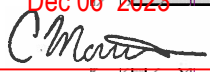
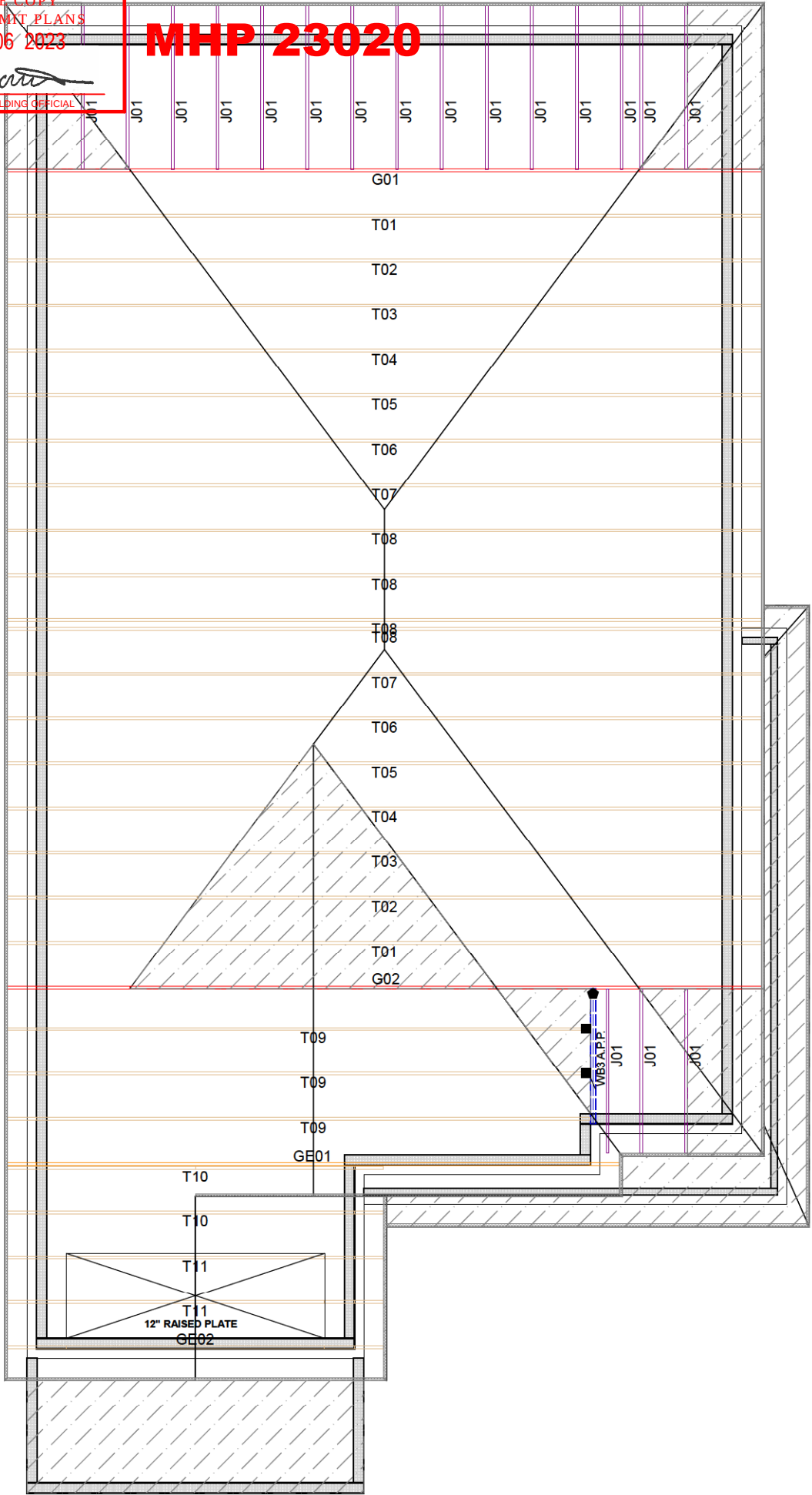


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Dec 06 2023
PER: 
CHIEF BUILDING OFFICIAL

MHP 23020



Hanger Name	Symbol	QTY
	▲	0
LJS26DS	■	2
	●	0
HGUS26-2	◆	1
	△	0
	□	0
	◊	0
	○	0



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 #	22-00196R0
Address	ZADORRA PENROSE 3-2 OSHAWA, ON
Model	PENROSE 3-2
Sales Rep	RALPH MIRIGELLO
Designer	BB
Date	5/31/2022
Path	S:\DESIGN\KLU\CUSTOMERS\GREENPARK\ZADORRA ESTATES\MODELS\PENROSE 3\PENROSE 3-2\T

DESIGN INFORMATION

Code	NBCC 2015
Bldg	Residential - HSB (NBCC Part 9)
TC LL	34.8 lb/ft²
TC DL	3.0 lb/ft²
BC LL	0.0 lb/ft²
BC DL	7.3 lb/ft²
Deflection	LL=L/360 TL=L/360
Spacing	24" O/C unless otherwise noted
Complies With	OBC 2012 (2019 Amendment) CSA O86-14 and TPIC 2014

IMPORTANT INFORMATION

Hangers and Fasteners to be installed as per manufacturer

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



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



MHP 23020

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.



TOTAL WEIGHT = 145 lb

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD		SPECIFIED LOADS:			
GROSS REACTION		GROSS REACTION		GROSS REACTION		BRG		BRG		TOP CH.	LL	=	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX	BOT CH.	LL	=	
T	3894	0	3894	0	0	5-8	4-13	4-13	4-13			=	34.8 PSF
L	3894	0	3894	0	0	5-8	4-13	4-13	4-13			=	3.0 PSF
												=	0.0 PSF
												=	7.3 PSF
										TOTAL LOAD	=		45.4 PSF

1ST L CASE		MAX/MIN COMPONENT REACTIONS					
JOINT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
T	2697	2090 / 0	0 / 0	0 / 0	0 / 0	607 / 0	0 / 0
L	2697	2090 / 0	0 / 0	0 / 0	0 / 0	607 / 0	0 / 0

LOADING IN FLAT SECTION BASED ON A
SI OPE OF 2 00/12 MINIMUM

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) T.L.
GIRDER TYPE: CPrimeHip

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.37 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED

LOADING
TOTAL LOAD CASES: (4)

CHORDS	WEBS	THIS DESIGN COMPLIES WITH:
--------	------	----------------------------

MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
A-B	0 / 43	-111.9	-111.9	0.17 (1)	10.00	S-C	-707 / 0 0.18 (1)
B-C	-4583 / 0	-111.9	-111.9	0.80 (1)	2.55	C-R	0 / 3569 0.88 (1)
C-D	-6546 / 0	-210.9	-210.9	0.75 (1)	2.76	R-D	-2134 / 0 0.55 (1)
D-E	-7826 / 0	-210.9	-210.9	0.87 (1)	2.38	D-Q	0 / 1674 0.41 (1)
E-F	-7801 / 0	-210.9	-210.9	0.73 (1)	2.60	Q-E	-907 / 0 0.24 (1)
F-G	-7801 / 0	-210.9	-210.9	0.87 (1)	2.37	E-O	-33 / 0 0.02 (1)
G-H	-7801 / 0	-210.9	-210.9	0.87 (1)	2.37	O-F	-914 / 0 0.24 (1)
H-I	-6552 / 0	-210.9	-210.9	0.76 (1)	2.75	O-H	0 / 1633 0.40 (1)
I-J	-4582 / 0	-111.9	-111.9	0.80 (1)	2.55	N-H	-2114 / 0 0.55 (1)
J-K	0 / 43	-111.9	-111.9	0.17 (1)	10.00	N-I	0 / 3578 0.89 (1)
T-B	-3831 / 0	0.0	0.0	0.27 (1)	5.42	M-I	-713 / 0 0.18 (1)
L-J	-3830 / 0	0.0	0.0	0.27 (1)	5.42	B-S	0 / 3911 0.97 (1)

- 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 (1.03")

CALCULATED VERT. DEFL.(LL) = L/ 994 (0.37")

ALLOWABLE DEFL.(TL)= L/360 (1.03")

CALCULATED VERT. DEFL.(TL) = L/ 613 (0.61")

CSI: TC=0.87/1.00 (F-H-1), BC=0.49/1.00 (O-Q-1),
WB=0.97/1.00 (B-S-1), SSI=0.50/1.00 (H-I-1)

T-S	0/0	-34.4	-34.4	0.04 (4)	10.00	DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS=1.00
S-P	0/3788	34.4	34.4	0.24 (1)	10.00	

S-R	0/3768	-34.4	-34.4	0.24 (1)	10.00	COMP=1.00 SHEAR=1.00 TENS=1.00 COMPANION LIVE LOAD FACTOR = 1.00
R-Q	0/6547	-34.4	-34.4	0.41 (1)	10.00	
Q-P	0/7826	-34.4	-34.4	0.49 (1)	10.00	

P-O	0/7826	-34.4	-34.4	0.49 (1)	10.00
O-N	0/6553	-34.4	-34.4	0.42 (1)	10.00
N-M	0/2706	24.4	24.4	0.24 (1)	10.00

TRUSS PLATE MANUFACTURED IS NOT

IN-M	0/3700	-34.4	-34.4	0.24 (1)	10.00	TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.
M-L	0/0	-34.4	-34.4	0.04 (4)	10.00	

FACTORED CONCENTRATED LOADS (LBS)						NAIL VALUES
JT	LOC.	LC1	MAX-	MAX+	CNCL	PLATE GRIP(DRY) SHEAR SECTION
C	A-1-A2	248	248			

C	4-12	-348	-348	—	FRONT	VERT	TOTAL	—	C1	FLATE	GRIP (PLI)	SHEAR (PLI)	SECTION (PLI)
I	26-10-4	-348	-348	—	FRONT	VERT	TOTAL	—	C1		MAX MIN	MAX MIN	MAX MIN

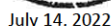
1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED	MI18HS 586 403 2455 1382 3163 3004
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PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

