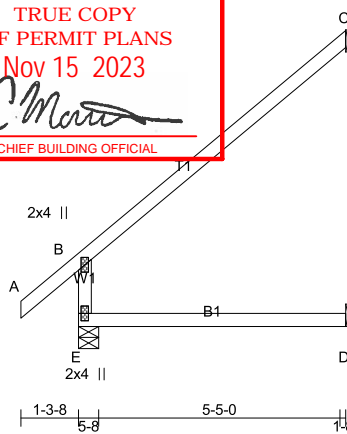


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-064	J06	11	1	TRUSS DESC.	



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ID:Ri?n8onNE0pB5PxIC02BN0dKFD2PACkYnPhnNb9AANF11RiHm37hXk006JjLvyytPk

Scale = 1:51.7



TOTAL WEIGHT = 11 X 19 = 213 lb

LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.	BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQD	SPECIFIED LOADS:	
E - B	2x4	DRY	No.2	SPF	GROSS REACTION	DOWN	GROSS REACTION	BRG	BRG	TOP CH. LL = 34.8 PSF	
A - C	2x4	DRY	No.2	SPF	VERT	HORZ	DOWN	UPLIFT	IN-SX	DL = 6.0 PSF	
E - D	2x4	DRY	No.2	SPF						BOT CH. LL = 0.0 PSF	
DRY: SEASONED LUMBER.										DL = 7.3 PSF	
										TOTAL LOAD = 48.1 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	469	357 / 0	0 / 0	0 / 0	0 / 0	112 / 0	0 / 0	
C	184	157 / 0	0 / 0	0 / 0	0 / 0	27 / 0	0 / 0	
D	37	0 / 0	0 / 0	0 / 0	0 / 0	37 / 0	0 / 0	

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 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)	LC1 MAX	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO		FROM TO			FR-TO		
E-B	-613 / 0	0.0 0.0	0.12 (4)	7.81			
A-B	0 / 53	-119.4 -119.4	0.16 (1)	10.00			
B-C	-57 / 0	-119.4 -119.4	0.74 (1)	6.25			
E-D	0 / 0	-18.2 -18.2	0.14 (4)	10.00			

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 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.74/0.97 (B-C:1) , BC=0.14/0.97 (D-E:4) ,
WB=0.00/0.97 (n/a:0) , SSI=0.27/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.42 (B) (INPUT = 0.90)
JSI METAL= 0.33 (B) (INPUT = 1.00)

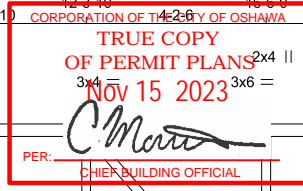


JULY 12, 2023

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.



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1-3-8



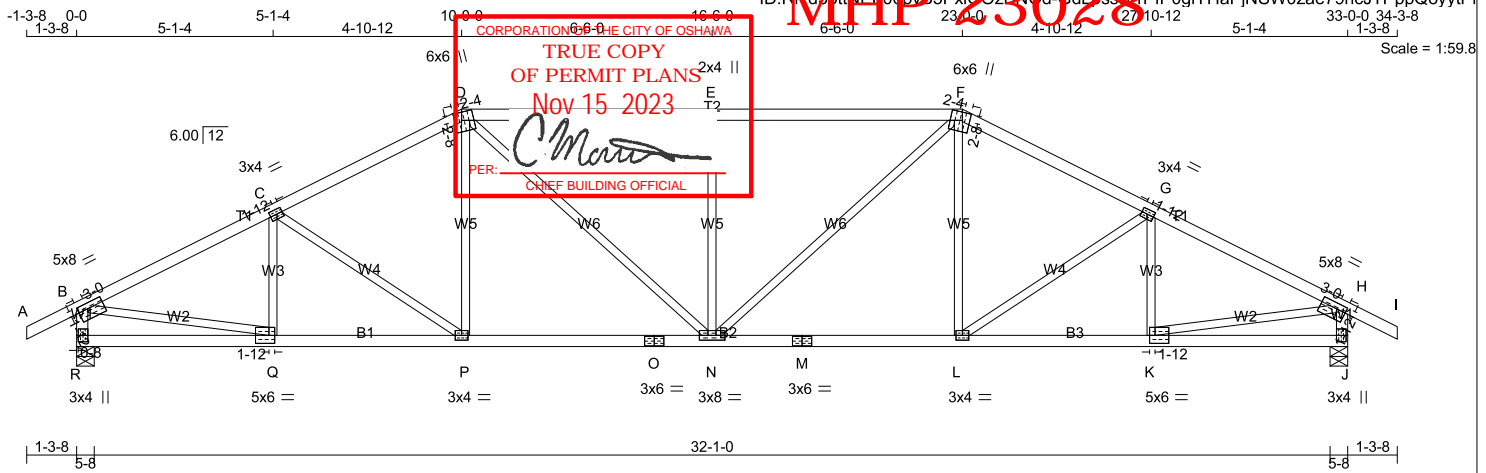
**READ ALL NOTES ON THIS PAGE AND ON THE
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IN THE DESIGN OF THIS COMPONENT.**



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-064	T02	1	1	TRUSS DESC.	

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ID: Rvd3ttJEf00v35P4X00zB410d-5dLss2-PfP0glYHaPjNSW0zae79hcJTPppQoytPi



TOTAL WEIGHT = 133 lb

LUMBER				DESCR.	
CHORDS	SIZE	LUMBER			
A - D	2x4	DRY	No.2	SPF	
D - F	2x4	DRY	No.2	SPF	
F - I	2x4	DRY	No.2	SPF	
R - B	2x4	DRY	No.2	SPF	
J - H	2x4	DRY	No.2	SPF	
R - O	2x4	DRY	No.2	SPF	
O - M	2x4	DRY	No.2	SPF	
M - J	2x4	DRY	No.2	SPF	
ALL WEBS	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	6.0	6.0	2.50	2.25
E	TMVW+w	MT20	2.0	4.0		
F	TTWW+m	MT20	6.0	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	BMVW-t	MT20	3.0	4.0		
M	BS-t	MT20	3.0	6.0		
N	BMVW-t	MT20	3.0	8.0		
O	BS-t	MT20	3.0	6.0		
P	BMVW-t	MT20	3.0	4.0		
Q	BMVW-t	MT20	5.0	6.0	2.50	1.75
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	MAXIMUM FACTORED	INPUT	REQD
GROSS REACTION	GROSS REACTION	BRG	BRG	
JT VERT HORZ	JT VERT HORZ	IN-SX	IN-SX	
R 2434 0	2434 0	5-8	4-7	
J 2434 0	2434 0	5-8	4-7	

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	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) R, J

