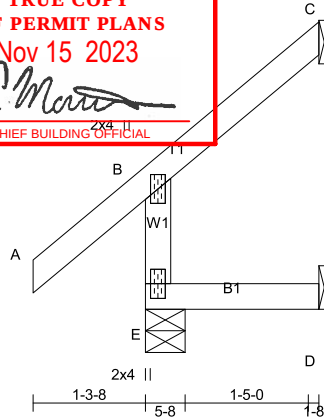


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-065	J07	3	1	TRUSS DESC.	

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Wed Jul 12 08:38:53 2023 Page 1
ID:Ri7d3... 617B... 1002... 2F... 81... 3MZ8kYmYSUGAXDiGyD1VxEDr5OyytOW



TOTAL WEIGHT = 3 X 9 = 26 lb

LUMBER					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER								DESIGN CRITERIA				[M]	
N. L. G. A. RULES		CHORDS		SIZE	LUMBER	DESCR.	BEARINGS								SPECIFIED LOADS:			
E - B	2x4	DRY	No.2	SPF	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG		TOP CH. LL = 34.8 PSF					
A - C	2x4	DRY	No.2	SPF	JT VERT HORZ		DOWN HORZ		UPLIFT		IN-SX		DL = 6.0 PSF					
E - D	2x4	DRY	No.2	SPF	E 334 0		334 0 0		5-8 1-8				BOT CH. LL = 0.0 PSF					
DRY: SEASONED LUMBER.					C 90 0		90 0 0		1-8 1-8				DL = 7.3 PSF					

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		

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	230	183 / 0	0 / 0	0 / 0	0 / 0	47 / 0	0 / 0
C	62	53 / 0	0 / 0	0 / 0	0 / 0	9 / 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 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (5)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO		FROM TO			FR-TO		
E-B	-314 / 0	0.0	0.0	0.01 (4)	7.81		
A-B	0 / 53	-119.4	-119.4	0.16 (1)	10.00		
B-C	-19 / 0	-119.4	-119.4	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 DESIGN

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, NBC-2019AE
- 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=0.16/0.97 (A-B:1), BC=0.02/0.97 (D-E:4),
WB=0.00/0.97 (n/a:0), SSI=0.10/1.00 (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= 0.22 (B) (INPUT = 0.90)
JSI METAL= 0.17 (B) (INPUT = 1.00)



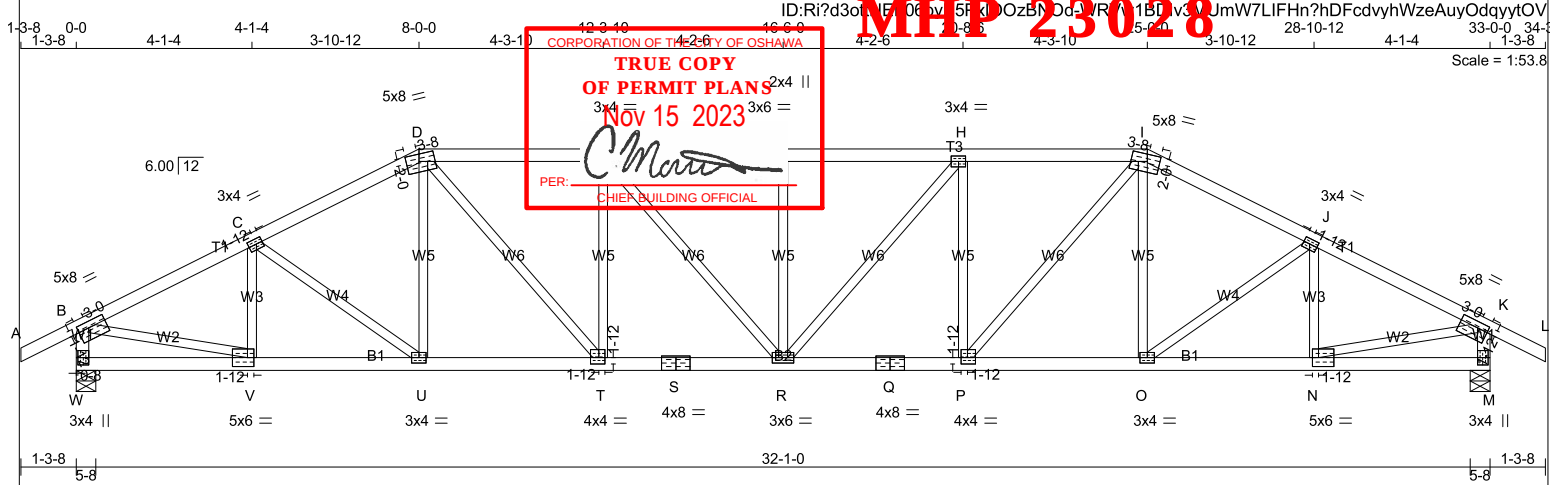
JULY 12, 2023

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



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-065	T01	1	1	TRUSS DESC.	

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Wed Jul 12 08:38:54 2023 Page 1



TOTAL WEIGHT = 139 lb

LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
F - I	2x4	DRY	No.2
I - L	2x4	DRY	No.2
W - B	2x4	DRY	No.2
M - K	2x4	DRY	No.2
W - S	2x4	DRY	No.2
S - Q	2x4	DRY	No.2
Q - M	2x4	DRY	No.2

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMVW-t	MT20	5.0	8.0	1.75	3.00
C TMWW-t	MT20	3.0	4.0	1.50	1.75
D TTWW-m	MT20	5.0	8.0	2.00	3.50
E TMWW-t	MT20	3.0	4.0		
F TS-t	MT20	3.0	6.0		
G TMW+w	MT20	2.0	4.0		
H TMWW-t	MT20	3.0	4.0		
I TTWW-m	MT20	5.0	8.0	2.00	3.50
J TMWW-t	MT20	3.0	4.0	1.50	1.75
K TMVW-t	MT20	5.0	8.0	1.75	3.00
M BMV1+p	MT20	3.0	4.0	2.00	
N BMWW-t	MT20	5.0	6.0	2.50	1.75
O BMWW-t	MT20	3.0	4.0		
P BMWW-t	MT20	4.0	4.0	1.75	1.75
Q BS-t	MT20	4.0	8.0		
R BMWW-t	MT20	3.0	6.0		
S BS-t	MT20	4.0	8.0		
T BMWW-t	MT20	4.0	4.0	1.75	1.75
U BMWW-t	MT20	3.0	4.0		
V BMWW-t	MT20	5.0	6.0	2.50	1.75
W BMV1+p	MT20	3.0	4.0	2.00	0.50

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

	FACTORED	MAXIMUM FACTORED	INPUT	REQRD
GROSS REACTION	GROSS REACTION	BRG	BRG	
JT VERT HORZ	DOWN HORZ	UPLIFT	IN-SX	
W 2434 0	2434 0	0	5-8	4-7
M 2434 0	2434 0	0	5-8	4-7

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
W	1698	1243 / 0	0 / 0	0 / 0	0 / 0	455 / 0	0 / 0
M	1698	1243 / 0	0 / 0	0 / 0	0 / 0	455 / 0	0 / 0