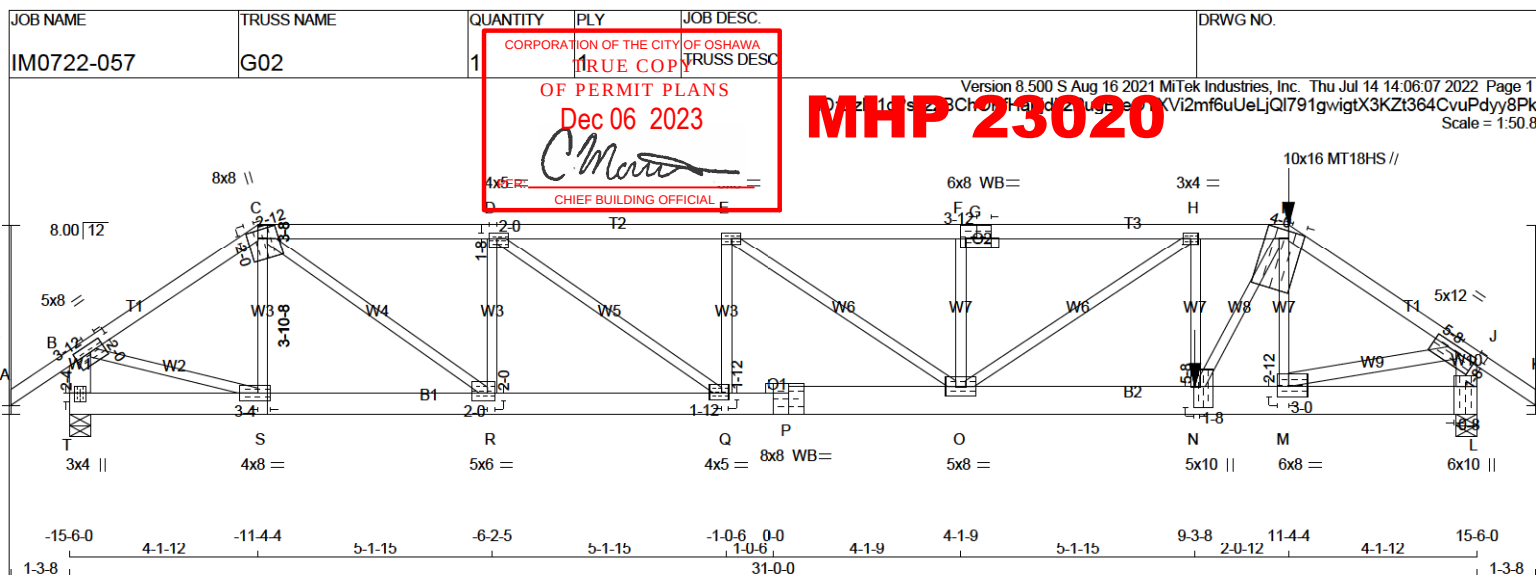
JSI GRIP= 0.90 (Q) (INPUT = 0.90)
JSI METAL= 1.00 (P) (INPUT = 1.00)

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





TOTAL WEIGHT = 156 lb

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	2100F 1.8E	SPF
C - G	2x4	DRY	2100F 1.8E	SPF
G - I	2x4	DRY	2100F 1.8E	SPF
I - K	2x4	DRY	2100F 1.8E	SPF
T - B	2x6	DRY	No.2	SPF
L - J	2x6	DRY	No.2	SPF
T - P	2x6	DRY	2100F 1.8E	SPF
P - L	2x8	DRY	1950F 1.7E	SPF

ALL WEBS EXCEPT M - J	2x3	DRY	No.2	SPF
	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
B	TMWw-t	MT20	5.0	8.0	2.00	3.75
C	TTWW+m	MT20	8.0	8.0	2.00	2.75
D	TMWw-t	MT20	4.0	5.0	1.50	2.00
E	TMWw-t	MT20	3.0	5.0		
F						
G	TSW-I	MT20	6.0	8.0	Edge	3.75
H	TMWw-t	MT20	3.0	4.0		
I	TTWW+m	MT18HS	10.0	16.0	Edge	4.00
J	TMW-t	MT20	5.0	12.0	1.50	5.50
L	BMV+1+t	MT20	6.0	10.0	Edge	5.00
M	BMWw-t	MT20	6.0	8.0	2.75	3.00
N	BMWw+t	MT20	5.0	10.0	5.50	1.50
O	BMWwW-t	MT20	5.0	8.0		
P	BS-t	MT20	8.0	8.0		
Q	BMWw-t	MT20	4.0	5.0	1.75	1.75
R	BMWw-t	MT20	5.0	6.0	2.00	2.00
S	BMW-t	MT20	4.0	8.0	2.00	3.25
T	BMV+1-p	MT20	3.0	4.0	2.25	1.50

Edge - INDICATES REFERENCE CORNER OF PLATE
TOUCHES EDGE OF CHORD

WB - INDICATES BLOCKING REQUIRED

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

BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQ'D BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
T	2782	0	2782	0	0	5-8	2-10
L	4813	0	4813	0	0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SC
T	1925	1503 / 0	0 / 0	0 / 0	0 / 0	422 / 0	0
L	3334	2580 / 0	0 / 0	0 / 0	0 / 0	755 / 0	0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.91 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY
APPLIED

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX CSI (LC)		
FR-TO		FROM TO			FR-TO				
A-B	0 / 43	-111.9	-111.9	0.11 (1)	10.00	S-C	-490 / 0	0.13 (1)	
B-C	-3156 / 0	-111.9	-111.9	0.32 (1)	4.46	C-R	0 / 2994	0.74 (1)	
C-D	-5024 / 0	-111.9	-111.9	0.50 (1)	3.50	R-D	-1710 / 0	0.44 (1)	
D-E	-6488 / 0	-111.9	-111.9	0.63 (1)	3.01	D-Q	0 / 1816	0.45 (1)	
E-F	-7130 / 0	-111.9	-111.9	0.62 (1)	2.91	Q-E	-1019 / 0	0.26 (1)	
F-G	-7130 / 0	-111.9	-111.9	0.62 (1)	2.91	E-O	0 / 791	0.20 (1)	
G-H	-7130 / 0	-111.9	-111.9	0.62 (1)	2.91	O-F	-598 / 0	0.15 (1)	
H-I	-6683 / 0	-210.9	-210.9	0.36 (1)	3.15	O-H	0 / 551	0.14 (1)	
I-J	-5944 / 0	-111.9	-111.9	0.49 (1)	3.25	N-H	-835 / 0	0.21 (1)	
J-K	0 / 43	-111.9	-111.9	0.11 (1)	10.00	N-I	0 / 3624	0.90 (1)	
T-B	-2759 / 0	0.0	0.0	0.20 (1)	6.25	M-I	-631 / 0	0.16 (1)	
L-J	-4770 / 0	0.0	0.0	0.34 (1)	4.88	B-S	0 / 2693	0.67 (1)	
						M-J	0 / 5053	0.89 (1)	
T-S	0 / 0	-18.2	-18.2	0.03 (4)	10.00				
S-R	0 / 2608	-18.2	-18.2	0.17 (1)	10.00				
R-Q	0 / 5024	-18.2	-18.2	0.31 (1)	10.00				
Q-P	0 / 6487	-18.2	-18.2	0.44 (1)	10.00				
P-O	0 / 6487	-18.2	-18.2	0.44 (1)	10.00				
O-N	0 / 6683	-18.2	-18.2	0.42 (1)	10.00				
N-M	0 / 4920	-34.4	-34.4	0.34 (1)	10.00				
M-L	0 / 0	-34.4	-34.4	0.03 (1)	10.00				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
I	26-10.4	-348	-348	—	FRONT	VERT	TOTAL	—	C1
N	24-9.8	-515	-577	—	FRONT	VERT	DEAD	—	C1
N	24-9.8	-2086	-2086	—	FRONT	VERT	SNOW	—	C1

CONNECTION REQUIREMENTS

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



July 14, 2022

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

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	=	3.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.3	PSF
TOTAL LOAD				=	45.1 PSF

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeIip
SIDE SETBACK = 4-1-12
END SETBACK = 6-0-0
END WALL WIDTH = 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 6-2-8 OF SPAN
MEASURED FROM THE RIGHT.

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL
OR SMALL BUILDING REQUIREMENTS OF
PART 9, 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)= $L/360$ (1.03")
 CALCULATED VERT. DEFL.(LL) = $L/999$ (0.31")
 ALLOWABLE DEFL.(TL)= $L/360$ (1.03")
 CALCULATED VERT. DEFL.(TL) = $L/747$ (0.50")

CSI: TC=0.63/1.00 (D-E:1), BC=0.44/1.00 (O-Q:1)
WB=0.90/1.00 (I-N:1), SSI=0.30/1.00 (C-D:1)

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

COMPANION IVE LOAD FACTOR = 1.00

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

CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0722-057	G02	1	1	TRUSS DESC	

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NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	650 371	1747 788	1987 1873
MT18HS	586 403	2455 1382	3163 3004

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (S) (INPUT = 0.90)

JSI METAL= 0.96 (P) (INPUT = 1.00)



July 14, 2022

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



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0722-057	GE01	1	CORPORATION OF THE CITY OF OSHAWA TRUE COPY	TRUSS DESC	

OF PERMIT PLANS

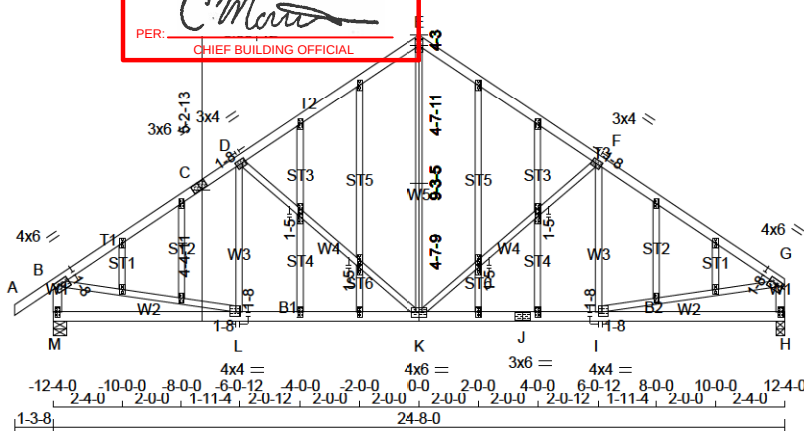
Dec 06 2023

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CHIEF BUILDING OFFICIAL

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I:\Projects\12-22-23\ShOshawa\12-22-23\61230QQ0LGHUcJqhGD7FqSxQGILIFJsSx3yy8Pj

Scale = 1:77.7



TOTAL WEIGHT = 135 lb

[M/F]

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

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

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMW-t	MT20	4.0	6.0	1.50	3.00
C	TS-t	MT20	3.0	6.0		
D	TMW-t	MT20	3.0	4.0	1.50	1.50
E	TTW+p	MT20	3.0	5.0		
F	TMW-t	MT20	3.0	4.0	1.50	1.50
G	TMW-t	MT20	4.0	6.0	1.50	3.00
H	BMV1+p	MT20	2.0	4.0		
I	BMW-t	MT20	4.0	4.0	1.50	1.50
J	BS-t	MT20	3.0	6.0		
K	BMW-t	MT20	4.0	6.0		
L	BMW-t	MT20	4.0	4.0	1.50	1.50
M	BMV1+p	MT20	2.0	4.0		
N, Q, Z, AC						
N	NP+w	MT20	2.0	4.0	1.25	1.00
N, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AB, AC, AD, AE, AF, AG						
N	NP+w	MT20	2.0	4.0		

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

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
M	1758	0	1758	0
H	1605	0	1605	0

UNFACTORED REACTIONS

	1ST CASE	MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
M	1216	954 / 0	0 / 0	0 / 0	0 / 0	262 / 0	0 / 0
H	1112	858 / 0	0 / 0	0 / 0	0 / 0	254 / 0	0 / 0