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.76 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO			FR-TO			
A-B	0 / 36	-119.4 -119.4	0.16 (1)	10.00	Q-C	-416 / 0	0.09 (1)	
B-C	-3298 / 0	-119.4 -119.4	0.53 (1)	3.35	C-P	-329 / 0	0.21 (1)	
C-D	-3056 / 0	-119.4 -119.4	0.50 (1)	3.50	P-D	0 / 300	0.07 (1)	
D-E	-3301 / 0	-119.4 -119.4	0.85 (1)	2.76	D-N	0 / 798	0.18 (1)	
E-F	-3301 / 0	-119.4 -119.4	0.85 (1)	2.76	N-E	-954 / 0	0.57 (1)	
F-G	-3056 / 0	-119.4 -119.4	0.50 (1)	3.50	N-F	0 / 798	0.18 (1)	
G-H	-3298 / 0	-119.4 -119.4	0.53 (1)	3.35	L-F	0 / 300	0.07 (1)	
H-I	0 / 36	-119.4 -119.4	0.16 (1)	10.00	L-G	-329 / 0	0.21 (1)	
R-B	-2389 / 0	0.0	0.0	0.24 (1)	5.46	K-G	-416 / 0	0.09 (1)
J-H	-2389 / 0	0.0	0.0	0.24 (1)	5.46	B-Q	0 / 3018	0.68 (1)
					K-H	0 / 3018	0.68 (1)	
R-Q	0 / 0	-18.2	-18.2	0.10 (4)	10.00			
Q-P	0 / 2976	-18.2	-18.2	0.55 (1)	10.00			
P-O	0 / 2709	-18.2	-18.2	0.51 (1)	10.00			
O-N	0 / 2709	-18.2	-18.2	0.51 (1)	10.00			
N-M	0 / 2709	-18.2	-18.2	0.51 (1)	10.00			
M-L	0 / 2709	-18.2	-18.2	0.51 (1)	10.00			
L-K	0 / 2976	-18.2	-18.2	0.55 (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	=	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, 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 (0.19")
 ALLOWABLE DEFL.(TL)= L/360 (1.10")
 CALCULATED VERT. DEFL.(TL) = L/ 999 (0.33")

CSI: TC=0.85/0.97 (E-F:1), BC=0.55/0.97 (K-L:1),
 WB=0.68/0.97 (H-K:1), SSI=0.38/1.00 (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= 0.87 (Q) (INPUT = 0.90)
 JSI METAL= 0.85 (M) (INPUT = 1.00)

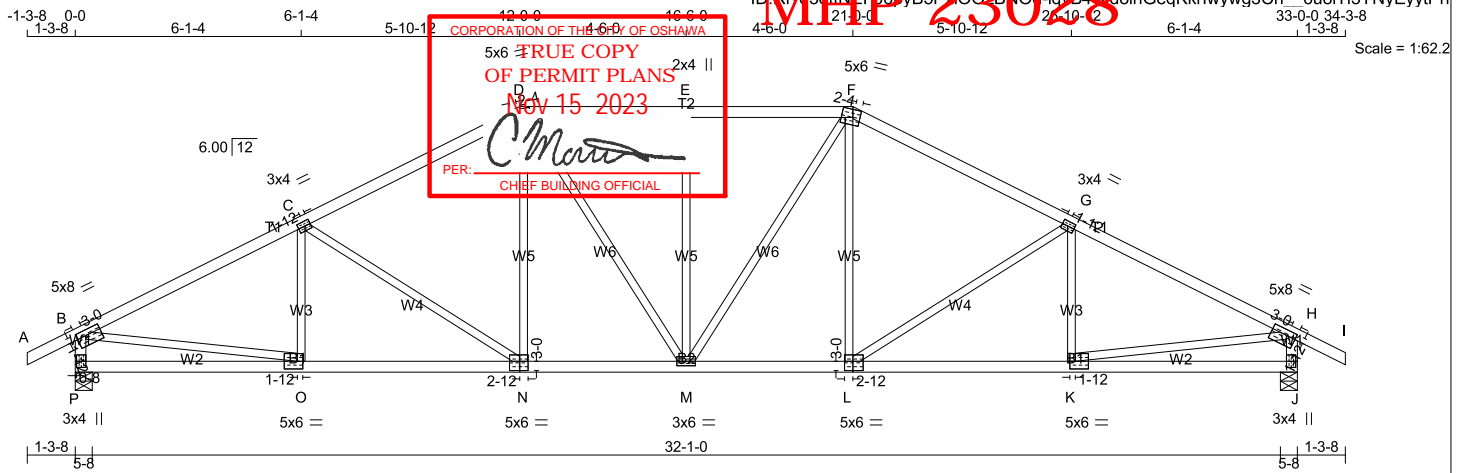


JULY 12, 2023

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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-064	T03	1	1	TRUSS DESC.	



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	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
P	2434	0	2434	0
J	2434	0	2434	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. SNOW	MIN. COMPONENT 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 CSI (LC)	MAX UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (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)

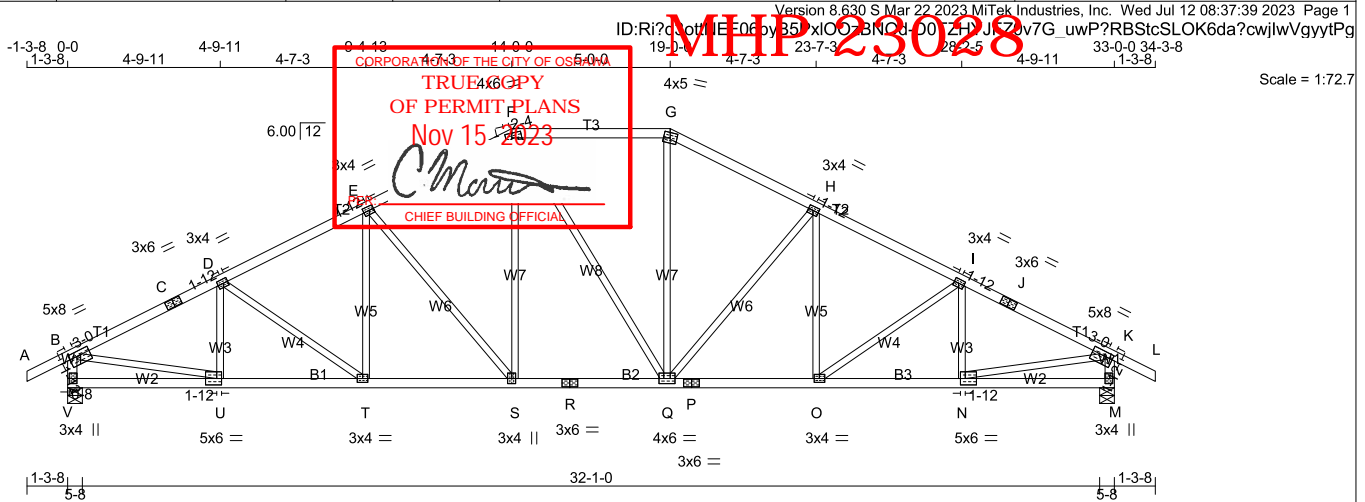


JULY 12, 2023

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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-064	T04	1	1	TRUSS DESC.	



