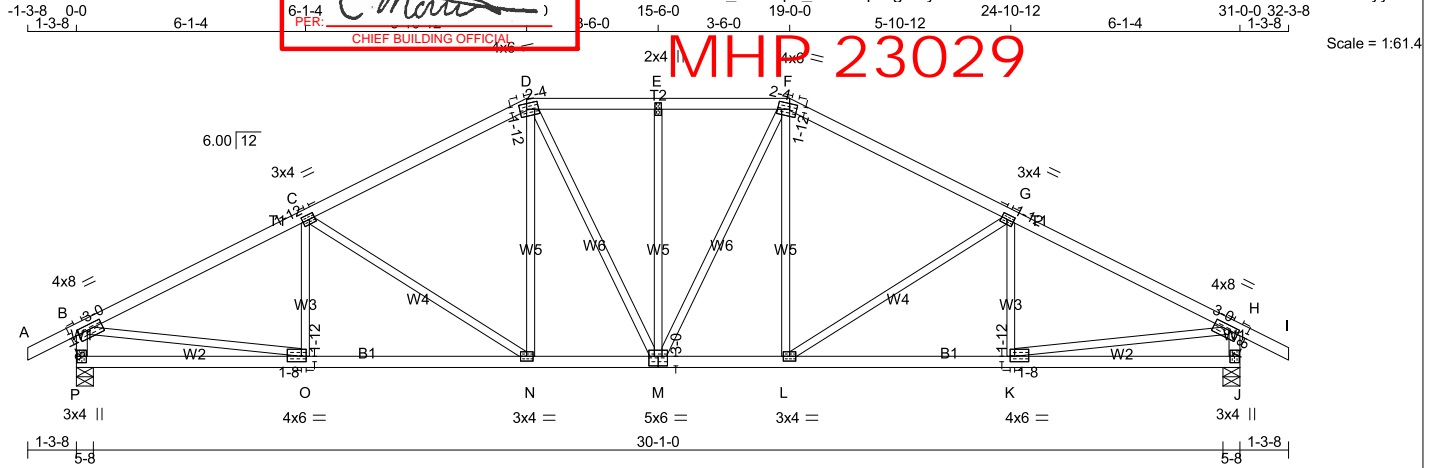


JOB NAME	TRUSS NAME	QUANTITY COPY OF PERMIT PLANS Nov 22 2023 CHIEF BUILDING OFFICIAL	JOB DESC.	DRWG NO.
IM0723-080	T03		TRUSS DESC.	

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ID:QK_tCmQp0_tF2YVqi0sgQdyWVx2-A66EkN2iJa1JrQ5Nv64k9OSrNJu?60zGiwU2C1yyYBn



TOTAL WEIGHT = 134 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
P - B	2x4	DRY	No.2
J - H	2x4	DRY	No.2
P - M	2x4	DRY	No.2
M - J	2x4	DRY	No.2

ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

	FACTORED	MAXIMUM FACTORED	INPUT	REQRD
GROSS REACTION	GROSS REACTION	BRG	BRG	
JT VERT HORZ	DOWN HORZ	UPLIFT	IN-SX	IN-SX
P 2296 0	2296 0	0 5-8	3-15	
J 2296 0	2296 0	0 5-8	3-15	

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	1602	1174 / 0	0 / 0	0 / 0	0 / 0	429 / 0	0 / 0
J	1602	1174 / 0	0 / 0	0 / 0	0 / 0	429 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.13 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	-279 / 34	0.07 (1)
B-C	-3111 / 0	-119.4 -119.4	0.75 (1)	3.13	C-N	-633 / 0	0.63 (1)
C-D	-2596 / 0	-119.4 -119.4	0.67 (1)	3.49	N-D	0 / 443	0.10 (1)
D-E	-2429 / 0	-119.4 -119.4	0.23 (1)	4.18	D-M	0 / 301	0.07 (1)
E-F	-2429 / 0	-119.4 -119.4	0.23 (1)	4.18	M-E	-498 / 0	0.45 (1)
F-G	-2596 / 0	-119.4 -119.4	0.67 (1)	3.49	M-F	0 / 301	0.07 (1)
G-H	-3111 / 0	-119.4 -119.4	0.75 (1)	3.13	L-F	0 / 443	0.10 (1)
H-I	0 / 36	-119.4 -119.4	0.16 (1)	10.00	L-G	-633 / 0	0.63 (1)
P-B	-2247 / 0	0.0 0.0	0.23 (1)	5.61	K-G	-279 / 34	0.07 (1)
J-H	-2247 / 0	0.0 0.0	0.23 (1)	5.61	B-O	0 / 2844	0.64 (1)
					K-H	0 / 2844	0.64 (1)
P-O	0 / 0	-18.2 -18.2	0.15 (4)	10.00			
O-N	0 / 2816	-18.2 -18.2	0.51 (1)	10.00			
N-M	0 / 2292	-18.2 -18.2	0.42 (1)	10.00			
M-L	0 / 2292	-18.2 -18.2	0.42 (1)	10.00			
L-K	0 / 2816	-18.2 -18.2	0.51 (1)	10.00			
K-J	0 / 0	-18.2 -18.2	0.15 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	34.8	PSF
	DL	=	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) = $L/360$ (1.03")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.15")
ALLOWABLE DEFL.(TL) = $L/360$ (1.03")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.25")