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

BRACINGTOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.20 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 43	-111.9 -111.9	0.15 (1)	10.00	K-E	0 / 918	0.21 (1)
B-C	-1800 / 0	-111.9 -111.9	0.64 (1)	4.20	K-F	-618 / 0	0.83 (1)
C-D	-1800 / 0	-111.9 -111.9	0.64 (1)	4.20	I-F	-142 / 85	0.07 (1)
D-E	-1332 / 0	-111.9 -111.9	0.59 (1)	4.82	D-K	-618 / 0	0.83 (1)
E-F	-1332 / 0	-111.9 -111.9	0.59 (1)	4.82	L-D	-142 / 85	0.07 (1)
F-G	-1800 / 0	-111.9 -111.9	0.64 (1)	4.20	B-L	0 / 1558	0.35 (1)
M-B	-1711 / 0	0.0 0.0	0.18 (1)	6.36	I-G	0 / 1558	0.35 (1)
H-G	-1557 / 0	0.0 0.0	0.16 (1)	6.61			
M-L	0 / 0	-18.2 -18.2	0.17 (4)	10.00			
L-K	0 / 1536	-18.2 -18.2	0.33 (1)	10.00			
K-J	0 / 1536	-18.2 -18.2	0.33 (1)	10.00			
J-I	0 / 1536	-18.2 -18.2	0.33 (1)	10.00			
I-H	0 / 0	-18.2 -18.2	0.17 (4)	10.00			

DESIGN CRITERIASPECIFIED LOADS:

TOP CH.	LL	=	34.8	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.3	PSF
TOTAL LOAD		=	45.1	PSF

SPACING = 24.0 IN. C/C

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

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

(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 (0.82")
CALCULATED VERT. DEFL. (LL)= L/999 (0.07")
ALLOWABLE DEFL. (TL)= L/360 (0.82")
CALCULATED VERT. DEFL. (TL)= L/999 (0.12")CSI: TC=0.64/1.00 (F-G-1), BC=0.33/1.00 (I-K-1),
WB=0.83/1.00 (F-K-1), SSI=0.28/1.00 (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)	(PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	650 371	1747 788	1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

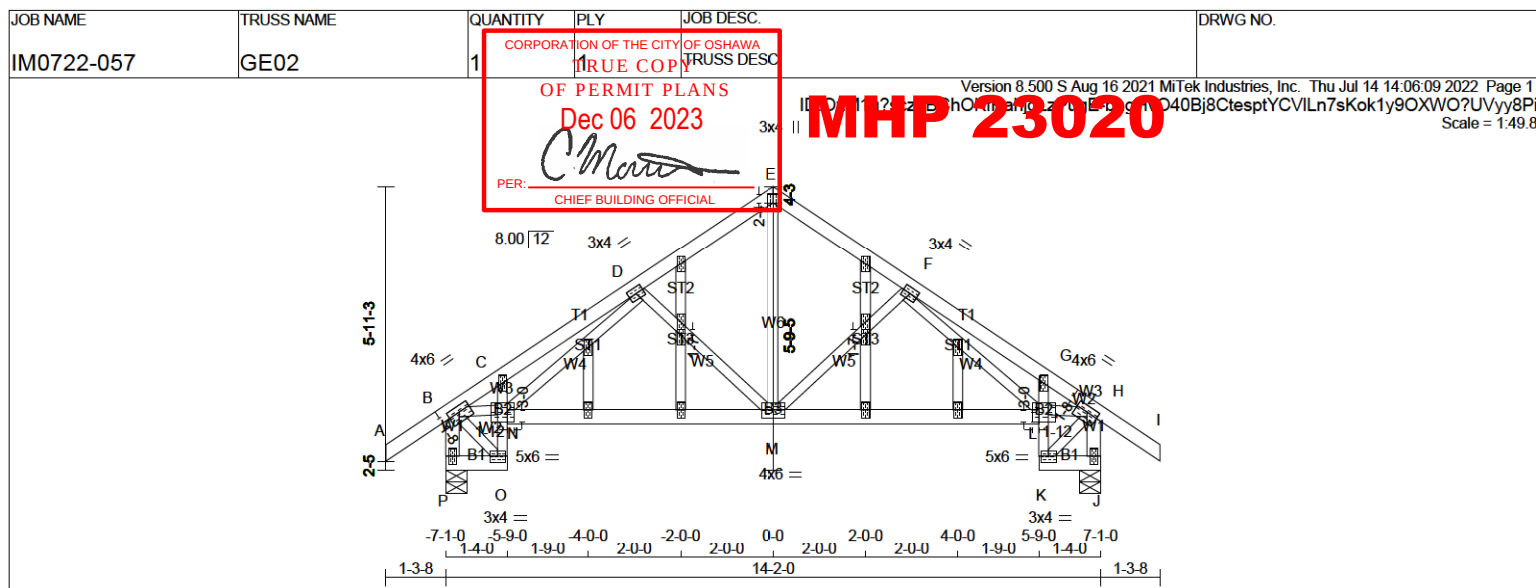
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (I) (INPUT = 0.90)
JSI METAL= 0.52 (L) (INPUT = 1.00)

July 14, 2022

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





TOTAL WEIGHT = 71 lb

LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - E	2x4	DRY	No.2
E - I	2x4	DRY	No.2
P - B	2x4	DRY	No.2
J - H	2x4	DRY	No.2
P - O	2x4	DRY	No.2
O - C	2x3	DRY	No.2
N - L	2x4	DRY	No.2
K - G	2x3	DRY	No.2
K - J	2x4	DRY	No.2

ALL WEBS 2x3 DRY No.2 SPF
 EXCEPT

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

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVWW-t	MT20	4.0	6.0	1.50	3.00
C	TMV+p	MT20	2.0	4.0		
D	TMVWW-t	MT20	3.0	4.0		
E	TTV+p	MT20	3.0	4.0	2.25	1.50
F	TMVWW-t	MT20	3.0	4.0		
G	TMV+p	MT20	2.0	4.0		
H	TMVWW-t	MT20	4.0	6.0	1.50	3.00
J	BMV1+p	MT20	2.0	4.0		
K	BMVWW-t	MT20	3.0	4.0		
L	BMVWW-t	MT20	5.0	6.0	3.00	1.75
M	BMVWW-t	MT20	4.0	6.0		
N	BMVWW-t	MT20	5.0	6.0	3.00	1.75
O	BMVWW-t	MT20	3.0	4.0		
P	BMV1+p	MT20	2.0	4.0		
Q	NP+w	MT20	2.0	4.0	1.50	1.00
R, S, T, U, V, W, X, Y, Z						
Q	NP+w	MT20	2.0	4.0		
X	NP+w	MT20	2.0	4.0	1.50	1.00

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		
P	1075	0	1075	0	5-8	1-8
J	1075	0	1075	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM. LIVE	WIND			
P	743	588 / 0	0 / 0	0 / 0	0 / 0	154 / 0	0 / 0
J	743	588 / 0	0 / 0	0 / 0	0 / 0	154 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.63 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 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 TO		FR-TO				
A-B	0 / 43	-111.9 -111.9	0.15 (1)	10.00	M-E	0 / 638	0.14 (1)	
B-C	-1247 / 0	-111.9 -111.9	0.13 (1)	5.63	M-F	-370 / 0	0.11 (1)	
C-D	-1190 / 0	-111.9 -111.9	0.13 (1)	5.72	F-L	0 / 95	0.02 (1)	
D-E	-829 / 0	-111.9 -111.9	0.13 (1)	6.25	D-M	-370 / 0	0.11 (1)	
E-F	-829 / 0	-111.9 -111.9	0.13 (1)	6.25	N-D	0 / 95	0.02 (1)	
F-G	-1190 / 0	-111.9 -111.9	0.13 (1)	5.72	B-N	0 / 970	0.22 (1)	
G-H	-1247 / 0	-111.9 -111.9	0.13 (1)	5.63	L-H	0 / 970	0.22 (1)	
H-I	0 / 43	-111.9 -111.9	0.15 (1)	10.00	B-O	0 / 32	0.01 (1)	
P-B	-1064 / 0	0.0	0.0	11 (1)	7.64	K-H	0 / 32	0.01 (1)
J-H	-1064 / 0	0.0	0.0	11 (1)	7.64			
P-O	0 / 0	-18.2	-18.2	0.01 (4)	10.00			
O-N	-10 / 8	0.0	0.0	0.05 (1)	10.00			
N-C	-97 / 0	0.0	0.0	0.05 (1)	7.81			
N-M	0 / 942	-18.2	-18.2	0.25 (1)	10.00			
M-L	0 / 942	-18.2	-18.2	0.25 (1)	10.00			
K-L	-10 / 8	0.0	0.0	0.05 (1)	10.00			
L-G	-97 / 0	0.0	0.0	0.05 (1)	7.81			
K-J	0 / 0	-18.2	-18.2	0.01 (4)	10.00			

DESIGN CRITERIA**SPECIFIED LOADS:**

TOP CH. LL = 34.8 PSF
 DL = 3.0 PSF
 BOT CH. LL = 0.0 PSF
 DL = 7.3 PSF
 TOTAL LOAD = 45.1 PSF

SPACING = 24.0 IN. C/C

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

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

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

ALLOWABLE DEFL. (LL) = $L/360$ (0.47")
 CALCULATED VERT. DEFL. (LL) = $L/999$ (0.03")
 ALLOWABLE DEFL. (TL) = $L/360$ (0.47")
 CALCULATED VERT. DEFL. (TL) = $L/999$ (0.06")

CSI: TC=0.15/1.00 (A-B:1), BC=0.25/1.00 (L-M:1), WB=0.22/1.00 (H-L:1), SSI=0.13/1.00 (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

AUTOSOLVE HEELS OFF

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.83 (N) (INPUT = 0.90)
 JSI METAL= 0.33 (H) (INPUT = 1.00)



July 14, 2022

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



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0722-057	J01	13	TRUE COPY	TRUSS DESC	

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ID: 2201422 OK: 11/11/22 File: 1G3VoR?QFjklYKAek9kmSpYmA8Z0yyy8Ph Scale = 1:32.8

OF PERMIT PLANS
Dec 06 2023

 PER: _____
 CHIEF BUILDING OFFICIAL

MHP 23020

TOTAL WEIGHT = 18 X 17 = 308 lb

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				
E - B	2x4	DRY	No.2	VERT	DOWN	UP	IN-SX	DL = 3.0 PSF				
A - C	2x4	DRY	No.2	HORZ	HORZ	IN-SX	IN-SX	BOT CH. LL = 0.0 PSF				
E - D	2x4	DRY	No.2					DL = 7.3 PSF				
DRY: SEASONED LUMBER.				JT				TOTAL LOAD = 45.1 PSF				
				E	636	0	5-8	1-8				
				C	252	0	1-8	1-8				
				D	45	0	1-8	1-8				
				SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C, D								
				UNFACTORED REACTIONS								
				1ST LCASE MAX./MIN. COMPONENT REACTIONS								
				JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL	
				E	437	355 / 0	0 / 0	0 / 0	0 / 0	82 / 0	0 / 0	
				C	170	157 / 0	0 / 0	0 / 0	0 / 0	14 / 0	0 / 0	
				D	36	0 / 0	0 / 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 F.T.								
				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. LIVE LC1 (LC)	MAX. UNBRACED LENGTH (F.T.)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LIVE LC1 (LC)	
				FR-TO		FROM	TO		FR-TO			
				E-B	-571 / 0	0.0	0.0	0.13 (4)	7.81			
				A-B	0 / 34	-111.9	-111.9	0.15 (1)	10.00			
				B-C	-38 / 0	-111.9	-111.9	0.69 (1)	6.25			
				E-D	0 / 0	-18.2	-18.2	0.13 (4)	10.00			
				CS: TC=0.69/1.00 (B-C:1), BC=0.13/1.00 (D-E:4), WB=0.00/1.00 (n/a:0), SSI=0.29/1.00 (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= 0.32 (B) (INPUT = 0.90) JSI METAL= 0.24 (B) (INPUT = 1.00)								

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

[illegible]

[illegible]

JOB NAME TRUSS NAME QUANTITY PLY JOB DESC.