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

BRACINGTOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.08 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
A-B	0 / 36	-119.4 -119.4	0.16 (1)	10.00	V-C	-539 / 0	0.10 (1)
B-C	-3188 / 0	-119.4 -119.4	0.45 (1)	3.49	C-U	-46 / 0	0.02 (1)
C-D	-3194 / 0	-119.4 -119.4	0.44 (1)	3.49	U-D	0 / 116	0.03 (4)
D-E	-3642 / 0	-119.4 -119.4	0.51 (1)	3.20	D-T	0 / 1217	0.27 (1)
E-F	-3872 / 0	-119.4 -119.4	0.53 (1)	3.08	T-E	-837 / 0	0.33 (1)
F-G	-3872 / 0	-119.4 -119.4	0.53 (1)	3.08	E-R	0 / 352	0.08 (1)
G-H	-3872 / 0	-119.4 -119.4	0.53 (1)	3.08	R-G	-461 / 0	0.18 (1)
H-I	-3642 / 0	-119.4 -119.4	0.51 (1)	3.20	R-H	0 / 352	0.08 (1)
I-J	-3194 / 0	-119.4 -119.4	0.44 (1)	3.49	P-H	-837 / 0	0.33 (1)
J-K	-3188 / 0	-119.4 -119.4	0.45 (1)	3.49	P-I	0 / 1217	0.27 (1)
K-L	0 / 36	-119.4 -119.4	0.16 (1)	10.00	O-I	0 / 116	0.03 (4)
W-B	-2394 / 0	0.0	0.0 0.24 (1)	5.46	Q-J	-46 / 0	0.02 (1)
M-K	-2394 / 0	0.0	0.0 0.24 (1)	5.46	N-J	-539 / 0	0.10 (1)
					B-V	0 / 2933	0.66 (1)
					N-K	0 / 2933	0.66 (1)
W-V	0 / 0	-18.2 -18.2	0.07 (4)	10.00			
V-U	0 / 2871	-18.2 -18.2	0.50 (1)	10.00			
U-T	0 / 2836	-18.2 -18.2	0.50 (1)	10.00			
T-S	0 / 3642	-18.2 -18.2	0.63 (1)	10.00			
S-R	0 / 3642	-18.2 -18.2	0.63 (1)	10.00			
R-Q	0 / 3642	-18.2 -18.2	0.63 (1)	10.00			
Q-P	0 / 3642	-18.2 -18.2	0.63 (1)	10.00			
P-O	0 / 2836	-18.2 -18.2	0.50 (1)	10.00			
O-N	0 / 2871	-18.2 -18.2	0.50 (1)	10.00			
N-M	0 / 0	-18.2 -18.2	0.07 (4)	10.00			

DESIGN CRITERIA**SPECIFIED LOADS:**

TOP CH. LL = 34.8 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.3 PSF
TOTAL LOAD = 48.1 PSF

SPACING = 24.0 IN. C/CLOADING IN FLAT SECTION BASED ON A
SLOPE OF 2.00/12 MINIMUMTHIS TRUSS IS DESIGNED FOR RESIDENTIAL
OR SMALL BUILDING REQUIREMENTS OF
PART 9, NBC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, NBC-2019AE
- 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 (1.10")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.23")
ALLOWABLE DEFL.(TL) = L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.39")

CSI: TC=0.53/0.97 (G-H:1), BC=0.63/0.97 (R-T:1)
, WB=0.66/0.97 (B-V:1), SSI=0.24/1.00 (H-I:1)DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (R) (INPUT = 0.90)
JSI METAL= 0.81 (S) (INPUT = 1.00)

JULY 12, 2023

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



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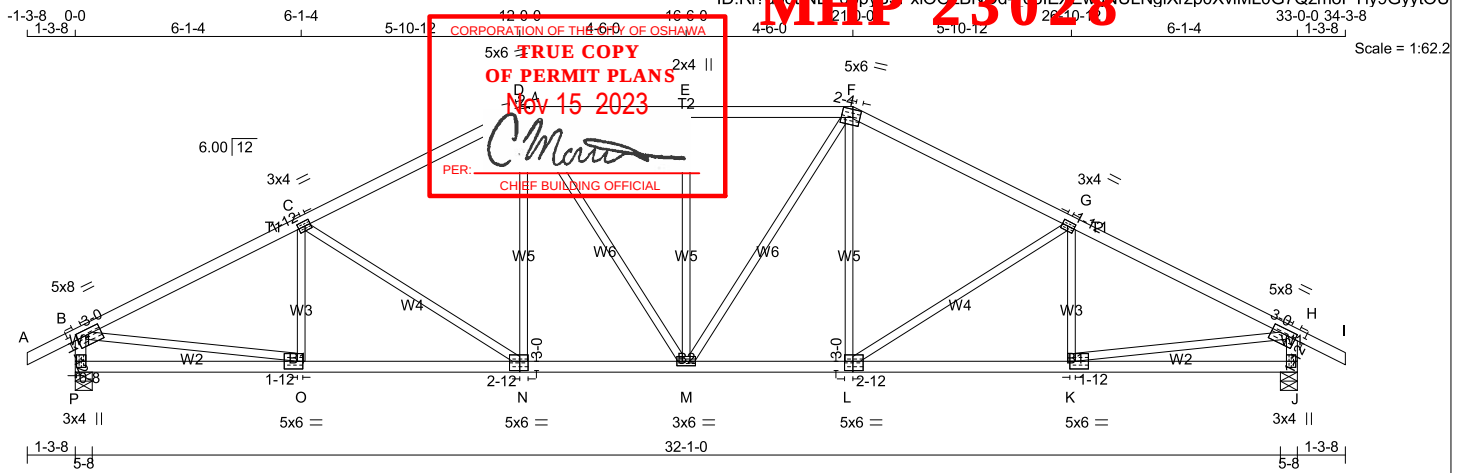
JULY 12, 2023

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ENGINEERING NOTES: TRUSSES. THE NOTE PAGE
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CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.**



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-065	T03	1	1	TRUSS DESC.	

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Wed Jul 12 08:38:55 2023 Page 1



TOTAL WEIGHT = 139 lb

LUMBER

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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	8.0	1.75	3.00
C	TMVW-t	MT20	3.0	4.0	1.50	1.75
D	TTWW-m	MT20	5.0	6.0	2.50	2.25
E	TMVW-w	MT20	2.0	4.0		
F	TTWW-m	MT20	5.0	6.0	2.50	2.25
G	TMVW-t	MT20	3.0	4.0	1.50	1.75
H	TMVW-t	MT20	5.0	8.0	1.75	3.00
J	BMV1+p	MT20	3.0	4.0	2.00	
K	BMVW-t	MT20	5.0	6.0	2.50	1.75
L	BSWW-t	MT20	5.0	6.0	3.00	2.75
M	BMVWW-t	MT20	3.0	6.0		
N	BSWW-t	MT20	5.0	6.0	3.00	2.75
O	BMVW-t	MT20	5.0	6.0	2.50	1.75
P	BMV1+p	MT20	3.0	4.0	2.00	0.50

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

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
P	2434	0	2434	0
J	2434	0	2434	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	1698	1243 / 0	0 / 0	0 / 0	0 / 0	455 / 0	0 / 0
J	1698	1243 / 0	0 / 0	0 / 0	0 / 0	455 / 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 = 2.98 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 36	-119.4	-119.4	0.16 (1)	10.00	O-C	-300 / 36
B-C	-3353 / 0	-119.4	-119.4	0.78 (1)	2.98	C-N	-611 / 0
C-D	-2858 / 0	-119.4	-119.4	0.70 (1)	3.31	N-D	0 / 413
D-E	-2772 / 0	-119.4	-119.4	0.39 (1)	3.77	D-M	0 / 446
E-F	-2772 / 0	-119.4	-119.4	0.39 (1)	3.77	M-E	-652 / 0
F-G	-2858 / 0	-119.4	-119.4	0.70 (1)	3.31	M-F	0 / 446
G-H	-3353 / 0	-119.4	-119.4	0.78 (1)	2.98	L-F	0 / 413
H-I	0 / 36	-119.4	-119.4	0.16 (1)	10.00	L-G	-611 / 0
P-B	-2386 / 0	0.0	0.0	0.24 (1)	5.46	K-G	-300 / 36
J-H	-2386 / 0	0.0	0.0	0.24 (1)	5.46	B-O	0 / 3062
P-O	0 / 0	-18.2	-18.2	0.18 (4)	10.00	K-H	0 / 3062
O-N	0 / 3032	-18.2	-18.2	0.57 (1)	10.00		
N-M	0 / 2527	-18.2	-18.2	0.45 (1)	10.00		
M-L	0 / 2527	-18.2	-18.2	0.45 (1)	10.00		
L-K	0 / 3032	-18.2	-18.2	0.57 (1)	10.00		
K-J	0 / 0	-18.2	-18.2	0.18 (4)	10.00		

DESIGN CRITERIA**SPECIFIED LOADS:**

TOP CH.	LL	=	34.8	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.3	PSF
TOTAL LOAD	=	48.1	PSF	

