 2019  
- PART 9 OF OBC 2012 (2019 AMENDMENT)  
- CSA 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 (0.11")  
ALLOWABLE DEFL.(TL)= L/360 (1.06")  
CALCULATED VERT. DEFL.(TL)= L/999 (0.18")

CSI: TC=0.42/1.00 (D-E-1), BC=0.50/1.00 (O-Q-1),

WB=0.48/1.00 (I-L-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)  
MAX MIN MAX MIN MAX MIN  
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (O) (INPUT = 0.90)  
JSI METAL = 0.81 (P) (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.**

**RECEIVED**  
**2021-02-19**  
**TOWN OF EAST GWILLIMBURY**  
**Building Standards Branch**

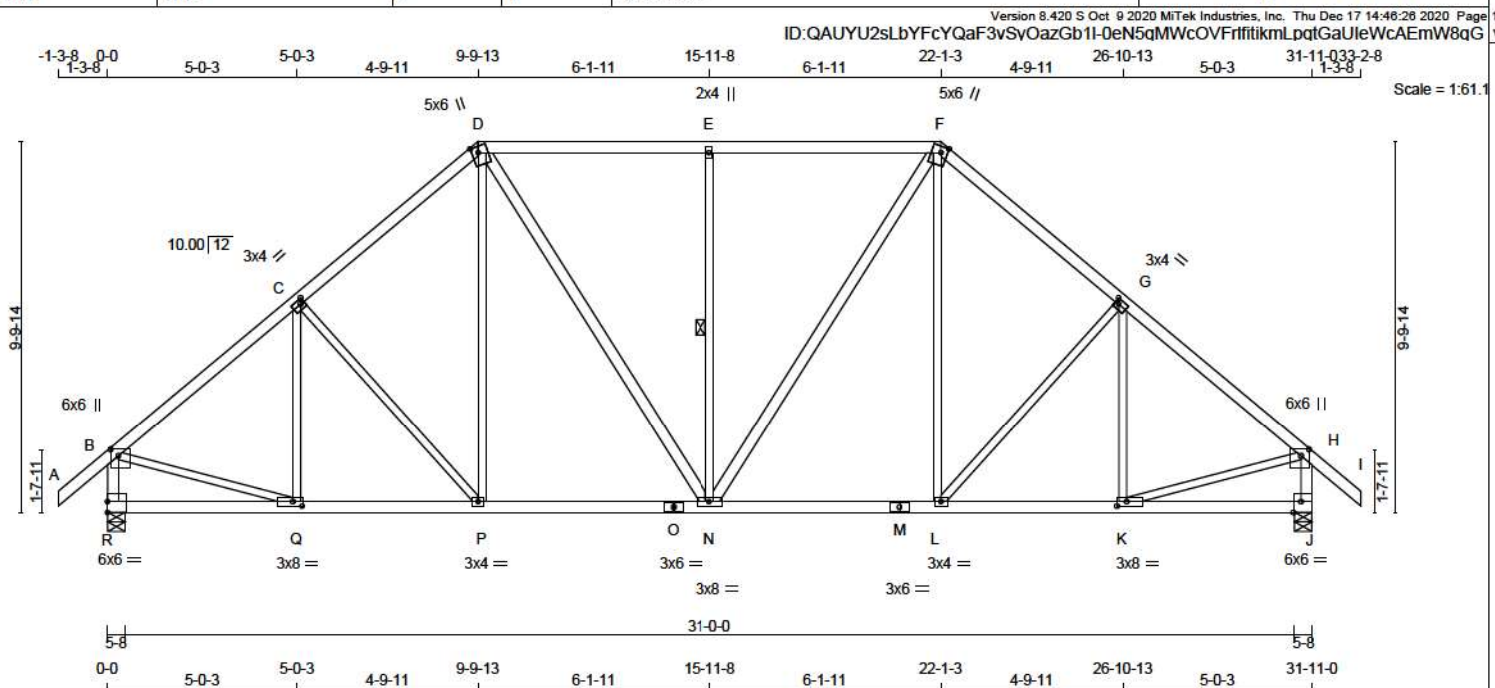


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			







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

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
J	T	TYPE	PLATES	W	LEN	Y X
C	B	MMWW+p	MTZ0	6.0	6.0	2.00 2.50
C	B	MMWW-t	MTZ0	3.0	4.0	1.50 1.25
D	T	MMWW+m	MTZ0	5.0	6.0	2.00 2.00
E	B	MMWW-w	MTZ0	2.0	4.0	
F	T	MMWW+m	MTZ0	5.0	6.0	2.00 2.00
G	B	MMWW-t	MTZ0	3.0	4.0	1.50 1.25
H	T	MMWW+p	MTZ0	6.0	6.0	2.00 2.50
J	B	MMV1-t	MTZ0	6.0	6.0	Edge 2.50
K	B	MMWW-t	MTZ0	3.0	8.0	1.50 3.00
L	B	BS-t	MTZ0	3.0	4.0	
M	B	BS-t	MTZ0	3.0	6.0	
N	B	MMWWW-t	MTZ0	3.0	8.0	
O	B	BS-t	MTZ0	3.0	6.0	
P	B	MMWW-t	MTZ0	3.0	4.0	
Q	B	MMWW-t	MTZ0	3.0	8.0	1.50 3.00
R	B	MMV1-t	MTZ0	6.0	6.0	3.50

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

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

BEARINGS			FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
R	2784	0	2784	0	0	5-8	5-8	
J	2784	0	2784	0	0	5-8	5-8	