IM0722-057 T03

CORPORATION OF THE CITY OF OSHAWA
TRUE COPY
OF PERMIT PLANS
Dec 06 2023
CHIEF BUILDING OFFICIAL

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ID:O... KFH... L... UeWmk6bOYgICNzPU5YmoE97rDUdf4qy8P
Scale = 1:59.9

MHP 23020

LUMBER

N.L.G.A.	RULES
CHORDS	SIZE
A - D	2x4 DRY No.2 SPF
D - F	2x4 DRY No.2 SPF
F - I	2x4 DRY No.2 SPF
P - B	2x4 DRY No.2 SPF
J - H	2x4 DRY No.2 SPF
P - M	2x4 DRY No.2 SPF
M - J	2x4 DRY No.2 SPF

ALL WEBS EXCEPT 2x3 DRY No.2 SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMVW-t	MT20	5.0	6.0	1.75	3.00
C TMWW-t	MT20	3.0	4.0	1.50	1.50
D TTWW-m	MT20	5.0	6.0	2.25	1.75
E TMW-w	MT20	2.0	4.0		
F TTWW-m	MT20	5.0	6.0	2.25	1.75
G TMVW-t	MT20	3.0	4.0	1.50	1.50
H TMVW-t	MT20	5.0	6.0	1.75	3.00
J BMV1+p	MT20	3.0	4.0		
K BMWW-t	MT20	3.0	8.0	1.50	3.25
L BMWW-t	MT20	3.0	4.0		
M BSWWW-I	MT20	5.0	6.0	3.00	3.00
N BMWW-t	MT20	3.0	4.0		
O BMWW-t	MT20	3.0	8.0	1.50	3.25
P BMV1+p	MT20	3.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	MAXIMUM FACTORED GROSS REACTION DOWN	INPUT BRG IN-SX	REQD BRG IN-SX
P	2171	0	5-8	3-9
J	2171	0	5-8	3-9

UNFACTORED REACTIONS

JT	1ST CASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	1502	1174 / 0	0 / 0	0 / 0	0 / 0	328 / 0	0 / 0
J	1502	1174 / 0	0 / 0	0 / 0	0 / 0	328 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.41 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

C H O R D S				W E B S				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)		
FR-TO				FR-TO				
A-B	0 / 43	-111.9 -111.9	0.15 (1)	10.00	O-C	-414 / 0	0.12 (1)	
B-C	-2324 / 0	-111.9 -111.9	0.33 (1)	4.20	C-N	-160 / 0	0.10 (1)	
C-D	-2248 / 0	-111.9 -111.9	0.32 (1)	4.27	N-D	0 / 238	0.05 (1)	
D-E	-2366 / 0	-111.9 -111.9	0.79 (1)	3.41	D-M	0 / 738	0.17 (1)	
E-F	-2366 / 0	-111.9 -111.9	0.79 (1)	3.41	M-E	-943 / 0	0.84 (1)	
F-G	-2248 / 0	-111.9 -111.9	0.32 (1)	4.27	M-F	0 / 738	0.17 (1)	
G-H	-2324 / 0	-111.9 -111.9	0.33 (1)	4.20	L-F	0 / 238	0.05 (1)	
H-I	0 / 43	-111.9 -111.9	0.15 (1)	10.00	L-G	-160 / 0	0.10 (1)	
P-B	-2131 / 0	0.0	0.0	0.22 (1)	5.81	K-G	-414 / 0	0.12 (1)
J-H	-2131 / 0	0.0	0.0	0.22 (1)	5.81	B-O	0 / 2016	0.45 (1)
					K-H	0 / 2016	0.45 (1)	
P-O	0 / 0	-18.2	-18.2	0.08 (4)	10.00			
O-N	0 / 1958	-18.2	-18.2	0.42 (1)	10.00			
N-M	0 / 1845	-18.2	-18.2	0.40 (1)	10.00			
M-L	0 / 1845	-18.2	-18.2	0.40 (1)	10.00			
L-K	0 / 1958	-18.2	-18.2	0.42 (1)	10.00			
K-J	0 / 0	-18.2	-18.2	0.08 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 34.8 PSF
DL = 3.0 PSF

BOT CH. LL = 0.0 PSF
DL = 7.3 PSF

TOTAL LOAD = 45.1 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 CBC 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 (1.03")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.11")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.22")

CSI: TC=0.79/1.00 (D-E-1), BC=0.42/1.00 (N-O-1), WB=0.84/1.00 (E-M-1), SSI=0.37/1.00 (E-F-1)

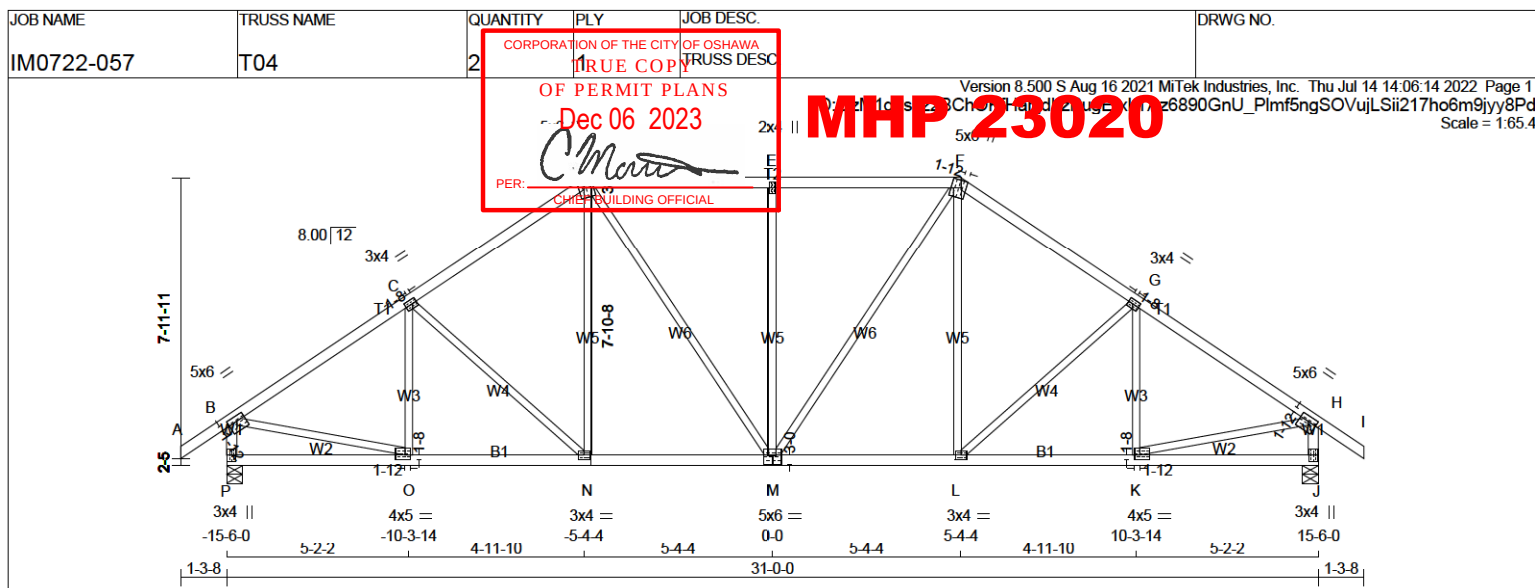
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
P	2171	0	2171	0
J	2171	0	2171	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX. MIN. SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
P	1502	1174 / 0	0 / 0	0 / 0	0 / 0	328 / 0	0 / 0
J	1502	1174 / 0	0 / 0	0 / 0	0 / 0	328 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.02 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 43	-111.9	-111.9	O-C	-324 / 21	0.11 (1)	
B-C	-2367 / 0	-111.9	-111.9	C-N	-330 / 0	0.28 (1)	
C-D	-2149 / 0	-111.9	-111.9	N-D	0 / 328	0.07 (1)	
D-E	-2033 / 0	-111.9	-111.9	D-M	0 / 489	0.11 (1)	
E-F	-2033 / 0	-111.9	-111.9	M-E	-731 / 0	0.95 (1)	
F-G	-2149 / 0	-111.9	-111.9	M-F	0 / 489	0.11 (1)	
G-H	-2367 / 0	-111.9	-111.9	L-F	0 / 328	0.07 (1)	
H-I	0 / 43	-111.9	-111.9	L-G	-330 / 0	0.28 (1)	
P-B	-2128 / 0	0.0	0.0	K-G	-324 / 21	0.11 (1)	
J-H	-2128 / 0	0.0	0.0	B-O	0 / 2043	0.46 (1)	
				K-H	0 / 2043	0.46 (1)	
P-O	0 / 0	-18.2	-18.2				
O-N	0 / 2000	-18.2	-18.2				
N-M	0 / 1758	-18.2	-18.2				
M-L	0 / 1758	-18.2	-18.2				
L-K	0 / 2000	-18.2	-18.2				
K-J	0 / 0	-18.2	-18.2				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	34.8	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.3	PSF
TOTAL LOAD		=	45.1	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 U86-14
- 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) = $L/360$ (1.03")
CALCULATED VERT. DEFL. (LL) = $L/999$ (0.10")
ALLOWABLE DEFL. (TL) = $L/360$ (1.03")
CALCULATED VERT. DEFL. (TL) = $L/999$ (0.17")

CSI: TC=0.46/1.00 (D-E:1), BC=0.39/1.00 (N-O:1), WB=0.95/1.00 (E-M:1), SSI=0.29/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

