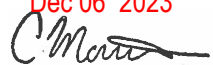
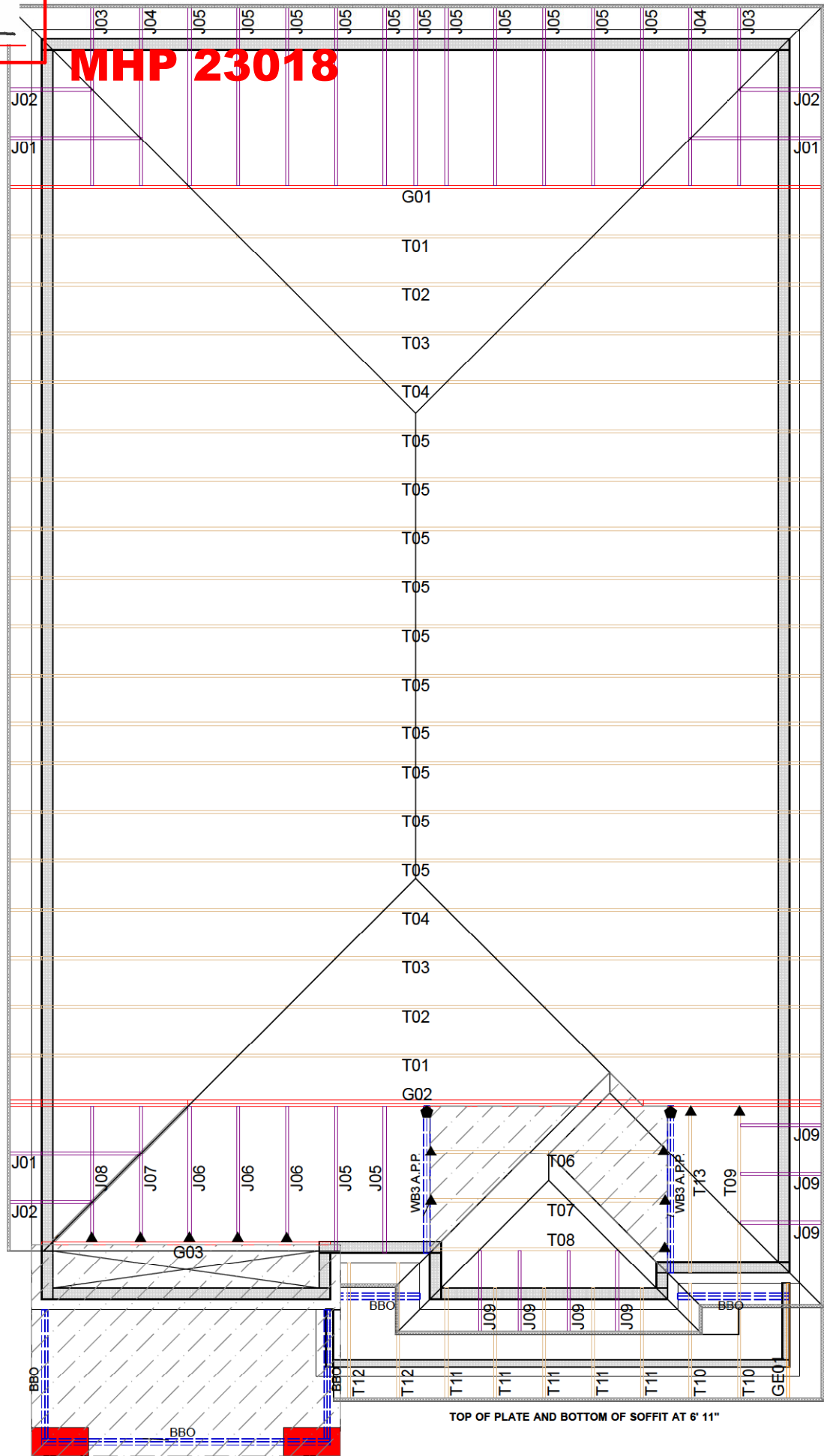


CORPORATION OF THE CITY OF OSHAWA
TRUE COPY
OF PERMIT PLANS
Dec 06 2023
PER: 
CHIEF BUILDING OFFICIAL



Hanger Name	Symbol	QTY
LUS24	▲	12
	■	0
	●	0
LUS26-2	◆	2
	△	0
	□	0
	◊	0
	○	0

JOB INFORMATION

Customer	GREENPARK HOMES
Job #	22-00195R0
Address	ZADORRA PENROSE 1-3 OSHAWA, ON
Model	PENROSE 1-3
Sales Rep	RALPH MIRIGELLO
Designer	BB
Date	6/9/2022
Path	S:\DESIGN\KLU\CUSTOMERS\GREENPARK\ZADORRA ESTATES\MODELS\PENROSE 1\PENROSE 1-3\T

DESIGN INFORMATION

Code	NBCC 2015
Bldg	Residential - HSB (NBCC Part 9)
TC LL	34.8 lb/ft ²
TC DL	3.0 lb/ft ²
BC LL	0.0 lb/ft ²
BC DL	7.3 lb/ft ²
Deflection	LL=L/360 TL=L/360
Spacing	24" O/C unless otherwise noted
Complies With	OBC 2012 (2019 Amendment) CSA O86-14 and TPIC 2014

IMPORTANT INFORMATION

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.



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.

KOTT Inc.
14 Anderson Blvd.
Uxbridge, ON
905.642.4400



ENGINEERING NO. (NP-1)
PLEASE READ PRIOR TO INSTALLATION

TRUE COPY
OF PERMIT PLANS
Dec 06 2023

CHIEF BUILDING OFFICIAL

MHP 23018

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")**

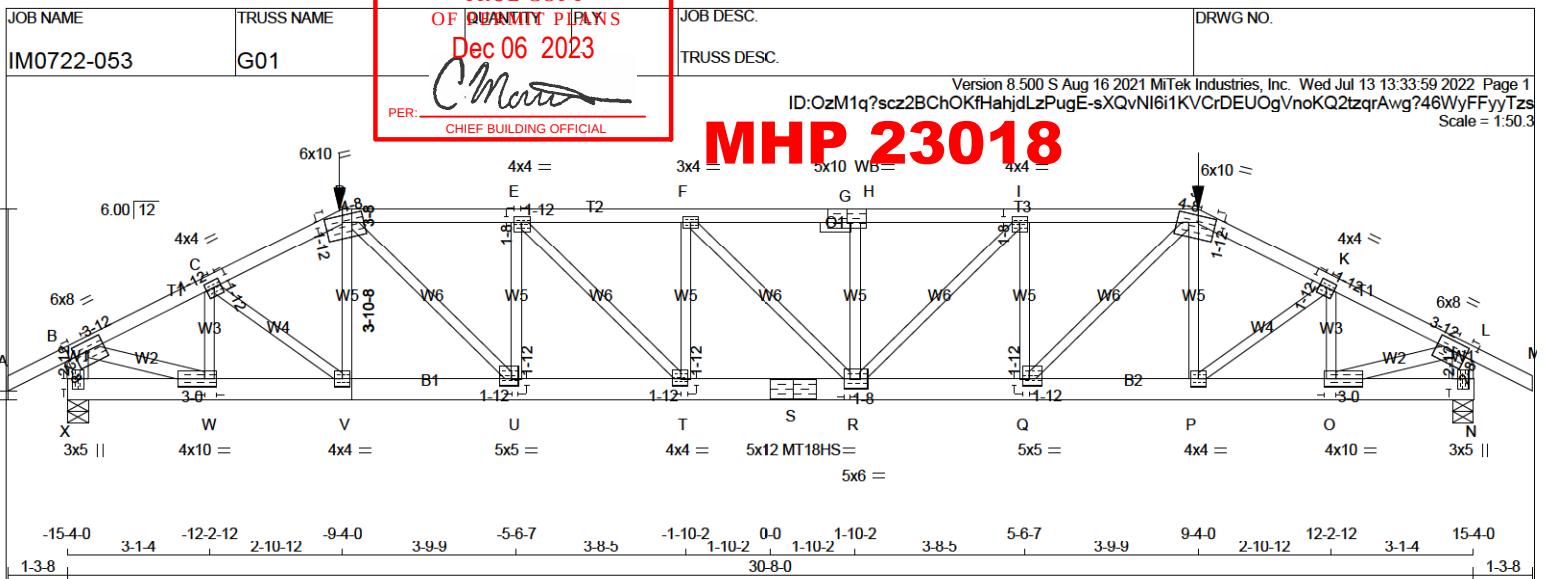
SUPPORTS

- 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.
A - D	2x4	DRY No.2	SPF
D - G	2x4	DRY 2100F 1.8E	SPF
G - J	2x4	DRY 2100F 1.8E	SPF
J - M	2x4	DRY No.2	SPF
X - B	2x6	DRY No.2	SPF
N - L	2x6	DRY No.2	SPF
X - S	2x6	DRY 2100F 1.8E	SPF
S - N	2x6	DRY 2100F 1.8E	SPF

ALL WEBS EXCEPT	2x3	DRY No.2	SPF
B - W	2x4	DRY No.2	SPF
O - L	2x4	DRY No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	8.0	2.50	3.75
C	TMVW-t	MT20	4.0	4.0	1.75	1.75
D	TTWW-m	MT20	6.0	10.0	1.75	4.50
E	TMVW-t	MT20	4.0	4.0	1.50	1.75
F	TMVW-t	MT20	3.0	4.0		
G	TSW-I	MT20	5.0	10.0	Edge	5.00
H						
I	TMVW-t	MT20	4.0	4.0	1.50	2.00
J	TTWW-m	MT20	6.0	10.0	1.75	4.50
K	TMVW-t	MT20	4.0	4.0	1.75	1.75
L	TMVW-t	MT20	6.0	8.0	2.50	3.75
N	BMV1+p	MT20	3.0	5.0	2.75	1.50
O	BMVW-t	MT20	4.0	10.0	2.00	3.00
P	BMVW-t	MT20	4.0	4.0		
Q	BMVW-t	MT20	5.0	5.0	1.75	1.75
R	BMVW-t	MT20	5.0	6.0	2.50	1.50
S	BS-t	MT18HS	5.0	12.0		
T	BMVW-t	MT20	4.0	4.0	1.75	1.75
U	BMVW-t	MT20	5.0	5.0	1.75	1.75
V	BMVW-t	MT20	4.0	4.0		
W	BMVW-t	MT20	4.0	10.0	2.00	3.00
X	BMV1+p	MT20	3.0	5.0	2.75	1.50

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
X	3823	0	3823	0
N	3823	0	3823	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN. SNOW	MAX/MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
X	2648	2050 / 0	0 / 0	0 / 0	0 / 0	599 / 0	0 / 0
N	2648	2050 / 0	0 / 0	0 / 0	0 / 0	599 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) X, N.
BEARING SIZE FACTOR = 1.15 AT JNT(S) X, N (BASED ON SUPPORT DEPTH = 1-8)**BRACING**TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.40 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 MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (PLF)	MAX. UNBRACED LENGTH (FT)	MEMB.	WEBS MAX. FACTORED FORCE (LBS)	MAX. LC1 (PLF)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 34	-111.9	-111.9	0.16 (1)	10.00	W-C	-1202 / 0
B-C	-5054 / 0	-111.9	-111.9	0.51 (1)	2.69	C-V	0 / 793
C-D	-5784 / 0	-111.9	-111.9	0.58 (1)	2.40	V-D	-221 / 78
D-E	-6988 / 0	-210.9	-210.9	0.55 (1)	2.89	D-U	0 / 2594
E-F	-7851 / 0	-210.9	-210.9	0.61 (1)	2.65	U-E	-1751 / 0
F-G	-7825 / 0	-210.9	-210.9	0.53 (1)	2.76	E-T	0 / 1238
G-H	-7825 / 0	-210.9	-210.9	0.53 (1)	2.76	T-F	-738 / 0
H-I	-7825 / 0	-210.9	-210.9	0.62 (1)	2.65	F-R	-38 / 0
I-J	-6994 / 0	-210.9	-210.9	0.56 (1)	2.88	R-H	-747 / 0
J-K	-5783 / 0	-111.9	-111.9	0.58 (1)	2.40	H-I	0 / 1191
K-L	-5054 / 0	-111.9	-111.9	0.51 (1)	2.69	I-Q	-1726 / 0
L-M	0 / 34	-111.9	-111.9	0.16 (1)	10.00	Q-J	0 / 2604
X-B	-3696 / 0	0.0	0.0	0.26 (1)	5.51	P-K	-228 / 77
N-L	-3696 / 0	0.0	0.0	0.26 (1)	5.51	P-K	0 / 791
X-W	0 / 0	-34.4	-34.4	0.09 (1)	10.00	O-K	-1200 / 0
W-V	0 / 4530	-34.4	-34.4	0.33 (1)	10.00	B-W	0 / 4669
V-U	0 / 5151	-34.4	-34.4	0.31 (1)	10.00	O-L	0 / 4669
U-T	0 / 6988	-34.4	-34.4	0.43 (1)	10.00		
T-S	0 / 7851	-34.4	-34.4	0.49 (1)	10.00		
S-R	0 / 7851	-34.4	-34.4	0.49 (1)	10.00		
R-Q	0 / 6994	-34.4	-34.4	0.44 (1)	10.00		
Q-P	0 / 5150	-34.4	-34.4	0.30 (1)	10.00		
P-O	0 / 4530	-34.4	-34.4	0.33 (1)	10.00		
O-N	0 / 0	-34.4	-34.4	0.09 (1)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR	HEEL	CONN.
D	6-0-0	-503	-503	—	FRONT	VERT	—	C1
J	24-8-0	-503	-503	—	FRONT	VERT	—	C1

CONNECTION REQUIREMENTS

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

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 6-0-0
END SETBACK = 6-0-0
END WALL WIDTH = 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADD'L LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL (LL) = L/360 (1.02")
CALCULATED VERT. DEFL (LL) = L/999 (0.35")
ALLOWABLE DEFL (TL) = L/360 (1.02")
CALCULATED VERT. DEFL (TL) = L/645 (0.57")

CSI: TC=0.62/1.00 (H-I-1), BC=0.49/1.00 (R-T-1), WB=0.83/1.00 (L-O-1), SSI=0.41/1.00 (I-J-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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
MT18HS	586	403	2455	1382	3163	3004

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (Q) (INPUT = 0.90)
JSI METAL= 0.99 (S) (INPUT = 1.00)

CONTINUED ON PAGE 2



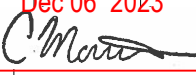
July 14, 2022

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	JOB DESC.	DRWG NO.
IM0722-053	G01	TRUSS DESC.	

Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Wed Jul 13 13:33:59 2022 Page 2
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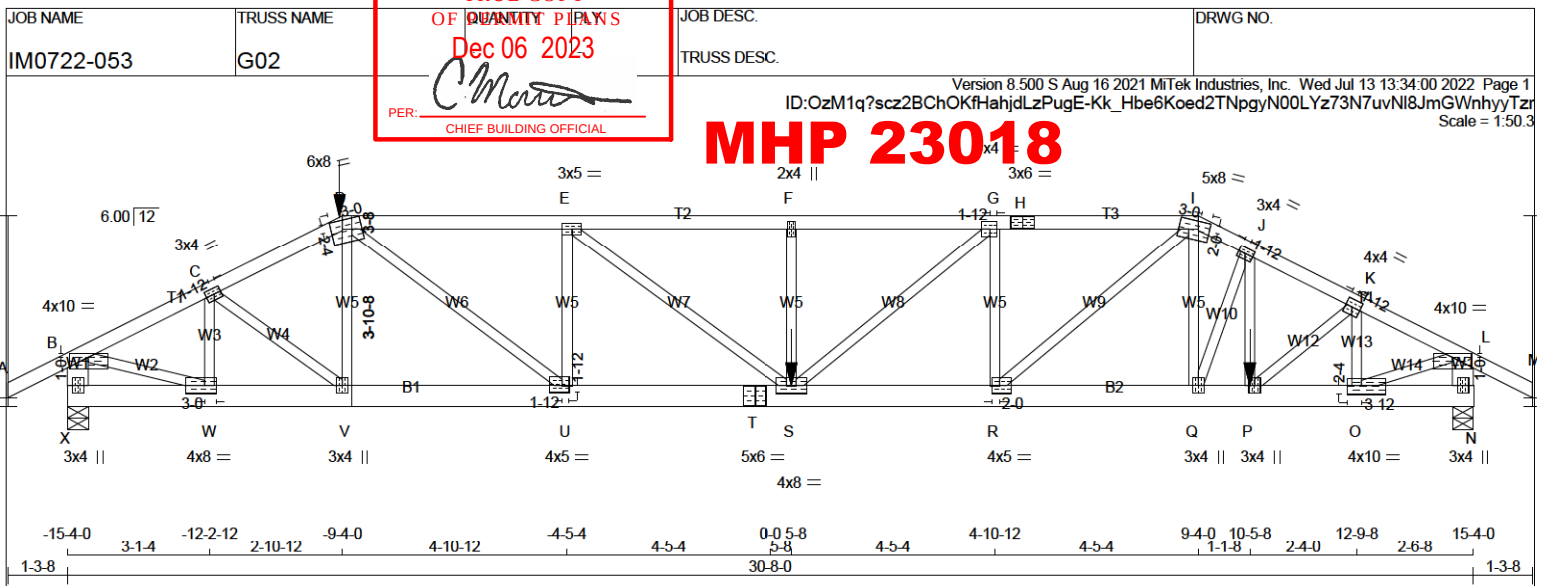
WB - INDICATES BLOCKING REQUIRED



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.