TOTAL WEIGHT = 145 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 - R	2x4	DRY	No.2	SPF
R - 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, E, H, I						
D	TMVW-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	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	BMVWW-t	MT20	4.0	6.0		
R	BS-t	MT20	3.0	6.0		
S	BMVW-t	MT20	3.0	4.0		
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	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
V	2434	0	2434	0
M	2434	0	2434	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. SNOW	MIN. COMPONENT 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 = 3.44 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)

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	-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 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 (0.16")
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
MT20	650	371	1747

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)

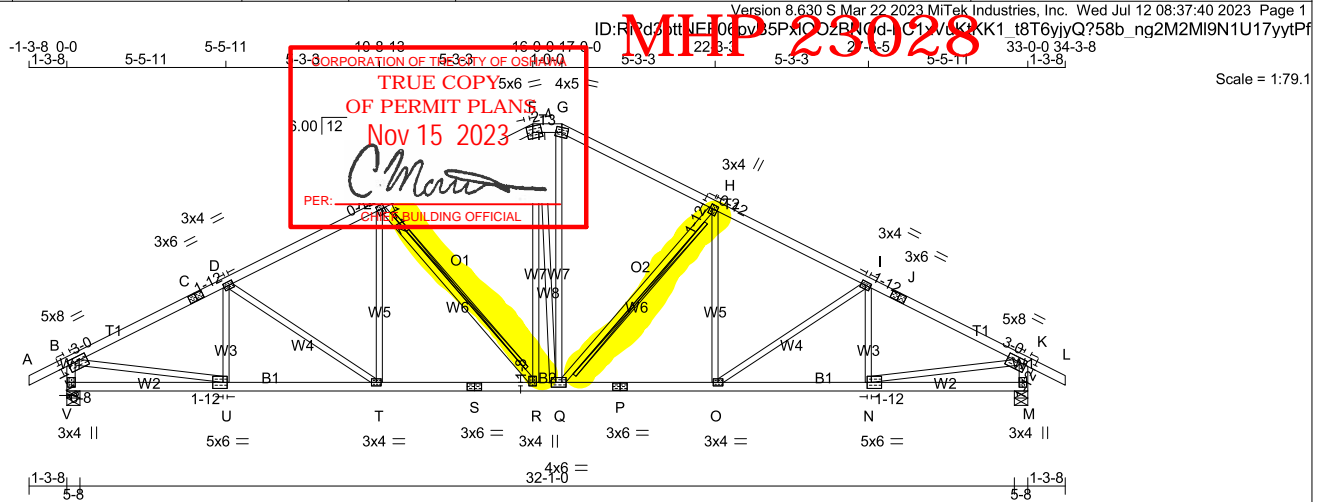


JULY 12, 2023

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.
IM0723-064	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 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	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	TTW-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	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
V	2434	0	2434	0
M	2434	0	2434	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. SNOW	MIN. COMPONENT 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

BRACINGTOP 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)	LC1 MAX CSI (LC)	MAX. UNBRAC	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	2.24 (1)	5.46	B-U	0 / 3016	0.68 (1)
M-K	-2388 / 0	0.0	0.0	2.24 (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 VALUESPLATE 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.

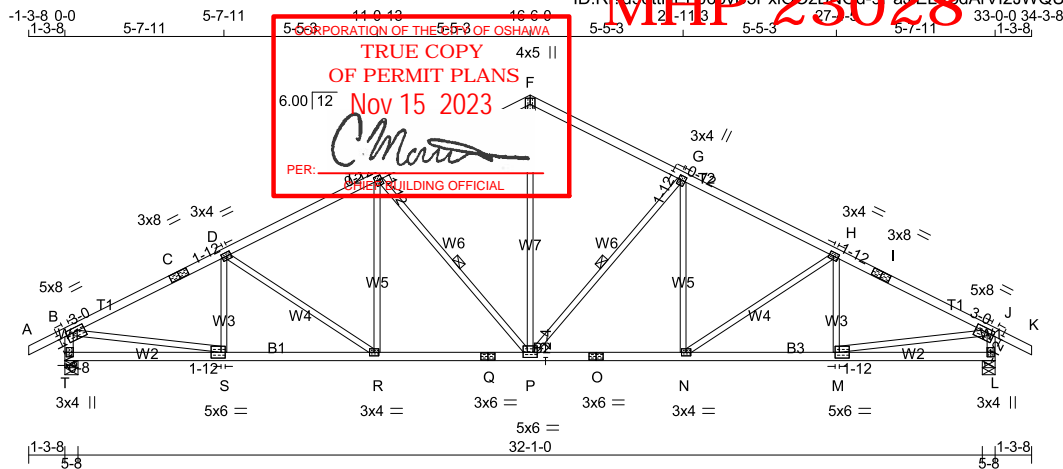
JSI GRIP= 0.87 (M) (INPUT = 0.90)
JSI METAL= 0.87 (S) (INPUT = 1.00)

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.
IM0723-064	T06	8	1	TRUSS DESC.	



Scale = 1:81.7

TOTAL WEIGHT = 8 X 140 = 1116 lb

LUMBER	CHORDS	SIZE	LUMBER	DESCR.
N. L. G. A. RULES				
A - C	2x4	DRY	No.2	SPF
C - F	2x4	DRY	No.2	SPF
F - I	2x4	DRY	No.2	SPF
I - K	2x4	DRY	No.2	SPF
T - B	2x4	DRY	No.2	SPF
L - J	2x4	DRY	No.2	SPF
T - Q	2x4	DRY	No.2	SPF
Q - O	2x4	DRY	No.2	SPF
O - L	2x4	DRY	No.2	SPF

ALL WEBS 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	TS-t	MT20	3.0	8.0		
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	TTW+p	MT20	4.0	5.0		
G	TMVW-t	MT20	3.0	4.0	1.75	0.75
H	TMVW-t	MT20	3.0	4.0	1.50	1.75
I	TS-t	MT20	3.0	8.0		
J	TMVW-t	MT20	5.0	8.0	1.75	3.00
L	BMV1+p	MT20	3.0	4.0	2.00	
M	BMVW-t	MT20	5.0	6.0	2.50	1.75
N	BMVW-t	MT20	3.0	4.0		
O	BS-t	MT20	3.0	6.0		
P	BMVWW-t	MT20	5.0	6.0	2.25	3.00
Q	BS-t	MT20	3.0	6.0		
R	BMVW-t	MT20	3.0	4.0		
S	BMVW-t	MT20	5.0	6.0	2.50	1.75
T	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	REQRD BRG
JT	VERT	HORZ	DOWN	UPLIFT
T	2434	0	2434	0
L	2434	0	2434	0

UNFACTORED REACTIONS

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

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.22 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF G-P, E-P. DBS = 20-0-0. CBF = 117 LBS.