CSI: TC=0.75/0.97 (B-C:1) , BC=0.51/0.97 (K-L:1) ,
WB=0.64/0.97 (H-K: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)	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= 0.90 (J) (INPUT = 0.90)
JSI METAL= 0.67 (O) (INPUT = 1.00)



JULY 13, 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 IM0723-080	TRUSS NAME T04	<div style="border: 2px solid red; padding: 5px; display: inline-block;"> QUANTITY COPY OF PERMIT PLANS Nov 22 2023 CHIEF BUILDING OFFICIAL </div>	JOB DESC. TRUSS DESC.
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Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Thu Jul 13 08:46:05 2023 Page 1
 ID: QK_tCmQp0_tF2YVqi0sgQdyWVx2-elfcyj2K4u9ATagZSpbzib_4mjEcrQ6PxaEbkTyyYBm

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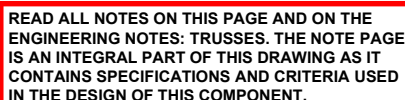
TOTAL WEIGHT = 139 lb [M][F]

LUMBER N. L. G. A. RULES <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>CHORDS</th> <th>SIZE</th> <th>LUMBER</th> <th>DESCR.</th> </tr> </thead> <tbody> <tr><td>A - C</td><td>2x4</td><td>DRY</td><td>No.2</td></tr> <tr><td>C - F</td><td>2x4</td><td>DRY</td><td>No.2</td></tr> <tr><td>F - G</td><td>2x4</td><td>DRY</td><td>No.2</td></tr> <tr><td>G - J</td><td>2x4</td><td>DRY</td><td>No.2</td></tr> <tr><td>J - L</td><td>2x4</td><td>DRY</td><td>No.2</td></tr> <tr><td>U - B</td><td>2x4</td><td>DRY</td><td>No.2</td></tr> <tr><td>M - K</td><td>2x4</td><td>DRY</td><td>No.2</td></tr> <tr><td>U - Q</td><td>2x4</td><td>DRY</td><td>No.2</td></tr> <tr><td>Q - M</td><td>2x4</td><td>DRY</td><td>No.2</td></tr> </tbody> </table> ALL WEBS EXCEPT 2x3 DRY No.2 SPF	CHORDS	SIZE	LUMBER	DESCR.	A - C	2x4	DRY	No.2	C - F	2x4	DRY	No.2	F - G	2x4	DRY	No.2	G - J	2x4	DRY	No.2	J - L	2x4	DRY	No.2	U - B	2x4	DRY	No.2	M - K	2x4	DRY	No.2	U - Q	2x4	DRY	No.2	Q - M	2x4	DRY	No.2	DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">JT</th> <th colspan="2">FACTORED GROSS REACTION</th> <th colspan="2">MAXIMUM FACTORED GROSS REACTION</th> <th rowspan="2">INPUT BRG</th> <th rowspan="2">REQRD BRG</th> </tr> <tr> <th>VERT</th> <th>HORZ</th> <th>DOWN</th> <th>HORZ</th> </tr> </thead> <tbody> <tr> <td>U</td> <td>2296</td> <td>0</td> <td>2296</td> <td>0</td> <td>5-8</td> <td>3-15</td> </tr> <tr> <td>M</td> <td>2296</td> <td>0</td> <td>2296</td> <td>0</td> <td>5-8</td> <td>3-15</td> </tr> </tbody> </table> UNFACTORED REACTIONS <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">JT</th> <th colspan="2">1ST LCASE COMBINED</th> <th colspan="2">MAX./MIN. COMPONENT REACTIONS</th> <th rowspan="2">WIND</th> <th rowspan="2">DEAD</th> <th rowspan="2">SOIL</th> </tr> <tr> <th>SNOW</th> <th>LIVE</th> <th>PERM.LIVE</th> <th></th> </tr> </thead> <tbody> <tr> <td>U</td> <td>1602</td> <td>1174 / 0</td> <td>0 / 0</td> <td>0 / 0</td> <td>0 / 0</td> <td>429 / 0</td> <td>0 / 0</td> </tr> <tr> <td>M</td> <td>1602</td> <td>1174 / 0</td> <td>0 / 0</td> <td>0 / 0</td> <td>0 / 0</td> <td>429 / 0</td> <td>0 / 0</td> </tr> </tbody> </table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, M BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.58 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.	JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG	VERT	HORZ	DOWN	HORZ	U	2296	0	2296	0	5-8	3-15	M	2296	0	2296	0	5-8	3-15	JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL	SNOW	LIVE	PERM.LIVE		U	1602	1174 / 0	0 / 0	0 / 0	0 / 0	429 / 0	0 / 0	M	1602	1174 / 0	0 / 0	0 / 0	0 / 0	429 / 0	0 / 0	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, NBC2015 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 (1.03") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.14") ALLOWABLE DEFL.(TL) = L/360 (1.03") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.25") CSI: TC=0.45/0.97 (I-K:1) , BC=0.48/0.97 (N-O:1) , WB=0.77/0.97 (E-R: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 <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">PLATE</th> <th colspan="2">GRIP(DRY)</th> <th colspan="2">SHEAR</th> <th colspan="2">SECTION</th> </tr> <tr> <th>(PSI)</th> <th>(PLI)</th> <th>(PSI)</th> <th>(PLI)</th> <th>(PSI)</th> <th>(PLI)</th> </tr> </thead> <tbody> <tr> <td>MT20</td> <td>650</td> <td>371</td> <td>1747</td> <td>788</td> <td>1987</td> <td>1873</td> </tr> </tbody> </table> PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.90 (M) (INPUT = 0.90) JSI METAL= 0.65 (N) (INPUT = 1.00)	PLATE	GRIP(DRY)		SHEAR		SECTION		(PSI)	(PLI)	(PSI)	(PLI)	(PSI)	(PLI)	MT20	650	371	1747	788	1987	1873
CHORDS	SIZE	LUMBER	DESCR.																																																																																																																
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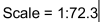
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MHP 23029