TOTAL WEIGHT = 2 X 146 = 292 lb

LUMBER

N. L. G. A. RULES	SIZE	LUMBER	DESCR.
CHORDS			
A - D	2x4	DRY	No.2 SPF
D - H	2x4	DRY	No.2 SPF
H - I	2x4	DRY	No.2 SPF
I - M	2x4	DRY	No.2 SPF
X - B	2x6	DRY	No.2 SPF
N - L	2x6	DRY	No.2 SPF
X - T	2x6	DRY	No.2 SPF
T - N	2x6	DRY	No.2 SPF
ALL WEBS EXCEPT	2x3	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		
A - D	12	SIDE(0.0)
D - H	12	SIDE(49.5)
H - I	12	TOP
I - M	12	TOP
X - B	2	TOP
N - L	2	TOP
BOTTOM CHORDS: (0.122"x3") SPIRAL NAILS		
X - T	2	SIDE(9.0)
T - N	2	SIDE(71.2)
WEBS: (0.122"x3") SPIRAL NAILS		
2x3	1	6

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

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

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
X	4410	0	4410	0
N	5374	0	5374	0

UNFACTORED REACTIONS

	1ST LCASE	MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
X	3056	2359 / 0	0 / 0	0 / 0	0 / 0	697 / 0	0 / 0
N	3721	2889 / 0	0 / 0	0 / 0	0 / 0	832 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.17 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. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	
FR-TO		FROM TO	CSI (LC)	FR-TO		CSI (LC)	
A-B	0 / 34	-111.9 -111.9	0.08 (1)	10.00	W-C	-1424 / 0 0.12 (1)	
B-C	-5906 / 0	-111.9 -111.9	0.20 (1)	3.87	C-V	0 / 1025 0.13 (1)	
C-D	-6837 / 0	-111.9 -111.9	0.23 (1)	3.59	V-D	-330 / 68 0.04 (1)	
D-E	-9102 / 0	-210.9 -210.9	0.85 (1)	2.50	D-U	0 / 3805 0.47 (1)	
E-F	-10358 / 0	-210.9 -210.9	0.97 (1)	2.17	U-E	-2162 / 0 0.28 (1)	
F-G	-10358 / 0	-111.9 -111.9	0.62 (1)	2.63	E-S	0 / 1589 0.20 (1)	
G-H	-8817 / 0	-111.9 -111.9	0.49 (1)	2.99	S-F	-705 / 0 0.09 (1)	
H-I	-8817 / 0	-111.9 -111.9	0.49 (1)	2.99	S-G	0 / 2028 0.25 (1)	
I-J	-7346 / 0	-111.9 -111.9	0.20 (1)	3.50	R-G	-1829 / 0 0.24 (1)	
J-K	-7621 / 0	-111.9 -111.9	0.26 (1)	3.38	R-I	0 / 2919 0.36 (1)	
K-L	-6677 / 0	-111.9 -111.9	0.22 (1)	3.64	Q-I	0 / 1115 0.14 (1)	
L-M	0 / 34	-111.9 -111.9	0.08 (1)	10.00	Q-J	-689 / 0 0.08 (1)	
X-B	-4272 / 0	0.0 0.0	0.15 (1)	6.93	P-J	0 / 570 0.07 (1)	
N-L	-5102 / 0	0.0 0.0	0.18 (1)	6.45	P-K	0 / 1116 0.14 (1)	
					O-K	-1439 / 0 0.12 (1)	
X-W	0 / 0	-34.4 -34.4	0.10 (1)	10.00	B-W	0 / 5452 0.67 (1)	
W-V	0 / 5290	-34.4 -34.4	0.44 (1)	10.00	O-L	0 / 6242 0.77 (1)	
V-U	0 / 6091	-34.4 -34.4	0.44 (1)	10.00			
U-T	0 / 9102	-34.4 -34.4	0.69 (1)	10.00			
T-S	0 / 9102	-34.4 -34.4	0.69 (1)	10.00			
S-R	0 / 8816	-18.2 -18.2	0.66 (1)	10.00			
R-Q	0 / 6595	-18.2 -18.2	0.48 (1)	10.00			
Q-P	0 / 6811	-18.2 -18.2	0.56 (1)	10.00			
P-O	0 / 5971	-160.6 -160.6	0.52 (1)	10.00			
O-N	0 / 0	-160.6 -160.6	0.08 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	FACE	DIR.	TYPE	HEEL	CONN.
D	6-0-0	-503	-503	—	FRONT	VERT	TOTAL	C1
P	25-9-8	-305	-342	—	FRONT	VERT	DEAD	C1
P	25-9-8	-1228	-1228	—	FRONT	VERT	SNOW	C1
S	15-9-8	-305	-342	—	FRONT	VERT	DEAD	C1
S	15-9-8	-1228	-1228	—	FRONT	VERT	SNOW	C1

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

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

SPECIFIED LOADS:

TOP CH. LL = 34.8 PSF
DL = 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: CStdGirder
START DISTANCE = 25-9-8
START SPAN CARRIED = 6-10-0
END DISTANCE = 30-8-0
END SPAN CARRIED = 6-10-0
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.
(DEFINED BY USER)

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 6-0-0
END SETBACK = 6-0-0
END WALL WIDTH = 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 15-9-8 OF SPAN MEASURED FROM THE LEFT.

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, 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 (1.02")
CALCULATED VERT. DEFL.(LL) = L/999 (0.28")
ALLOWABLE DEFL.(TL) = L/360 (1.02")
CALCULATED VERT. DEFL.(TL) = L/817 (0.45")

CSI: TC=0.97/1.00 (E-F-1), BC=0.69/1.00 (S-U-1), WB=0.77/1.00 (L-O-1), SSI=0.27/1.00 (D-E-1)

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

CONTINUED ON PAGE 2



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	TRUSS DESC.	DRWG NO.
IM0722-053	G02		

TRUE COPY
OF QUANTITY PLANS
Dec 06 2023

PER: *C. Motta*
CHIEF BUILDING OFFICIAL

Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Wed Jul 13 13:34:01 2022 Page 2
ID:OzM1q?scz2BChOKfHahjdLzPugE-owYfo_7yZxlv4XNtV5XFtWlpnt7eq_HYQ?3J7yyTzq

MHP 23018

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW-p	MT20	4.0	10.0	1.00 5.00
C	TMVW-t	MT20	3.0	4.0	1.50 1.75
D	TTWW-m	MT20	6.0	8.0	2.25 3.00
E	TMVW-t	MT20	3.0	5.0	
F	TMVW-w	MT20	2.0	4.0	
G	TMVW-t	MT20	4.0	4.0	2.00 1.75
H	TS-t	MT20	3.0	6.0	
I	TTWW-m	MT20	5.0	8.0	2.00 3.00
J	TMVW-t	MT20	3.0	4.0	1.50 1.75
K	TMVW-t	MT20	4.0	4.0	2.00 1.75
L	TMVW-p	MT20	4.0	10.0	1.00 5.00
N	BMV1+p	MT20	3.0	4.0	
O	BMVW-t	MT20	4.0	10.0	2.25 3.75
P, Q, V					
P	BMVW+t	MT20	3.0	4.0	
R	BMVW-t	MT20	4.0	5.0	2.00 2.00
S	BMVWW-t	MT20	4.0	8.0	
T	BS-t	MT20	5.0	6.0	
U	BMVW-t	MT20	4.0	5.0	1.75 1.75
W	BMVW-t	MT20	4.0	8.0	2.00 3.00
X	BMV1+p	MT20	3.0	4.0	

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 (U) (INPUT = 0.90)

JSI METAL= 0.89 (T) (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	JOB DESC.	DRWG NO.
IM0722-053	GE01	TRUSS DESC.	

TRUE COPY

OF QUANTITY PLANS

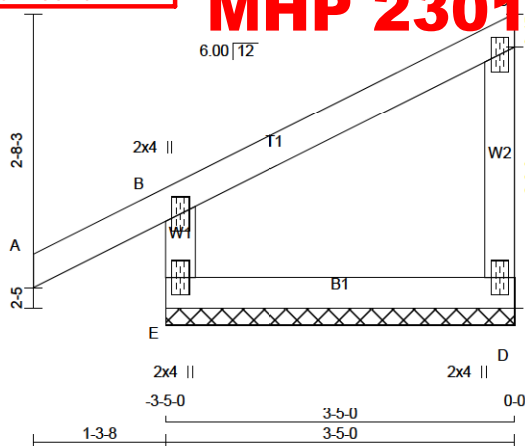
Dec 06 2023

PER: 
CHIEF BUILDING OFFICIAL

Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Wed Jul 13 13:34:02 2022 Page 1

ID:OzM1q?scz2BChOKfHahjdLzPugE-G6610K8bJFtmigy33o2UQz2gxZcNTIRm4ldsayTzp
Scale = 1:22.6

MHP 23018



TOTAL WEIGHT = 13 lb

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

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0	
C	TMV+p	MT20	2.0	4.0	
D	BMV1+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**

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.

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

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

LOADING

TOTAL LOAD CASES: (7)

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			
E-B	-380 / 0	0.0 0.0	0.03 (4)	7.81			
A-B	0 / 34	-111.9 -111.9	0.15 (1)	10.00			
B-C	-47 / 0	-111.9 -111.9	0.18 (6)	6.25			
D-C	-154 / 0	0.0 0.0	0.09 (1)	7.81			
E-D	0 / 33	-18.2 -18.2	0.04 (6)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN**PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.****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 CBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

CSI: TC=0.18/1.00 (B-C-6), BC=0.04/1.00 (D-E-6), WB=0.00/1.00 (n/a.0), SSI=0.15/1.00 (B-C-6)

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= 0.23 (B) (INPUT = 0.90)

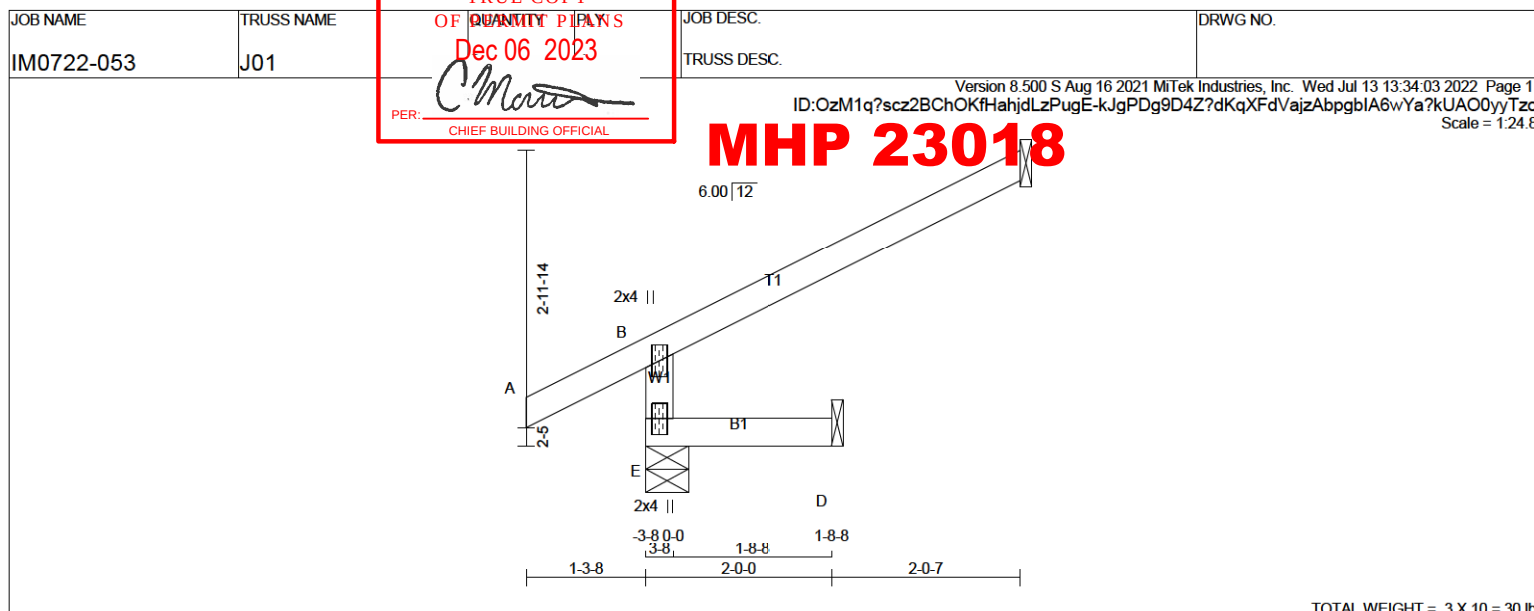
JSI METAL= 0.19 (B) (INPUT = 1.00)



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 = 3 X 10 = 30 lb

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

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 UPLIFT	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
E	454	0	454	0	5-8	1-8
C	169	0	169	0	1-8	1-8
D	16	0	18	0	1-8	1-8

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN SNOW		LIVE		PERM. LIVE		WIND	DEAD	SOIL
	DOWN	UP	DOWN	UP	DOWN	UP	DOWN	UP			
E	309	270 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	39 / 0	0 / 0	0 / 0
C	114	105 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	9 / 0	0 / 0	0 / 0
D	13	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	13 / 0	0 / 0	0 / 0

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

BRACINGTOP 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. CS1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS1 (LC)	
FR-TO		FROM	TO	FR-TO		FROM	TO
E-B	-434 / 0	0.0	0.0 0.01 (4)	7.81			
A-B	0 / 34	-111.9	-111.9 0.15 (1)	10.00			
B-C	-25 / 0	-111.9	-111.9 0.31 (1)	6.25			
E-D	0 / 0	-18.2	-18.2 0.02 (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 CBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

ALLOWABLE DEFL. (LL) = L/360 (0.19")
CALCULATED VERT. DEFL. (LL) = L/999 (0.00")
ALLOWABLE DEFL. (TL) = L/360 (0.19")
CALCULATED VERT. DEFL. (TL) = L/999 (0.00")CSI: TC=0.31/1.00 (B-C:1), BC=0.02/1.00 (D-E:4),
WB=0.00/1.00 (n/a:0), SSI=0.20/1.00 (B-C:1)DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

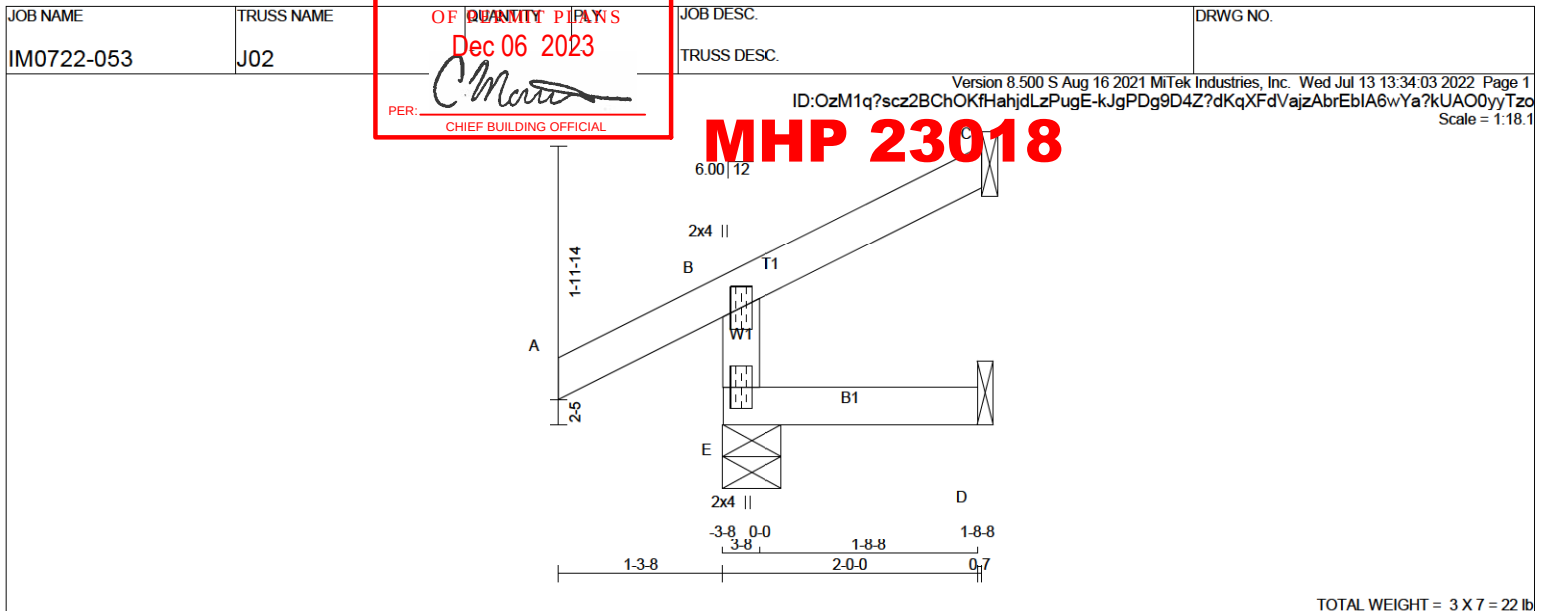
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.24 (B) (INPUT = 0.90)
JSI METAL= 0.18 (B) (INPUT = 1.00)