### UNFACTORED REACTIONS

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
R	2053	1207 / 0	335 / 0	0 / 0	0 / 0	510 / 0	0 / 0
J	2053	1207 / 0	335 / 0	0 / 0	0 / 0	510 / 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 = 3.68 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF E-N. DBS = 20-0-0. CBF = 117 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 (LBS)	FACTORED VERT. LOAD	LC1 MAX (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED (LBS)	FORCE MAX	CSI (LC)	
FR-TO		FROM TO		LENGTH	FR-TO				
A-B	0 / 55	-124.4	-124.4	0.17 (1)	10.00	Q-C	-338 / 38	0.18 (1)	
B-C	-2678 / 0	-124.4	-124.4	0.52 (1)	3.78	C-P	-328 / 0	0.35 (1)	
C-D	-2462 / 0	-124.4	-124.4	0.49 (1)	3.90	P-D	0 / 470	0.11 (2)	
D-E	-2259 / 0	-124.4	-124.4	0.09 (1)	3.68	D-N	0 / 703	0.11 (1)	
E-F	-2259 / 0	-124.4	-124.4	0.69 (1)	3.68	N-E	-933 / 0	0.61 (1)	
F-G	-2462 / 0	-124.4	-124.4	0.49 (1)	3.90	N-F	0 / 703	0.11 (1)	
G-H	-2678 / 0	-124.4	-124.4	0.52 (1)	3.78	L-F	0 / 470	0.11 (2)	
H-I	0 / 55	-124.4	-124.4	0.17 (1)	10.00	L-G	-328 / 0	0.35 (1)	
R-B	-2701 / 0	0.0	0.0	0.29 (1)	5.23	K-G	-338 / 38	0.18 (1)	
J-H	-2701 / 0	0.0	0.0	0.29 (1)	5.23	B-Q	0 / 2162	0.49 (1)	
						K-H	0 / 2162	0.49 (1)	
R-Q	0 / 0	-39.2	-39.2	0.17 (3)	10.00				
P-O	0 / 2062	-39.2	-39.2	0.46 (1)	10.00				
Q-P	0 / 1878	-39.2	-39.2	0.48 (2)	10.00				
Q-N	0 / 1878	-39.2	-39.2	0.48 (2)	10.00				
N-M	0 / 1878	-39.2	-39.2	0.48 (2)	10.00				
M-L	0 / 1878	-39.2	-39.2	0.48 (2)	10.00				
L-K	0 / 2062	-39.2	-39.2	0.46 (1)	10.00				
K-J	0 / 0	-39.2	-39.2	0.17 (3)	10.00				

## DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)=  $L/360$  (1.06")  
CALCULATED VERT. DEFL.(LL) =  $L/999$  (0.10")  
ALLOWABLE DEFL.(TL)=  $L/360$  (1.06")  
CALCULATED VERT. DEFL.(TL) =  $L/999$  (0.17")

CSI: TC=0.69/1.00 (D-E:1) , BC=0.48/1.00 (N-P:2) ,  
WB=0.61/1.00 (E-N:1) , SSI=0.37/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (Q) (INPUT = 0.90 )  
JSI METAL= 0.59 (O) (INPUT = 1.00 )



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

RECEIVED  
2021-02-19  
TOWN OF EAST GWILLIMBURY  
Building Standards Branch

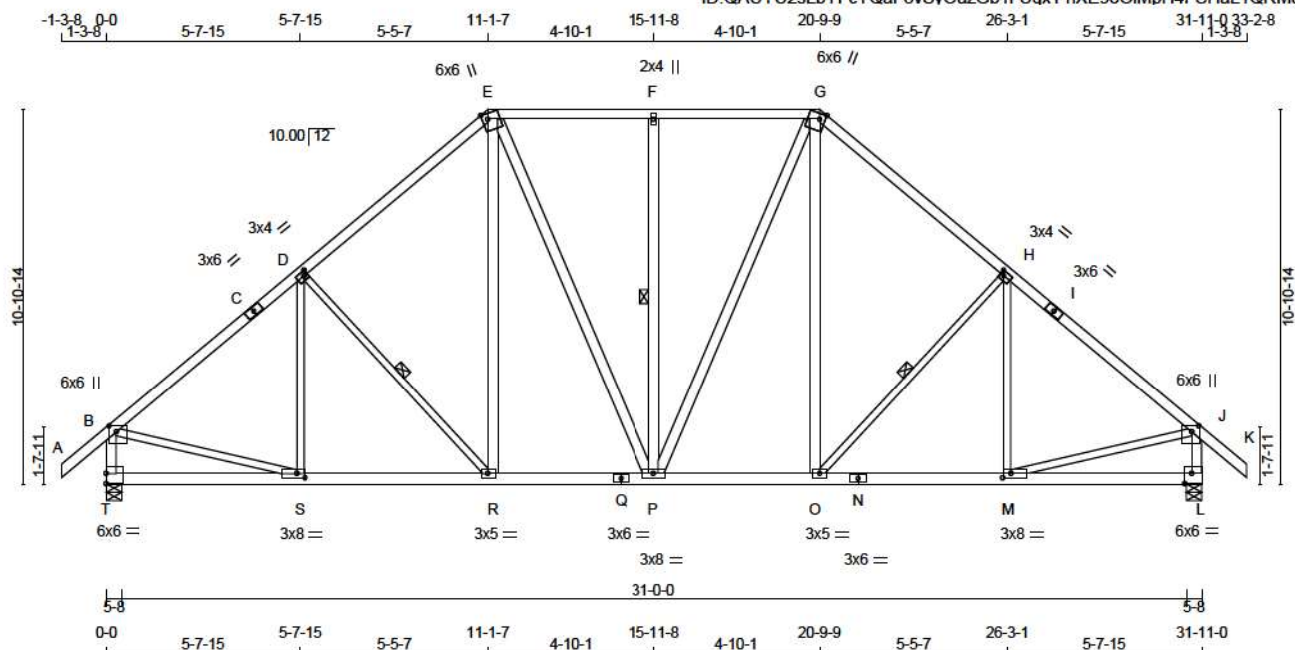


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-1
Sewage System			
Zoning			







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

DRY: SEASONED LUMBER.

#### PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	6.0	6.0	2.00	2.50
C	TS-t	MT20	3.0	6.0		
D	TMWW-t	MT20	3.0	4.0	1.50	1.25
E	TTWW+m	MT20	6.0	6.0	2.00	2.00
F	TMW+w	MT20	2.0	4.0		
G	TTWW+m	MT20	6.0	6.0	2.00	2.00
H	TMWW-t	MT20	3.0	4.0	1.50	1.25
I	TS-t	MT20	3.0	6.0		
J	TMVW+p	MT20	6.0	6.0	2.00	2.50
L	BMV1-t	MT20	6.0	6.0	Edge 2.50	
M	BMWW-t	MT20	3.0	8.0	1.50	2.75
N	BS-t	MT20	3.0	6.0		
O	BMWW-t	MT20	3.0	5.0		
P	BMWW-t	MT20	3.0	8.0		
Q	BS-t	MT20	3.0	6.0		
R	BMWW-t	MT20	3.0	5.0		
S	BMWW-t	MT20	3.0	8.0	1.50	2.75
T	BMV1-t	MT20	6.0	6.0	3.50	

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

##### BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	DOWN	UPLIFT	IN-SX
T	2784	0	0	5-8
L	2784	0	0	5-8

##### UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM.LIVE
T	2053	1207 / 0	335 / 0	0 / 0
L	2053	1207 / 0	335 / 0	0 / 0

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

##### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.54 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF D-R, F-P, H-O. DBS = 20-0-0. CBF = 91 LBS.

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

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

##### LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED L1 MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	0 / 55	-124.4 -124.4	0.17 (1)	10.00	S-D	-240 / 113	0.16 (1)
B-C	-2702 / 0	-124.4 -124.4	0.69 (1)	3.54	D-R	-482 / 0	0.22 (1)
C-D	-2702 / 0	-124.4 -124.4	0.69 (1)	3.54	R-E	0 / 553	0.09 (1)
D-E	-2387 / 0	-124.4 -124.4	0.62 (1)	3.80	E-P	0 / 497	0.08 (1)
E-F	-2002 / 0	-124.4 -124.4	0.42 (1)	4.33	P-F	-728 / 0	0.44 (1)
F-G	-2002 / 0	-124.4 -124.4	0.42 (1)	4.33	P-G	0 / 497	0.08 (1)
G-H	-2387 / 0	-124.4 -124.4	0.62 (1)	3.80	O-G	0 / 553	0.09 (1)
H-I	-2702 / 0	-124.4 -124.4	0.69 (1)	3.54	O-H	-482 / 0	0.22 (1)
I-J	-2702 / 0	-124.4 -124.4	0.69 (1)	3.54	M-H	-240 / 113	0.16 (1)
J-K	0 / 55	-124.4 -124.4	0.17 (1)	10.00	B-S	0 / 2171	0.49 (1)
T-B	-2694 / 0	0.0	0.0	5.24	M-J	0 / 2171	0.49 (1)
L-J	-2694 / 0	0.0	0.0	5.24			
T-S	0 / 0	-39.2	-39.2	0.24 (3)	10.00		
S-R	0 / 2116	-39.2	-39.2	0.50 (2)	10.00		
R-Q	0 / 1796	-39.2	-39.2	0.40 (1)	10.00		
Q-P	0 / 1796	-39.2	-39.2	0.40 (1)	10.00		
P-O	0 / 1796	-39.2	-39.2	0.40 (1)	10.00		
O-N	0 / 2116	-39.2	-39.2	0.50 (2)	10.00		
N-M	0 / 2116	-39.2	-39.2	0.50 (2)	10.00		
M-L	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

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 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 (0.09")  
ALLOWABLE DEFL.(TL)= L/360 (1.06")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.15")

CSI: TC=0.66/1.00 (B-D-1), BC=0.50/1.00 (R-S-2), WB=0.49/1.00 (B-S-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)

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 = 0.64 (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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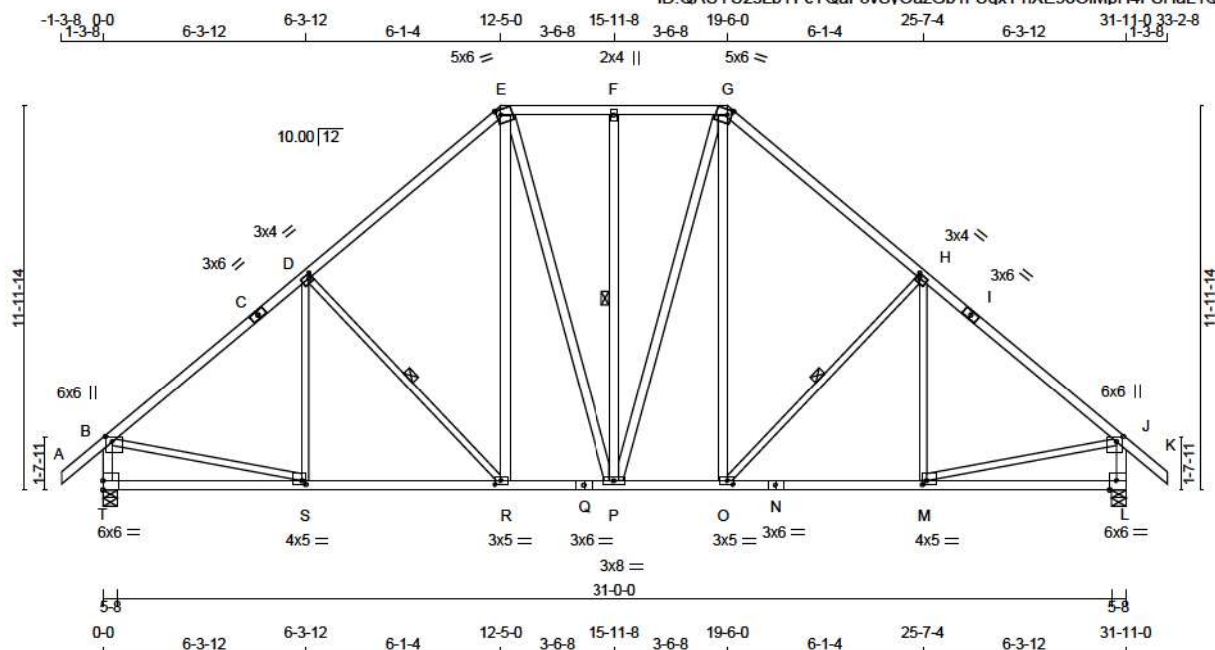
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			