JSI GRIP= 0.90 (L) (INPUT = 0.90)
JSI METAL= 0.66 (Q) (INPUT = 1.00)



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TOTAL WEIGHT = 130 lb

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

DESIGN CRITERIA

SPACING = 24.0 IN. C/C

THIS DESIGN COMPLIES WITH:

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

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.27")

CSI: TC=0.55/0.97 (A-C:1), BC=0.50/0.97 (L-M:1), WB=0.63/0.97 (A-P:1), SSI=0.26/1.00 (G-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES						
PLATE	GRIP(DRY)		SHEAR		SECTION	
	(PSI)		(PLI)		(PLI)	
	MAX	MIN	MAX	MIN	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 (K) (INPUT = 0.90)
JSI METAL= 0.66 (P) (INPUT = 1.00)

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.45 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 F-N, D-N. DBS = 20-0-0 . CBF = 110 LBS

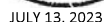
DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE (PER BRACE). FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.

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)

C H O R D S					W E B S				
MAX. FACTORED		FACTORED			MAX. FACTORED				
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX CSI (LC)	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM	TO		LENGTH	FR-TO			
A-B	-3065 / 0	-119.4	-119.4	0.55 (1)	3.45	N-E	0 / 1428	0.32 (1)	
B-C	-3065 / 0	-119.4	-119.4	0.55 (1)	3.45	N-F	-882 / 0	0.37 (1)	
C-D	-2784 / 0	-119.4	-119.4	0.45 (1)	3.74	M-F	0 / 294	0.07 (1)	
D-E	-2174 / 0	-119.4	-119.4	0.42 (1)	4.16	M-G	-334 / 0	0.23 (1)	
E-F	-2174 / 0	-119.4	-119.4	0.42 (1)	4.16	L-G	-352 / 0	0.08 (1)	
F-G	-2784 / 0	-119.4	-119.4	0.45 (1)	3.74	D-N	-882 / 0	0.37 (1)	
G-H	-3065 / 0	-119.4	-119.4	0.55 (1)	3.45	O-D	0 / 294	0.07 (1)	
H-I	-3065 / 0	-119.4	-119.4	0.55 (1)	3.45	C-O	-334 / 0	0.23 (1)	
I-J	0 / 36	-119.4	-119.4	0.16 (1)	10.00	P-C	-352 / 0	0.08 (1)	
Q-A	-2089 / 0	0.0	0.0	0.21 (1)	5.78	A-P	0 / 2800	0.63 (1)	
K-I	-2251 / 0	0.0	0.0	0.23 (1)	5.60	L-I	0 / 2800	0.63 (1)	
Q-P	0 / 0	-18.2	-18.2	0.10 (4)	10.00				
P-O	0 / 2764	-18.2	-18.2	0.50 (1)	10.00				
O-N	0 / 2489	-18.2	-18.2	0.46 (1)	10.00				
N-M	0 / 2489	-18.2	-18.2	0.46 (1)	10.00				
M-L	0 / 2764	-18.2	-18.2	0.50 (1)	10.00				
L-K	0 / 0	-18.2	-18.2	0.10 (4)	10.00				