July 14, 2022

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TOTAL WEIGHT = 3 X 7 = 22 lb

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
E	314	0	314	0
C	86	0	86	0
D	16	0	16	0

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

JT	1ST LCASE	MAX. MIN.	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	215	183 / 0	0 / 0	0 / 0	0 / 0	0 / 0	32 / 0	0 / 0
C	58	54 / 0	0 / 0	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0
D	13	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	13 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 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: (5)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS1 (LC)	
FR-TO		FROM	TO	FR-TO		FROM	TO
E-B	-294 / 0	0.0	0.0	0.01 (4)	7.81		
A-B	0 / 34	-111.9	-111.9	0.15 (1)	10.00		
B-C	-12 / 0	-111.9	-111.9	0.08 (1)	6.25		
E-D	0 / 0	-18.2	-18.2	0.02 (4)	10.00		

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGNPATTERN-LOADING CHECK APPLIED TO THIS TRUSS.**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 CBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

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

CSI: $TC=0.15/1.00$ (A-B:1), $BC=0.02/1.00$ (D-E:4),
 $WB=0.00/1.00$ (n/a:0), $SSI=0.11/1.00$ (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

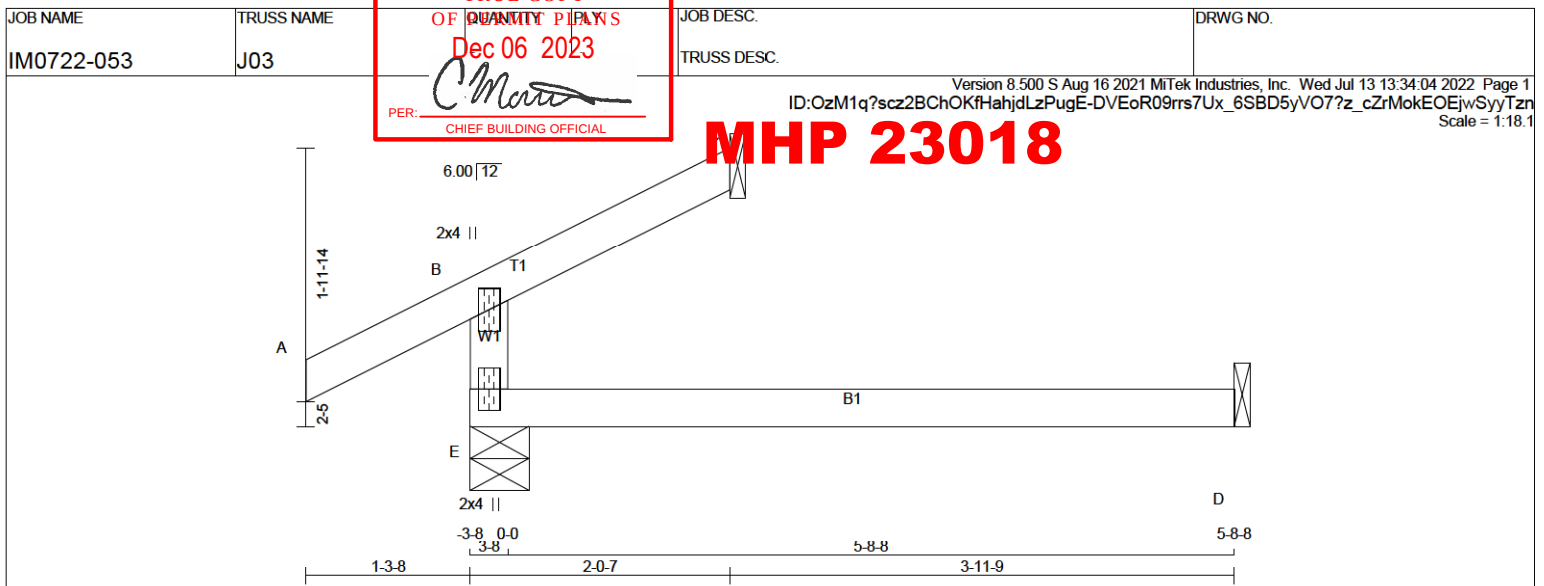
JSI GRIP= 0.16 (B) (INPUT = 0.90)
JSI METAL= 0.12 (B) (INPUT = 1.00)



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 = 2 X 12 = 24 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	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
E	358	0	358	0	5-8	1-8
C	86	0	86	0	1-8	1-8
D	45	0	51	0	1-8	1-8

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

JT	1ST LCASE		MAX / MIN		COMPONENT REACTIONS		
	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	250	183 / 0	0 / 0	0 / 0	0 / 0	67 / 0	0 / 0
C	58	54 / 0	0 / 0	0 / 0	0 / 0	5 / 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, C

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)

MEMB.	CHORDS		FACTORED		MAX. CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	WEBS	
	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	VERT. LOAD (PLF)	MAX. CSI (LC)				MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO									
E-B	-294 / 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	-12 / 0	-111.9	-111.9	0.08 (1)	6.25				
E-D	0 / 0	-18.2	-18.2	0.13 (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 CBC 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) = $L/999$ (0.00")
ALLOWABLE DEFL. (TL) = $L/360$ (0.20")
CALCULATED VERT. DEFL. (TL) = $L/999$ (0.03")

CSI: TC=0.15/1.00 (A-B:1), BC=0.13/1.00 (D-E:4), WB=0.00/1.00 (n/a:0), SSI=0.11/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

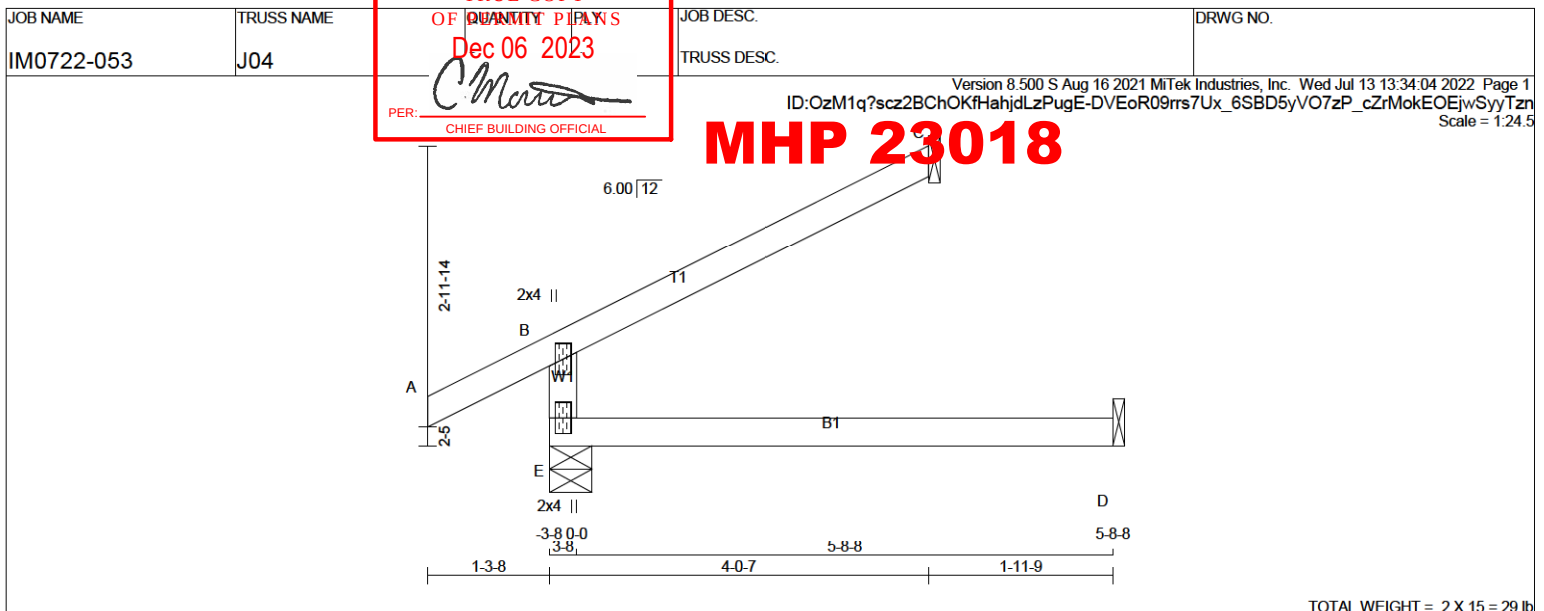
JSI GRIP= 0.16 (B) (INPUT = 0.90)
JSI METAL= 0.12 (B) (INPUT = 1.00)



July 14, 2022

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LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG UPLIFT IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
E	498	0	498	0	5-8	1-8
C	169	0	169	0	1-8	1-8
D	45	0	51	0	1-8	1-8

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM. LIVE			
E	345	270 / 0	0 / 0	0 / 0	0 / 0	75 / 0	0 / 0
C	114	105 / 0	0 / 0	0 / 0	0 / 0	9 / 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, C

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)

MEMB.	CHORDS		FACTORED		WEBS	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LIVE	MAX. CS1 (LC)	MAX. UNBRACED LENGTH	MAX. FACTORED FORCE (LBS)
FR-TO						
E-B	-434 / 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	-25 / 0	-111.9	-111.9	0.31 (1)	6.25	
E-D	0 / 0	-18.2	-18.2	0.13 (4)	10.00	

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	PSF
DL	3.0	PSF
BOT CH.	LL	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) = $L/360$ (0.20")
CALCULATED VERT. DEFL. (LL) = $L/999$ (0.00")
ALLOWABLE DEFL. (TL) = $L/360$ (0.20")
CALCULATED VERT. DEFL. (TL) = $L/999$ (0.03")

CSI: $TC=0.31/1.00$ (B-C:1), $BC=0.13/1.00$ (D-E:4),
 $WB=0.00/1.00$ (n/a:0), $SSI=0.20/1.00$ (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

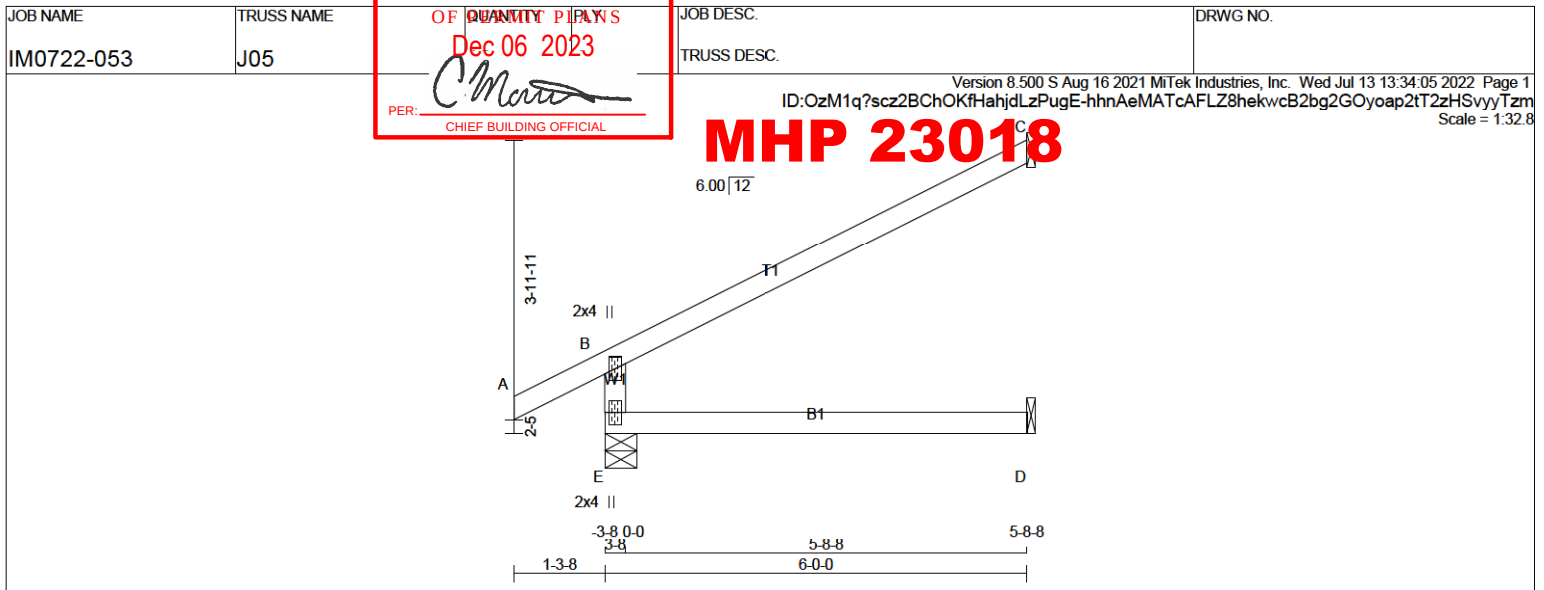
JSI GRIP= 0.24 (B) (INPUT = 0.90)
JSI METAL= 0.18 (B) (INPUT = 1.00)



July 14, 2022

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TOTAL WEIGHT = 13 X 17 = 222 lb

LUMBER

N. L. G. A. RULES

CHORDS SIZE

E - B 2x4 DRY No.2

A - C 2x4 DRY No.2

E - D 2x4 DRY No.2

LUMBER

DESCR.

SPF

SPF

SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	INPUT UPLIFT	REQD BRG IN-SX
E	636	0	636	0	0	5-8
C	252	0	252	0	0	1-8
D	45	0	51	0	0	1-8

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX / MIN 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	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LIVE LC1 (LC)
FR-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		

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 CBC 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) = $L/999$ (0.00")
 ALLOWABLE DEFL. (TL) = $L/360$ (0.20")
 CALCULATED VERT. DEFL. (TL) = $L/999$ (0.03")

CSI: $TC=0.69/1.00$ (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) (PSI)	SHEAR (PLI)	SECTION (PLI)
MT20	650	371	1747
		788	1987
			1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

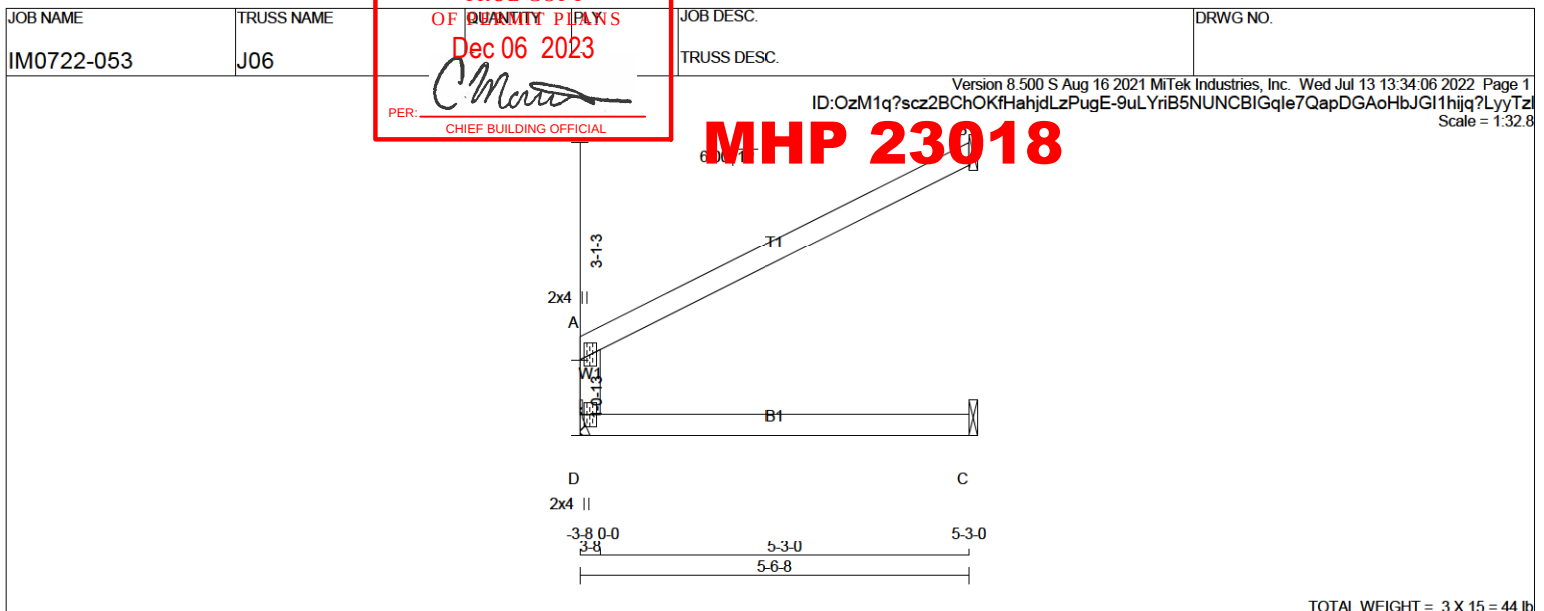
JSI GRIP= 0.32 (B) (INPUT = 0.90)
 JSI METAL= 0.24 (B) (INPUT = 1.00)



July 14, 2022

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 IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 3 X 15 = 44 lb

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

DRY: SEASONED LUMBER.