CONTINUED ON PAGE 2







Scale = 1:71.9

TOTAL WEIGHT = 2 X 189 = 378 lb

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

DRY: SEASONED LUMBER.

#### PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	6.0	6.0	2.00	2.50
C	TS-t	MT20	3.0	6.0		
D	TMWW-t	MT20	3.0	4.0	1.50	1.25
E	TTWW-m	MT20	5.0	6.0	2.00	1.75
F	TMW+w	MT20	2.0	4.0		
G	TTWW-m	MT20	5.0	6.0	2.00	1.75
H	TMWW-t	MT20	3.0	4.0	1.50	1.25
I	TS-t	MT20	3.0	6.0		
J	TMVW+p	MT20	6.0	6.0	2.00	2.50
L	BMV1-t	MT20	6.0	6.0	Edge 2.50	
M	BMWW-t	MT20	4.0	5.0	1.50	1.50
N	BS-t	MT20	3.0	6.0		
O	BMWW-t	MT20	3.0	5.0	1.50	2.25
P	BMWW-t	MT20	3.0	8.0		
Q	BS-t	MT20	3.0	6.0		
R	BMWW-t	MT20	3.0	5.0	1.50	2.25
S	BMWW-t	MT20	4.0	5.0	1.50	1.50
T	BMV1-t	MT20	6.0	6.0	3.50	

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

##### BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	DOWN	UPLIFT	IN-SX
T	2784	0	0	5-8
L	2784	0	0	5-8

##### UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
T	2053	1207	0
L	2053	1207	0

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

##### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.23 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.

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF D-R, F-P, H-O. DBS = 20-0-0. CBF = 78 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.	FORCE (LBS)	FACTORED (PLF)	FACTORED CSI (LC)	MEMB.	FORCE (LBS)	FACTORED CSI (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	0 / 55	-124.4 -124.4	0.17 (1)	10.00	S-D	-158 / 175	0.13 (1)
B-C	-2710 / 0	-124.4 -124.4	0.89 (1)	3.23	D-R	-623 / 0	0.35 (1)
C-D	-2710 / 0	-124.4 -124.4	0.89 (1)	3.23	R-E	0 / 849	0.10 (1)
D-E	-2275 / 0	-124.4 -124.4	0.78 (1)	3.61	E-P	0 / 319	0.05 (1)
E-F	-1798 / 0	-124.4 -124.4	0.22 (1)	4.79	P-F	-517 / 0	0.41 (1)
F-G	-1798 / 0	-124.4 -124.4	0.22 (1)	4.79	P-G	0 / 319	0.05 (1)
G-H	-2275 / 0	-124.4 -124.4	0.78 (1)	3.61	O-G	0 / 849	0.10 (1)
H-I	-2710 / 0	-124.4 -124.4	0.89 (1)	3.23	O-H	-623 / 0	0.35 (1)
I-J	-2710 / 0	-124.4 -124.4	0.89 (1)	3.23	M-H	-158 / 175	0.13 (1)
J-K	0 / 55	-124.4 -124.4	0.17 (1)	10.00	S-S	0 / 2172	0.49 (1)
T-B	-2685 / 0	0.0	0.0	5.25	M-J	0 / 2172	0.49 (1)
L-J	-2685 / 0	0.0	0.0	5.25			
T-S	0 / 0	-39.2	-39.2	0.31 (3)	10.00		
S-R	0 / 2127	-39.2	-39.2	0.57 (2)	10.00		
R-Q	0 / 1705	-39.2	-39.2	0.39 (1)	10.00		
Q-P	0 / 1705	-39.2	-39.2	0.39 (1)	10.00		
P-O	0 / 1705	-39.2	-39.2	0.39 (1)	10.00		
O-N	0 / 2127	-39.2	-39.2	0.57 (2)	10.00		
N-M	0 / 2127	-39.2	-39.2	0.57 (2)	10.00		
M-L	0 / 0	-39.2	-39.2	0.31 (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 (0.10")  
ALLOWABLE DEFL.(TL)= L/360 (1.06")  
CALCULATED VERT. DEFL.(TL)= L/999 (0.17")

CSI: TC=0.89/1.00 (B-D-1), BC=0.57/1.00 (R-S-2),  
WB=0.49/1.00 (B-S-1), SSI=0.29/1.00 (B-D-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90 )  
JSI METAL = 0.72 (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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2021-02-19  
TOWN OF EAST GWILLIMBURY  
Building Standards Branch