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED 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			
A-B	0 / 36	-119.4 -119.4	0.16 (1)	P-F	0 / 1538	0.35 (1)	
B-C	-3314 / 0	-119.4 -119.4	0.65 (1)	P-G	-940 / 0	0.45 (1)	
C-D	-3314 / 0	-119.4 -119.4	0.65 (1)	N-G	0 / 311	0.07 (1)	
D-E	-2988 / 0	-119.4 -119.4	0.53 (1)	N-H	-383 / 0	0.30 (1)	
E-F	-2334 / 0	-119.4 -119.4	0.50 (1)	M-H	-350 / 3	0.09 (1)	
F-G	-2334 / 0	-119.4 -119.4	0.50 (1)	E-P	-940 / 0	0.45 (1)	
G-H	-2988 / 0	-119.4 -119.4	0.53 (1)	R-E	0 / 311	0.07 (1)	
H-I	-3314 / 0	-119.4 -119.4	0.65 (1)	D-R	-383 / 0	0.30 (1)	
I-J	-3314 / 0	-119.4 -119.4	0.65 (1)	S-D	-350 / 3	0.09 (1)	
J-K	0 / 36	-119.4 -119.4	0.16 (1)	B-S	0 / 3023	0.68 (1)	
T-B	-2387 / 0	0.0	0.0	M-J	0 / 3023	0.68 (1)	
L-J	-2387 / 0	0.0	0.0				
T-S	0 / 0	-18.2 -18.2	0.12 (4)				
S-R	0 / 2989	-18.2 -18.2	0.53 (1)				
R-Q	0 / 2672	-18.2 -18.2	0.50 (1)				
Q-P	0 / 2672	-18.2 -18.2	0.50 (1)				
P-O	0 / 2672	-18.2 -18.2	0.50 (1)				
O-N	0 / 2672	-18.2 -18.2	0.50 (1)				
N-M	0 / 2989	-18.2 -18.2	0.53 (1)				
M-L	0 / 0	-18.2 -18.2	0.12 (4)				

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 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=0.65/0.97 (H-J:1), BC=0.53/0.97 (R-S:1),
 WB=0.68/0.97 (B-S:1), SSI=0.28/1.00 (H-J: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= 0.88 (F) (INPUT = 0.90)
 JSI METAL= 0.81 (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.



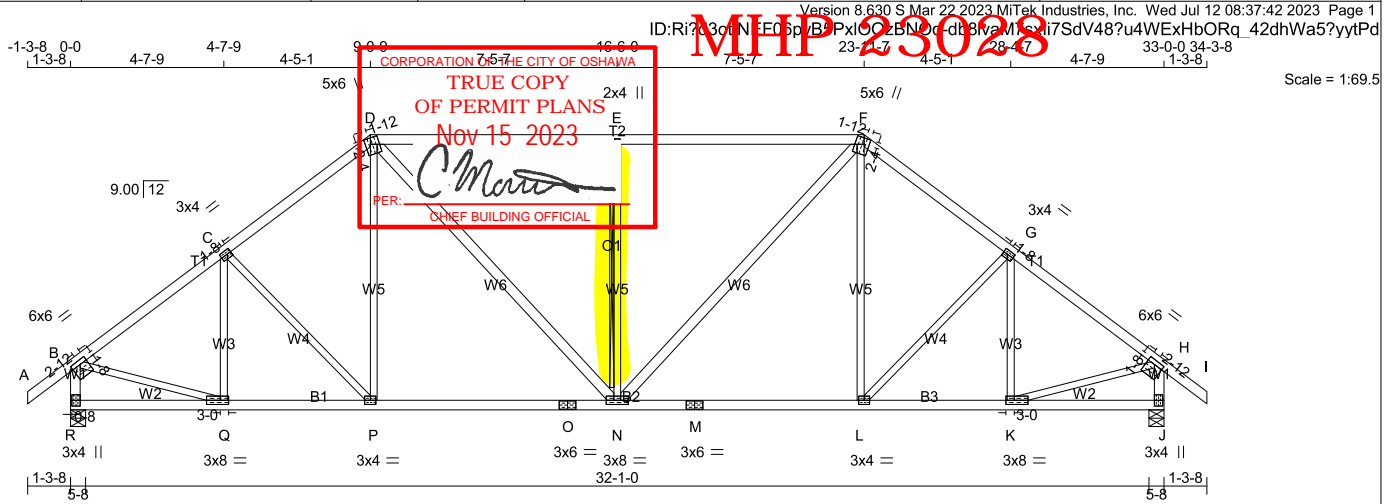
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JULY 12, 2023