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	GROSS REACTION	DOWN	BRG	IN-SX	BRG	IN-SX
D	361	0	0	361	0	0	MECHANICAL	0	0
B	283	0	0	283	0	0	1-8	1-8	1-8
C	78	0	0	78	0	0	1-8	1-8	1-8

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

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) B, C

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
D	250	193 / 0	0 / 0	0 / 0	0 / 0	57 / 0	0 / 0	
B	192	173 / 0	0 / 0	0 / 0	0 / 0	19 / 0	0 / 0	
C	58	20 / 0	0 / 0	0 / 0	0 / 0	38 / 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

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS1 (LC)	
FR-TO		FROM TO		FR-TO			
D-A	-337 / 0	0.0 0.0	0.18 (1)	7.81			
A-B	-12 / 1	-111.9 -111.9	0.48 (1)	6.25			
D-C	0 / 0	-18.2 -18.2	0.23 (1)	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 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) = $L/360$ (0.19")
CALCULATED VERT. DEFL. (LL) = $L/999$ (0.05")
ALLOWABLE DEFL. (TL) = $L/360$ (0.19")
CALCULATED VERT. DEFL. (TL) = $L/640$ (0.10")

CSI: TC=0.48/1.00 (A-B:1), BC=0.23/1.00 (C-D:1), WB=0.00/1.00 (n/a:0), SSI=0.24/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.19 (A) (INPUT = 0.90)

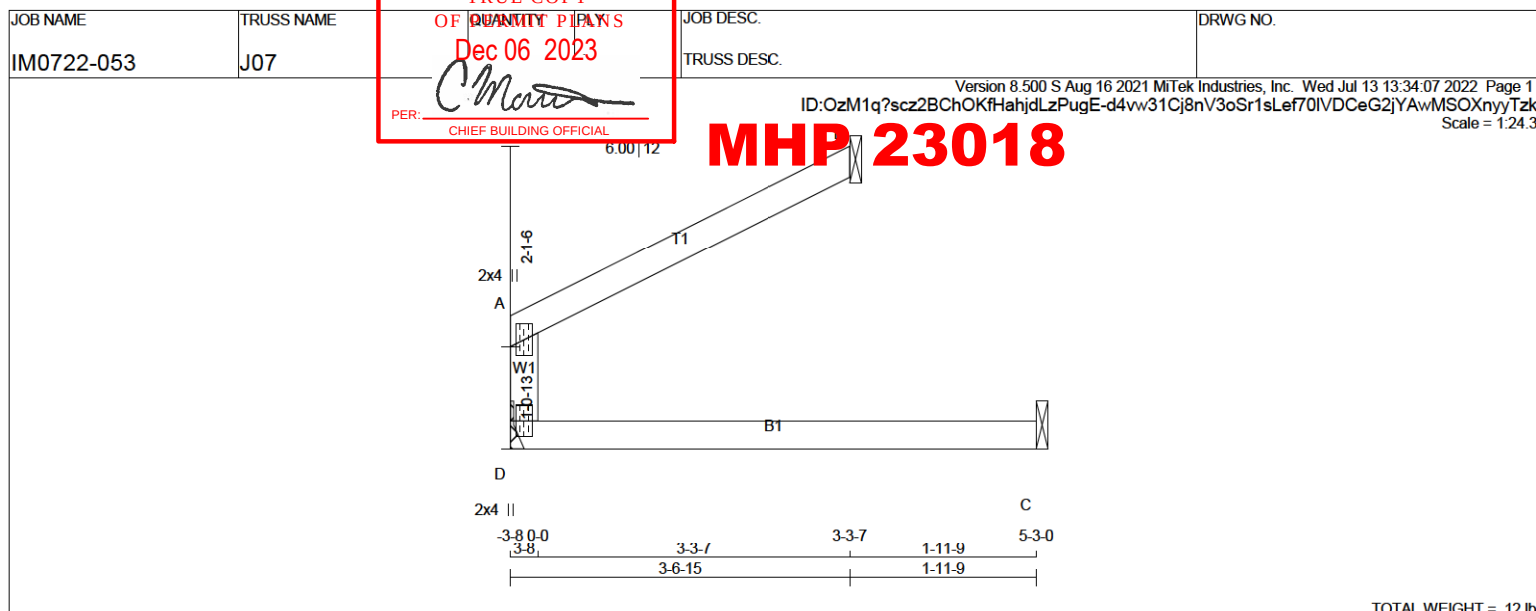
JSI METAL= 0.14 (A) (INPUT = 1.00)



July 14, 2022

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LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	2.0	4.0		
D	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
D	253	0	253	0	0	MECHANICAL	
B	193	0	193	0	0	1-8	1-8
C	55	0	55	0	0	1-8	1-8

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

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) B, C

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	177	128 / 0	0 / 0	0 / 0	0 / 0	49 / 0	0 / 0
B	131	115 / 0	0 / 0	0 / 0	0 / 0	17 / 0	0 / 0
C	43	6 / 0	0 / 0	0 / 0	0 / 0	37 / 0	0 / 0

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS1 (LC)	MAX. UNBRACED LENGTH	MEMB.	WEBS	MAX. FACTORED FORCE (LBS)	MAX. CS1 (LC)
FR-TO						FR-TO			
D-A		-207 / 0	0.0	0.0	0.05 (4)	7.81			
A-B		-3 / 4	-111.9	-111.9	0.21 (1)	10.00			
D-C		0 / 0	-18.2	-18.2	0.13 (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) = $L/360$ (0.19")
CALCULATED VERT. DEFL. (LL) = $L/999$ (0.02")
ALLOWABLE DEFL. (TL) = $L/360$ (0.19")
CALCULATED VERT. DEFL. (TL) = $L/999$ (0.05")

CSI: TC=0.21/1.00 (A-B:1), BC=0.13/1.00 (C-D:4),
WB=0.00/1.00 (n/a:0), SSI=0.14/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.12 (A) (INPUT = 0.90)

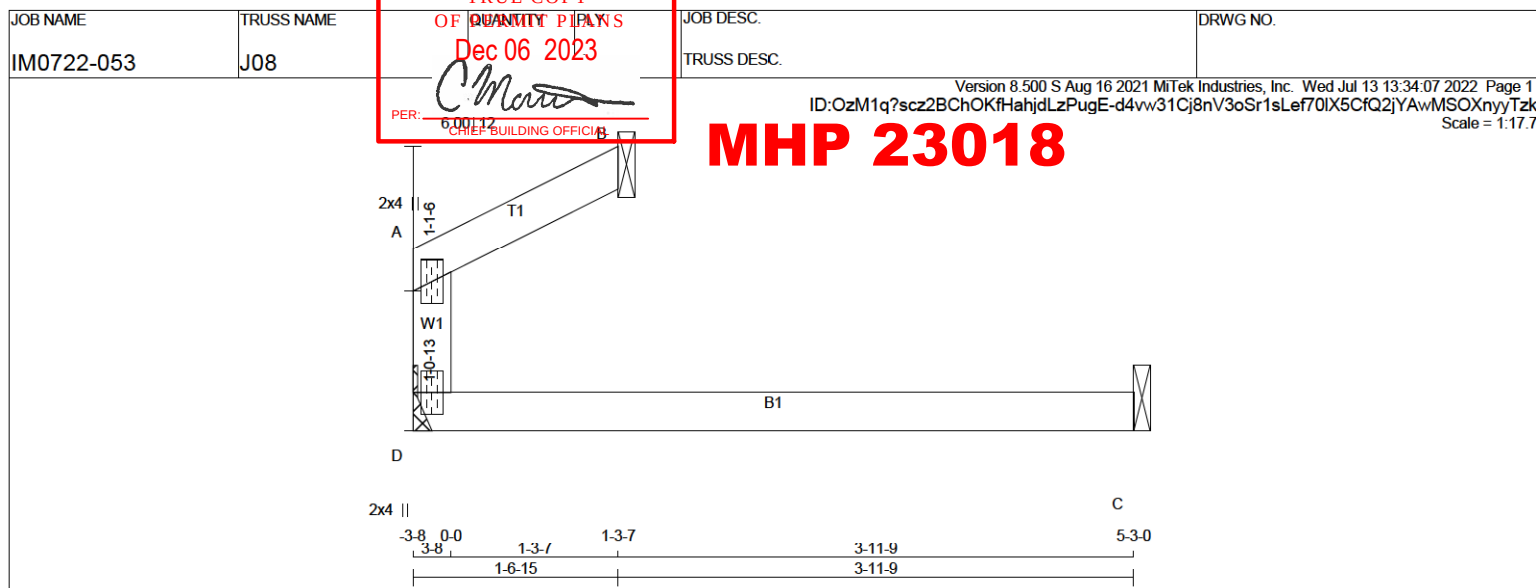
JSI METAL= 0.09 (A) (INPUT = 1.00)



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TOTAL WEIGHT = 10 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	2.0	4.0		
D	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	IN-SX	IN-SX
D	125	0	125	0	0	MECHANICAL
B	108	0	108	0	1-8	1-8
C	45	0	49	0	1-8	1-8

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

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) B, C

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	89	57/0	0/0	0/0	0/0	32/0	0/0
B	76	53/0	0/0	0/0	0/0	23/0	0/0
C	36	1/0	0/0	0/0	0/0	35/0	0/0

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD (PLF)		MAX. CS (LC)		WEBS MAX. FACTORED FORCE (LBS)		MAX. CS (LC)	
	FR-TO	FROM	TO	TO	MAX	UNBRAC	MEMB.	FR-TO	FROM	TO
D-A	-69 / 19	0.0	0.0	0.09 (4)	7.81					
A-B	0 / 12	-111.9	-111.9	0.09 (4)	10.00					
D-C	0 / 0	-18.2	-18.2	0.12 (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 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) = $L/360$ (0.19")
CALCULATED VERT. DEFL. (LL) = $L/999$ (0.00")
ALLOWABLE DEFL. (TL) = $L/360$ (0.19")
CALCULATED VERT. DEFL. (TL) = $L/999$ (0.03")

CSI: TC=0.09/1.00 (A-D-4), BC=0.12/1.00 (C-D-4), WB=0.00/1.00 (n/a.0), SS=0.08/1.00 (C-D-4)

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= 0.04 (A) (INPUT = 0.90)

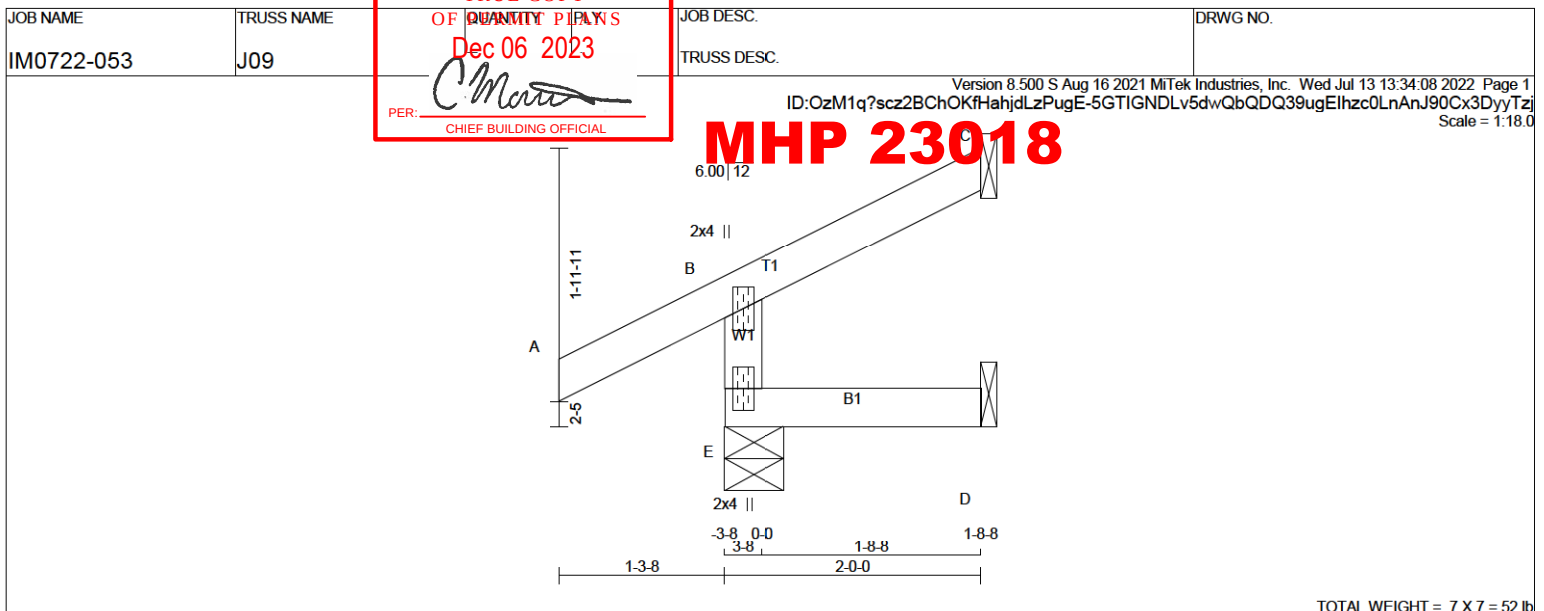
JSI METAL= 0.03 (A) (INPUT = 1.00)



July 14, 2022

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TOTAL WEIGHT = 7 X 7 = 52 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
E	311	0	311	0	5-8	1-8
C	85	0	85	0	1-8	1-8
D	16	0	18	0	1-8	1-8

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

JT	1ST LCASE	MAX / MIN COMPONENT REACTIONS						
	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL	
E	213	181 / 0	0 / 0	0 / 0	0 / 0	32 / 0	0 / 0	
C	57	53 / 0	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0	
D	13	0 / 0	0 / 0	0 / 0	0 / 0	13 / 0	0 / 0	

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 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: (5)

CHORDS					WEBS				
MEMB.	MAX. FACTORED	FORCE (LBS)	FACTORED		MAX. UNBRACED	MEMB.	MAX. FACTORED	FORCE (LBS)	MAX CSI (LC)
	VERT. LOAD		LC1 (PLF)	LC2 CSI (LC)					
FR-TO			FROM	TO	LENGTH	FR-TO			
E-B	-291 / 0		0.0	0.0	0.01 (4)	7.81			
A-B	0 / 34		-111.9	-111.9	0.15 (1)	10.00			
B-C	-12 / 0		-111.9	-111.9	0.07 (1)	6.25			
E-D	0 / 0		-18.2	-18.2	0.02 (4)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

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

CSI: TC=0.15/1.00 (A-B:1), BC=0.02/1.00 (D-E:4),
WB=0.00/1.00 (n/a:0), SSI=0.11/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

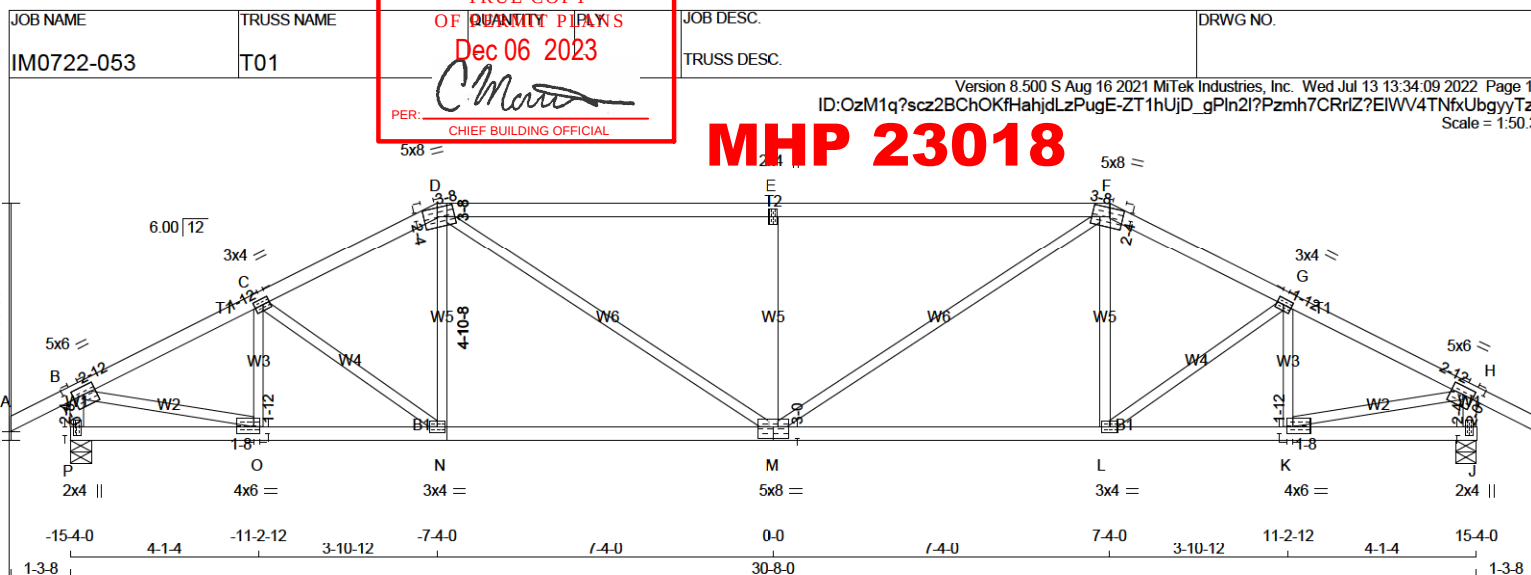
JSI GRIP= 0.16 (B) (INPUT = 0.90)
JSI METAL= 0.12 (B) (INPUT = 1.00)