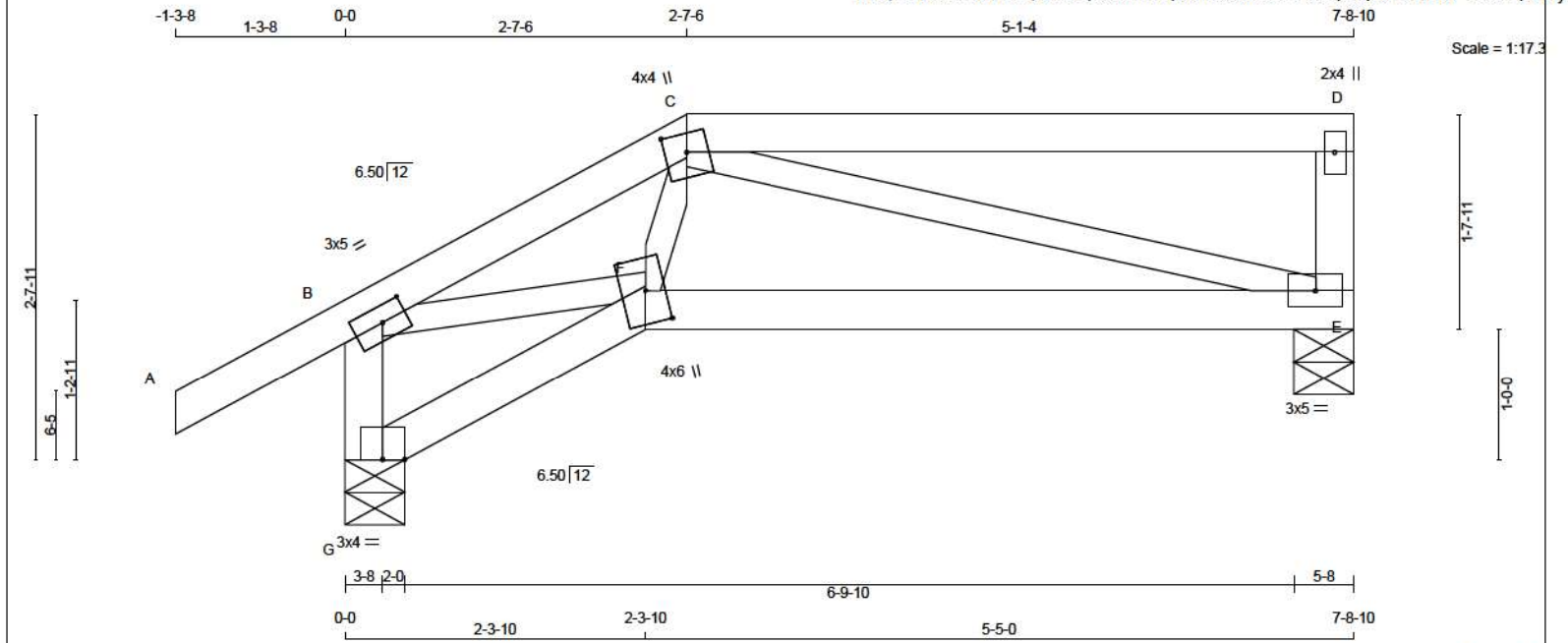


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			

CONTINUED ON PAGE 2





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

PLATES (table is in inches)						
JT TYPE	PLATES	W	LEN	Y	X	
B	TMVW-1	MT20	3.0	5.0	1.50	2.25
C	TTWW+m	MT20	4.0	4.0	1.75	2.00
D	TMV+p	MT20	2.0	4.0		
E	BMVW1-1	MT20	3.0	5.0		
F	BBWW+m	MT20	4.0	6.0	3.00	1.75
G	BVM1-p	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	IN-SX	IN-SX
G	801	0	801	0	0	5-8	5-8	5-8	5-8
E	632	0	632	0	0	5-8	5-8	1-8	1-8

UNFACTORED REACTIONS		1ST LCASE		MAX/MIN COMPONENT REACTIONS		SOIL	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	584	363 / 0	81 / 0	0 / 0	0 / 0	140 / 0	0 / 0
E	468	266 / 0	81 / 0	0 / 0	0 / 0	118 / 0	0 / 0

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

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.15 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

#### LOADING

TOTAL LOAD CASES: (4)

CHORDS		MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD (PLF)		MAX. FACTORED VERT. LOAD (PLF)		MAX. FACTORED VERT. LOAD (PLF)		MAX. FACTORED VERT. LOAD (PLF)		MAX. FACTORED VERT. LOAD (PLF)		MAX. FACTORED VERT. LOAD (PLF)	
MEMB.	FORCE	VERT.	LOAD	LC1	MAX	LC1	MAX	LC1	MAX	LC1	MAX	LC1	MAX	LC1	MAX
FR-TO															
G-B	-756 / 0	0.0	0.0	0.08	(1)	7.81	B-F	0 / 843	0.19	(1)					
A-B	0 / 40	-124.4	-124.4	0.16	(1)	10.00	F-C	0 / 230	0.05	(3)					
B-C	-956 / 0	-124.4	-124.4	0.16	(1)	8.15	C-E	-825 / 0	0.38	(1)					
C-D	0 / 0	-124.4	-124.4	0.55	(1)	10.00									
E-D	-317 / 0	0.0	0.0	0.03	(1)	7.81									
G-F	0 / 0	-39.2	-39.2	0.05	(3)	10.00									
F-E	0 / 798	-39.2	-39.2	0.36	(2)	10.00									

#### DESIGN CRITERIA

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

**SPACING = 24.0 IN. C/C**

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.26")  
CALCULATED VERT. DEFL.(LL)= L/999 (0.06")  
ALLOWABLE DEFL.(TL)= L/360 (0.26")  
CALCULATED VERT. DEFL.(TL)= L/889 (0.10")

CSI: TC=0.55/1.00 (C-D-1) , BC=0.36/1.00 (E-F-2) ,  
WB=0.38/1.00 (C-E-1) , SSI=0.25/1.00 (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)  
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= 0.84 (B) (INPUT = 0.90 )  
JSI METAL= 0.44 (G) (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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**TOWN OF EAST GWILLIMBURY**  
Building Standards Branch