**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.
IM0723-064	T08	2	1	TRUSS DESC.	

**LUMBER**

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	6.0	1.50	2.75
C	TMVW-t	MT20	3.0	4.0	1.50	1.50
D	TTWW+m	MT20	5.0	6.0	2.25	1.75
E	TMVW+w	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	6.0	2.25	1.75
G	TMVW-t	MT20	3.0	4.0	1.50	1.50
H	TMVW-t	MT20	6.0	6.0	1.50	2.75
J	BMV1+p	MT20	3.0	4.0	2.00	
K	BMVW-t	MT20	3.0	8.0	1.50	3.00
L	BMVW-t	MT20	3.0	4.0		
M	BS-t	MT20	3.0	6.0		
N	BMVWW-t	MT20	3.0	8.0		
O	BS-t	MT20	3.0	6.0		
P	BMVW-t	MT20	3.0	4.0		
Q	BMVW-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	DOWN	UP	IN-SX
R	2436	0	2436	0
J	2436	0	2436	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. SNOW	MIN. COMPONENT 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			
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 / 49	-119.4 -119.4	0.16 (1)	Q-C	-440 / 0	0.16 (1)	
B-C	-2466 / 0	-119.4 -119.4	0.40 (1)	C-P	-189 / 0	0.14 (1)	
C-D	-2382 / 0	-119.4 -119.4	0.39 (1)	P-D	0 / 251	0.06 (1)	
D-E	-2449 / 0	-119.4 -119.4	0.62 (1)	D-N	0 / 845	0.14 (1)	
E-F	-2449 / 0	-119.4 -119.4	0.62 (1)	N-E	-1095 / 0	0.54 (1)	
F-G	-2382 / 0	-119.4 -119.4	0.39 (1)	N-F	0 / 845	0.14 (1)	
G-H	-2466 / 0	-119.4 -119.4	0.40 (1)	L-F	0 / 251	0.06 (1)	
H-I	0 / 49	-119.4 -119.4	0.16 (1)	L-G	-189 / 0	0.14 (1)	
R-B	-2397 / 0	0.0 0.0	0.25 (1)	K-G	-440 / 0	0.16 (1)	
J-H	-2397 / 0	0.0 0.0	0.25 (1)	B-Q	0 / 2068	0.47 (1)	
				K-H	0 / 2068	0.47 (1)	
R-Q	0 / 0	-18.2 -18.2	0.08 (4)				
Q-P	0 / 2002	-18.2 -18.2	0.40 (1)				
P-O	0 / 1874	-18.2 -18.2	0.42 (1)				
O-N	0 / 1874	-18.2 -18.2	0.42 (1)				
N-M	0 / 1874	-18.2 -18.2	0.42 (1)				
M-L	0 / 1874	-18.2 -18.2	0.42 (1)				
L-K	0 / 2002	-18.2 -18.2	0.40 (1)				
K-J	0 / 0	-18.2 -18.2	0.08 (4)				

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, 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 (0.10")
 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)	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= 0.90 (B) (INPUT = 0.90)
 JSI METAL= 0.65 (H) (INPUT = 1.00)

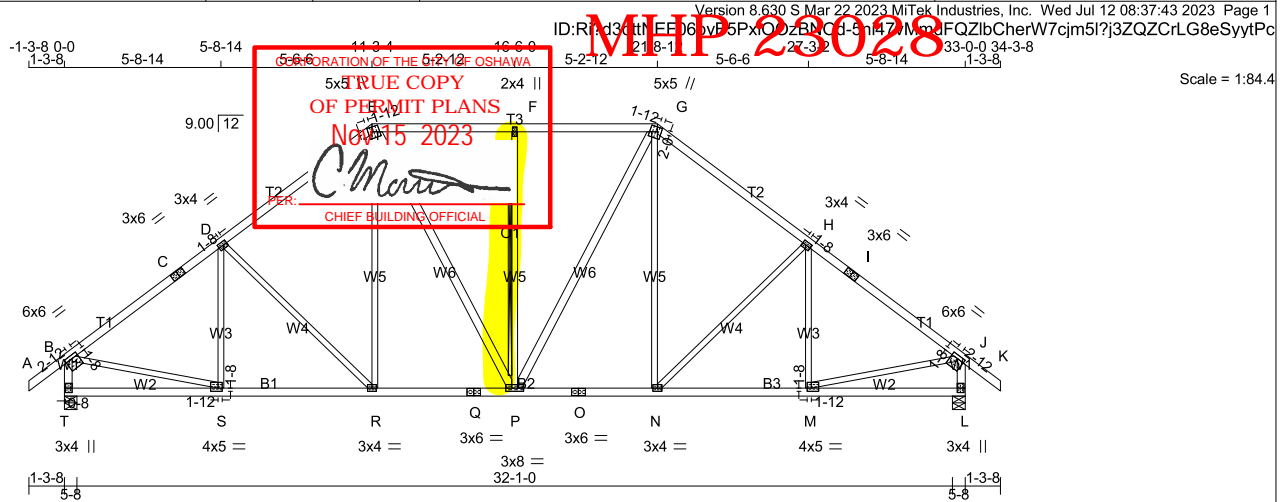


JULY 12, 2023

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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-064	T09	1	1	TRUSS DESC.	



TOTAL WEIGHT = 165 lb

LUMBER

N. L. G. A. RULES

CHORDS SIZE

A - C 2x4 DRY

C - E 2x4 DRY

E - G 2x4 DRY

G - I 2x4 DRY

I - K 2x4 DRY

T - B 2x4 DRY

L - J 2x4 DRY

T - Q 2x4 DRY

Q - O 2x4 DRY

O - L 2x4 DRY

ALL WEBS 2x3 DRY

EXCEPT

E - P 2x4 DRY

P - G 2x4 DRY

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMVW-t	MT20	6.0	6.0	1.50	2.75
C TS-t	MT20	3.0	6.0		
D TMVW-t	MT20	3.0	4.0	1.50	1.50
E TTWW+m	MT20	5.0	5.0	2.00	1.75
F TMW+w	MT20	2.0	4.0		
G TTWW+m	MT20	5.0	5.0	2.00	1.75
H TMVW-t	MT20	3.0	4.0	1.50	1.50
I TS-t	MT20	3.0	6.0		
J TMVW-t	MT20	6.0	6.0	1.50	2.75
L BMV1+p	MT20	3.0	4.0	2.00	
M BMVW-t	MT20	4.0	5.0	1.50	1.75
N BMVW-t	MT20	3.0	4.0		
O BS-t	MT20	3.0	6.0		
P BMVWW-t	MT20	3.0	8.0		
Q BS-t	MT20	3.0	6.0		
R BMVW-t	MT20	3.0	4.0		
S BMVW-t	MT20	4.0	5.0	1.50	1.75
T 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	IN-SX
T 2436 0	2436 0	0 5-8	4-7	
L 2436 0	2436 0	0 5-8	4-7	

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
T	1700	1245 / 0	0 / 0	0 / 0	0 / 0	455 / 0	0 / 0
L	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) T, L

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.64 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 F-P