July 14, 2022

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LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMW-t	MT20	5.0	6.0	2.00	2.75
C	TMW-t	MT20	3.0	4.0	1.50	1.75
D	TTWW-m	MT20	5.0	8.0	2.25	3.50
E	TMW-w	MT20	2.0	4.0		
F	TTWW-m	MT20	5.0	8.0	2.25	3.50
G	TMW-t	MT20	3.0	4.0	1.50	1.75
H	TMW-t	MT20	5.0	6.0	2.00	2.75
J	BMV1+p	MT20	2.0	4.0	2.25	1.00
K	BMW-t	MT20	4.0	6.0	1.75	1.50
L	BMW-t	MT20	3.0	4.0		
M	BSWWW-I	MT20	5.0	8.0	3.00	4.00
N	BMW-t	MT20	3.0	4.0		
O	BMW-t	MT20	4.0	6.0	1.75	1.50
P	BMV1+p	MT20	2.0	4.0	2.25	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	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
P	2147	0	2147	0	5-8	3-8
J	2147	0	2147	0	5-8	3-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.	LIVE			
P	1485	1161 / 0	0 / 0	0 / 0	0 / 0	324 / 0	0 / 0
J	1485	1161 / 0	0 / 0	0 / 0	0 / 0	324 / 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 = 3.92 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	MAX.	MEMB.	MAX. FACTORED	MAX
	FORCE	LOAD	LOAD			UNBRAC		FORCE	
	(LBS)	(PLF)			(LC)	LENGTH		(LBS)	CSI (LC)
FR-TO		FROM	TO				FR-TO		
A-B	0 / 34	-111.9	-111.9	0.15 (1)		10.00	O-C	-479 / 0	0.09 (1)
B-C	-2771 / 0	-111.9	-111.9	0.30 (1)		3.92	C-N	-70 / 11	0.03 (1)
C-D	-2752 / 0	-111.9	-111.9	0.29 (1)		3.94	N-D	0 / 182	0.05 (4)
D-E	-3286 / 0	-111.9	-111.9	0.60 (1)		4.06	D-M	0 / 1011	0.23 (1)
E-F	-3286 / 0	-111.9	-111.9	0.60 (1)		4.06	M-E	-1010 / 0	0.40 (1)
F-G	-2752 / 0	-111.9	-111.9	0.29 (1)		3.94	M-F	0 / 1011	0.23 (1)
G-H	-2771 / 0	-111.9	-111.9	0.30 (1)		3.92	L-F	0 / 182	0.05 (4)
H-I	0 / 34	-111.9	-111.9	0.15 (1)		10.00	L-G	-70 / 11	0.03 (1)
P-B	-2105 / 0	0.0	0.0	0.21 (1)		5.84	K-G	-479 / 0	0.09 (1)
J-H	-2105 / 0	0.0	0.0	0.21 (1)		5.84	B-O	0 / 2551	0.57 (1)
							K-H	0 / 2551	0.57 (1)
P-O	0 / 0	-18.2	-18.2	0.08 (4)		10.00			
O-N	0 / 2497	-18.2	-18.2	0.52 (1)		10.00			
N-M	0 / 2444	-18.2	-18.2	0.51 (1)		10.00			
M-L	0 / 2444	-18.2	-18.2	0.51 (1)		10.00			
L-K	0 / 2497	-18.2	-18.2	0.52 (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 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) = $L/360$ (1.02")
CALCULATED VERT. DEFL. (LL) = $L/999$ (0.17")
ALLOWABLE DEFL. (TL) = $L/360$ (1.02")
CALCULATED VERT. DEFL. (TL) = $L/999$ (0.32")

CSI: TC=0.60/1.00 (E-F:1), BC=0.52/1.00 (K-L:1), WB=0.57/1.00 (H-K:1), SSI=0.40/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



July 14, 2022

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TRUE COPY

OF QUANTITY PLANS

Dec 06 2023

PER: *C. M. ...*
CHIEF BUILDING OFFICIAL

JOB DESC.

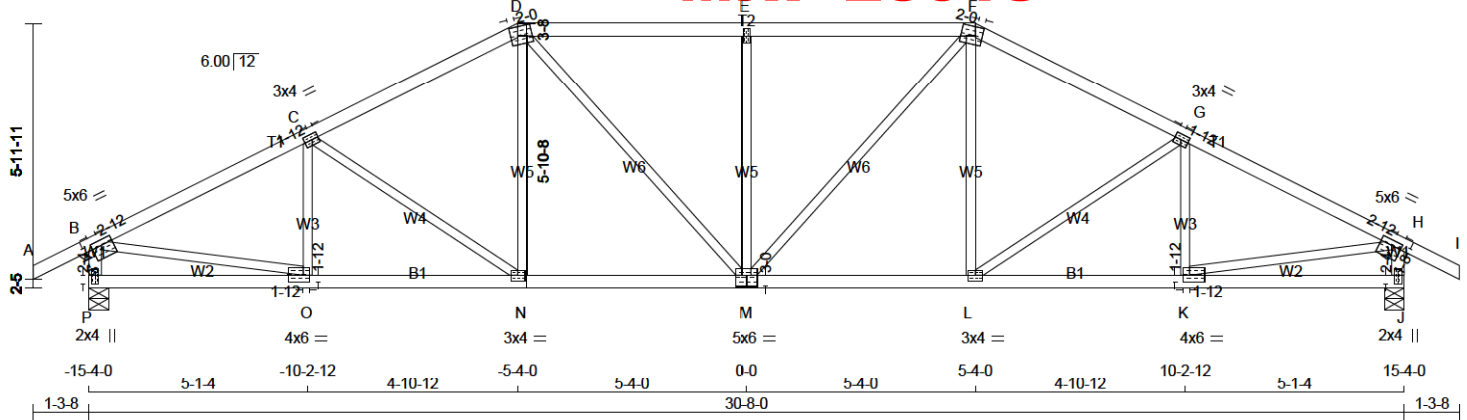
TRUSS DESC.

DRWG NO.

Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Wed Jul 13 13:34:09 2022 Page 1

ID: OzM1q?scz2BChOKfHahjdLzPugE-ZT1hUjD_gPln2l?Pzmh7CRm9?FIWUpTnfxUbggyTzi

Scale = 1:53.7

MHP 23018

TOTAL WEIGHT = 2 X 126 = 252 lb

LUMBER

N. L. G. A. RULES

CHORDS SIZE

A - D 2x4 DRY No.2

D - F 2x4 DRY No.2

F - I 2x4 DRY No.2

P - B 2x4 DRY No.2

J - H 2x4 DRY No.2

P - M 2x4 DRY No.2

M - J 2x4 DRY No.2

ALL WEBS 2x3 DRY No.2

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMW-t	MT20	5.0	6.0	1.50	2.75
C	TMW-t	MT20	3.0	4.0	1.50	1.75
D	TTWW-m	MT20	5.0	6.0	2.50	2.00
E	TMW-w	MT20	2.0	4.0		
F	TTWW-m	MT20	5.0	6.0	2.50	2.00
G	TMW-t	MT20	3.0	4.0	1.50	1.75
H	TMW-t	MT20	5.0	6.0	1.50	2.75
J	BMV1+p	MT20	2.0	4.0	2.25	1.00
K	BMW-t	MT20	4.0	6.0	1.75	1.75
L	BMW-t	MT20	3.0	4.0		
M	BSWWW-I	MT20	5.0	6.0	3.00	3.00
N	BMW-t	MT20	3.0	4.0		
O	BMW-t	MT20	4.0	6.0	1.75	1.75
P	BMV1+p	MT20	2.0	4.0	2.25	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	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
P	2147	0	2147	0
J	2147	0	2147	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX. MIN. SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
P	1485	1161 / 0	0 / 0	0 / 0	0 / 0	324 / 0	0 / 0
J	1485	1161 / 0	0 / 0	0 / 0	0 / 0	324 / 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 = 3.69 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. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 34	-111.9	-111.9	0.15 (1)	10.00	O-C	-347 / 14
B-C	-2864 / 0	-111.9	-111.9	0.47 (1)	3.69	C-N	-352 / 0
C-D	-2598 / 0	-111.9	-111.9	0.44 (1)	3.88	N-D	0 / 308
D-E	-2668 / 0	-111.9	-111.9	0.50 (1)	3.74	D-M	0 / 545
E-F	-2668 / 0	-111.9	-111.9	0.50 (1)	3.74	M-E	-730 / 0
F-G	-2598 / 0	-111.9	-111.9	0.44 (1)	3.88	M-F	0 / 545
G-H	-2864 / 0	-111.9	-111.9	0.47 (1)	3.69	L-F	0 / 308
H-I	0 / 34	-111.9	-111.9	0.15 (1)	10.00	L-G	-352 / 0
P-B	-2103 / 0	0.0	0.0	0.21 (1)	5.84	K-G	-347 / 14
J-H	-2103 / 0	0.0	0.0	0.21 (1)	5.84	B-O	0 / 2623
						K-H	0 / 2623
P-O	0 / 0	-18.2	-18.2	0.10 (4)	10.00		
O-N	0 / 2587	-18.2	-18.2	0.48 (1)	10.00		
N-M	0 / 2302	-18.2	-18.2	0.44 (1)	10.00		
M-L	0 / 2302	-18.2	-18.2	0.44 (1)	10.00		
L-K	0 / 2587	-18.2	-18.2	0.48 (1)	10.00		
K-J	0 / 0	-18.2	-18.2	0.10 (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 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) = $L/360$ (1.02")
 CALCULATED VERT. DEFL. (LL) = $L/999$ (0.15")
 ALLOWABLE DEFL. (TL) = $L/360$ (1.02")
 CALCULATED VERT. DEFL. (TL) = $L/999$ (0.25")

CSI: TC=0.50/1.00 (D-E-1), BC=0.48/1.00 (K-L-1),
 WB=0.59/1.00 (H-K-1), SSI=0.29/1.00 (D-E-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP (DRY) (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= 0.90 (P) (INPUT = 0.90)

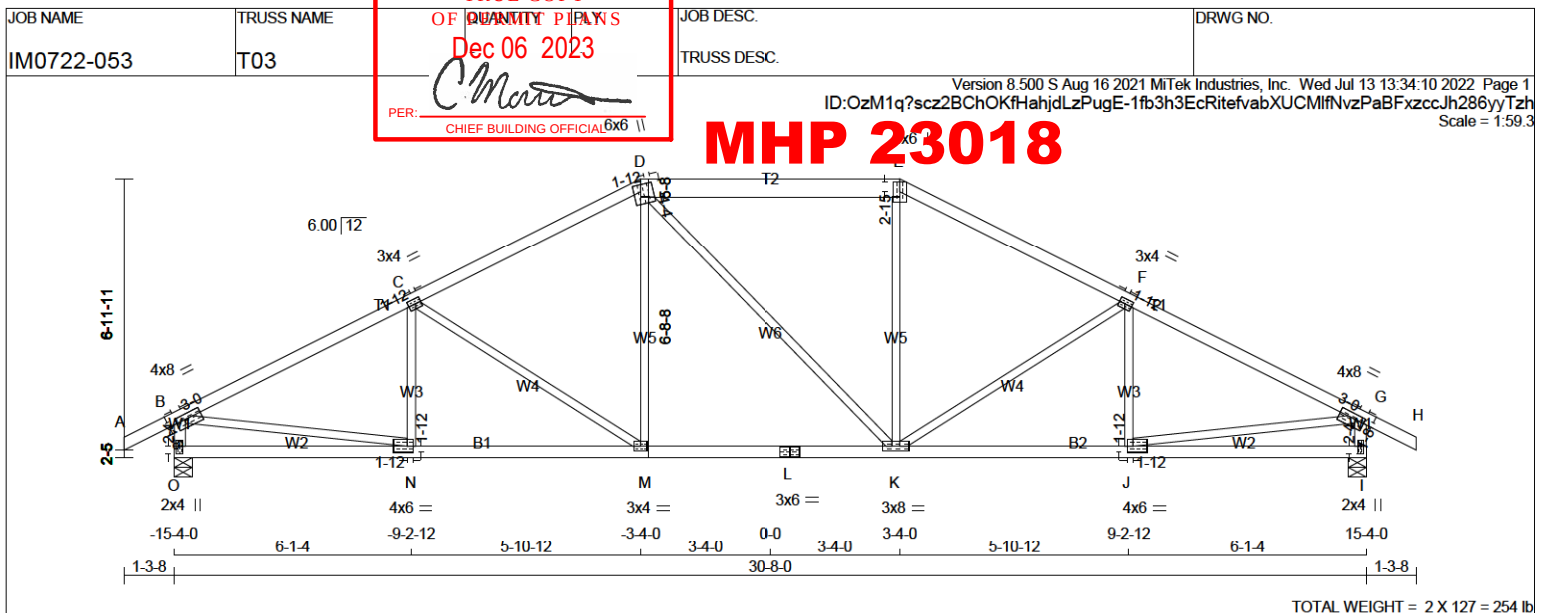
JSI METAL= 0.73 (H) (INPUT = 1.00)