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, NBC-2019AE
- 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) = $L/360$ (1.10")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.17")
ALLOWABLE DEFL.(TL) = $L/360$ (1.10")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.30")

CSI: TC=0.78/0.97 (B-C:1) , BC=0.57/0.97 (N-O:1)
WB=0.69/0.97 (B-O:1) , SSI=0.31/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (N) (INPUT = 0.90)
JSI METAL= 0.69 (O) (INPUT = 1.00)



JULY 12, 2023

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



MHP-23028

Version 8.630 S Mar 22 2023 MITek Industries, Inc. Wed Jul 12 08:38:56 2023 Page 1
ID: R:\V3\truss\06_V_5PxiOzB\LO_qcGRTfQgcC?phjPgKF46lcvQc79P3xeCRVijyytOT

Scale = 1:72.7

TRUE COPY OF PERMIT PLANS
Nov 15 2023
C. MORA
CHIEF BUILDING OFFICIAL

LUMBER
N.L.G.A. RULES
CHORDS SIZE LUMBER DESCR.
A - C 2x4 DRY No.2 SPF
C - F 2x4 DRY No.2 SPF
F - G 2x4 DRY No.2 SPF
G - J 2x4 DRY No.2 SPF
J - L 2x4 DRY No.2 SPF
V - B 2x4 DRY No.2 SPF
M - K 2x4 DRY No.2 SPF
V - R 2x4 DRY No.2 SPF
R - P 2x4 DRY No.2 SPF
P - M 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 TMW-t MT20 5.0 8.0 1.75 3.00
C TS-t MT20 3.0 6.0
D E.H.I
D TMW-t MT20 3.0 4.0 1.50 1.75
F TTWW-m MT20 4.0 6.0 1.75 2.25
G TTW-m MT20 4.0 5.0
J TS-t MT20 3.0 6.0
K TMW-t MT20 5.0 8.0 1.75 3.00
M BMV+p MT20 3.0 4.0 2.00
N BMWW-t MT20 5.0 6.0 2.50 1.75
O BMWW-t MT20 3.0 4.0
R BS-t MT20 3.0 6.0
Q BMWWW-t MT20 4.0 6.0
S BS-t MT20 3.0 6.0
T BMWW+t MT20 3.0 4.0
S BMWW-t MT20 3.0 4.0
U BMWW-t MT20 5.0 6.0 2.50 1.75
V BMV+p MT20 3.0 4.0 2.00 0.50

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER
BEARINGS
FACTORED MAXIMUM FACTORED INPUT REQ'D
GROSS REACTION GROSS REACTION BRG BRG
JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX
V 2434 0 2434 0 0 5-8 4-7
M 2434 0 2434 0 0 5-8 4-7
UNFACTORED REACTIONS
1ST LCASE MAX/MIN COMPONENT REACTIONS
JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL
V 1698 1243 / 0 0 / 0 0 / 0 0 455 / 0 0 / 0
M 1698 1243 / 0 0 / 0 0 / 0 0 455 / 0 0 / 0
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) V, M
BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.44 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)
C H O R D S W E B S
MEMB. MAX. FACTORED FORCE (LBS) VERT. LOAD (PLF) MAX. FACTORED CSI (LC) UNBRACED LENGTH FR-TO MEMB. MAX. FACTORED FORCE (LBS) MAX. FACTORED CSI (LC)
FR-TO FROM TO
A-B 0 / 36 -119.4 -119.4 0.16 (1) 10.00 U-D -440 / 0 0.09 (1)
B-C -3260 / 0 -119.4 -119.4 0.48 (1) 3.44 D-T -173 / 0 0.09 (1)
C-D -3260 / 0 -119.4 -119.4 0.48 (1) 3.44 T-E 0 / 186 0.04 (1)
D-E -3124 / 0 -119.4 -119.4 0.39 (1) 3.61 E-S -729 / 0 0.75 (1)
E-F -2623 / 0 -119.4 -119.4 0.38 (1) 3.90 S-F 0 / 643 0.14 (1)
F-G -2333 / 0 -119.4 -119.4 0.46 (1) 3.97 F-Q 0 / 2 0.00 (1)
G-H -2624 / 0 -119.4 -119.4 0.38 (1) 3.90 Q-G 0 / 646 0.15 (1)
H-I -3123 / 0 -119.4 -119.4 0.39 (1) 3.61 Q-H -727 / 0 0.75 (1)
I-J -3260 / 0 -119.4 -119.4 0.48 (1) 3.44 O-H 0 / 184 0.04 (1)
J-K -3260 / 0 -119.4 -119.4 0.48 (1) 3.44 O-I -174 / 0 0.09 (1)
K-L 0 / 36 -119.4 -119.4 0.16 (1) 10.00 N-I -439 / 0 0.09 (1)
V-B -2391 / 0 0.0 0.0 0.24 (1) 5.46 B-U 0 / 2982 0.67 (1)
M-K -2392 / 0 0.0 0.0 0.24 (1) 5.46 N-K 0 / 2982 0.67 (1)
V-U 0 / 0 -18.2 -18.2 0.09 (4) 10.00
U-T 0 / 2935 -18.2 -18.2 0.52 (1) 10.00
T-S 0 / 2794 -18.2 -18.2 0.49 (1) 10.00
S-R 0 / 2332 -18.2 -18.2 0.43 (1) 10.00
R-Q 0 / 2332 -18.2 -18.2 0.43 (1) 10.00
Q-P 0 / 2794 -18.2 -18.2 0.50 (1) 10.00
P-O 0 / 2794 -18.2 -18.2 0.50 (1) 10.00
O-N 0 / 2936 -18.2 -18.2 0.52 (1) 10.00
N-M 0 / 0 -18.2 -18.2 0.09 (4) 10.00

DESIGN CRITERIA
SPECIFIED LOADS:
TOP CH. LL = 34.8 PSF DL = 6.0 PSF
BOT CH. LL = 0.0 PSF DL = 7.3 PSF
TOTAL LOAD = 48.1 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 , NBC-2019AE
- 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 (1.10")
CALCULATED VERT. DEFL.(LL) = L/999 (0.16")
ALLOWABLE DEFL.(TL)= L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/999 (0.27")
CSI: TC=0.48/0.97 (I-K:1) , BC=0.52/0.97 (N-O:1) , WB=0.75/0.97 (E-S:1) , SSI=0.23/1.00 (I-K:1)
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10
COMPANION LIVE LOAD FACTOR = 1.00
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873
PLATE PLACEMENT TOL. = 0.250 inches
PLATE ROTATION TOL. = 5.0 Deg.
JSI GRIP= 0.89 (S) (INPUT = 0.90)
JSI METAL= 0.80 (P) (INPUT = 1.00)

TOTAL WEIGHT = 145 lb [M][F]

JULY 12, 2023

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: TRUSSES. 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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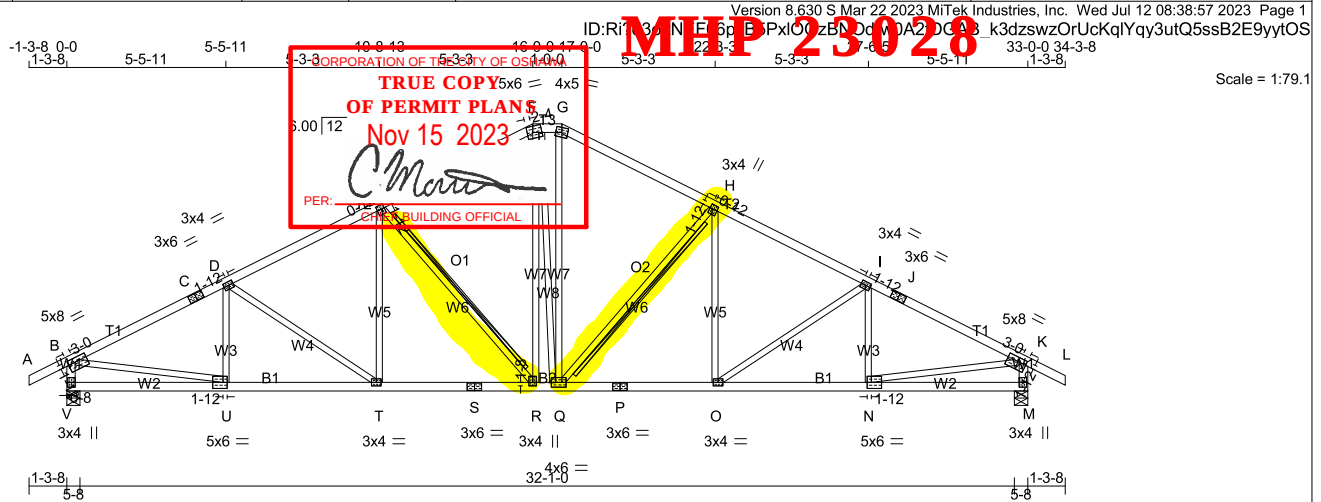


JULY 12, 2023

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



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-065	T05	1	1	TRUSS DESC.	