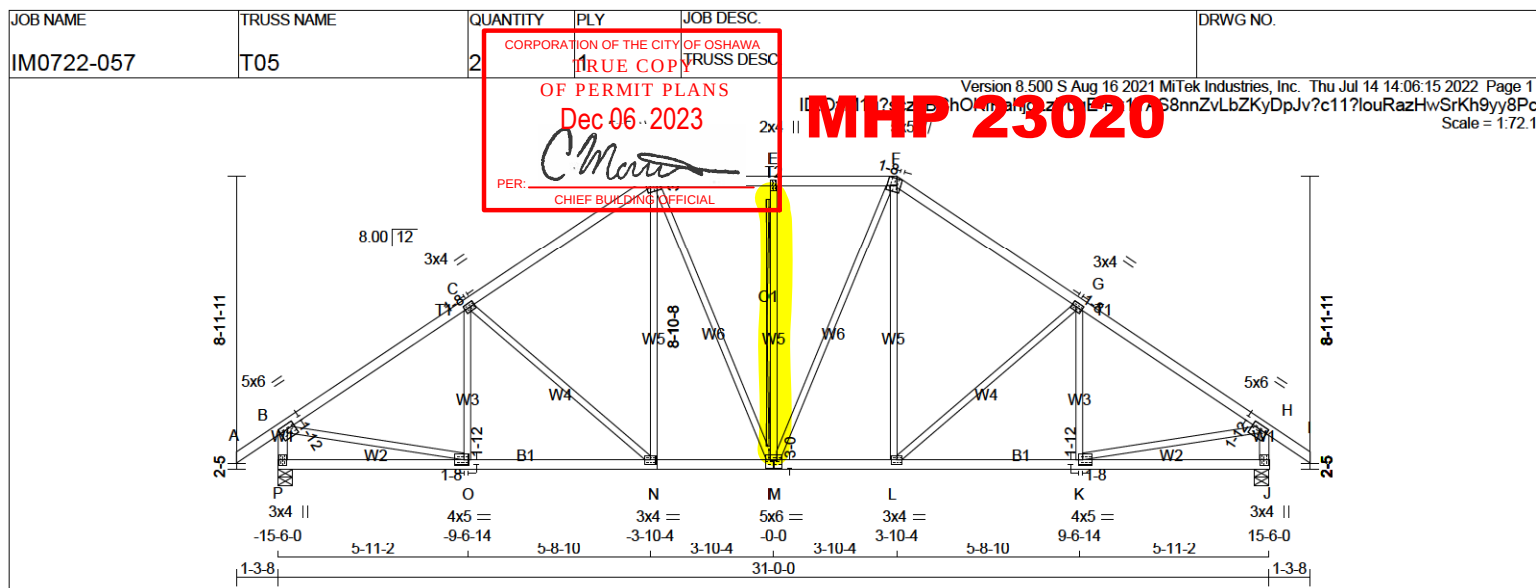
JSI GRIP= 0.86 (B) (INPUT = 0.90)
JSI METAL= 0.62 (H) (INPUT = 1.00)



July 14, 2022

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





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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMWw-t	MT20	5.0	6.0	1.75 3.00
C	TMWw-t	MT20	3.0	4.0	1.50 1.50
D	TTWw+m	MT20	5.0	5.0	2.50 1.50
E	TMWw	MT20	2.0	4.0	
F	TTWw+m	MT20	5.0	5.0	2.50 1.50
G	TMWw-t	MT20	3.0	4.0	1.50 1.50
H	TMWw-t	MT20	5.0	6.0	1.75 3.00
J	BMVw-1+p	MT20	3.0	4.0	
K	BMWw-t	MT20	4.0	5.0	1.75 1.50
L	BMWw-t	MT20	3.0	4.0	
M	BSWwWw-I	MT20	5.0	6.0	3.00 3.00
N	BMWw-t	MT20	3.0	4.0	
O	BMWw-t	MT20	4.0	5.0	1.75 1.50
P	BMVw-1+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
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
JT	2171	0	2171	0	0	5-8	3-9
P	2171	0	2171	0	0	5-8	3-9
J	2171	0	2171	0	0	5-8	3-9

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	1502	1174 / 0	0 / 0	0 / 0	0 / 0	328 / 0	0 / 0
J	1502	1174 / 0	0 / 0	0 / 0	0 / 0	328 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.80 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY
APPLIED

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LOCAL CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX CSI (LC)		
FR-TO		FROM	TO		FR-TO				
A-B	0/43	-111.9	-111.9	0.15 (1)	10.00	O-C	-252/56 0.11 (1)		
B-C	-2387/0	-111.9	-111.9	0.62 (1)	3.80	C-N	-484/0 0.58 (1)		
C-D	-2036/0	-111.9	-111.9	0.57 (1)	4.11	N-D	0/413 0.09 (1)		
D-E	-1782/0	-111.9	-111.9	0.23 (1)	4.79	D-M	0/307 0.07 (1)		
E-F	-1782/0	-111.9	-111.9	0.23 (1)	4.79	M-E	-515/0 0.32 (1)		
F-G	-2036/0	-111.9	-111.9	0.57 (1)	4.11	M-F	0/307 0.07 (1)		
G-H	-2387/0	-111.9	-111.9	0.62 (1)	3.80	L-F	0/413 0.09 (1)		
H-I	0/43	-111.9	-111.9	0.15 (1)	10.00	L-G	-484/0 0.58 (1)		
P-B	-2125/0	0.0	0.0	0.22 (1)	5.81	K-G	-252/56 0.11 (1)		
J-H	-2125/0	0.0	0.0	0.22 (1)	5.81	B-O	0/2055 0.46 (1)		
						K-H	0/2055 0.46 (1)		
P-O	0/0	-18.2	-18.2	0.15 (4)	10.00				
O-N	0/2022	-18.2	-18.2	0.39 (1)	10.00				
N-M	0/1660	-18.2	-18.2	0.32 (1)	10.00				
M-L	0/1660	-18.2	-18.2	0.32 (1)	10.00				
L-K	0/2022	-18.2	-18.2	0.39 (1)	10.00				
K-J	0/0	-18.2	-18.2	0.15 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:			
TOP CH.	LL =	34.8	PSF
	DL =	3.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.3	PSF
TOTAL LOAD =		45.1	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 U86-14
- 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 (1.03")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.16")

CSI: TC=0.62/1.00 (B-C:1), BC=0.39/1.00 (N-O:1)
 , WB=0.58/1.00 (C-N:1), SSI=0.27/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

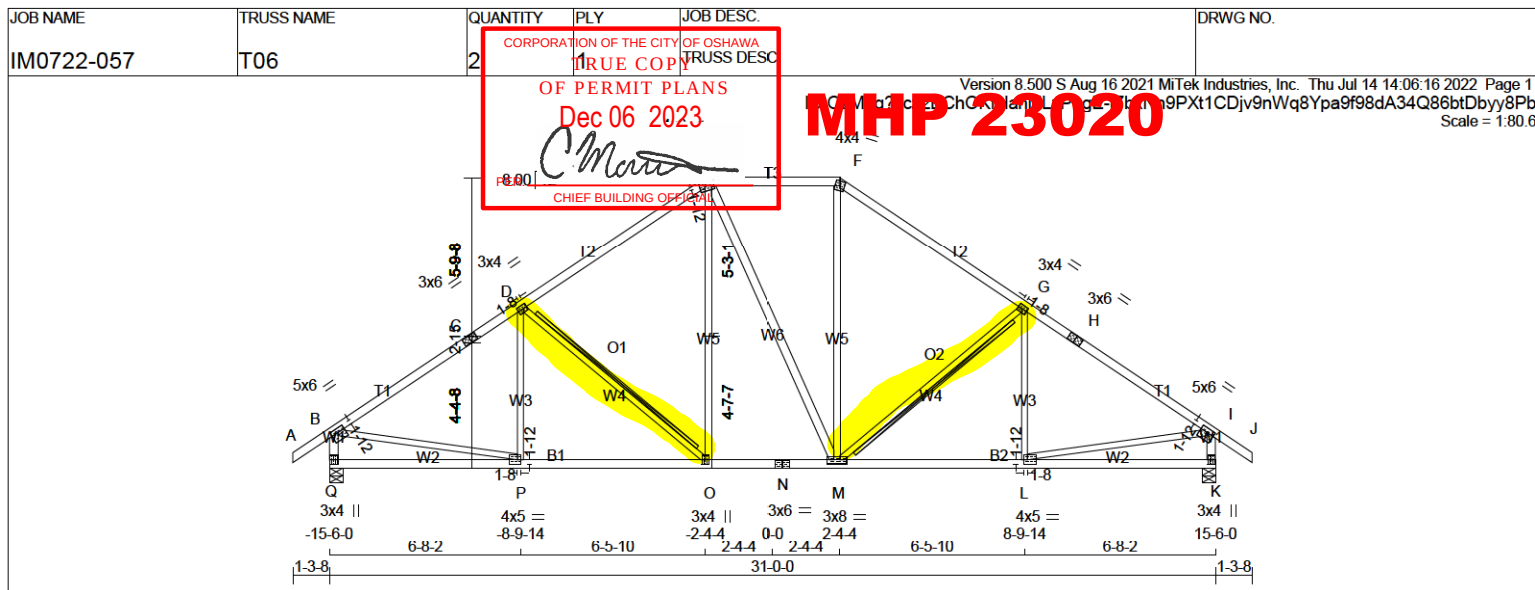
JSI GRIP= 0.89 (K) (INPUT = 0.90)
JSI METAL= 0.63 (B) (INPUT = 1.00)



July 14, 2022

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IN THE DESIGN OF THIS COMPONENT.**





TOTAL WEIGHT = 2 X 143 = 286 lb

LUMBER

N. L. G. A. RULES

CHORDS SIZE

A - C 2x4 DRY No.2

C - E 2x4 DRY No.2

E - F 2x4 DRY No.2

F - H 2x4 DRY No.2

H - J 2x4 DRY No.2

Q - B 2x4 DRY No.2

K - I 2x4 DRY No.2

Q - N 2x4 DRY No.2

N - K 2x4 DRY No.2

ALL WEBS 2x3 DRY No.2

EXCEPT

E - M 2x4 DRY No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	6.0	1.75	3.00
C	TS-t	MT20	3.0	6.0		
D	TMVW-t	MT20	3.0	4.0	1.50	1.50
E	TTWW-m	MT20	4.0	6.0	1.75	2.50
F	TTW-m	MT20	4.0	4.0		
G	TMVW-t	MT20	3.0	4.0	1.50	1.50
H	TS-t	MT20	3.0	6.0		
I	TMVW-t	MT20	5.0	6.0	1.75	3.00
K	BMV1+p	MT20	3.0	4.0		
L	BMVW-t	MT20	4.0	5.0	1.75	1.50
M	BMVWW-t	MT20	3.0	8.0		
N	BS-t	MT20	3.0	6.0		
O	BMVW-t	MT20	3.0	4.0		
P	BMVW-t	MT20	4.0	5.0	1.75	1.50
Q	BMV1+p	MT20	3.0	4.0		

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

BUILDING DESIGNER

BEARINGS

	FACTORED	MAXIMUM FACTORED	INPUT	REQD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ
Q	2171	0	2171	0
K	2171	0	2171	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN.	COMPONENT REACTIONS
	COMBINED	SNOW	LIVE
Q	1502	1174 / 0	0 / 0
K	1502	1174 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.48 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

2x4 DRY SPF No.2 T-BRACE AT D-O, G-M

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

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

LOADING

TOTAL LOAD CASES: (4)