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. 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 / 49	-119.4 -119.4	0.16 (1)	10.00	S-D	-314 / 17	0.16 (1)
B-C	-2515 / 0	-119.4 -119.4	0.64 (1)	3.64	D-R	-427 / 0	0.55 (1)
C-D	-2515 / 0	-119.4 -119.4	0.64 (1)	3.64	R-E	0 / 397	0.09 (1)
D-E	-2234 / 0	-119.4 -119.4	0.59 (1)	3.88	E-P	0 / 484	0.08 (1)
E-F	-1979 / 0	-119.4 -119.4	0.47 (1)	4.24	P-F	-760 / 0	0.59 (1)
F-G	-1979 / 0	-119.4 -119.4	0.47 (1)	4.24	P-G	0 / 484	0.08 (1)
G-H	-2234 / 0	-119.4 -119.4	0.59 (1)	3.88	N-G	0 / 397	0.09 (1)
H-I	-2515 / 0	-119.4 -119.4	0.64 (1)	3.64	N-H	-427 / 0	0.55 (1)
I-J	-2515 / 0	-119.4 -119.4	0.64 (1)	3.64	M-H	-314 / 17	0.16 (1)
J-K	0 / 49	-119.4 -119.4	0.16 (1)	10.00	B-S	0 / 2094	0.47 (1)
T-B	-2392 / 0	0.0 0.0	0.25 (1)	5.46	M-J	0 / 2094	0.47 (1)
L-J	-2392 / 0	0.0 0.0	0.25 (1)	5.46			
T-S	0 / 0	-18.2 -18.2	0.14 (4)	10.00			
S-R	0 / 2051	-18.2 -18.2	0.39 (1)	10.00			
R-Q	0 / 1749	-18.2 -18.2	0.34 (1)	10.00			
Q-P	0 / 1749	-18.2 -18.2	0.34 (1)	10.00			
P-O	0 / 1749	-18.2 -18.2	0.34 (1)	10.00			
O-N	0 / 1749	-18.2 -18.2	0.34 (1)	10.00			
N-M	0 / 2051	-18.2 -18.2	0.39 (1)	10.00			
M-L	0 / 0	-18.2 -18.2	0.14 (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 (0.09")
 ALLOWABLE DEFL.(TL) = L/360 (1.10")
 CALCULATED VERT. DEFL.(TL) = L/ 999 (0.17")

CSI: TC=0.64/0.97 (B-D:1), BC=0.39/0.97 (R-S:1),
 WB=0.59/0.97 (F-P:1), SSI=0.30/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

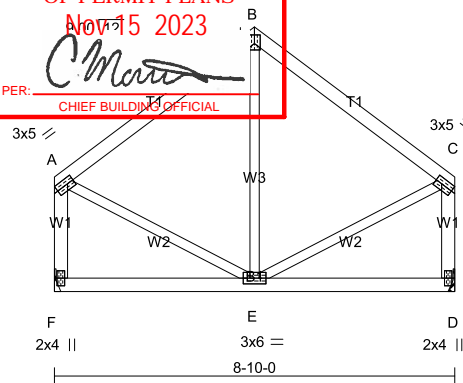


JULY 12, 2023

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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-064	T10	2	1	TRUSS DESC.	



TOTAL WEIGHT = 2 X 40 = 79 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 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
F	425	307 / 0	0 / 0	0 / 0	0 / 0	117 / 0
D	425	307 / 0	0 / 0	0 / 0	0 / 0	117 / 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. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	-314 / 0	-119.4 -119.4	0.30 (1)	6.25	E-B	-151 / 38	0.08 (1)
B-C	-314 / 0	-119.4 -119.4	0.30 (1)	6.25	A-E	0 / 280	0.06 (1)
F-A	-577 / 0	0.0 0.0	0.08 (1)	7.81	E-C	0 / 280	0.06 (1)
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)

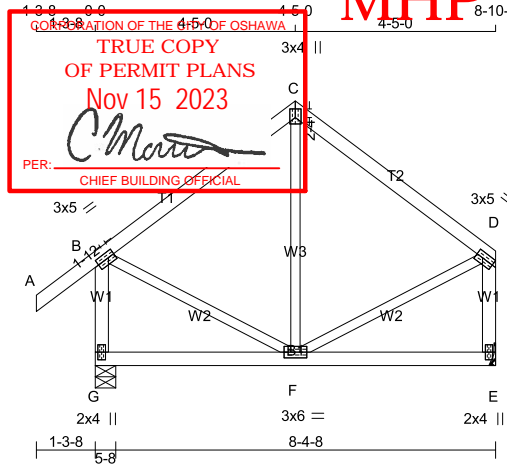


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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-064	T11	1	1	TRUSS DESC.	



Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Wed Jul 12 08:37:45 2023 Page 1
ID: Rvd3jttJEfD0by5PNOZBAGd-Aqg1L09sgG_vM4IGYbi8sXboU31S0UJfEiKyytPa

Scale = 1:50.8

TOTAL WEIGHT = 41 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
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)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 MAX	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH
FR-TO		FROM TO			FR-TO		
A-B	0 / 49	-119.4 -119.4	0.16 (1)	10.00	F-C	-151 / 38	0.08 (1)
B-C	-314 / 0	-119.4 -119.4	0.30 (1)	6.25	B-F	0 / 280	0.06 (1)
C-D	-314 / 0	-119.4 -119.4	0.30 (1)	6.25	F-D	0 / 280	0.06 (1)
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, NBC 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 (PSI)	SECTION (PLI)
MT20	650	371	1747
	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

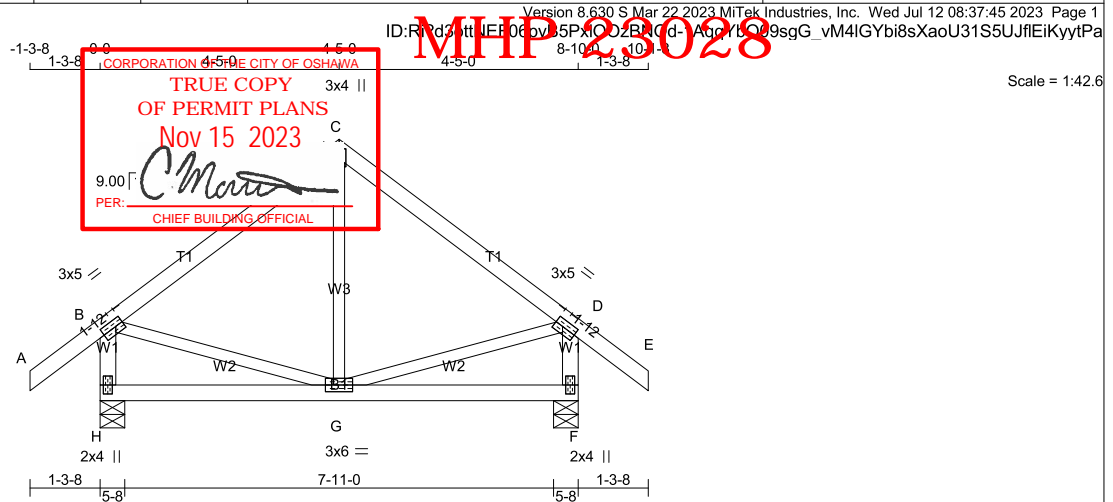


JULY 12, 2023

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.
IM0723-064	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 - E	2x4	DRY	No.2	SPF
H - B	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
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	1.75
F	BMV1+p	MT20	2.0	4.0		
G	BMVWW-t	MT20	3.0	6.0		
H	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	HORZ	UPLIFT	IN-SX	IN-SX
H	773	0	773	0	0	5-8	1-8
F	773	0	773	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	538	403 / 0	0 / 0	0 / 0	0 / 0	134 / 0	0 / 0
F	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) H, F

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 49	-119.4 -119.4	0.16 (1)	10.00	G-C	-67 / 63	0.02 (1)
B-C	-383 / 0	-119.4 -119.4	0.30 (1)	6.25	B-G	0 / 318	0.07 (1)
C-D	-383 / 0	-119.4 -119.4	0.30 (1)	6.25	G-D	0 / 318	0.07 (1)
D-E	0 / 49	-119.4 -119.4	0.16 (1)	10.00			
H-B	-741 / 0	0.0	0.08 (1)	7.81			
F-D	-741 / 0	0.0	0.08 (1)	7.81			
H-G	0 / 0	-18.2 -18.2	0.10 (4)	10.00			
G-F	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=0.07/0.97 (B-G: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)	(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= 0.60 (D) (INPUT = 0.90)
JSI METAL= 0.18 (D) (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.