TOTAL WEIGHT = 152 lb

LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - F	2x4	DRY	No.2	SPF
F - G	2x4	DRY	No.2	SPF
G - J	2x4	DRY	No.2	SPF
J - L	2x4	DRY	No.2	SPF
V - B	2x4	DRY	No.2	SPF
M - K	2x4	DRY	No.2	SPF
V - S	2x4	DRY	No.2	SPF
S - P	2x4	DRY	No.2	SPF
P - M	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	8.0	1.75	3.00
C	TS-t	MT20	3.0	6.0		
D	TMVW-t	MT20	3.0	4.0	1.50	1.75
E	TMVW-t	MT20	3.0	4.0	1.75	0.75
F	TTWW-m	MT20	5.0	6.0	2.50	2.25
G	TTWW-m	MT20	4.0	5.0		
H	TMVW-t	MT20	3.0	4.0	1.75	0.75
I	TMVW-t	MT20	3.0	4.0	1.50	1.75
J	TS-t	MT20	3.0	6.0		
K	TMVW-t	MT20	5.0	8.0	1.75	3.00
M	BMV1+p	MT20	3.0	4.0	2.00	
N	BMVW-t	MT20	5.0	6.0	2.50	1.75
O	BMVW-t	MT20	3.0	4.0		
P	BS-t	MT20	3.0	6.0		
Q	BMVW-t	MT20	4.0	6.0		
R	BMVW-t	MT20	3.0	4.0	1.50	1.50
S	BS-t	MT20	3.0	6.0		
T	BMVW-t	MT20	3.0	4.0		
U	BMVW-t	MT20	5.0	6.0	2.50	1.75
V	BMV1+p	MT20	3.0	4.0	2.00	0.50

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

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	DOWN	UP	IN-SX
V	2434	0	2434	0
M	2434	0	2434	0

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
V	1698	1243 / 0	0 / 0	0 / 0	0 / 0	455 / 0	0 / 0
M	1698	1243 / 0	0 / 0	0 / 0	0 / 0	455 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.27 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

2x4 DRY SPF No.2 T-BRACE AT E-R, H-Q

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	0 / 36	-119.4 -119.4	0.16 (1)	10.00	U-D	-370 / 0	0.09 (1)
B-C	-3305 / 0	-119.4 -119.4	0.61 (1)	3.27	D-T	-338 / 0	0.25 (1)
C-D	-3305 / 0	-119.4 -119.4	0.61 (1)	3.27	T-E	0 / 299	0.07 (1)
D-E	-3020 / 0	-119.4 -119.4	0.50 (1)	3.55	E-R	-914 / 0	0.47 (1)
E-F	-2381 / 0	-119.4 -119.4	0.47 (1)	3.95	R-F	0 / 650	0.15 (1)
F-G	-2121 / 0	-119.4 -119.4	0.06 (1)	4.61	F-Q	0 / 93	0.02 (1)
G-H	-2390 / 0	-119.4 -119.4	0.47 (1)	3.94	Q-G	0 / 746	0.17 (1)
H-I	-3016 / 0	-119.4 -119.4	0.50 (1)	3.55	Q-H	-897 / 0	0.46 (1)
I-J	-3307 / 0	-119.4 -119.4	0.61 (1)	3.27	O-H	0 / 280	0.06 (1)
J-K	-3307 / 0	-119.4 -119.4	0.61 (1)	3.27	O-I	-343 / 0	0.25 (1)
K-L	0 / 36	-119.4 -119.4	0.16 (1)	10.00	N-I	-364 / 0	0.09 (1)
V-B	-2387 / 0	0.0	0.0 0.24 (1)	5.46	B-U	0 / 3016	0.68 (1)
M-K	-2388 / 0	0.0	0.0 0.24 (1)	5.46	N-K	0 / 3018	0.68 (1)
V-U	0 / 0	-18.2 -18.2	0.11 (4)	10.00			
U-T	0 / 2980	-18.2 -18.2	0.54 (1)	10.00			
T-S	0 / 2701	-18.2 -18.2	0.49 (1)	10.00			
S-R	0 / 2701	-18.2 -18.2	0.49 (1)	10.00			
R-Q	0 / 2111	-18.2 -18.2	0.44 (1)	10.00			
Q-P	0 / 2698	-18.2 -18.2	0.54 (1)	10.00			
P-O	0 / 2698	-18.2 -18.2	0.54 (1)	10.00			
O-N	0 / 2981	-18.2 -18.2	0.53 (1)	10.00			
N-M	0 / 0	-18.2 -18.2	0.11 (4)	10.00			

DESIGN CRITERIA**SPECIFIED LOADS:**

TOP CH. LL = 34.8 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.3 PSF
TOTAL LOAD = 48.1 PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, NBC-2019AE
- 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 (1.10")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.17")
ALLOWABLE DEFL.(TL) = L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.30")

CSI: TC=0.61/0.97 (I-K:1), BC=0.54/0.97 (O-Q:1),
WB=0.68/0.97 (K-N:1), SSI=0.27/1.00 (I-K: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= 0.87 (M) (INPUT = 0.90)
JSI METAL= 0.87 (S) (INPUT = 1.00)



JULY 12, 2023

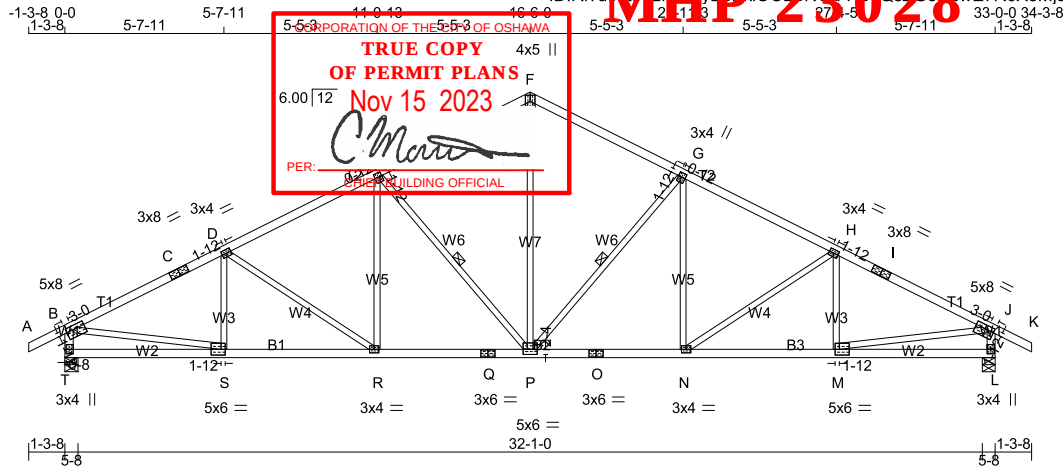
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: TRUSSES. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-065	T06	8	1	TRUSS DESC.	