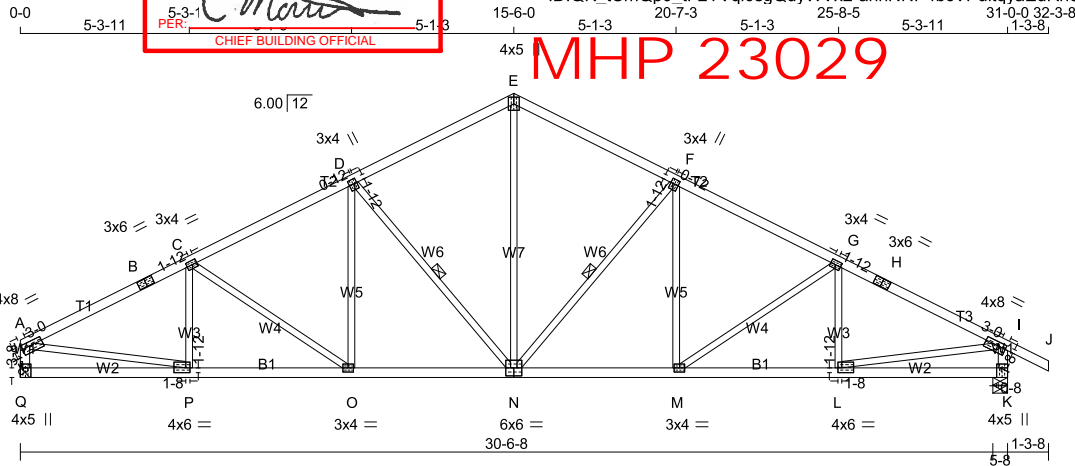
**READ ALL NOTES ON THIS PAGE AND ON THE
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IN THE DESIGN OF THIS COMPONENT.**



JOB NAME	TRUSS NAME	QUANTITY COPY OF PERMIT PLANS 3 Nov 22 2023 CHIEF BUILDING OFFICIAL	JOB DESC.	DRWG NO.
IM0723-080	T05B		TRUSS DESC.	

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ID:QK_tCmQp0_tF2YVqi0sgQdyWVx2-ahnNPN4bcVPuitqyaEdRn04OoXwvJNsiOujpMyyYBk



Scale = 1:72.3

TOTAL WEIGHT = 3 X 130 = 390 lb

LUMBER

N. L. G. A. RULES

CHORDS SIZE

A - B 2x4 DRY

B - E 2x4 DRY

E - H 2x4 DRY

H - J 2x4 DRY

Q - A 2x4 DRY

K - I 2x4 DRY

Q - N 2x4 DRY

N - K 2x4 DRY

LUMBER

DESCR.