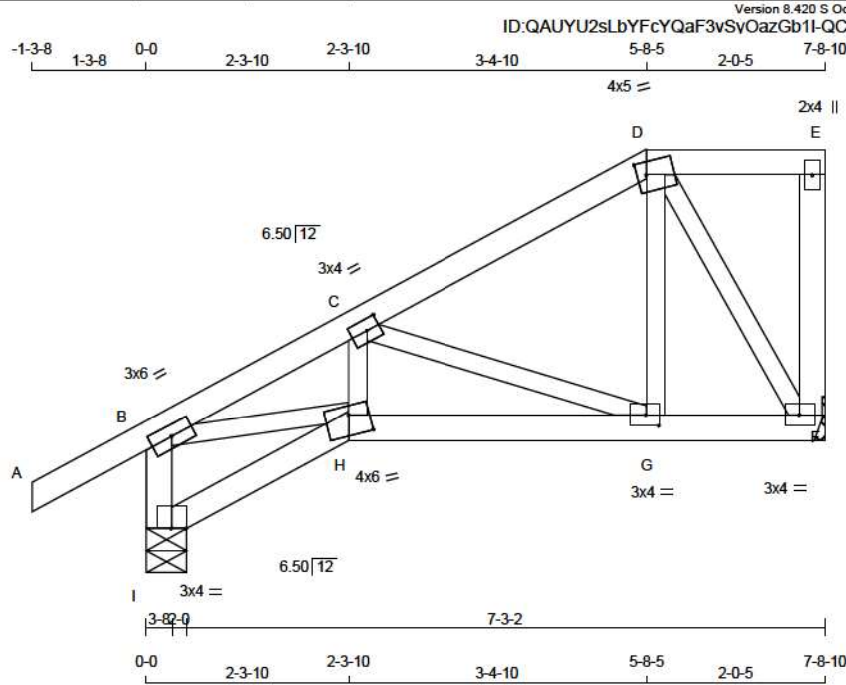


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			







Scale = 1:26.2

TOTAL WEIGHT = 35 lb

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW-1	MT20	3.0	6.0	
C	TMWW-1	MT20	3.0	4.0	1.50 1.75
D	TTWW-m	MT20	4.0	5.0	1.75 1.25
E	TMVW-p	MT20	2.0	4.0	
F	BMVW1-t	MT20	3.0	4.0	
G	BMWW-1	MT20	3.0	4.0	1.50 1.75
H	BBWW-m	MT20	4.0	6.0	2.75 2.75
I	BVM1-p	MT20	3.0	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	
I	801	0	801	0	0	5-8	1-8	
F	632	0	632	0	0	MECHANICAL		

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

##### UNFACTORED REACTIONS

JT	1ST LCASE		MAX/MIN		COMPONENT REACTIONS		DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	IN-SX		
I	584	363 / 0	81 / 0	0 / 0	0 / 0	140 / 0	0 / 0	0 / 0
F	468	266 / 0	81 / 0	0 / 0	0 / 0	118 / 0	0 / 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 = 5.98 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

##### LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX. (LC) UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO		FR-TO			
I-B	-758 / 0	0.0	0.0 0.08 (1)	7.81	B-H	0 / 957	0.22 (1)
A-B	0 / 40	-124.4	-124.4 0.16 (1)	10.00	H-C	0 / 167	0.04 (2)
B-C	-1068 / 0	-124.4	-124.4 0.12 (1)	5.98	C-G	-668 / 0	0.16 (1)
C-D	-373 / 0	-124.4	-124.4 0.15 (1)	6.25	G-D	0 / 358	0.08 (1)
D-E	0 / 0	-124.4	-124.4 0.09 (1)	10.00	D-F	-588 / 0	0.13 (1)
F-E	-126 / 0	0.0	0.0 0.02 (1)	7.81			
I-H	0 / 0	-39.2	-39.2 0.05 (3)	10.00			
H-G	0 / 944	-39.2	-39.2 0.21 (1)	10.00			
G-F	0 / 328	-39.2	-39.2 0.11 (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 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 (0.26")  
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")  
ALLOWABLE DEFL.(TL)= L/360 (0.26")  
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.16/1.00 (A-B-1) , BC=0.21/1.00 (G-H-1) , WB=0.22/1.00 (B-H-1) , SSI=0.16/1.00 (C-D-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

##### NAIL VALUES

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

MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (H) (INPUT = 0.90 )  
JSI METAL = 0.44 (I) (INPUT = 1.00 )



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			

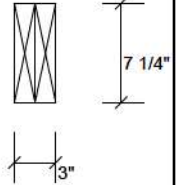
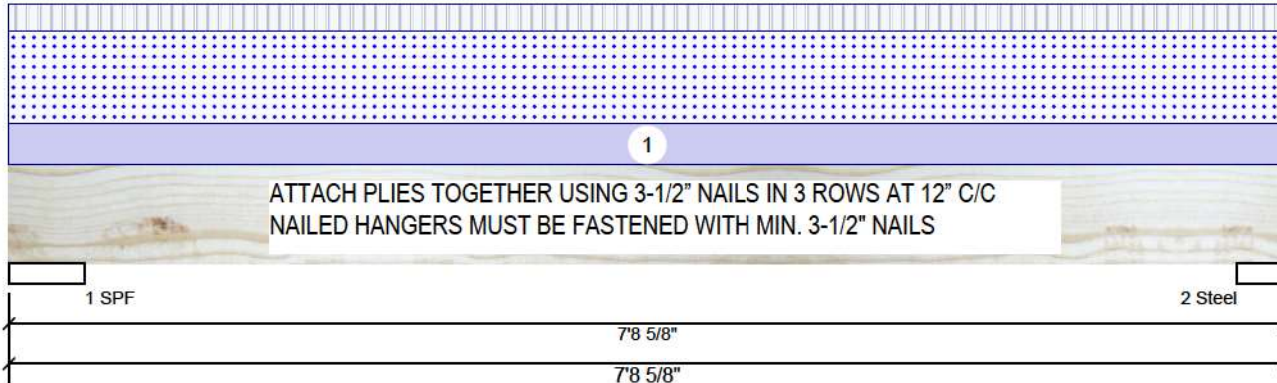


**READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.**

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**B1 S-P-F #2 2.000" X 8.000" 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	314	457	1040	0
2	301	438	996	0

**Bearings and Factored Reactions**

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.500"	24%	572 / 1875	2446	L	1.25D+1.5S +L
2 - Steel	3.500"	36%	548 / 1795	2343	L	1.25D+1.5S +L

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3903 ft-lb	3'11 5/16"	4047 ft-lb	0.964 (96%)	1.25D+1.5S +L	L
Unbraced	3903 ft-lb	3'11 5/16"	3906 ft-lb	0.999 (100%)	1.25D+1.5S +L	L
Shear	2201 lb	1'	3406 lb	0.646 (65%)	1.25D+1.5S +L	L
LL Defl inch	0.132 (L/646)	3'11 3/8"	0.236 (L/360)	0.560 (56%)	S+0.5L	L
TL Defl inch	0.182 (L/467)	3'11 3/8"	0.236 (L/360)	0.770 (77%)	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 must be laterally braced at a maximum of 3'4 7/8" o.c.
- 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		7-7-0	Far 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.**



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



CSD | DRAW DESIGN BUILD

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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			



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

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

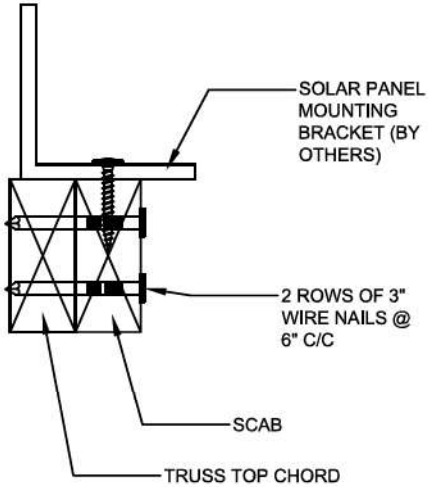
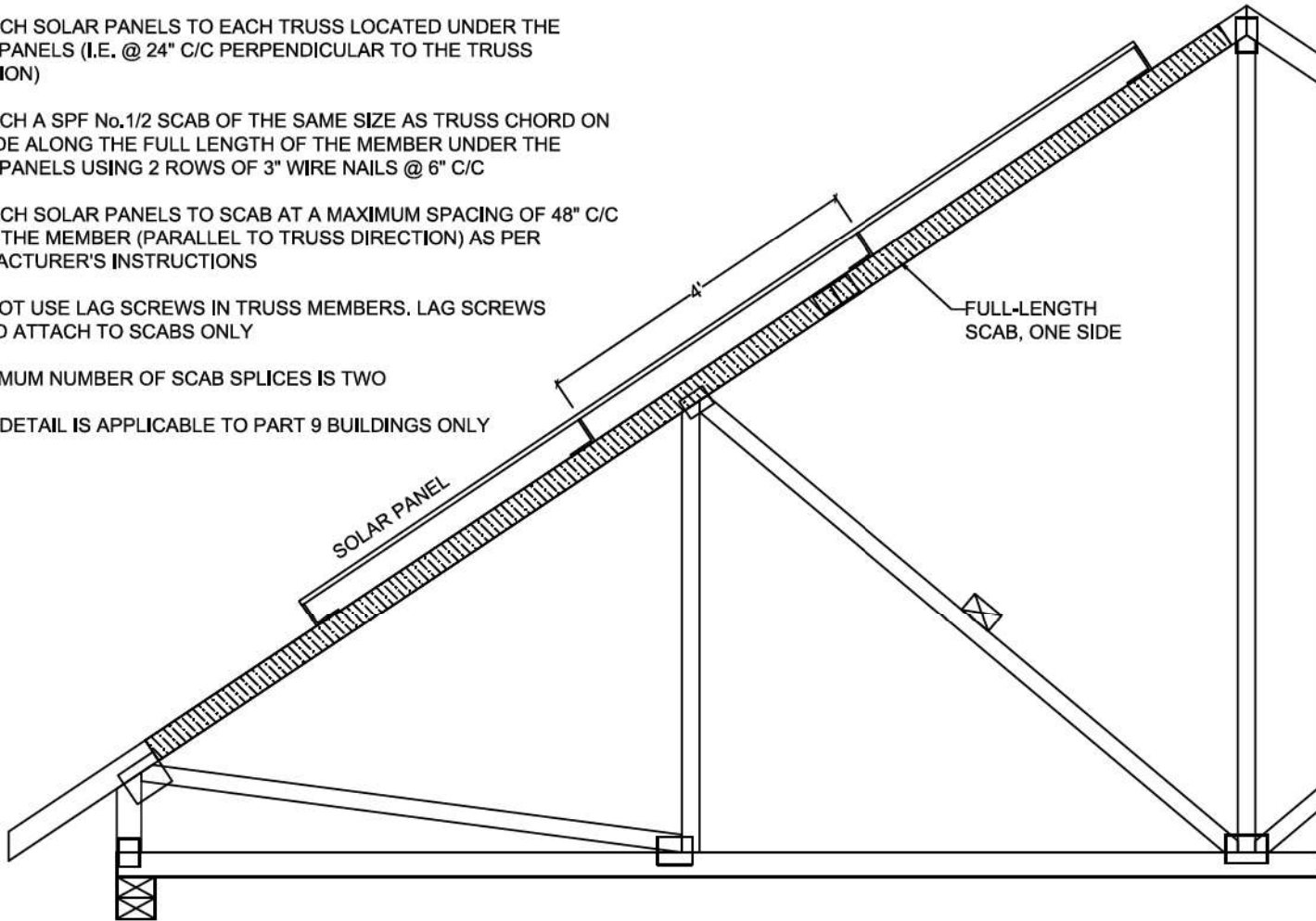
3) ATTACH A SPF No.1/2 SCAB OF THE SAME SIZE AS TRUSS CHORD ON ONE SIDE ALONG THE FULL LENGTH OF THE MEMBER UNDER THE SOLAR PANELS USING 2 ROWS OF 3" WIRE NAILS @ 6" C/C