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Wed Jul 12 08:38:58 2023 Page 1

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Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Wed Jul 12 08:38:59 2023 Page 1



**TRUE COPY
OF PERMIT PLANS**

Nov 15 - 2023

PER: *C. Moore*
CHIEF BUILDING OFFICIAL

TOTAL WEIGHT = 2 X 154 = 309 lb

LUMBER					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA				[M] [F]
N. L. G. A. RULES																			
CHORDS		SIZE	LUMBER	DESCR.	<u>BEARINGS</u>										SPECIFIED LOADS:				
A - D	2x4	DRY	No.2	SPF	FACTORED		MAXIMUM FACTORED		INPUT		REQRD		TOP CH. LL = 34.8 PSF						
D - F	2x4	DRY	2100F 1.8E	SPF	GROSS REACTION		GROSS REACTION		BRG		BRG		DL = 6.0 PSF						
F - I	2x4	DRY	No.2	SPF	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	BOT CH. LL = 0.0 PSF						
R - B	2x4	DRY	No.2	SPF	R	2436	0	2436	0	0	5-8	4-7	DL = 7.3 PSF						
J - H	2x4	DRY	No.2	SPF	J	2436	0	2436	0	0	5-8	4-7	TOTAL LOAD = 48.1 PSF						
R - O	2x4	DRY	No.2	SPF															
O - M	2x4	DRY	No.2	SPF															
M - J	2x4	DRY	No.2	SPF															
ALL WEBS EXCEPT					<u>UNFACTORED REACTIONS</u>										<u>SPACING = 24.0 IN. C/C</u>				
					1ST LCASE MAX./MIN. COMPONENT REACTIONS														
					JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL							
					R	1700	1245 / 0	0 / 0	0 / 0	0 / 0	455 / 0	0 / 0							
					J	1700	1245 / 0	0 / 0	0 / 0	0 / 0	455 / 0	0 / 0							
															LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM				

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMWV-t	MT20	6.0	6.0	1.50 2.75
C	TMWVW-t	MT20	3.0	4.0	1.50 1.50
D	TTWVW+m	MT20	5.0	6.0	2.25 1.75
E	TMW-w	MT20	2.0	4.0	
F	TTWVW+m	MT20	5.0	6.0	2.25 1.75
G	TMWVW-t	MT20	3.0	4.0	1.50 1.50
H	TMWV-t	MT20	6.0	6.0	1.50 2.75
J	BMV1+p	MT20	3.0	4.0	2.00
K	BMWVW-t	MT20	3.0	8.0	1.50 3.00
L	BMWVW-t	MT20	3.0	4.0	
M	BS-t	MT20	3.0	6.0	
N	BMWVWVW-t	MT20	3.0	8.0	
O	BS-t	MT20	3.0	6.0	
P	BMWVW-t	MT20	3.0	4.0	
Q	BMWVW-t	MT20	3.0	8.0	1.50 3.00
R	BMV1+p	MT20	3.0	4.0	2.00 0.50

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

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
R	2436	0	2436	0	0	5-8	4-7
J	2436	0	2436	0	0	5-8	4-7

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	1700	1245 / 0	0 / 0	0 / 0	0 / 0	455 / 0	0 / 0
J	1700	1245 / 0	0 / 0	0 / 0	0 / 0	455 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.99 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY
APPLIED.

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

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

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			
MAX. FACTORED		FACTORED		MAX. FACTORED			
MEMB.	FORCE	VERT. LOAD	MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
A-B	0 / 49	-119.4	-119.4	0.16 (1)	10.00	Q-C	-440 / 0
B-C	-2466 / 0	-119.4	-119.4	0.40 (1)	3.99	C-P	-189 / 0
C-D	-2382 / 0	-119.4	-119.4	0.39 (1)	4.05	P-D	0 / 251
D-E	-2449 / 0	-119.4	-119.4	0.62 (1)	4.42	D-N	0 / 845
E-F	-2449 / 0	-119.4	-119.4	0.62 (1)	4.42	N-E	-1095 / 0
F-G	-2382 / 0	-119.4	-119.4	0.39 (1)	4.05	N-F	0 / 845
G-H	-2466 / 0	-119.4	-119.4	0.40 (1)	3.99	L-F	0 / 251
H-I	0 / 49	-119.4	-119.4	0.16 (1)	10.00	L-G	-189 / 0
R-B	-2397 / 0	0.0	0.0	0.25 (1)	5.45	K-G	-440 / 0
J-H	-2397 / 0	0.0	0.0	0.25 (1)	5.45	B-Q	0 / 2068
						K-H	0 / 2068
R-Q	0 / 0	-18.2	-18.2	0.08 (4)	10.00		
Q-P	0 / 2002	-18.2	-18.2	0.40 (1)	10.00		
P-O	0 / 1874	-18.2	-18.2	0.42 (1)	10.00		
O-N	0 / 1874	-18.2	-18.2	0.42 (1)	10.00		
N-M	0 / 1874	-18.2	-18.2	0.42 (1)	10.00		
M-L	0 / 1874	-18.2	-18.2	0.42 (1)	10.00		
L-K	0 / 2002	-18.2	-18.2	0.40 (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 =	6.0	PSF
BOT	CH.	LL =	0.0	PSF
		DL =	7.3	PSF
TOTAL LOAD		=	48.1	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 , NBC-2019AE
- 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 (1.10")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.19")

CSI: TC=0.62/0.97 (D-E:1) , BC=0.42/0.97 (L-N:1) ,
WB=0.54/0.97 (E-N:1) , SSI=0.43/1.00 (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)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90)
JSI METAL= 0.65 (H) (INPUT = 1.00)

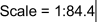


JULY 12, 2023

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CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.**



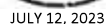
Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Wed Jul 12 08:39:01 2023 Page 1



TOTAL WEIGHT = 165 lb

DRY: SEASONED LUMBER.

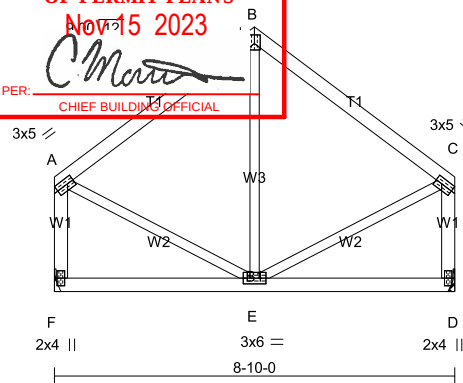
JSI GRIP= 0.89 (B) (INPUT = 0.90)
JSI METAL= 0.67 (J) (INPUT = 1.00)



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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-065	T10	2	1	TRUSS DESC.	



Scale = 1:50.8

TOTAL WEIGHT = 2 X 40 = 79 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

	FACTORED	MAXIMUM FACTORED	INPUT	REQRD
GROSS REACTION	GROSS REACTION	BRG	BRG	
JT	VERT	HORZ	DOWN	HORZ
F	608	0	608	0
D	608	0	608	0

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	425	307 / 0	0 / 0	0 / 0	0 / 0	117 / 0	0 / 0
D	425	307 / 0	0 / 0	0 / 0	0 / 0	117 / 0	0 / 0

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM	TO		FR-TO		
A-B	-314 / 0	-119.4	-119.4	0.30 (1)	6.25	E-B	-151 / 38
B-C	-314 / 0	-119.4	-119.4	0.30 (1)	6.25	A-E	0 / 280
F-A	-577 / 0	0.0	0.0	0.08 (1)	7.81	E-C	0 / 280
D-C	-577 / 0	0.0	0.0	0.08 (1)	7.81		
F-E	0 / 0	-18.2	-18.2	0.10 (4)	10.00		
E-D	0 / 0	-18.2	-18.2	0.10 (4)	10.00		

DESIGN CRITERIA**SPECIFIED LOADS:**

TOP CH.	LL	=	34.8	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.3	PSF
TOTAL LOAD	=	48.1	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, NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL) = L/360 (0.29")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL) = L/360 (0.29")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")CSI: TC=0.30/0.97 (B-C:1), BC=0.10/0.97 (E-F:4),
WB=0.08/0.97 (B-E:1), SSI=0.16/1.00 (B-C:1)DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

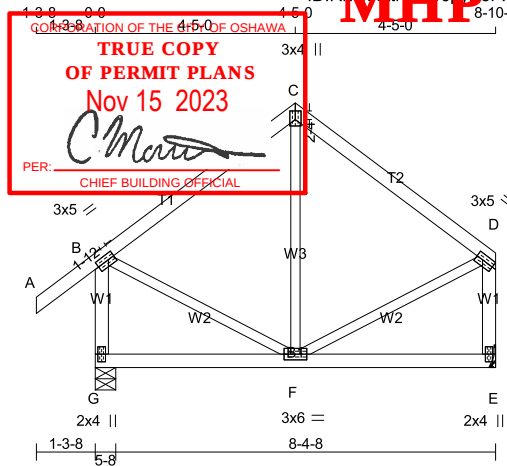
JSI GRIP= 0.48 (E) (INPUT = 0.90)
JSI METAL= 0.13 (C) (INPUT = 1.00)

JULY 12, 2023

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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-065	T11	1	1	TRUSS DESC.	