July 14, 2022

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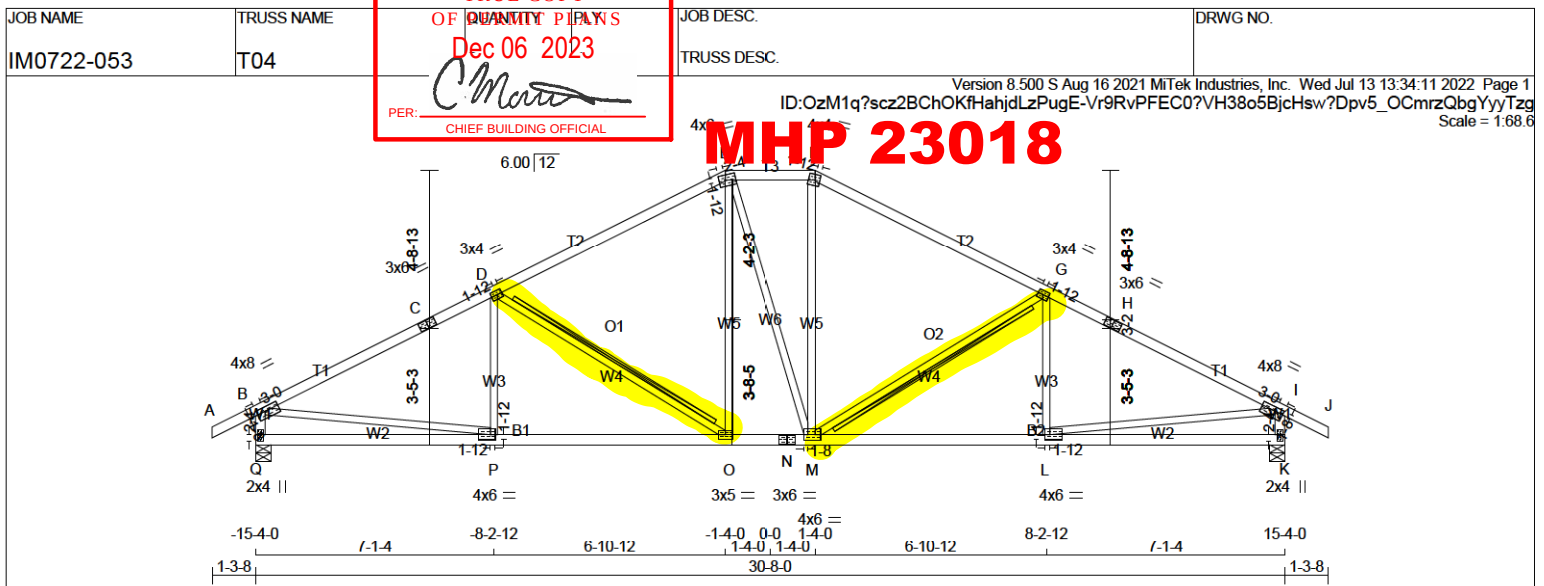
LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY				DESIGN CRITERIA			
N. L. G. A. RULES				BUILDING DESIGNER				SPECIFIED LOADS:			
CHORDS				BEARINGS				TOP CH. LL = 34.8 PSF			
SIZE				FACTORED				DL = 3.0 PSF			
LUMBER				GROSS REACTION				BOT CH. LL = 0.0 PSF			
DESCR.				DOWN				DL = 7.3 PSF			
SPF				UPLIFT				TOTAL LOAD = 45.1 PSF			
SPF				UNFACTORED REACTIONS				SPACING = 24.0 IN. C/C			
SPF				1ST LCASE				LOADING IN FLAT SECTION BASED ON A			
SPF				MAX. MIN. COMPONENT REACTIONS				SLOPE OF 2.00/12 MINIMUM			
SPF				BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) O, I				THIS DESIGN COMPLIES WITH:			
SPF				BRACING				- PART 9 OF BCBC 2018, ABC 2019			
SPF				TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.39 FT.				- PART 9 OF OBC 2012 (2019 AMENDMENT)			
SPF				MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY				- CSA 086-14			
SPF				APPLIED.				- TPIC 2014			
SPF				ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATEROALLY RESTRAINED.				(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F.			
SPF				LOADING				RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED			
SPF				TOTAL LOAD CASES: (4)				ROOF LIVE LOAD			
SPF				CHORDS				ALLOWABLE DEFL. (LL) = L/360 (1.02")			
SPF				MAX. FACTORED				CALCULATED VERT. DEFL. (LL) = L/999 (0.14")			
SPF				MEMB. FORCE				ALLOWABLE DEFL. (TL) = L/360 (1.02")			
SPF				VERT. LOAD				CALCULATED VERT. DEFL. (TL) = L/999 (0.24")			
SPF				FROM TO				CSI: TC=0.69/1.00 (B-C:1), BC=0.50/1.00 (J-K:1),			
SPF				FR-TO				WB=0.60/1.00 (B-N:1), SSI=0.29/1.00 (F-G:1)			
SPF				A-B				DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10			
SPF				B-C				COMP=1.10 SHEAR=1.10 TENS=1.10			
SPF				C-D				COMPANION LIVE LOAD FACTOR = 1.00			
SPF				D-E				TRUSS PLATE MANUFACTURER IS NOT			
SPF				E-F				RESPONSIBLE FOR QUALITY CONTROL IN			
SPF				F-G				THE TRUSS MANUFACTURING PLANT.			
SPF				G-H				NAIL VALUES			
SPF				H-I				PLATE GRIP(DRY) SHEAR SECTION			
SPF				I-G				(PSI) (PLI) (PLI)			
SPF				O-N				MAX MIN MAX MIN MAX MIN			
SPF				N-M				MT20 650 371 1747 788 1987 1873			
SPF				M-L				PLATE PLACEMENT TOL. = 0.250 inches			
SPF				L-K				PLATE ROTATION TOL. = 5.0 Deg.			
SPF				K-J				JSI GRIP= 0.90 (O) (INPUT = 0.90)			
SPF				J-I				JSI METAL= 0.69 (L) (INPUT = 1.00)			



July 14, 2022

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TOTAL WEIGHT = 2 X 128 = 257 lb

LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
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 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	8.0	1.50	3.00
C	TS-t	MT20	3.0	6.0		
D	TMVW-t	MT20	3.0	4.0	1.50	1.75
E	TTWW-m	MT20	4.0	6.0	1.75	2.25
F	TTWW-m	MT20	4.0	4.0	2.00	1.75
G	TMVW-t	MT20	3.0	4.0	1.50	1.75
H	TS-t	MT20	3.0	6.0		
I	TMVW-t	MT20	4.0	8.0	1.50	3.00
K	BMV1+p	MT20	2.0	4.0	2.25	1.00
L	BMVW-t	MT20	4.0	6.0	1.75	1.75
M	BMVWW-t	MT20	4.0	6.0	2.00	1.50
N	BS-t	MT20	3.0	6.0		
O	BMVW-t	MT20	3.0	5.0		
P	BMVW-t	MT20	4.0	6.0	1.75	1.75
Q	BMV1+p	MT20	2.0	4.0	2.25	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	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
Q	2147	0	2147	0	5-8	3-8
K	2147	0	2147	0	5-8	3-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. SNOW		LIVE		PERM. LIVE		WIND	DEAD	SOIL
	Q	K	Q	K	Q	K	Q	K			
Q	1485	1161	0	0	0/0	0/0	0/0	0/0	0/0	324/0	0/0
K	1485	1161	0	0	0/0	0/0	0/0	0/0	0/0	324/0	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 = 2.86 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

2x4 DRY SPF No.2 T-BRACE AT D-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 FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.		MAX. FACTORED FORCE (LBS)
FR-TO	FROM				FR-TO	FROM	
A-B	0/34	-111.9	-111.9	0.15 (1)	P-D	-174/98	0.06 (1)
B-C	-2906/0	-111.9	-111.9	0.98 (1)	D-O	-837/0	0.44 (1)
C-D	-2906/0	-111.9	-111.9	0.98 (1)	O-E	0/522	0.12 (1)
D-E	-2200/0	-111.9	-111.9	0.84 (1)	E-M	0/6	0.00 (1)
E-F	-1937/0	-111.9	-111.9	0.14 (1)	M-F	0/528	0.12 (1)
F-G	-2202/0	-111.9	-111.9	0.84 (1)	M-G	-834/0	0.44 (1)
G-H	-2905/0	-111.9	-111.9	0.98 (1)	L-G	-177/97	0.06 (1)
H-I	-2905/0	-111.9	-111.9	0.98 (1)	B-P	0/2655	0.60 (1)
I-J	0/34	-111.9	-111.9	0.15 (1)	L-I	0/2655	0.60 (1)
Q-B	-2093/0	0.0	0.0	0.21 (1)			
K-I	-2092/0	0.0	0.0	0.21 (1)			
Q-P	0/0	-18.2	-18.2	0.23 (4)			
P-O	0/2636	-18.2	-18.2	0.53 (1)			
O-N	0/1935	-18.2	-18.2	0.39 (1)			
N-M	0/1935	-18.2	-18.2	0.39 (1)			
M-L	0/2636	-18.2	-18.2	0.52 (1)			
L-K	0/0	-18.2	-18.2	0.23 (4)			

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 MINIMUMTHIS 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 LOADALLOWABLE DEFL. (LL) = L/360 (1.02")
CALCULATED VERT. DEFL. (LL) = L/999 (0.15")
ALLOWABLE DEFL. (TL) = L/360 (1.02")
CALCULATED VERT. DEFL. (TL) = L/999 (0.27")CSI: TC=0.98/1.00 (B-D:1), BC=0.53/1.00 (O-P:1)
WB=0.60/1.00 (B-P:1), SSI=0.34/1.00 (G-I:1)DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (Q) (INPUT = 0.90)
JSI METAL= 0.65 (N) (INPUT = 1.00)

July 14, 2022

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IN THE DESIGN OF THIS COMPONENT.

CORPORATION OF THE CITY OF OSHAWA
TRUE COPY
OF QUANTITY PLANS
Dec 06 2023
PER: 
CHIEF BUILDING OFFICIAL

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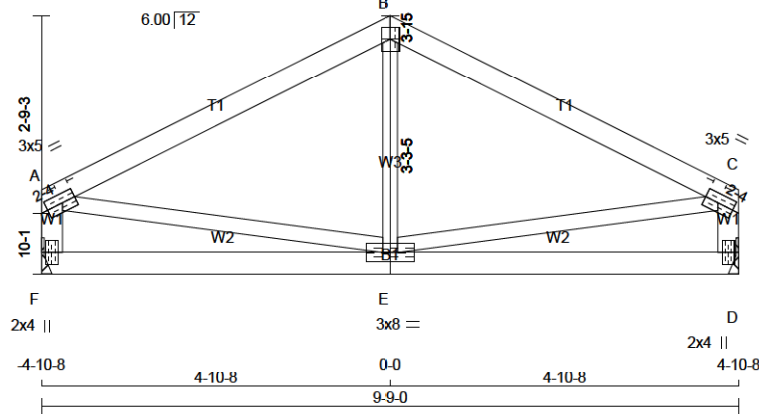


JOB NAME	TRUSS NAME	JOB DESC.	DRWG NO.
IM0722-053	T06	TRUSS DESC.	



Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Wed Jul 13 13:34:13 2022 Page 1
ID: OzM1q?scz2BChOKfHahjdLzPugE-SEGBJ5GukdGCWNIAccl4NH?VcditSQJ2IHvikRyyTze
Scale: 3/8"=1'

MHP 23018



TOTAL WEIGHT = 35 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	
ALL WEBS EXCEPT	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	2.25
B	TTW+p	MT20	3.0	4.0		
C	TMVW-t	MT20	3.0	5.0	1.50	2.25
D	BMV1+p	MT20	2.0	4.0		
E	BMVWW-t	MT20	3.0	8.0		
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
F	634 0	634 0	MECHANICAL	MECHANICAL
D	634 0	634 0	MECHANICAL	MECHANICAL

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

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS
F	440	339 / 0	0 / 0
D	440	339 / 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

TOTAL LOAD CASES: (4)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	UNBRACED LENGTH	MEMB.	WEBS MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO			FR-TO		
A-B	-540 / 0	-111.9 -111.9	0.34 (1)	6.25	E-B	-63 / 81	0.03 (4)
B-C	-540 / 0	-111.9 -111.9	0.34 (1)	6.25	A-E	0 / 490	0.11 (1)
F-A	-599 / 0	0.0 0.0	0.06 (1)	7.81	E-C	0 / 490	0.11 (1)
D-C	-599 / 0	0.0 0.0	0.06 (1)	7.81			
F-E	0 / 0	-18.2 -18.2	0.12 (4)	10.00			
E-D	0 / 0	-18.2 -18.2	0.12 (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 (0.33")
CALCULATED VERT. DEFL. (LL) = L/999 (0.01")
ALLOWABLE DEFL. (TL)= L/360 (0.33")
CALCULATED VERT. DEFL. (TL) = L/999 (0.02")

CSI: TC=0.34/1.00 (B-C:1), BC=0.12/1.00 (D-E:4), WB=0.11/1.00 (A-E:1), SSI=0.19/1.00 (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)
MT20	650	371	1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

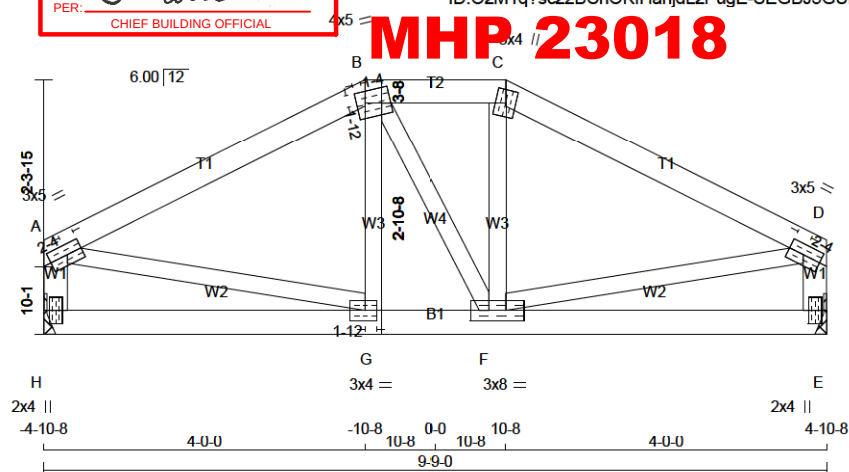
JSI GRIP= 0.53 (E) (INPUT = 0.90)
JSI METAL= 0.19 (C) (INPUT = 1.00)



July 14, 2022

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TOTAL WEIGHT = 38 lb

LUMBER

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

ALL WEBS EXCEPT	2x3	DRY	No.2
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DRY; SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMW-t	MT20	3.0	5.0	1.50	2.25
B	TTWW-m	MT20	4.0	5.0	1.75	1.25
C	TTW+m	MT20	3.0	4.0		
D	TMW-t	MT20	3.0	5.0	1.50	2.25
E	BMV1+p	MT20	2.0	4.0		
F	BMWWWW-t	MT20	3.0	8.0		
G	BMWW-t	MT20	3.0	4.0	1.50	1.75
H	BMV1+p	MT20	2.0	4.0		

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

BUILDING BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQ'D BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
H	634	0	634	0	0	MECHANICAL	
E	634	0	634	0	0	MECHANICAL	

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

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	440	339 / 0	0 / 0	0 / 0	0 / 0	100 / 0	0 / 0
E	440	339 / 0	0 / 0	0 / 0	0 / 0	100 / 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

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	-594 / 0	-111.9 -111.9	0.23 (1)	6.25	G-B	-55 / 36	0.01 (4)		
B-C	-529 / 0	-111.9 -111.9	0.05 (1)	6.25	B-F	0 / 2	0.00 (4)		
C-D	-596 / 0	-111.9 -111.9	0.23 (1)	6.25	F-C	-54 / 38	0.01 (4)		
H-A	-601 / 0	0.0	0.0 0.06 (1)	7.81	A-G	0 / 542	0.12 (1)		
E-D	-601 / 0	0.0	0.0 0.06 (1)	7.81	F-D	0 / 543	0.12 (1)		
H-G	0 / 0	-18.2	-18.2 0.06 (4)	10.00					
G-F	0 / 529	-18.2	-18.2 0.11 (1)	10.00					
F-E	0 / 0	-18.2	-18.2 0.07 (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 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 (0.32")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.32")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.23/1.00 (C-D:1) , BC=0.11/1.00 (F-G:1)
 , WB=0.12/1.00 (D-F:1) , SSI=0.16/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (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

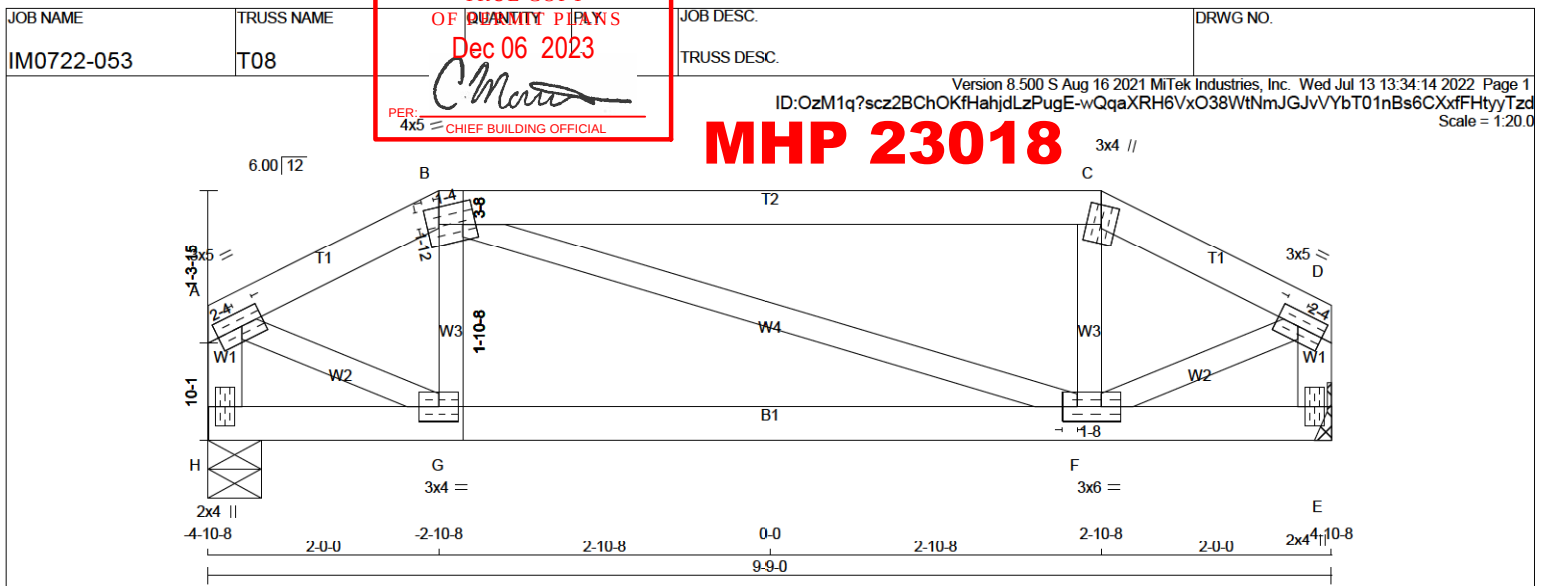
JSI GRIP= 0.79 (G) (INPUT = 0.90)
JSI METAL= 0.20 (D) (INPUT = 1.00)