SPF

SPF

SPF

SPF

SPF

SPF

SPF

ALL WEBS 2x3 DRY

EXCEPT

No.2

SPF

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

FACTORED

GROSS REACTION

DOWN

UP

MECHANICAL

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FACTORED

GROSS REACTION

DOWN

UP

MECHANICAL

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FACTORED

GROSS REACTION

DOWN

UP

MECHANICAL

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FACTORED

GROSS REACTION

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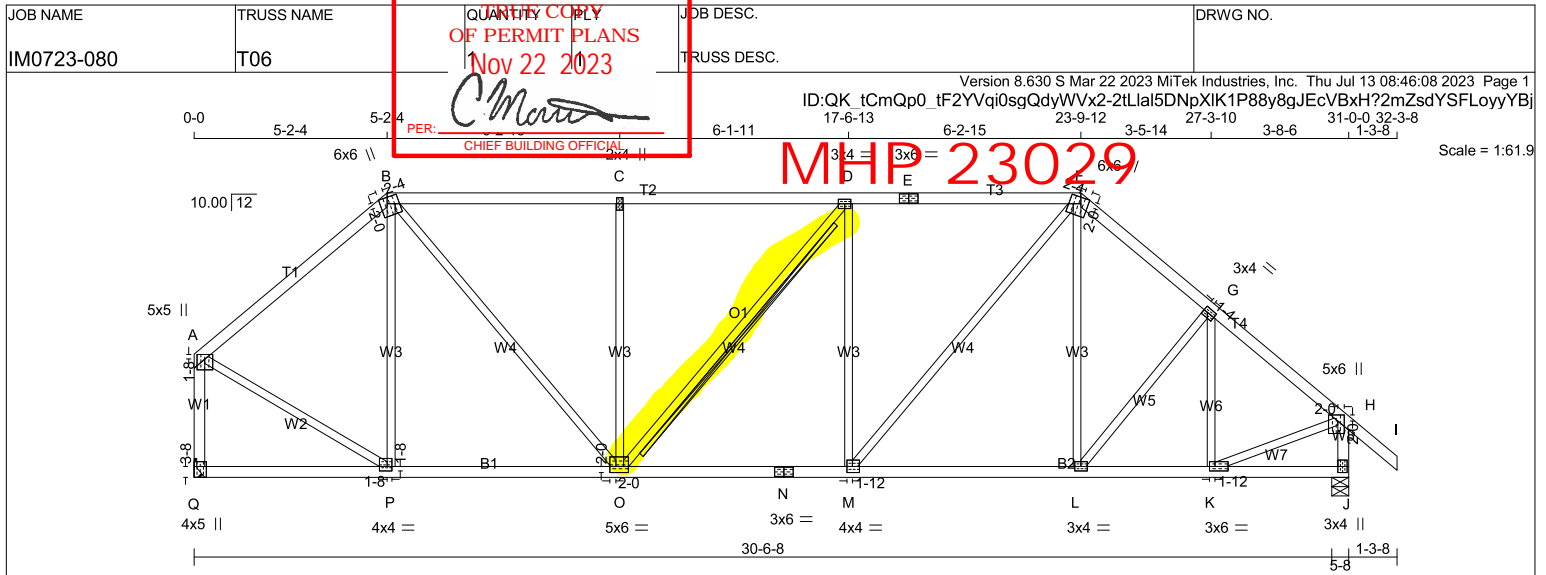
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**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	No.2 SPF
B - E	2x4	DRY	No.2 SPF
E - F	2x4	DRY	No.2 SPF
F - I	2x4	DRY	No.2 SPF
Q - A	2x4	DRY	No.2 SPF
J - H	2x4	DRY	No.2 SPF
Q - N	2x4	DRY	No.2 SPF
N - 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
A	TMVW+p	MT20	5.0	5.0	1.50	2.50
B	TTWW+m	MT20	6.0	6.0	2.00	2.25
C	TMVW+w	MT20	2.0	4.0		
D	TMVW-t	MT20	3.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TTWW+m	MT20	6.0	6.0	2.00	2.25
G	TMVW-t	MT20	3.0	4.0	1.50	1.25
H	TMVW+p	MT20	5.0	6.0	2.00	2.00
J	BMV1+p	MT20	3.0	4.0	2.00	
K	BMVW-t	MT20	3.0	6.0	1.50	1.75
L	BMVW-t	MT20	3.0	4.0		
M	BMVW-t	MT20	4.0	4.0	2.00	1.75
N	BS-t	MT20	3.0	6.0		
O	BMVWW-t	MT20	5.0	6.0	2.00	2.00
P	BMVW-t	MT20	4.0	4.0	1.50	1.50
Q	BMV1+t	MT20	4.0	5.0	3.50	

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

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	DOWN	UPLIFT	IN-SX
Q	2134	0	2134	0
J	2299	0	2299	0