Scale = 1:50.8

TOTAL WEIGHT = 41 lb

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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	3.0	5.0	1.50	1.75
C	TTW+p	MT20	3.0	4.0	2.25	1.50
D	TMVW-t	MT20	3.0	5.0	1.50	Edge
E	BMV1+p	MT20	2.0	4.0		
F	BMVWW-t	MT20	3.0	6.0		
G	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS

	FACTORED	MAXIMUM FACTORED	INPUT	REQRD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	UP
G	773	0	773	0
E	608	0	608	0

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	538	403 / 0	0 / 0	0 / 0	0 / 0	134 / 0	0 / 0
E	425	307 / 0	0 / 0	0 / 0	0 / 0	117 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 49	-119.4	-119.4	0.16 (1)	10.00	F-C	-151 / 38
B-C	-314 / 0	-119.4	-119.4	0.30 (1)	6.25	B-F	0 / 280
C-D	-314 / 0	-119.4	-119.4	0.30 (1)	6.25	F-D	0 / 280
G-B	-742 / 0	0.0	0.0	0.10 (1)	7.81		
E-D	-577 / 0	0.0	0.0	0.08 (1)	7.81		
G-F	0 / 0	-18.2	-18.2	0.10 (4)	10.00		
F-E	0 / 0	-18.2	-18.2	0.10 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	34.8	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.3	PSF
TOTAL LOAD	=	48.1	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, NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (0.29")
CALCULATED VERT. DEFL.(LL)= L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.29")
CALCULATED VERT. DEFL.(TL)= L/999 (0.01")

CSI: TC=0.30/0.97 (B-C:1) , BC=0.10/0.97 (F-G:4) ,
WB=0.08/0.97 (C-F:1) , SSI=0.16/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.60 (B) (INPUT = 0.90)
JSI METAL= 0.16 (D) (INPUT = 1.00)

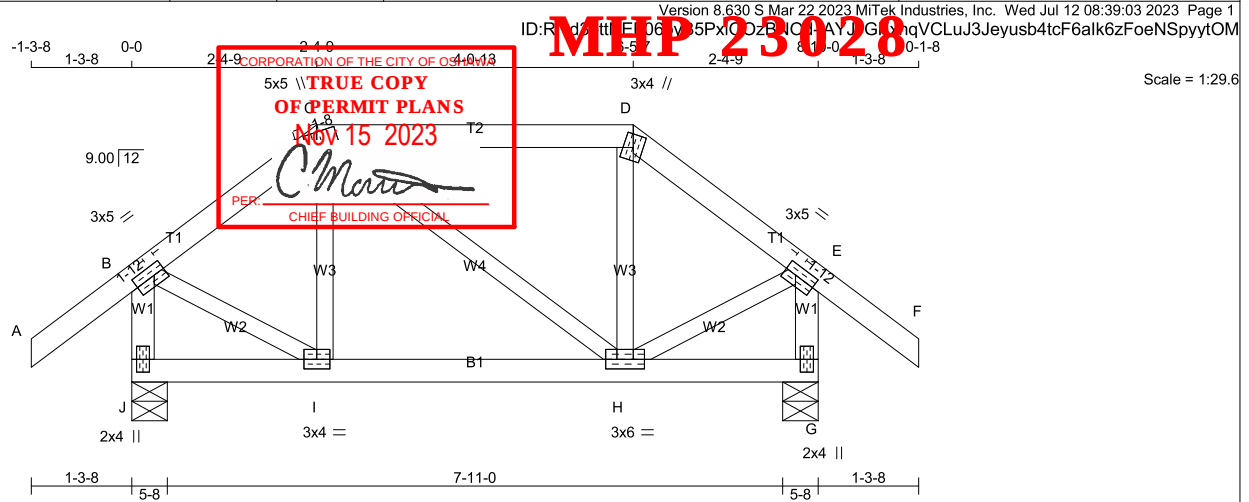


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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-065	T12	1	1	TRUSS DESC.	



TOTAL WEIGHT = 40 lb

LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	3.0	5.0	1.50	1.75
C	TTWW+m	MT20	5.0	5.0	2.25	1.50
D	TTWW+m	MT20	3.0	4.0		
E	TMVW-t	MT20	3.0	5.0	1.50	1.75
G	BMV1+p	MT20	2.0	4.0		
H	BMVWW-t	MT20	3.0	6.0		
I	BMVWW-t	MT20	3.0	4.0		
J	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	REQD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	UPLIFT
J	773	0	773	0
G	773	0	773	0

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	538	403 / 0	0 / 0	0 / 0	0 / 0	134 / 0	0 / 0
G	538	403 / 0	0 / 0	0 / 0	0 / 0	134 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	LC1	MAX. UNBRACED LENGTH	
FR-TO		FROM	TO		FR-TO				
A-B	0 / 49	-119.4	-119.4	0.16 (1)	10.00	I-C	-110 / 24	0.02 (1)	
B-C	-456 / 0	-119.4	-119.4	0.09 (1)	6.25	C-H	0 / 0	0.00 (1)	
C-D	-359 / 0	-119.4	-119.4	0.25 (1)	6.25	H-D	-110 / 24	0.02 (1)	
D-E	-455 / 0	-119.4	-119.4	0.09 (1)	6.25	B-I	0 / 403	0.09 (1)	
E-F	0 / 49	-119.4	-119.4	0.16 (1)	10.00	H-E	0 / 403	0.09 (1)	
J-B	-757 / 0	0.0	0.0	0.08 (1)	7.81				
G-E	-756 / 0	0.0	0.0	0.08 (1)	7.81				
J-I	0 / 0	-18.2	-18.2	0.04 (4)	10.00				
I-H	0 / 359	-18.2	-18.2	0.08 (1)	10.00				
H-G	0 / 0	-18.2	-18.2	0.04 (4)	10.00				

DESIGN CRITERIA**SPECIFIED LOADS:**

TOP CH.	LL	=	34.8	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.3	PSF
TOTAL LOAD	=	48.1	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, NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL) = L/360 (0.29")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL) = L/360 (0.29")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.25/0.97 (C-D:1), BC=0.08/0.97 (H-I:1),
WB=0.09/0.97 (B-I:1), SSI=0.19/1.00 (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
MT20	650	371	1747

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.69 (H) (INPUT = 0.90)
JSI METAL= 0.18 (B) (INPUT = 1.00)

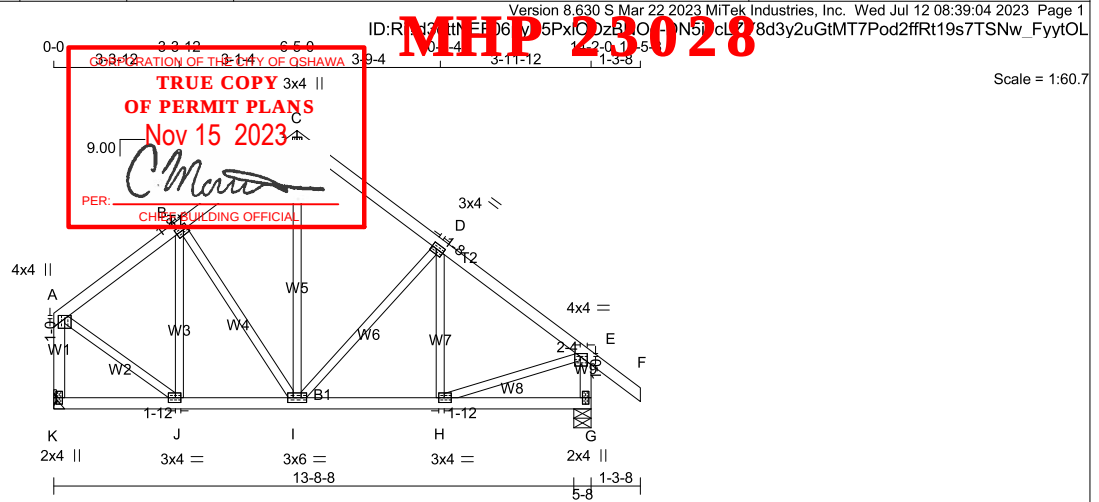


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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-065	T14	1	1	TRUSS DESC.	