July 14, 2022

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TOTAL WEIGHT = 35 lb

LUMBER
N. L. G. A. RULES
CHORDS SIZE

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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	5.0	1.50	2.25
B	TTWW-m	MT20	4.0	5.0	1.75	1.25
C	TTW+m	MT20	3.0	4.0		
D	TMVW-t	MT20	3.0	5.0	1.50	2.25
E	BMV1+p	MT20	2.0	4.0		
F	BMVWW-t	MT20	3.0	6.0	1.50	1.50
G	BMVW-t	MT20	3.0	4.0		
H	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
H	634 0	634 0	5-8	1-8
E	634 0	634 0	MECHANICAL	

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS
H	440	339 / 0	0 / 0
E	440	339 / 0	0 / 0

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

BRACINGTOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 F.I.
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 CS (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CS (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	-637 / 0	-111.9 -111.9	0.08 (1)	6.25	G-B	-147 / 40 0.02 (1)	
B-C	-560 / 0	-111.9 -111.9	0.06 (1)	6.25	B-F	0 / 0 0.00 (1)	
C-D	-636 / 0	-111.9 -111.9	0.08 (1)	6.25	F-C	-147 / 40 0.02 (1)	
H-A	-630 / 0	0.0 0.0	0.06 (1)	7.81	A-G	0 / 614 0.14 (1)	
E-D	-630 / 0	0.0 0.0	0.06 (1)	7.81	F-D	0 / 614 0.14 (1)	
H-G	0 / 0	-18.2 -18.2	0.09 (4)	10.00			
G-F	0 / 560	-18.2 -18.2	0.14 (1)	10.00			
F-E	0 / 0	-18.2 -18.2	0.09 (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 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 (0.32")
CALCULATED VERT. DEFL. (LL) = L/999 (0.01")
ALLOWABLE DEFL. (TL) = L/360 (0.32")
CALCULATED VERT. DEFL. (TL) = L/999 (0.03")

CSI: TC=0.66/1.00 (B-C:1), BC=0.14/1.00 (F-G:1), WB=0.14/1.00 (A-G:1), 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 (PSI)	SECTION (PLI)
MT20	650	371	1747

PLATE PLACEMENT TOL. = 0.250 inches

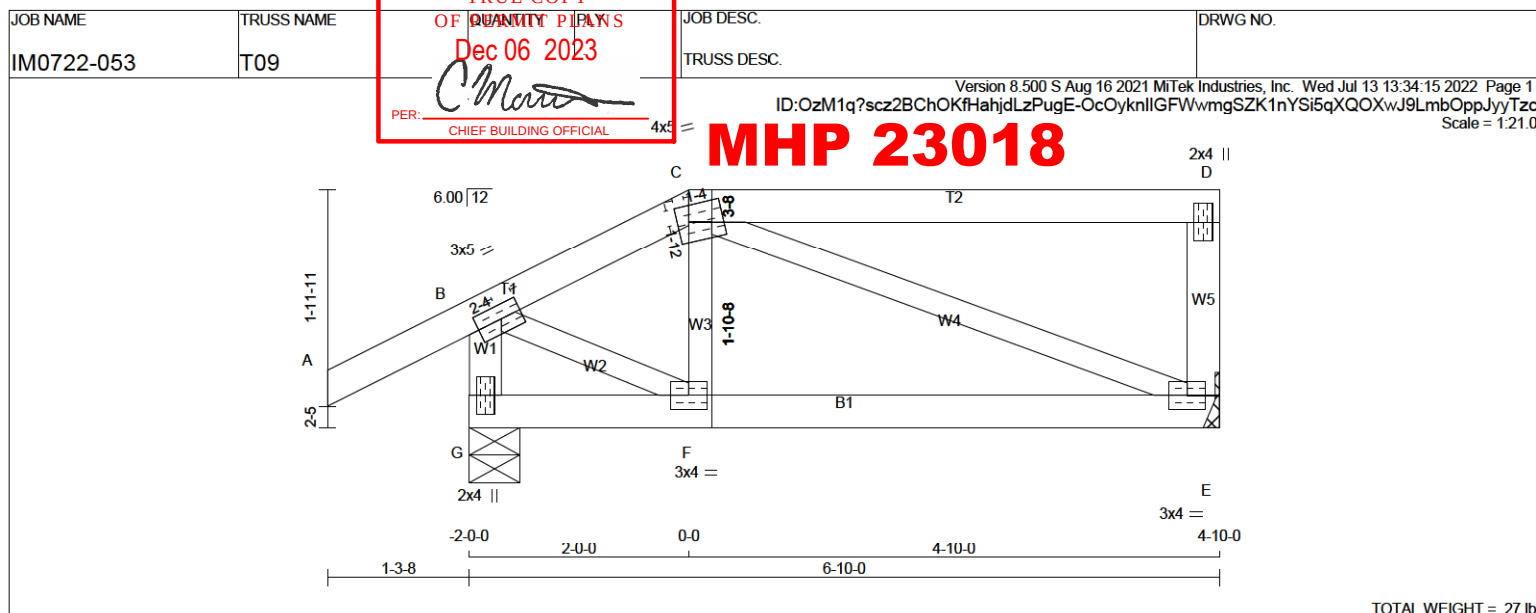
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (G) (INPUT = 0.90)
JSI METAL= 0.20 (A) (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 - C	2x4	DRY	No.2	SPF	
C - D	2x4	DRY	No.2	SPF	
E - D	2x4	DRY	No.2	SPF	
G - B	2x4	DRY	No.2	SPF	
G - E	2x4	DRY	No.2	SPF	

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	3.0	5.0	1.50	2.25
C	TTWW-m	MT20	4.0	5.0	1.75	1.25
D	TMV+p	MT20	2.0	4.0		
E	BMVW1-t	MT20	3.0	4.0		
F	BMVW-t	MT20	3.0	4.0		
G	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
E	445 0	445 0	MECHANICAL	
G	596 0	596 0	5-8	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS
E	308	238 / 0	0 / 0
G	411	332 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 F.I.
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 / 34	-111.9	-111.9	0.15 (1)	10.00	F-C	-65 / 58 0.02 (4)
B-C	-400 / 0	-111.9	-111.9	0.08 (1)	6.25	C-E	-379 / 0 0.15 (1)
C-D	0 / 0	-111.9	-111.9	0.44 (1)	10.00	B-F	0 / 386 0.09 (1)
E-D	-270 / 0	0.0	0.0	0.03 (1)	7.81		
G-B	-590 / 0	0.0	0.0	0.06 (1)	7.81		
G-F	0 / 0	-18.2	-18.2	0.08 (4)	10.00		
F-E	0 / 354	-18.2	-18.2	0.11 (1)	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) = $L/360$ (0.23")
CALCULATED VERT. DEFL. (LL) = $L/999$ (0.01")
ALLOWABLE DEFL. (TL) = $L/360$ (0.23")
CALCULATED VERT. DEFL. (TL) = $L/999$ (0.02")

CSI: TC=0.44/1.00 (C-D:1), BC=0.11/1.00 (E-F:1), WB=0.15/1.00 (C-E:1), SSI=0.21/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR 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.

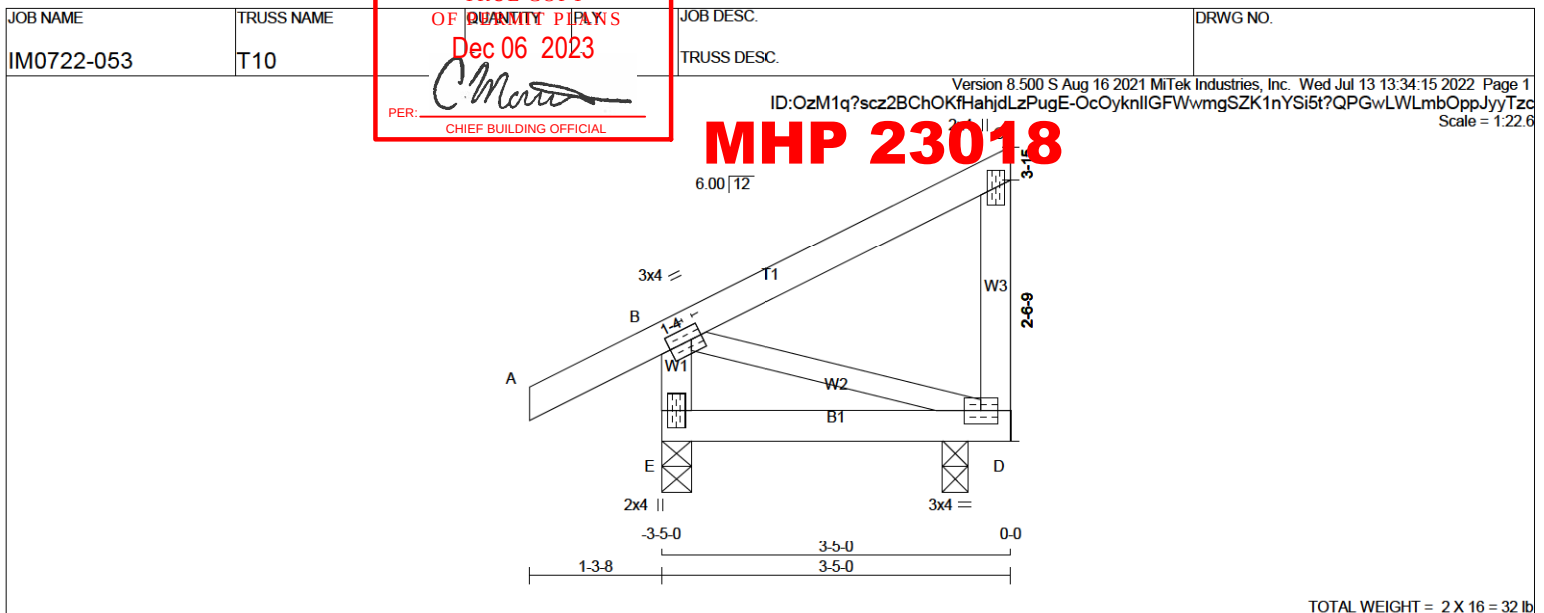
JSI GRIP= 0.54 (F) (INPUT = 0.90)
JSI METAL= 0.15 (B) (INPUT = 1.00)



July 14, 2022

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TOTAL WEIGHT = 2 X 16 = 32 lb

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF	
D - C	2x4	DRY	No.2	SPF	
E - B	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
B - TMVW-t	MT20	3.0	4.0	1.50	1.25
C - TMV+p	MT20	2.0	4.0		
D - BMVW1-t	MT20	3.0	4.0		
E - BMV1+p	MT20	2.0	4.0		

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

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
	VERT	DOWN	IN-SX	IN-SX
E	374	0	3-8	1-8
D	222	0	3-0	1-8

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	257	213/0	0/0	0/0	0/0	43/0	0/0
D	154	119/0	0/0	0/0	0/0	35/0	0/0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (7)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRACED LENGTH	MEMB.	WEBS MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 34	-111.9 -111.9	0.15 (1)	10.00	B-D	0 / 0	0.00 (1)
B-C	0 / 0	-111.9 -111.9	0.22 (1)	10.00			
D-C	-191 / 0	0.0 0.0	0.03 (1)	7.81			
E-B	-343 / 0	0.0 0.0	0.03 (1)	7.81			
E-D	0 / 0	-18.2 -18.2	0.06 (4)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.

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 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. (TL) = L/360 (0.19")
CALCULATED VERT. DEFL. (TL) = L/999 (0.01")

CSI: TC=0.22/1.00 (B-C:1), BC=0.06/1.00 (D-E:4), WB=0.00/1.00 (B-D:1), SS=0.13/1.00 (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)
			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= 0.30 (B) (INPUT = 0.90)
JSI METAL= 0.08 (C) (INPUT = 1.00)



July 14, 2022

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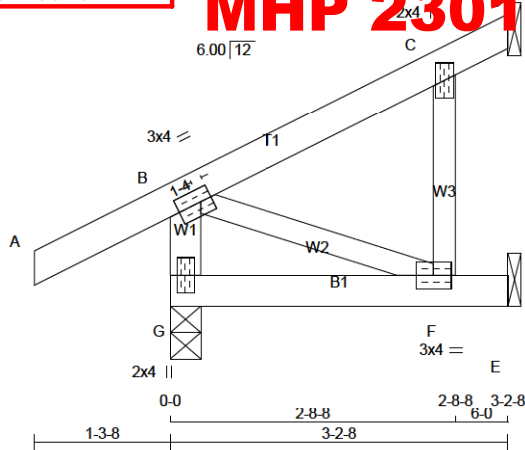
JOB NAME	TRUSS NAME	JOB DESC.	DRWG NO.
IM0722-053	T11	TRUSS DESC.	

TRUE COPY
OF QUANTITY PLANS
Dec 06 2023

PER: *C. M. M.*
CHIEF BUILDING OFFICIAL

Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Wed Jul 13 13:34:16 2022 Page 1
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Scale = 1:21.9

MHP 23018



TOTAL WEIGHT = 5 X 14 = 69 lb

LUMBER
N. L. G. A. RULES
CHORDS SIZE LUMBER DESCR.
A - D 2x4 DRY No.2 SPF
G - B 2x4 DRY No.2 SPF
G - 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-t	MT20	3.0	4.0	1.50	1.25
C	TMVW-t	MT20	2.0	4.0		
F	BMVW-t	MT20	3.0	4.0		
G	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
D	57	0	57	0
G	361	0	361	0
E	152	0	152	0

SEE MITTEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) D, E

UNFACTORED REACTIONS

JT	1ST LCASE	MAX	MIN	COMPONENT REACTIONS
	COMBINED	SNOW	LIVE	PERM. LIVE
D	41	24 / 0	0 / 0	0 / 0
G	247	206 / 0	0 / 0	0 / 0
E	104	87 / 0	0 / 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 = 10.00 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: (7)

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 / 34	-111.9	-111.9	0.15 (1)	10.00	B-F	0 / 5
B-C	-8 / 0	-111.9	-111.9	0.13 (6)	10.00	F-C	-152 / 12
C-D	0 / 9	-111.9	-111.9	0.03 (4)	10.00		
G-B	-303 / 0	0.0	0.0	0.03 (1)	7.81		
G-F	0 / 0	-18.2	-18.2	0.12 (1)	10.00		
F-E	0 / 0	-18.2	-18.2	0.12 (1)	10.00		

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.

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) = $L/360$ (0.19")
CALCULATED VERT. DEFL. (LL) = $L/999$ (0.01")
ALLOWABLE DEFL. (TL) = $L/360$ (0.19")
CALCULATED VERT. DEFL. (TL) = $L/999$ (0.02")

CSI: TC=0.15/1.00 (A-B-1), BC=0.12/1.00 (F-G-1),
WB=0.02/1.00 (C-F-1), SS=0.12/1.00 (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

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.27 (B) (INPUT = 0.90)
JSI METAL= 0.06 (G) (INPUT = 1.00)



July 14, 2022

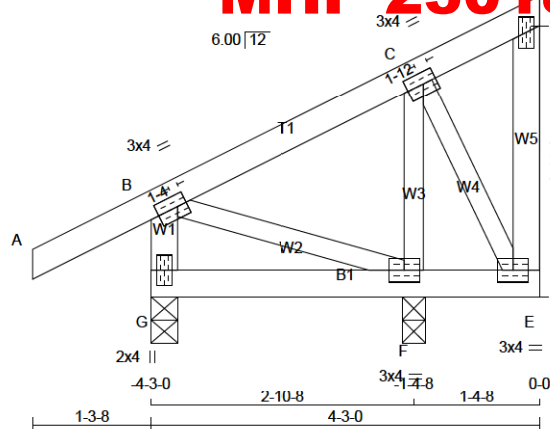
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Scale = 1:25 2

MHP 23018



TOTAL WEIGHT = $2 \times 22 = 43 \text{ lb}$

LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

PLATES (value is in inches)		PLATES	W	LEN	Y	X
B	TMVW-t	MT20	3.0	4.0	1.50	1.25
C	TMVW-t	MT20	3.0	4.0	1.50	1.75
D	TMV+p	MT20	2.0	4.0		
E	BMVW-t	MT20	3.0	4.0		
F	BMVWV-t	MT20	3.0	4.0		
G	BMV1+p	MT20	2.0	4.0		

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

BUILDING BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQ'D BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
G	296	0	330	0	-9	3-8	1-8
F	409	0	409	0	0	3-0	1-8

PROVIDE ANCHORAGE AT BEARING JOINT G FOR 150 LBS FACTORED UPLIFT

UNFACTORED REACTIONS

MAX/MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	203	194 / -23	0 / 0	0 / 0	0 / 0	31 / 0	0 / 0
F	283	219 / 0	0 / 0	0 / 0	0 / 0	65 / 0	0 / 0

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

BRACING

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

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

LOADING

LOADING
TOTAL LOAD CASES: (13)

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 / 34	-111.9	-111.9	0.15 (1)	10.00	F- C	-347 / 0	0.06 (1)	
B-C	-21 / 48	-111.9	-111.9	0.12 (1)	6.25	C- E	-57 / 79	0.02 (13)	
C-D	-28 / 0	-111.9	-111.9	0.12 (1)	6.25	B- F	-42 / 31	0.01 (13)	
E-D	-66 / 51	0.0	0.0	0.01 (12)	7.81				
G-B	-309 / 22	0.0	0.0	0.03 (7)	7.81				
G-F	0 / 0	-18.2	-18.2	0.03 (4)	10.00				
F-E	-41 / 29	-18.2	-18.2	0.03 (4)	6.25				

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.