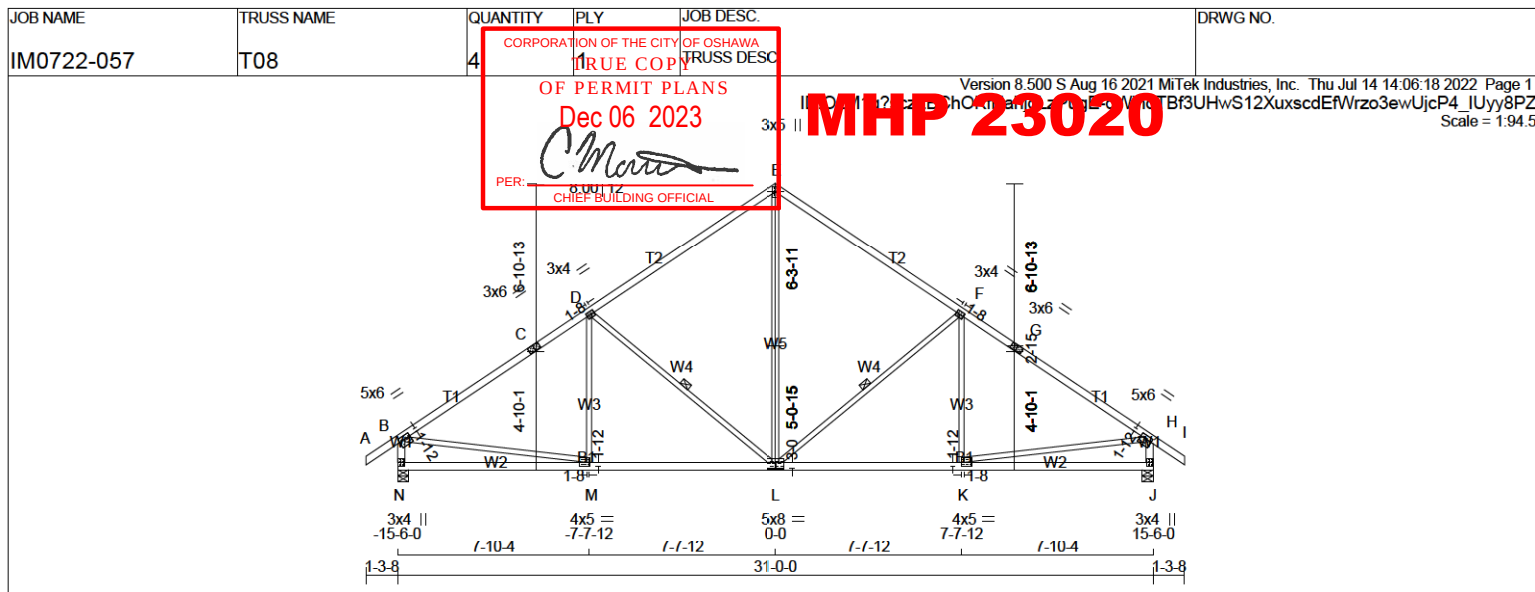
CHORDS				WEBS			
MEMB.	MAX. FACTORED	FACTORED	VERT. LOAD	MEMB.	MAX. FACTORED	FACTORED	VERT. LOAD
	(LBS)	(PLF)	LC1 (LC)		(LBS)	(PLF)	LC1 (LC)
FR-TO		FROM TO		FR-TO		FROM TO	
A-B	0 / 43	-111.9 -111.9	0.15 (1)	P-D	-192 / 85	0.10 (1)	
B-C	-2390 / 0	-111.9 -111.9	0.82 (1)	D-O	-629 / 0	0.36 (1)	
C-D	-2390 / 0	-111.9 -111.9	0.82 (1)	O-E	0 / 499	0.11 (1)	
D-E	-1913 / 0	-111.9 -111.9	0.73 (1)	E-M	0 / 2	0.00 (1)	
E-F	-1554 / 0	-111.9 -111.9	0.35 (1)	M-F	0 / 502	0.11 (1)	
F-G	-1914 / 0	-111.9 -111.9	0.73 (1)	M-G	-627 / 0	0.36 (1)	
G-H	-2389 / 0	-111.9 -111.9	0.82 (1)	L-G	-194 / 84	0.10 (1)	
H-I	-2389 / 0	-111.9 -111.9	0.82 (1)	B-P	0 / 2055	0.46 (1)	
I-J	0 / 43	-111.9 -111.9	0.15 (1)	L-I	0 / 2055	0.46 (1)	
Q-B	-2120 / 0	0.0	0.0				
K-I	-2120 / 0	0.0	0.0				
Q-P	0 / 0	-18.2 -18.2	0.20 (4)				
P-O	0 / 2029	-18.2 -18.2	0.42 (1)				
O-N	0 / 1553	-18.2 -18.2	0.31 (1)				
N-M	0 / 1553	-18.2 -18.2	0.31 (1)				
M-L	0 / 2028	-18.2 -18.2	0.42 (1)				
L-K	0 / 0	-18.2 -18.2	0.20 (4)				

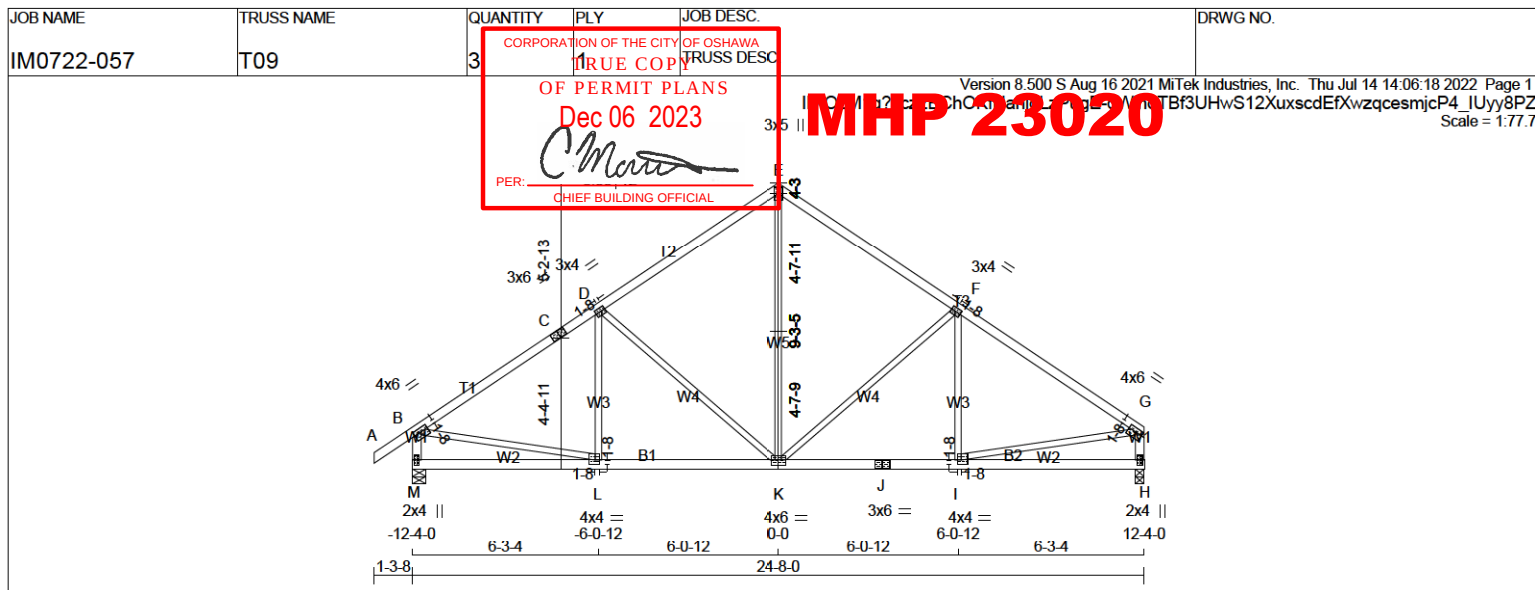


July 14, 2022

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TOTAL WEIGHT = 3 X 104 = 312 lb

LUMBER

N. L. G. A. RULES

CHORDS SIZE

A - C 2x4 DRY No.2

C - E 2x4 DRY No.2

E - G 2x4 DRY No.2

M - B 2x4 DRY No.2

H - G 2x4 DRY No.2

M - J 2x4 DRY No.2

J - H 2x4 DRY No.2

ALL WEBS 2x3 DRY No.2

EXCEPT

DRY: SEASONED LUMBER.

LUMBER

DESCR.

SPF

SPF

SPF

SPF

SPF

SPF

SPF

SPF

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

FACTORED

GROSS REACTION

DOWN

HORIZ

M 1758 0

H 1605 0

MAXIMUM FACTORED

GROSS REACTION

DOWN

HORIZ

M 1758 0

H 1605 0

INPUT

BRG

IN-SX

M 5-8

H 3-8

REQD

BRG

IN-SX

M 2-3

H 1-12

UNFACTORED REACTIONS

1ST LCASE

MAX. MIN. COMPONENT REACTIONS

JT COMBINED

M 1216 954 / 0

H 1112 858 / 0

SNOW

LIVE

PERM. LIVE

WIND

DEAD

SOIL

M 0 / 0

H 0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.20 FT.

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

APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		WEBS	
	MAX. FACTORED	FACTORED	MAX. FACTORED	FACTORED
	FORCE	VERT. LOAD	FORCE	FORCE
	(LBS)	(PLF)	(LBS)	(LBS)
FR-TO		FROM TO	FR-TO	
A-B	0 / 43	-111.9 -111.9	0.15 (1)	10.00
B-C	-1800 / 0	-111.9 -111.9	0.64 (1)	4.20
C-D	-1800 / 0	-111.9 -111.9	0.64 (1)	4.20
D-E	-1332 / 0	-111.9 -111.9	0.59 (1)	4.82
E-F	-1332 / 0	-111.9 -111.9	0.59 (1)	4.82
F-G	-1800 / 0	-111.9 -111.9	0.64 (1)	4.20
M-B	-1711 / 0	0.0 0.0	0.18 (1)	6.36
H-G	-1557 / 0	0.0 0.0	0.16 (1)	6.61
M-L	0 / 0	-18.2 -18.2	0.17 (4)	10.00
L-K	0 / 1536	-18.2 -18.2	0.33 (1)	10.00
K-J	0 / 1536	-18.2 -18.2	0.33 (1)	10.00
J-I	0 / 1536	-18.2 -18.2	0.33 (1)	10.00
I-H	0 / 0	-18.2 -18.2	0.17 (4)	10.00

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 34.8 PSF

DL = 3.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.3 PSF

TOTAL LOAD = 45.1 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018 , ABC 2019

- PART 9 OF OBC 2012 (2019 AMENDMENT)

- CSA 086-14

- TPIC 2014

(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) = $L/360$ (0.82")
CALCULATED VERT. DEFL. (LL) = $L/999$ (0.07")
ALLOWABLE DEFL. (TL) = $L/360$ (0.82")
CALCULATED VERT. DEFL. (TL) = $L/999$ (0.12")CSI: TC=0.64/1.00 (F-G-1), BC=0.33/1.00 (L-K-1),
WB=0.83/1.00 (F-K-1), SSI=0.28/1.00 (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)	(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= 0.86 (I) (INPUT = 0.90)

JSI METAL= 0.52 (L) (INPUT = 1.00)



July 14, 2022

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



JOB NAME IM0722-057	TRUSS NAME T10	QUANTITY 2	JOB DESC. CORPORATION OF THE CITY OF OSHAWA TRUSS DESCRIPTION
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TRUE COPY

OF PERMIT PLANS

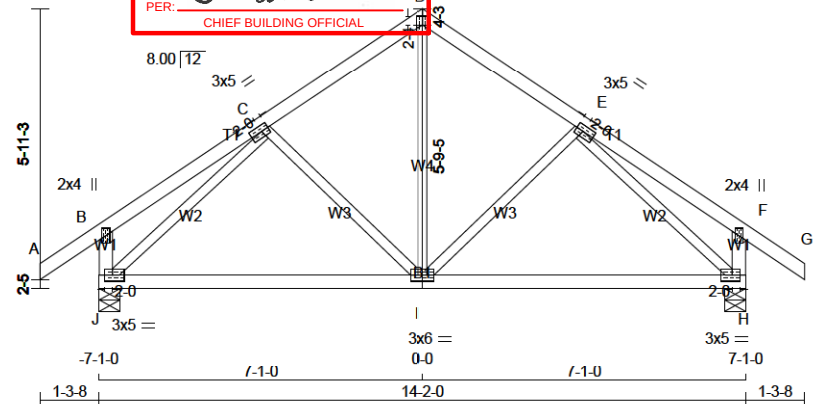
Dec 06 2023



PER: _____
CHIEF BUILDING OFFICIAL

Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Thu Jul 14 14:06:19 2022 Page 1
 ID: Wqsc2gOKKtjcdPgHs0BnqoPn4BdkSeNr9SCpFMBHNQptq3pXqwyy8PY
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MHP 23020



The diagram illustrates a symmetrical roof truss system. Key components include:

- Members:** Top chord (C, E), bottom chord (J, H), vertical posts (W1, W2, W3), and diagonal bracing (D).
- Dimensions:** Total height of 5-11-3, base width of 14-2-0, and individual bay widths of 7-1-0.
- Material Specifications:** Members are labeled with sizes such as 2x4, 3x5, and 3x6.