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT Q. MINIMUM BEARING LENGTH AT JOINT Q = 3-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. SNOW	MAX./MIN. LIVE	MAX./MIN. PERM. LIVE	WIND	DEAD	SOIL
Q	1491	1079 / 0	0 / 0	0 / 0	0 / 0	412 / 0	0 / 0
J	1604	1176 / 0	0 / 0	0 / 0	0 / 0	429 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.43 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO				FR-TO			
A-B	-1667 / 0	-119.4 -119.4	0.70 (1)	P-B	-598 / 0	0.64 (1)	
B-C	-2164 / 0	-119.4 -119.4	0.81 (1)	B-O	0 / 1379	0.31 (1)	
C-D	-2165 / 0	-119.4 -119.4	0.80 (1)	O-C	-803 / 0	0.86 (1)	
D-E	-2282 / 0	-119.4 -119.4	0.83 (1)	O-D	-182 / 0	0.13 (1)	
E-F	-2282 / 0	-119.4 -119.4	0.83 (1)	M-D	-663 / 0	0.71 (1)	
F-G	-2142 / 0	-119.4 -119.4	0.32 (1)	M-F	0 / 1023	0.23 (1)	
G-H	-2085 / 0	-119.4 -119.4	0.32 (1)	L-F	0 / 111	0.03 (4)	
H-I	0 / 53	-119.4 -119.4	0.16 (1)	L-G	-15 / 6	0.01 (1)	
Q-A	-2098 / 0	0.0	0.0	K-G	-518 / 0	0.17 (1)	
J-H	-2266 / 0	0.0	0.0	A-P	0 / 1466	0.33 (1)	
				K-H	0 / 1723	0.39 (1)	
Q-P	0 / 0	-18.2 -18.2	0.14 (4)				
P-O	0 / 1269	-18.2 -18.2	0.29 (1)				
O-N	0 / 2281	-18.2 -18.2	0.44 (1)				
N-M	0 / 2281	-18.2 -18.2	0.44 (1)				
M-L	0 / 1617	-18.2 -18.2	0.33 (1)				
L-K	0 / 1625	-18.2 -18.2	0.32 (1)				
K-J	0 / 0	-18.2 -18.2	0.06 (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, 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 (1.03")
CALCULATED VERT. DEFL.(LL) = L/999 (0.10")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/999 (0.18")

CSI: TC=0.83/0.97 (D-F:1), BC=0.44/0.97 (M-O:1), WB=0.86/0.97 (C-O:1), SSI=0.35/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (H) (INPUT = 0.90)
JSI METAL= 0.69 (N) (INPUT = 1.00)

JULY 13, 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 COPY OF PERMIT PLANS	JOB DESC.	DRWG NO.
IM0723-080	T07	Nov 22 2023	TRUSS DESC.	

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ID:QK tCmQp0 tF2YVqi0sgQdyWVx2-W4v7n55r87fcxBzKhfgvsR9pBKjCnPZ?sCCptFyyYBi

PER: 
CHIEF BUILDING OFFICIAL

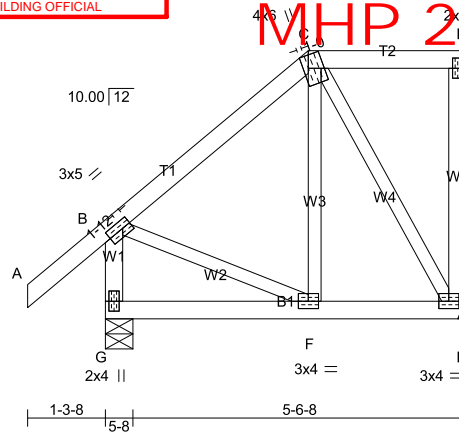
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6-0-0

Scale = 1:38.3



TOTAL WEIGHT = 32 lb

LUMBER

N. L. G. A. RULES

CHORDS SIZE

A - C 2x4 DRY No.2

C - D 2x4 DRY No.2

E - D 2x4 DRY No.2

G - B 2x4 DRY No.2

G - E 2x4 DRY No.2

ALL WEBS 2x3 DRY No.2

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	3.0	5.0	1.50	1.75
C	TTWW+m	MT20	4.0	6.0	Edge	1.00
D	TMV+p	MT20	2.0	4.0		
E	BMVW1-t	MT20	3.0	4.0		
F	BMVW1-t	MT20	3.0	4.0		
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	UPLIFT
E	413	0	413	0
G	578	0	578	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
E	289	209 / 0	0 / 0	0 / 0	0 / 0	80 / 0	0 / 0
G	402	305 / 0	0 / 0	0 / 0	0 / 0	96 / 0	0 / 0