**LUMBER**

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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	4.0	1.00	2.00
B	TMWW-t	MT20	3.0	4.0	1.50	1.50
C	TTW+p	MT20	3.0	4.0	2.25	1.50
D	TMWW-t	MT20	3.0	4.0	1.50	1.50
E	TMVW-p	MT20	4.0	4.0	1.00	2.25
G	BMV1+p	MT20	2.0	4.0		
H	BMWW-t	MT20	3.0	4.0	1.50	1.75
I	BMWWW-t	MT20	3.0	6.0		
J	BMWW-t	MT20	3.0	4.0	1.50	1.75
K	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	REQD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	UPLIFT
K	975	0	975	0
G	1140	0	1140	0

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
K	682	493 / 0	0 / 0	0 / 0	0 / 0	188 / 0	0 / 0
G	794	589 / 0	0 / 0	0 / 0	0 / 0	205 / 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 = 6.23 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH
FR-TO		FROM	TO		FR-TO		
A-B	-677 / 0	-119.4	-119.4	0.16 (1)	6.25	J-B	-310 / 0
B-C	-641 / 0	-119.4	-119.4	0.15 (1)	6.25	B-I	-130 / 0
C-D	-647 / 0	-119.4	-119.4	0.23 (1)	6.25	I-C	0 / 428
D-E	-873 / 0	-119.4	-119.4	0.23 (1)	6.23	I-D	-348 / 0
E-F	0 / 49	-119.4	-119.4	0.16 (1)	10.00	H-D	-139 / 32
K-A	-949 / 0	0.0	0.0	0.13 (1)	7.81	A-J	0 / 675
G-E	-1109 / 0	0.0	0.0	0.12 (1)	7.43	H-E	0 / 756
K-J	0 / 0	-18.2	-18.2	0.04 (4)	10.00		
J-I	0 / 563	-18.2	-18.2	0.11 (1)	10.00		
I-H	0 / 724	-18.2	-18.2	0.14 (1)	10.00		
H-G	0 / 0	-18.2	-18.2	0.06 (4)	10.00		

DESIGN CRITERIA**SPECIFIED LOADS:**

TOP CH.	LL	=	34.8	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.3	PSF
TOTAL LOAD	=	48.1	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, NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (0.47")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.23/0.97 (D-E:1), BC=0.14/0.97 (H-I:1), WB=0.19/0.97 (D-I:1), SSI=0.18/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (H) (INPUT = 0.90)
JSI METAL= 0.27 (E) (INPUT = 1.00)



JULY 12, 2023

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





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

TOWN OF OSHAWA CITY 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

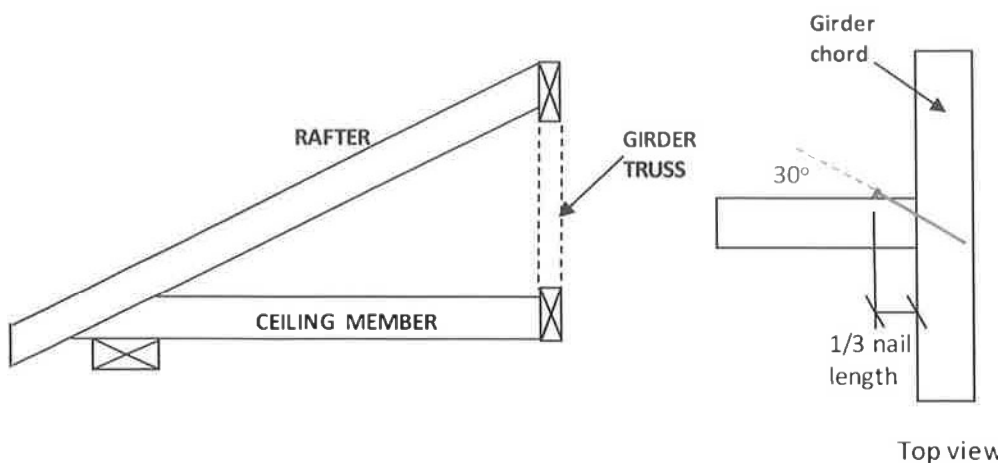


Figure 1: Toe-Nailing Rafter / Ceiling Member to Girder Truss

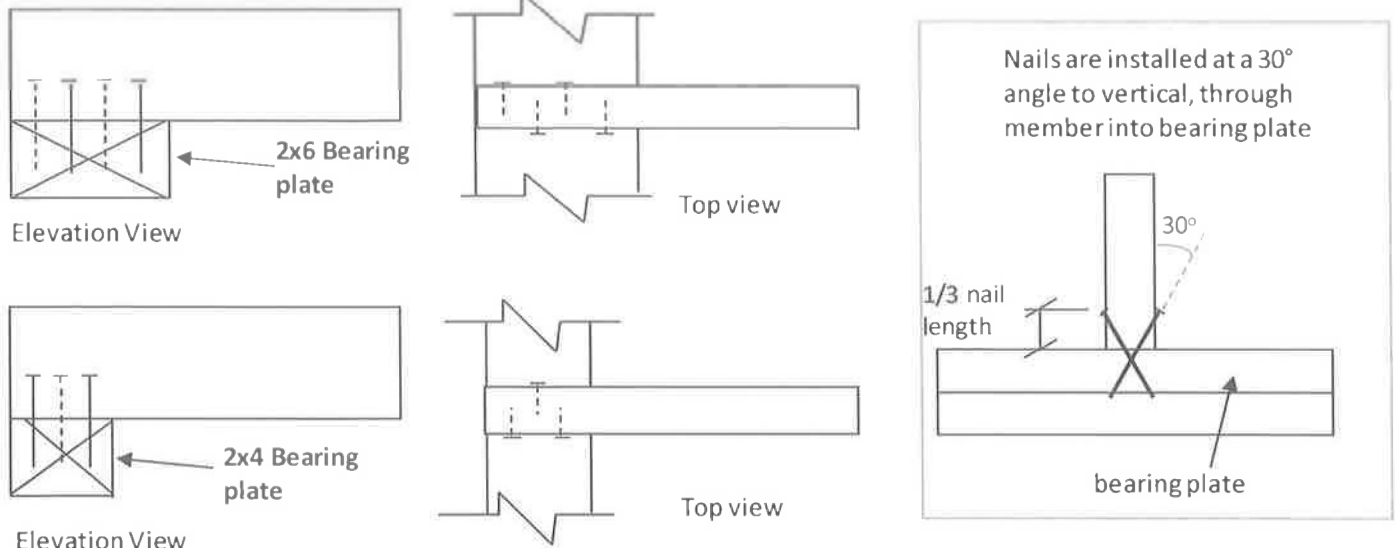




Issued: MARCH 1, 2022
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CITY DETAILS

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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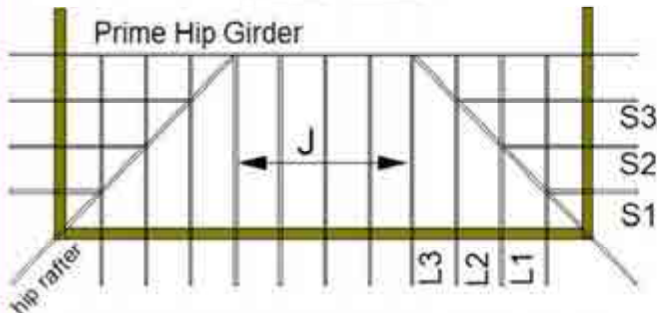
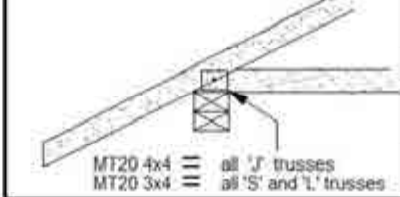