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

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

6) MAXIMUM NUMBER OF SCAB SPLICES IS TWO

7) THIS DETAIL IS APPLICABLE TO PART 9 BUILDINGS ONLY



NE1220-107  
GREENPARK - TRINAR HALL -  
GLENWAY 2A ELE 2

## Detail for Installation of Solar Panels - Scab Method



NE1220-107  
GREENPARK - TRINAR  
HALL - GLENWAY 2A ELE 2

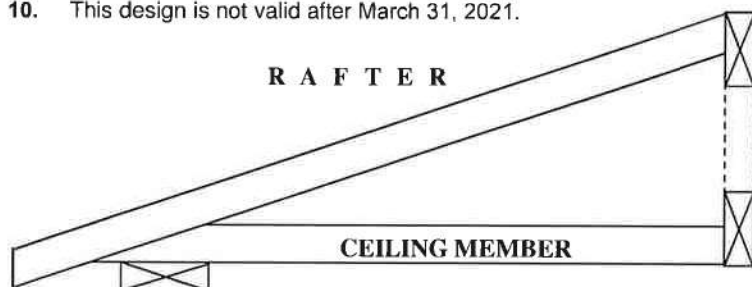
# BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B97791H1

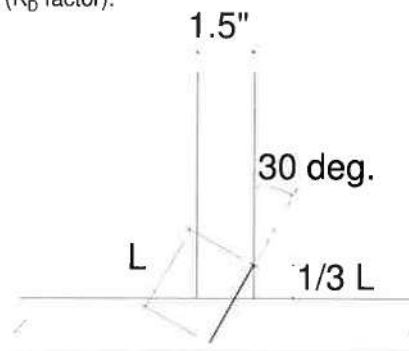
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL LATERAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	132	147
	3.25	0.144	132	147
	3.50	0.160	159	177
COMMON SPIRAL	3.00	0.122	97	108
	3.25	0.122	97	108
	3.50	0.152	145	162

## NOTES:

- 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.
- 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.
- For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
- 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.
- Nail values in table are based on the following relative lumber densities:  $G = 0.42$  (SPF),  $G = 0.49$  (D. Fir).
- 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).
- For loads due to **wind** the nail lateral capacity in this table may be multiplied by 1.15 ( $K_D$  factor).
- Lumber must be dry ( < 19% moisture content ) at the time of nail installation.
- Nail values in this table comply with CSA O86-14, section 12.9.4
- This design is not valid after March 31, 2021.



G  
I  
R  
D  
E  
R



TOE-NAIL INSTALLATION

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

**MiTek**

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

December

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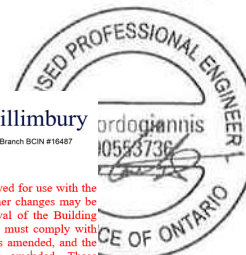


Town of  
**East Gwillimbury**  
Building Standards Branch BCIN #16487

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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-19
Sewage System			
Zoning			

PEO  
Certificate No. 10889485





NE1220-107  
GREENPARK - TRINAR  
HALL - GLENWAY 2A ELE 2

# BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B97791H2

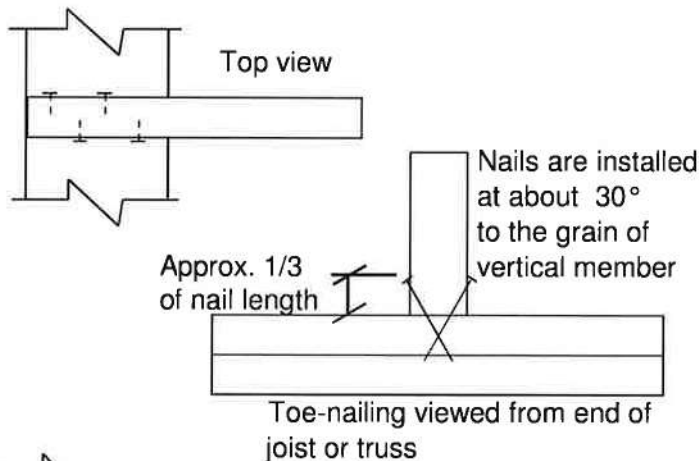
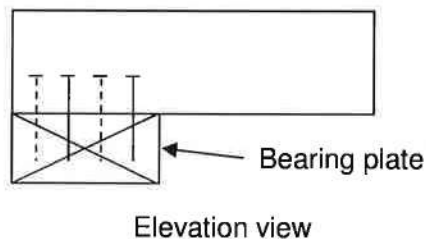
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52
COMMON SPIRAL	3.00	0.122	26	36
	3.25	0.122	28	40
	3.50	0.152	36	50

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

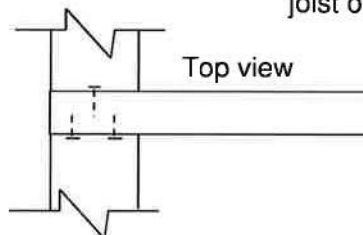
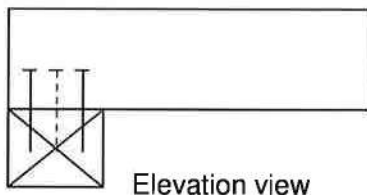
## NOTES:

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

## Toe-nailing on 2x6 Bearing Plate



## Toe-nailing on 2x4 Bearing Plate



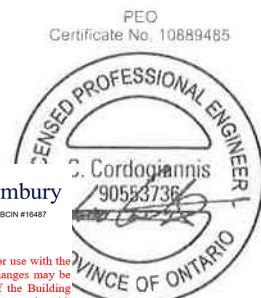
**MiTek**

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



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