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

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)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED	FACTORED		MEMB.	MAX. FACTORED		
	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX		FORCE (LBS)	MAX	
			CSI (LC)			CSI (LC)	
FR-TO		FROM	TO	FR-TO			
A-B	0 / 53	-119.4	-119.4 0.16 (1)	F-C	0 / 60	0.02 (4)	
B-C	-198 / 0	-119.4	-119.4 0.23 (1)	C-E	-284 / 0	0.10 (1)	
C-D	0 / 0	-119.4	-119.4 0.14 (1)	B-F	0 / 162	0.04 (1)	
E-D	-157 / 0	0.0	0.0 0.05 (1)				
G-B	-551 / 0	0.0	0.0 0.06 (1)				
G-F	0 / 0	-18.2	-18.2 0.05 (4)				
F-E	0 / 152	-18.2	-18.2 0.06 (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, 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 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")CSI: TC=0.23/0.97 (B-C:1) , BC=0.06/0.97 (E-F:4) ,
WB=0.10/0.97 (C-E:1) , SSI=0.12/1.00 (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)	(PLI)
	MAX	MIN	MAX
MT20	650	371	1747

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.47 (B) (INPUT = 0.90)
JSI METAL= 0.12 (B) (INPUT = 1.00)

JULY 13, 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	JOB DESC.	DRWG NO.
IM0723-080	T08		

CORPORATION OF THE CITY OF KOTT-GREENPARK-ZADORRA-ROSE 3 EL 1

QUANTITY COPY

OF PERMIT PLANS

Nov 22 2023

PER:

CHIEF BUILDING OFFICIAL

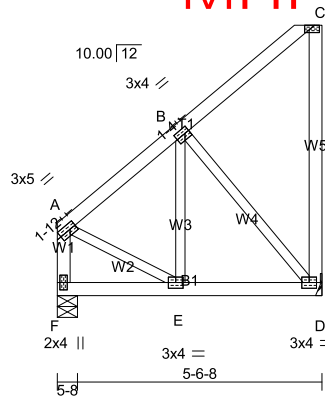
JOB DESC.

TRUSS DESC.

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Scale = 1:52.2



MHP 23029

TOTAL WEIGHT = 32 lb

LUMBER

N. L. G. A. RULES

CHORDS SIZE

A - C 2x4 DRY No.2

D - C 2x4 DRY No.2

F - A 2x4 DRY No.2

F - D 2x4 DRY No.2

ALL WEBS 2x3 DRY No.2

EXCEPT

DRY: SEASONED LUMBER.

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
D	413	0	413	0
F	413	0	413	0

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS			
D	289	209 / 0	0 / 0	0 / 0	80 / 0	0 / 0
F	289	209 / 0	0 / 0	0 / 0	80 / 0	0 / 0

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

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					FR-TO		
A-B	-243 / 0	-119.4	-119.4	0.14 (1)	E-B	-34 / 49	0.02 (4)
B-C	-27 / 0	-119.4	-119.4	0.14 (1)	B-D	-318 / 0	0.12 (1)
D-C	-150 / 0	0.0	0.0	0.12 (1)	A-E	0 / 232	0.05 (1)
F-A	-393 / 0	0.0	0.0	0.04 (1)			
F-E	0 / 0	-18.2	-18.2	0.04 (4)			
E-D	0 / 210	-18.2	-18.2	0.06 (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 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 (0.20")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.14/0.97 (A-B:1), BC=0.06/0.97 (D-E:4), WB=0.12/0.97 (B-D:1), SSI=0.14/1.00 (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.

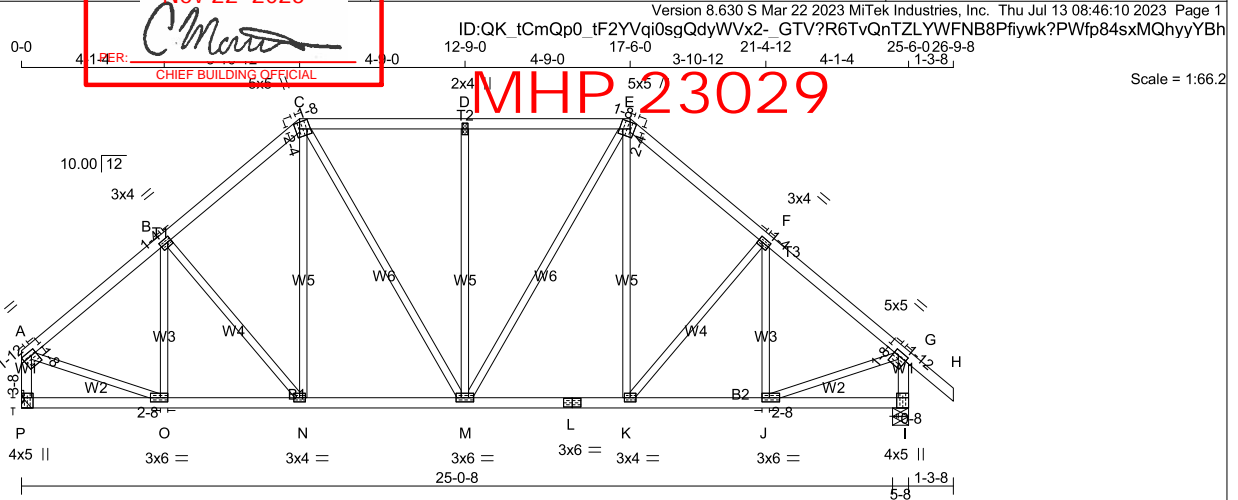
JSI GRIP= 0.39 (B) (INPUT = 0.90)
JSI METAL= 0.10 (A) (INPUT = 1.00)