CORPORATION OF THE CITY OF OSHAWA
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OF PERMIT PLANS
Nov 15 2023

STANDARD END FRAMING

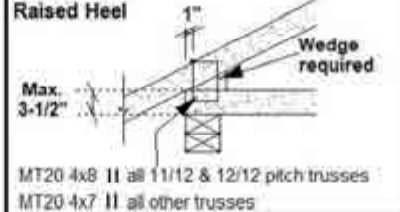
PER: *C. M...*
CHIEF BUILDING OFFICIAL

PLAN VIEW

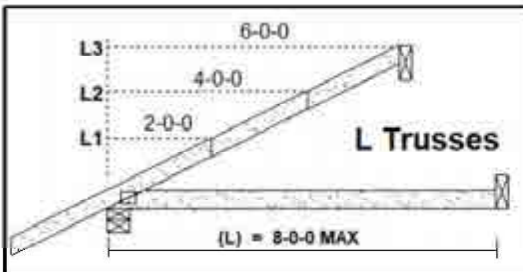
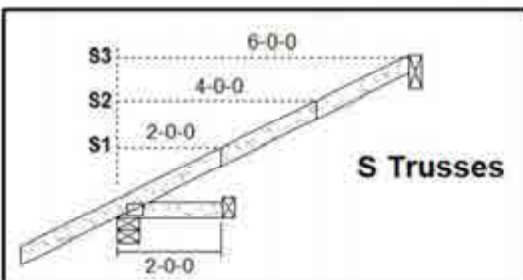
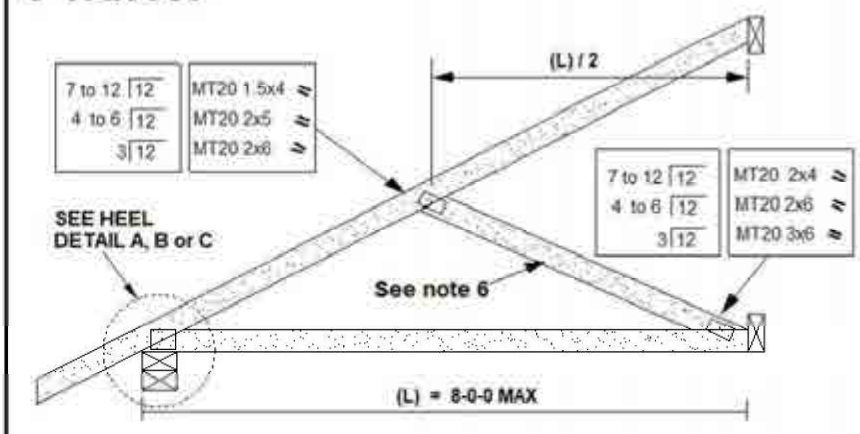
HEEL DETAIL 'A'
Standard HeelHEEL DETAIL 'C'
Cantilever

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

DETAIL 'B':
Raised Heel

J Trusses



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

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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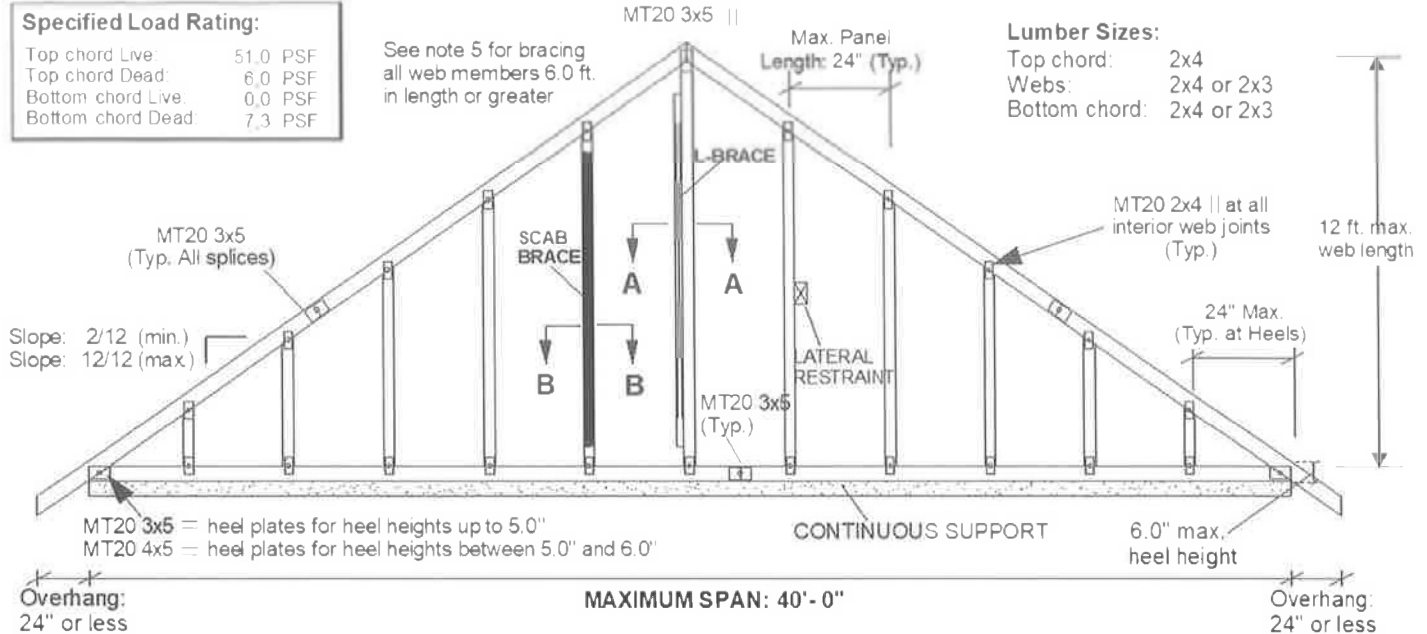
April 24, 2023

MiTek**STANDARD DETAIL MSD2015-K**
MHP 23028Issued: **MARCH 1, 2022**Expiry: **APRIL 30, 2024**CORPORATION OF THE CITY OF OSHAWA
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OF PERMIT PLANS
Nov 15 2023**STAIR LEAD DETAIL**PER: *C. M...*
CHIEF BUILDING OFFICIAL**Specified Load Rating:**

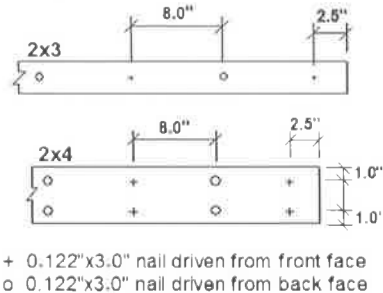
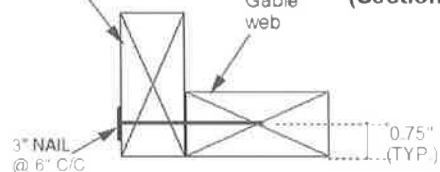
Top chord Live:	51.0 PSF
Top chord Dead:	6.0 PSF
Bottom chord Live:	0.0 PSF
Bottom chord Dead:	7.3 PSF

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)**

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

**L BRACE DETAIL (Section A-A)**

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

Notes:

1. This detail is only valid for projects conforming to **Part 9, NBCC 2015** that do not require a wind analysis to be incorporated into the design of the truss.
2. This detail is for vertical (gravity) load rating of the truss only. Truss must be continuously supported over the entire length of bottom chord.
3. Maximum web length not to exceed 12.0 ft. Spacing of gable stud webs in the truss not to exceed 24 inches cc.
4. Splice joints shall not be located in the first panel adjacent to the heel joint or peak joint.
5. Lateral restraint required at half-length of all webs over 6.0 ft. long. Alternatively install an L-Brace or scab brace as shown above. Scab braces shall be limited to 10 ft. long webs or less.
6. All plates are MITEK 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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