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)		W	LEN	Y	X
JT	TYPE	PLATES			
B	TMV+p	MT20	2.0	4.0	
C	TMWW-t	MT20	3.0	5.0	1.50
D	TTW+p	MT20	3.0	4.0	2.25
E	TMWW-t	MT20	3.0	5.0	1.50
F	TMV+p	MT20	2.0	4.0	
H	BMVW1-t	MT20	3.0	5.0	1.50
I	BMVWW-t	MT20	3.0	6.0	
J	BMVW1-t	MT20	3.0	5.0	1.50

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

BEARINGS							
FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
J	1075	0	1075	0	0	5-8	1-8
H	1075	0	1075	0	0	5-8	1-8

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	743	588 / 0	0 / 0	0 / 0	0 / 0	154 / 0	0 / 0
H	743	588 / 0	0 / 0	0 / 0	0 / 0	154 / 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 CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0/43	-111.9	-111.9 0.15 (1)	10.00	I-D	0/466	0.10 (1)
B-C	0/25	-111.9	-111.9 0.22 (1)	10.00	I-E	-221/7	0.09 (1)
C-D	-723/0	-111.9	-111.9 0.17 (1)	6.25	C-I	-221/7	0.09 (1)
D-E	-723/0	-111.9	-111.9 0.17 (1)	6.25	J-C	-1032/0	0.40 (1)
E-F	0/25	-111.9	-111.9 0.22 (1)	10.00	E-H	-1032/0	0.40 (1)
F-G	0/43	-111.9	-111.9 0.15 (1)	10.00			
J-B	-306/0	0.0	0.0 0.03 (1)	7.81			
H-F	-306/0	0.0	0.0 0.03 (1)	7.81			
J-I	0/739	-18.2	-18.2 0.30 (4)	10.00			
I-H	0/739	-18.2	-18.2 0.30 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:			
TOP	CH.	LL =	34.8 PSF
		DL =	3.0 PSF
BOT	CH.	LL =	0.0 PSF
		DL =	7.3 PSF
TOTAL LOAD		=	45.1 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 (0.47")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.22/1.00 (B-C:1), BC=0.30/1.00 (H-I:4),
WB=0.40/1.00 (C-J: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) (PSI)		SHEAR (PLI)		SECTION (PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



July 14, 2022

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



JSI GRIP= 0.83 (N) (INPUT = 0.90)
JSI METAL= 0.33 (B) (INPUT = 1.00)





STANDARD DETAIL MSD2015-H
MHP 23020 Issued: MARCH 1, 2022
 Expiry: APRIL 30, 2024

TOE-NAIL CAPACITY DETAILS

LATERAL AND WITHDRAWAL RESISTANCE OF BEARING ANCHORAGE BY TOE-NAILS

NAIL TYPE	Length (in)	Diameter (in)	LATERAL Resistance per nail (Lbs.)		WITHDRAWAL Resistance per nail (Lbs.)	
			SPF	D. FIR	SPF	D. FIR
COMMON WIRE	3.00	0.144	122	139	30	42
	3.25	0.144	127	144	32	45
	3.50	0.160	152	173	38	52
COMMON SPIRAL	3.00	0.122	96	108	26	36
	3.25	0.122	97	108	28	40
	3.50	0.152	142	161	36	50
3.25" Gun nail	3.25	0.120	94	105	28	39

Note: If using truss with D. Fir lumber and SPF bearing plate, use tabulated SPF values in table.

Nail type:	Common wire	Common spiral	Common wire	Common spiral	Gun Nail
Diameter (in.)	0.160	0.152	0.144	0.122	0.120
Length (in.)	3.50	3.50	3.00	3.00	3.25
LUMBER	MAXIMUM NUMBER OF TOE-NAILS				
2x4 SPF	2	2	3	3	3
2x6 SPF	4	4	4	5	5
2x4 D. FIR	2	2	2	2	2
2x6 D. FIR	3	3	3	4	4

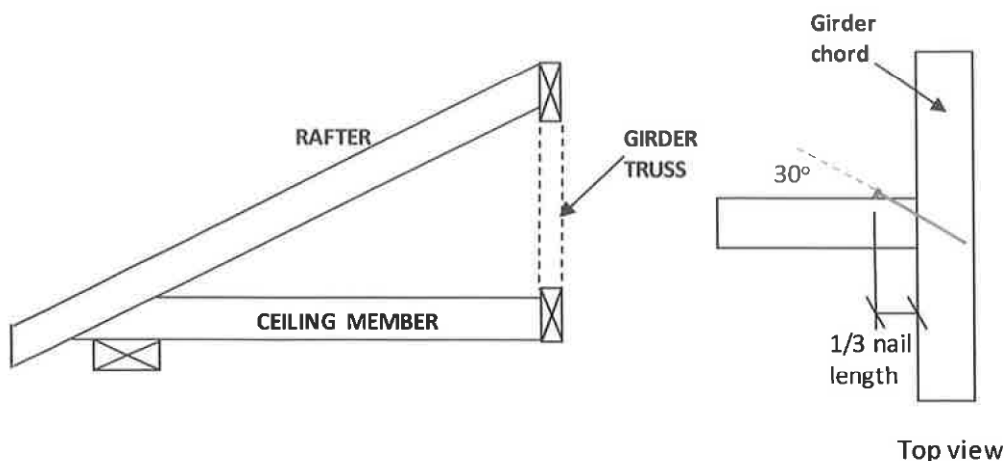
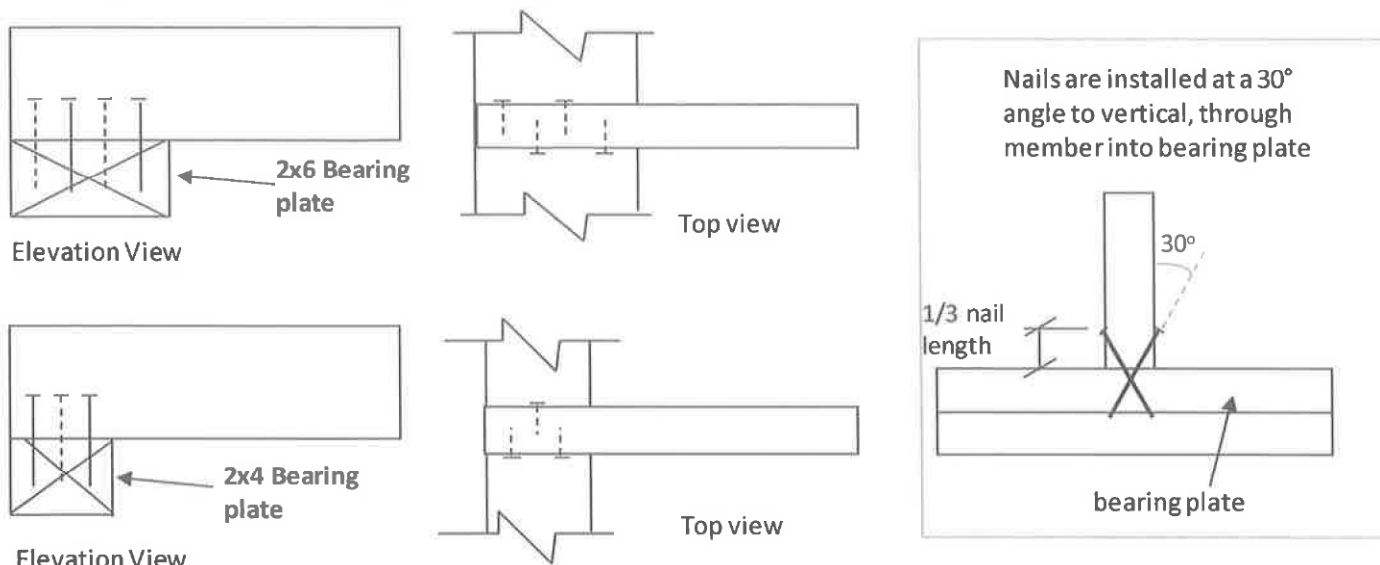


Figure 1: Toe-Nailing Rafter / Ceiling Member to Girder Truss



TOE-NAIL CAPACITY DETAILS

Figure 2: Toe-Nail Anchorage to Bearing Plate for Uplift



NOTES:

1. Rafter and ceiling members may be connected to top and bottom chords of girder truss by toe-nailing the members into the girder chords (see fig. 1), provided the factored vertical reactions of the supported members do not exceed the lateral resistance of the toe-nails. Mechanical connectors (hangers) are required if factored vertical reactions exceed the toe-nail capacity, or if the connection must resist horizontal loads (loads perpendicular to the face of girder or rafter).
2. Trusses, rafters or ceiling members may be anchored to the bearing plate with toe-nails (see fig. 2), provided that the factored uplift reactions due to **wind or earthquake loads** do not exceed the **withdrawal resistance of the toe-nails**. Mechanical anchors (tie-downs) are required for reactions that exceed the toe-nail withdrawal capacity. Toe-nail anchorage to bearing plates is **NOT** permitted if uplift reactions are generated from gravity loads (snow, floor live, dead).
3. Tabulated toe-nail resistances on page 1 are for **one** toe-nail. Multiply unit values by the number of nails used in the connection. Maximum number of nails in a connection shall not exceed the tabulated limits shown on page 1 for a given lumber size /species.
4. Nail values are based on specific gravity of $G = 0.42$ (SPF) and $G = 0.49$ (D. Fir).
5. 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.
6. For wind / earthquake loads, tabulated lateral resistances may be multiplied by 1.15 (K_D factor). No increases are permitted for tabulated withdrawal resistances.
7. Lumber must be dry (< 19% moisture content) at the time of nail installation.
8. Nail values in this table comply with CSA O86-19, Clause 12.9.