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

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= $L/120$ (0.19")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.00")
ALLOWABLE DEFL.(TL)= $L/120$ (0.19")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.00")

CSI: TC=0.15/1.00 (A-B:1), BC=0.03/1.00 (E-F:4),
WB=0.06/1.00 (C-F:1), SSI=0.13/1.00 (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) (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= 0.42 (C) (INPUT = 0.90)
JSI METAL= 0.07 (C) (INPUT = 1.00)



July 14, 2022

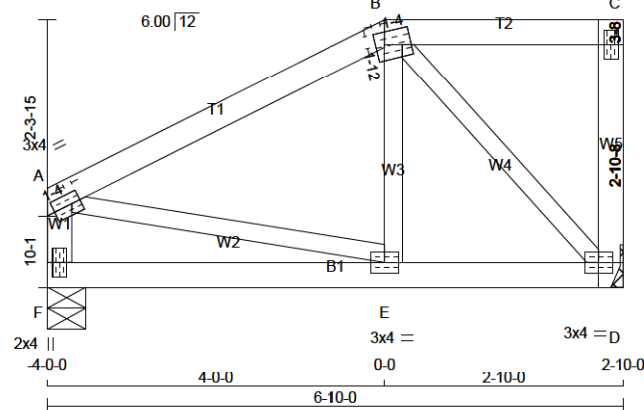
**READ ALL NOTES ON THIS PAGE AND ON THE
ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE
IS AN INTEGRAL PART OF THIS DRAWING AS IT
CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.**



JOB NAME	TRUSS NAME	JOB DESC.	DRWG NO.
IM0722-053	T13	TRUSS DESC.	



Version 8.500 S Aug 16 2021 MiTek Industries, Inc. Wed Jul 13 13:34:17 2022 Page 1

ID: OzM1q?scz2BChOkfHahjdLzPugE-K?Wi9SK?nsme?_cyRSq0X7ADNE3ROEXeDvtvtCyyTza
Scale = 1:27.3**MHP 23018**

TOTAL WEIGHT = 28 lb

LUMBER	CHORDS	SIZE	LUMBER	DESCR.
N. L. G. A. RULES				
A - B	2x4	DRY	No.2	SPF
B - C	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
F - A	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	4.0	1.50	1.25
B	TTWW-m	MT20	4.0	5.0	1.75	1.25
C	TMV+p	MT20	2.0	4.0		
D	BMVW1-t	MT20	3.0	4.0		
E	BMVW-t	MT20	3.0	4.0		
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
D	445	0	445	0
F	445	0	445	0

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

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
D	308	238 / 0	0 / 0	0 / 0	0 / 0	70 / 0	0 / 0
F	308	238 / 0	0 / 0	0 / 0	0 / 0	70 / 0	0 / 0

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

BRACINGTOP 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. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	-297 / 0	-111.9 -111.9	0.23 (1)	E-B	0 / 75	0.03 (4)	
B-C	0 / 0	-111.9 -111.9	0.15 (1)	B-D	-379 / 0	0.10 (1)	
D-C	-158 / 0	0.0 0.0	0.03 (1)	A-E	0 / 271	0.06 (1)	
F-A	-412 / 0	0.0 0.0	0.04 (1)				
F-E	0 / 0	-18.2 -18.2	0.06 (4)				
E-D	0 / 266	-18.2 -18.2	0.08 (4)				

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**

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) = $L/360$ (0.23")
CALCULATED VERT. DEFL. (LL) = $L/999$ (0.00")
ALLOWABLE DEFL. (TL) = $L/360$ (0.23")
CALCULATED VERT. DEFL. (TL) = $L/999$ (0.01")CSI: TC=0.23/1.00 (A-B:1), BC=0.08/1.00 (D-E:4),
WB=0.10/1.00 (B-D:1), SSI=0.16/1.00 (A-B:1)DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.63 (A) (INPUT = 0.90)
JSI METAL = 0.14 (A) (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.



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STANDARD DETAIL MSD2015-H

MHP 23018Issued: 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

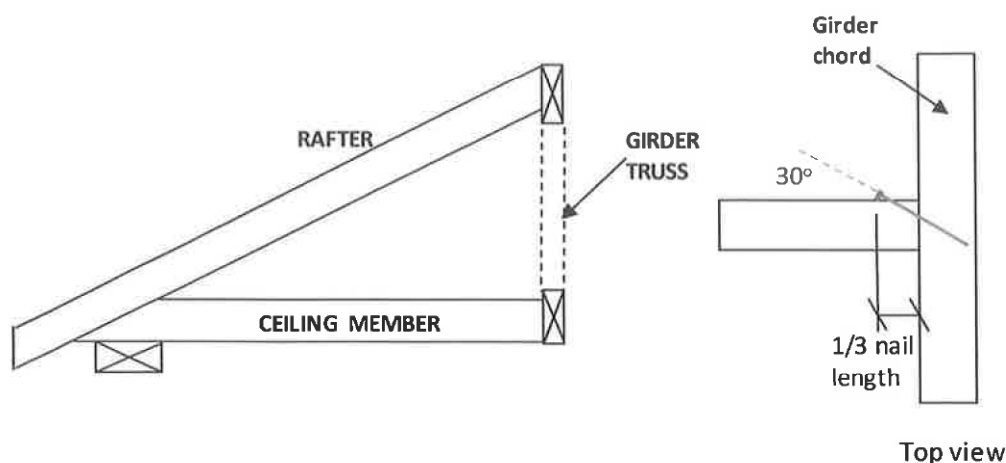


Figure 1: Toe-Nailing Rafter / Ceiling Member to Girder Truss



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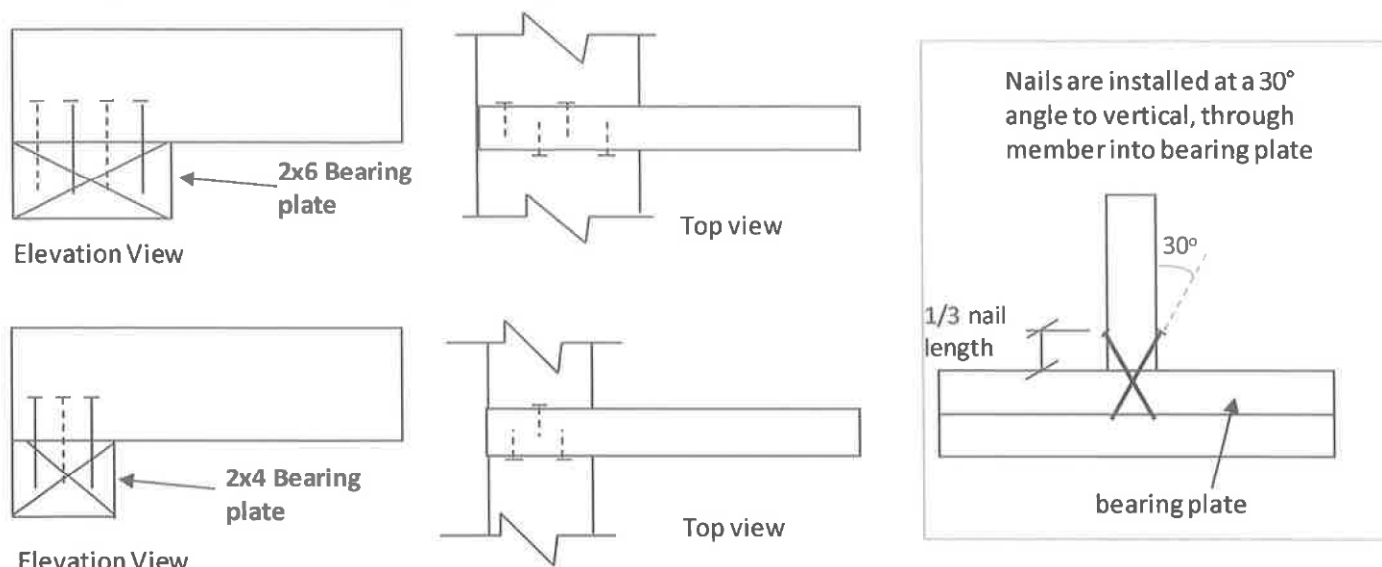
STANDARD DETAIL MSD2015-H

MHP 23018

Issued: MARCH 1, 2022
Expiry: APRIL 30, 2024

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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STANDARD DETAIL MSD2015-J

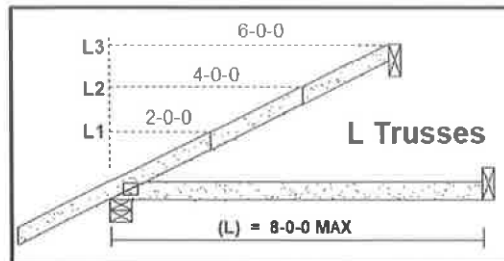
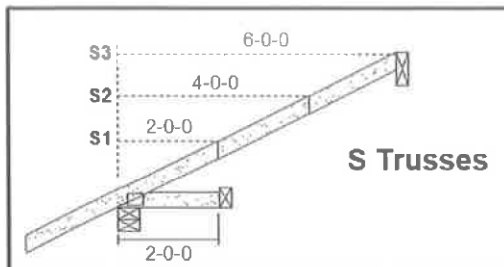
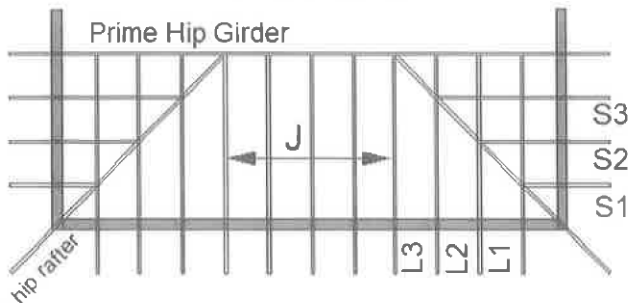
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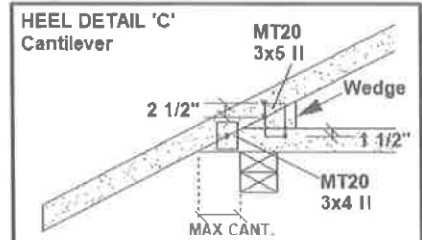
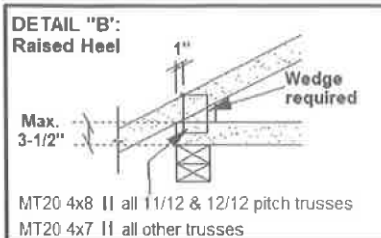
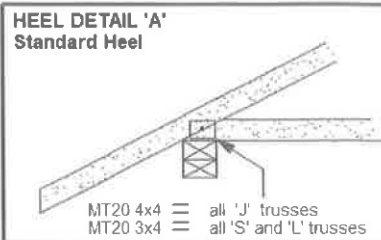
STANDARD HIP END FRAMING

PLAN VIEW



Specified Load Rating:

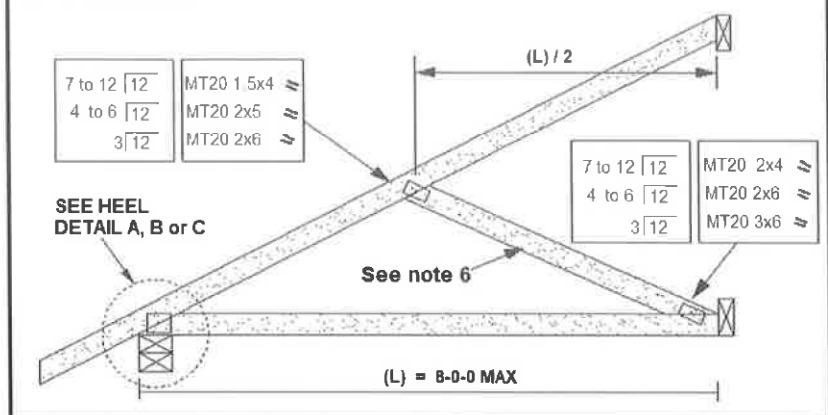
Top chord Live:	51.0 PSF or less
Top chord Dead:	6.0 PSF or less
Bottom chord Live:	0.0 PSF
Bottom chord Dead:	7.3 PSF or less



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"	3 X 5	2 X 6
9/12	8"	3 X 5	2 X 6
10/12	7 5"	3 X 5	2 X 6

J Trusses



NOTES:

1. 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.
2. Overhang length shall not exceed 24 inches.
3. All lumber shall be 2x4 SPF (or D-Fir) DRY No. 2 grade or better.
4. 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'.
5. Diagonal hip rafter design shall conform to section 9.23.14.6 of NBCC 2015.
6. 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)
7. 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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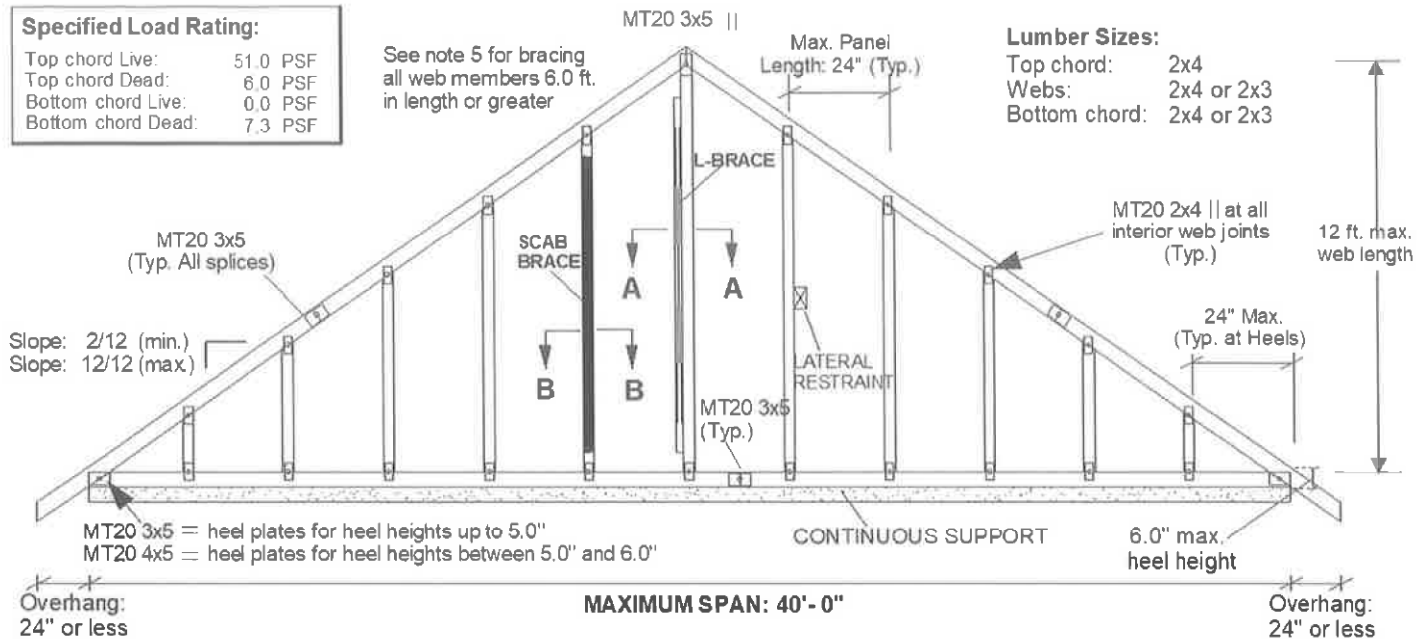
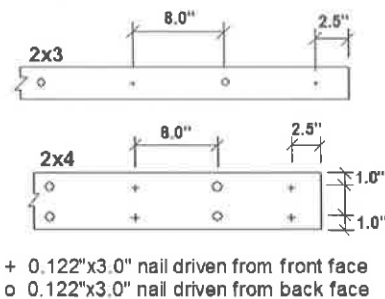
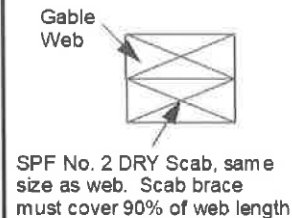
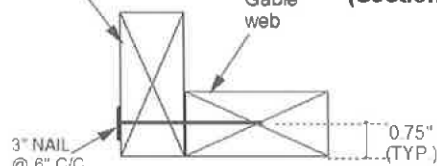
MiTek**STANDARD DETAIL MSD2015-K****MHP 23018**Issued: **MARCH 1, 2022**Expiry: **APRIL 30, 2024****STANDARD GABLE END DETAIL****Specified Load Rating:**

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)****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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