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

PER: *C. Morris*
CHIEF BUILDING OFFICIAL

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

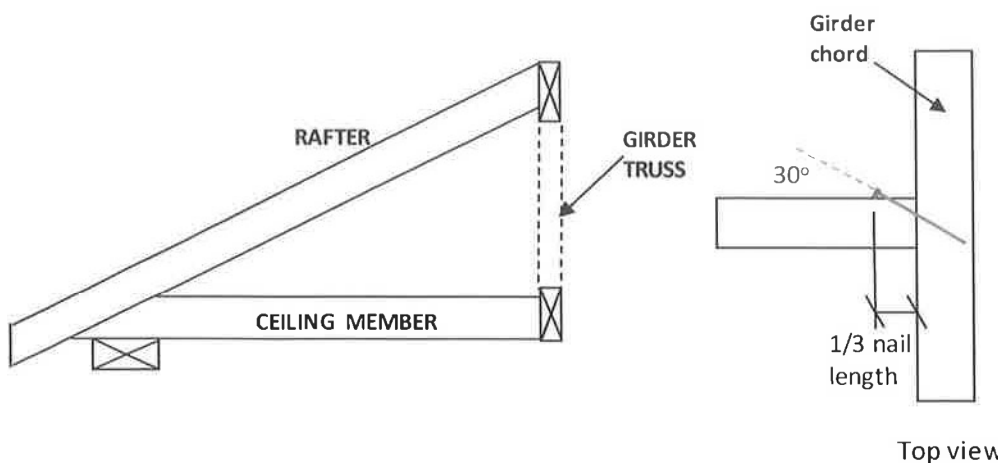


Figure 1: Toe-Nailing Rafter / Ceiling Member to Girder Truss

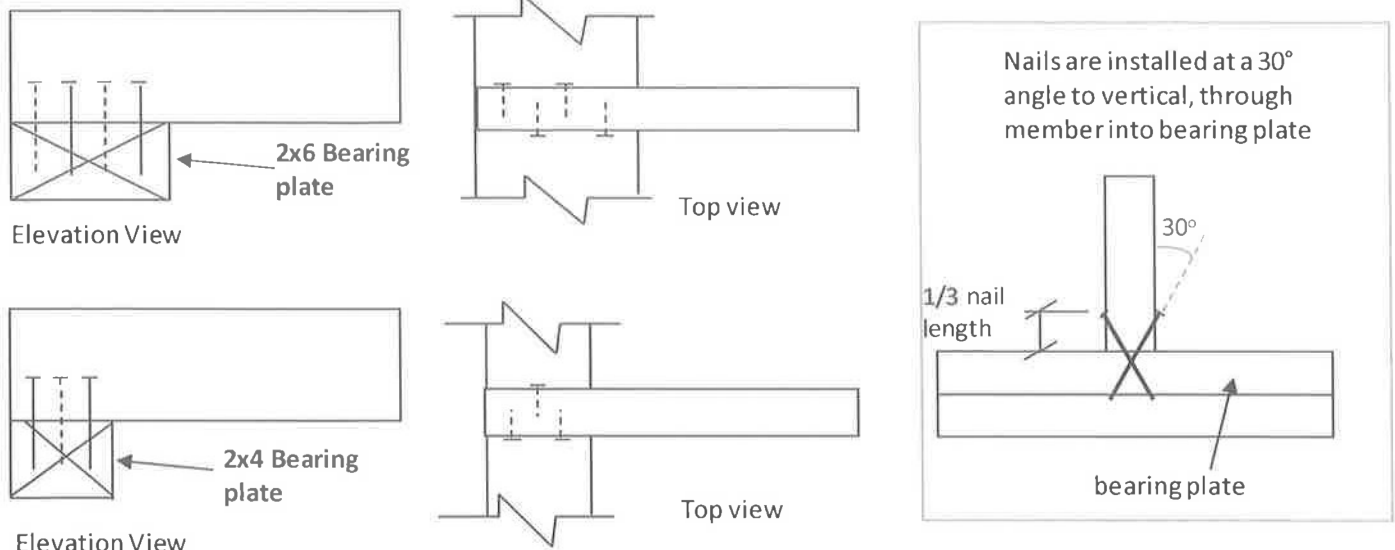




Issued: MARCH 1, 2022
Expiry: APRIL 30, 2024

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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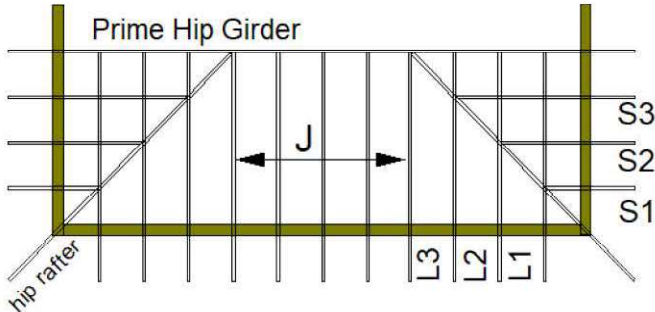


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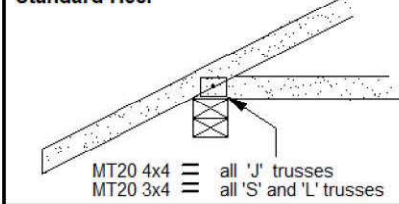
STANDARD END FRAMING