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Certificate No. 10889485



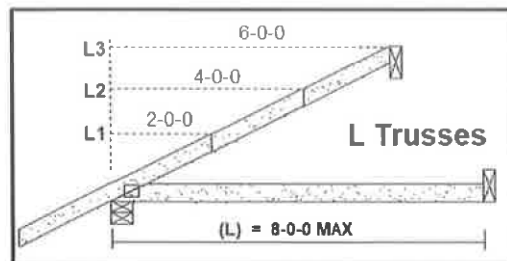
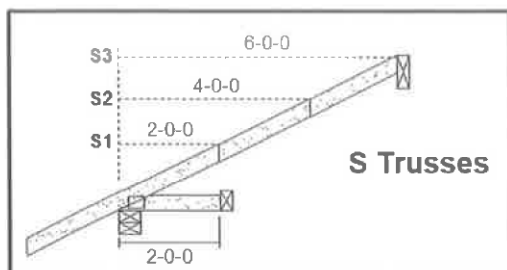
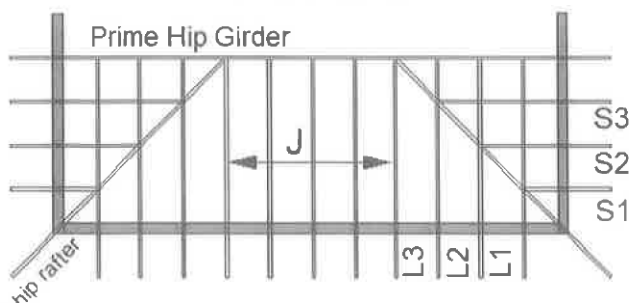
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CORPORATION OF THE CITY OF OSHAWA
TRUE COPY
OF PERMIT PLANS
Dec 06 2023
PER: *C. Morris*
CHIEF BUILDING OFFICIAL

STANDARD DETAIL MSD2015-J
MHP 23020
Issued: MARCH 17, 2021
Expiry: APRIL 30, 2023

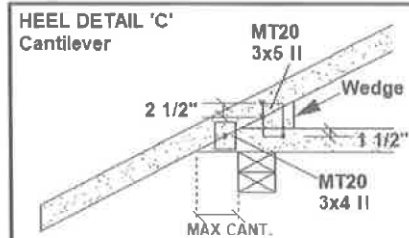
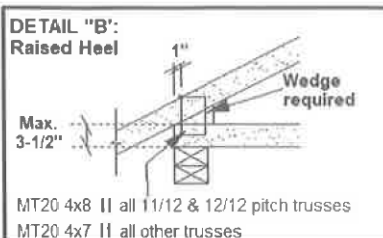
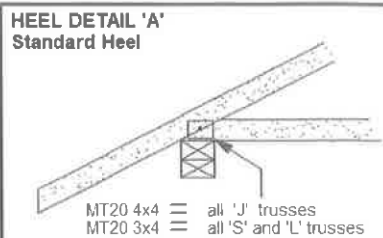
STANDARD HIP END FRAMING

PLAN VIEW



Specified Load Rating:

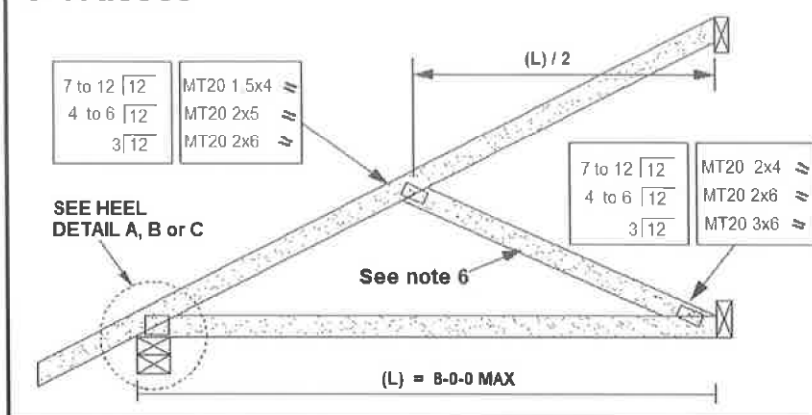
Top chord Live:	51.0 PSF or less
Top chord Dead:	6.0 PSF or less
Bottom chord Live:	0.0 PSF
Bottom chord Dead:	7.3 PSF or less



CANTILEVER DETAIL "C"

SLOPE	MAX CANT.	WEDGE PLATE	WEDGE SIZE
3/12	17"	3 X 5	2 X 3
4/12	14"	3 X 5	2 X 3
5/12	12"	3 X 5	2 X 4
6/12	10"	3 X 5	2 X 4
7/12	9"	3 X 5	2 X 6
8/12	8 5/8"	3 X 5	2 X 6
9/12	8"	3 X 5	2 X 6
10/12	7 5/8"	3 X 5	2 X 6

J Trusses



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Certificate No. 10889485

NOTES:

- This detail is valid only for projects conforming to **PART 9 NBCC 2015** that do not require a wind analysis to be incorporated into the design of the trusses.
- Overhang length shall not exceed 24 inches.
- All lumber shall be 2x4 SPF (or D-Fir) DRY No. 2 grade or better.
- All plates specified are MITEK MT20, pressed into both faces of each truss. Heel plates of all trusses shall conform to heel details 'A', 'B' or 'C'.
- Diagonal hip rafter design shall conform to section 9.23.14.6 of NBCC 2015.
- For 6.0 ft. or less span, diagonal web on truss 'J' is optional. Girder design must reflect choice of partial jack ('J' with diagonal web) or open jack ('J' without diagonal web)
- All truss-to-rafter and truss-to-truss connections shall be specified as per MITEK standard detail 'MSD2015-H: Toe-Nail Capacity Details'



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Dec 06 2023
PER: *C. Morin*
CHIEF BUILDING OFFICIAL

STANDARD DETAIL MSD2015-K
MHP 23020
Issued: MARCH 1, 2022
Expiry: APRIL 30, 2024

STANDARD GABLE END DETAIL

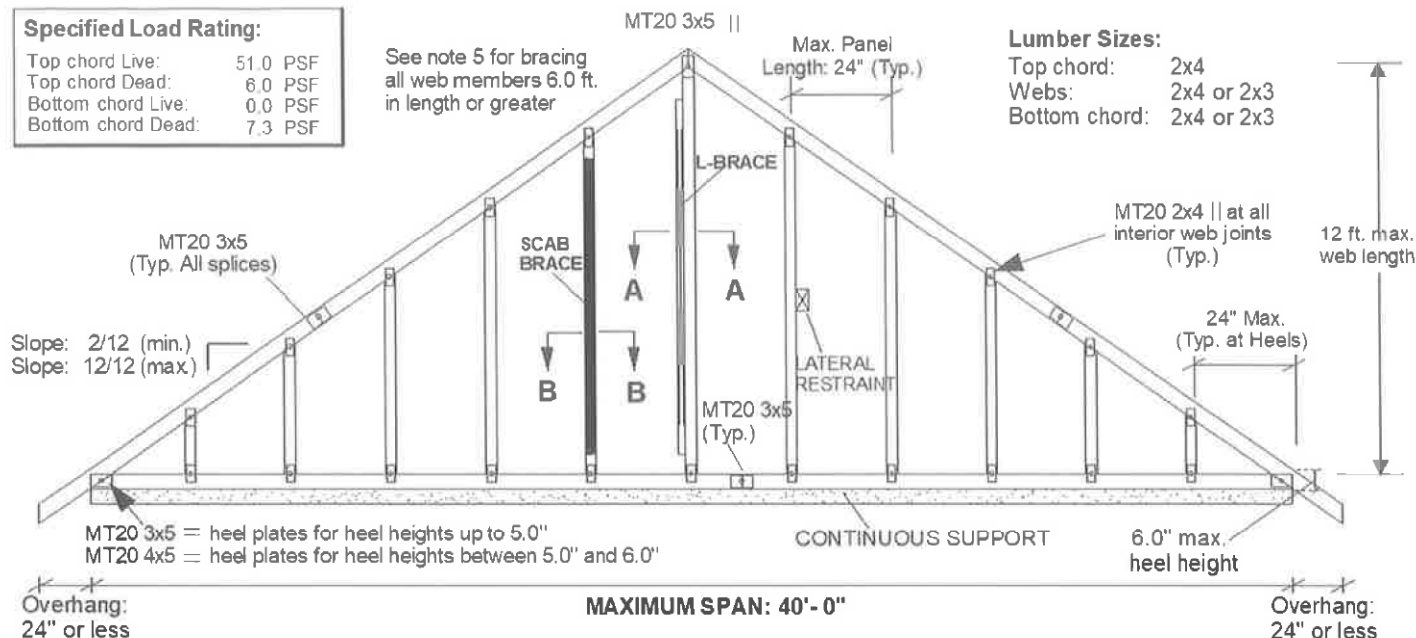
Specified Load Rating:

Top chord Live:	51.0 PSF
Top chord Dead:	6.0 PSF
Bottom chord Live:	0.0 PSF
Bottom chord Dead:	7.3 PSF

See note 5 for bracing
all web members 6.0 ft.
in length or greater

Lumber Sizes:

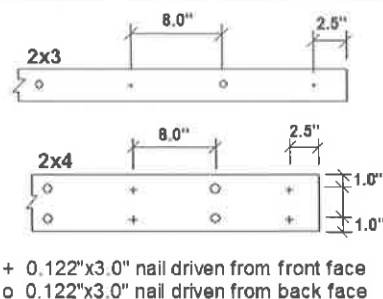
Top chord:	2x4
Webs:	2x4 or 2x3
Bottom chord:	2x4 or 2x3



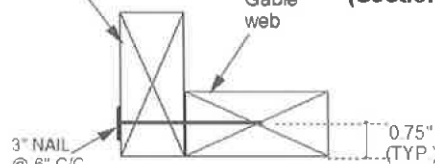
SCAB BRACE DETAIL (Section B-B)

Gable Web

SPF No. 2 DRY Scab, same size as web. Scab brace must cover 90% of web length



L BRACE DETAIL (Section A-A)



Fasten L-Brace to narrow edge of web with one row of 0.122" x 3.0" nails spaced at 6.0" c/c along entire length of web. Brace must cover 90% of the web length. Respect a 2.5" minimum end distance.

Notes:

1. This detail is only valid for projects conforming to **Part 9, NBCC 2015** that do not require a wind analysis to be incorporated into the design of the truss.
2. This detail is for vertical (gravity) load rating of the truss only. Truss must be continuously supported over the entire length of bottom chord.
3. Maximum web length not to exceed 12.0 ft. Spacing of gable stud webs in the truss not to exceed 24 inches cc.
4. Splice joints shall not be located in the first panel adjacent to the heel joint or peak joint.
5. Lateral restraint required at half-length of all webs over 6.0 ft. long. Alternatively install an L-Brace or scab brace as shown above. Scab braces shall be limited to 10 ft. long webs or less.
6. All plates are MITTEK MT20 pressed into both faces of truss.
7. All lumber to be SPF (or D-Fir) DRY and of No.2 grade or better.
8. Additional building bracing is typically installed to brace the face of the end wall assembly. See BCSI Canada 'Building Designer Responsibilities for Gable End Frame Bracing' for additional information on building bracing for gable-end assemblies.

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