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

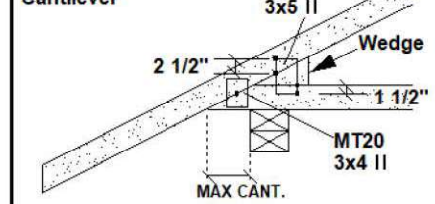
PLAN VIEW



HEEL DETAIL 'A' Standard Heel



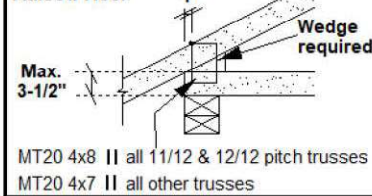
HEEL DETAIL 'C' Cantilever



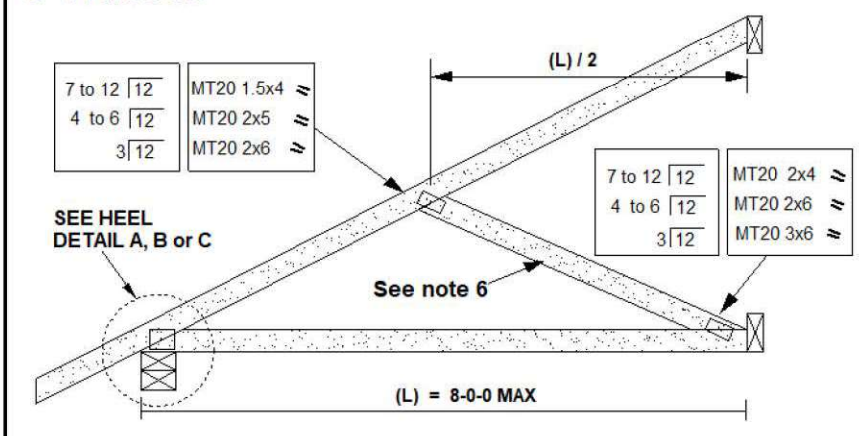
CANTILEVER DETAIL "C"

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

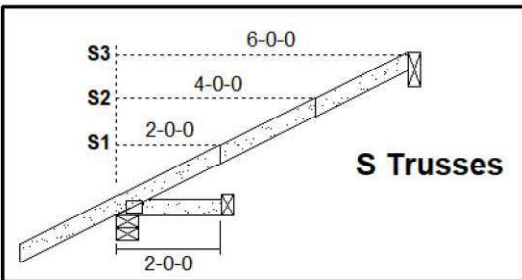
DETAIL "B": Raised Heel



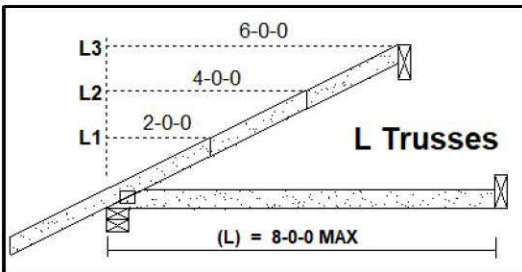
J Trusses



S Trusses



L 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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MiTek

STANDARD DETAIL MSD2015-K

MHP 23028

Issued: **MARCH 1, 2022**

Expiry: **APRIL 30, 2024**

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STAIR LEAD DETAIL

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

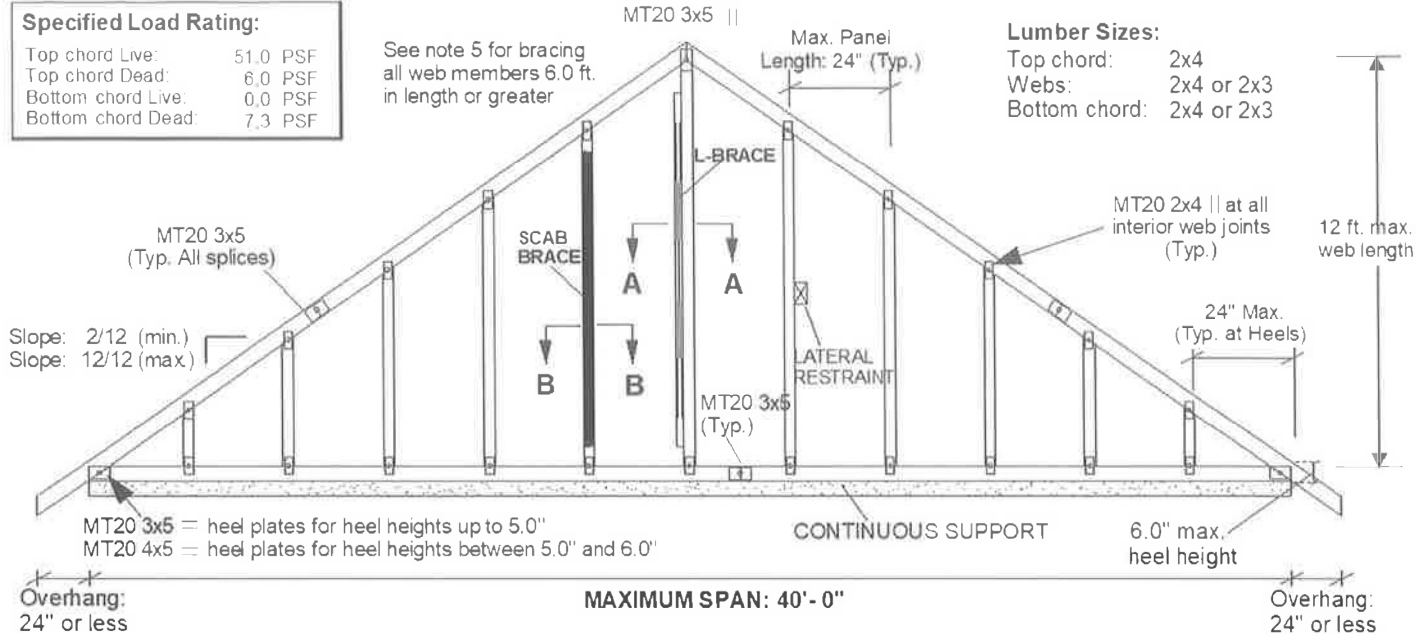
Specified Load Rating:

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:

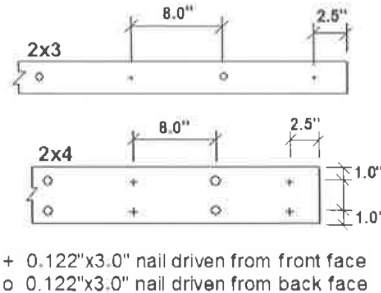
Top chord:	2x4
Webs:	2x4 or 2x3
Bottom chord:	2x4 or 2x3



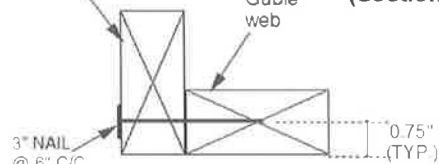
SCAB BRACE DETAIL (Section B-B)

Gable Web

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



L BRACE DETAIL (Section A-A)



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

Notes:

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