JULY 13, 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	JOB DESC.	DRWG NO.
IM0723-080	T09		



TOTAL WEIGHT = 125 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
E - H	2x4	DRY	No.2	SPF
P - A	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
P - L	2x4	DRY	No.2	SPF
L - I	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	5.0	5.0	1.50	1.75
B	TMVW-t	MT20	3.0	4.0	1.50	1.25
C	TTWW+m	MT20	5.0	5.0	2.25	1.50
D	TMVW-t	MT20	2.0	4.0		
E	TTWW+m	MT20	5.0	5.0	2.25	1.50
F	TMVW-t	MT20	3.0	4.0	1.50	1.25
G	TMVW-t	MT20	5.0	5.0	1.50	1.75
I	BMV1+t	MT20	4.0	5.0	Edge	0.50
J	BMVW-t	MT20	3.0	6.0	1.50	2.50
K	BMVW-t	MT20	3.0	4.0		
L	BS-t	MT20	3.0	6.0		
M	BMVW-t	MT20	3.0	6.0		
N	BMVW-t	MT20	3.0	4.0		
O	BMVW-t	MT20	3.0	6.0	1.50	2.50
P	BMV1+t	MT20	4.0	5.0	3.50	

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

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

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	UPLIFT
P	1755	0	1755	0
I	1921	0	1921	0

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT P. MINIMUM BEARING LENGTH AT JOINT P = 3-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX./MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
P	1227	888 / 0	0 / 0	0 / 0	0 / 0	339 / 0	0 / 0
I	1340	984 / 0	0 / 0	0 / 0	0 / 0	356 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.80 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	
FR-TO		FROM TO		FR-TO			
A-B	-1697 / 0	-119.4 -119.4	0.28 (1)	4.80	O-B	-348 / 0	0.13 (1)
B-C	-1612 / 0	-119.4 -119.4	0.27 (1)	4.90	B-N	-191 / 0	0.13 (1)
C-D	-1439 / 0	-119.4 -119.4	0.36 (1)	4.98	N-C	0 / 228	0.05 (1)
D-E	-1439 / 0	-119.4 -119.4	0.36 (1)	4.98	C-M	0 / 449	0.10 (1)
E-F	-1612 / 0	-119.4 -119.4	0.27 (1)	4.90	M-D	-688 / 0	0.94 (1)
F-G	-1697 / 0	-119.4 -119.4	0.28 (1)	4.80	M-E	0 / 449	0.10 (1)
G-H	0 / 53	-119.4 -119.4	0.16 (1)	10.00	K-E	0 / 228	0.05 (1)
P-A	-1722 / 0	0.0 0.0	0.18 (1)	6.26	K-F	-191 / 0	0.13 (1)
I-G	-1887 / 0	0.0 0.0	0.20 (1)	6.03	J-F	-348 / 0	0.13 (1)
					A-O	0 / 1396	0.31 (1)
P-O	0 / 0	-18.2 -18.2	0.06 (4)	10.00	J-G	0 / 1396	0.31 (1)
O-N	0 / 1330	-18.2 -18.2	0.25 (1)	10.00			
N-M	0 / 1210	-18.2 -18.2	0.23 (1)	10.00			
M-L	0 / 1210	-18.2 -18.2	0.23 (1)	10.00			
L-K	0 / 1210	-18.2 -18.2	0.23 (1)	10.00			
K-J	0 / 1330	-18.2 -18.2	0.25 (1)	10.00			
J-I	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

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 (0.85")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL) = L/360 (0.85")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CSI: TC=0.36/0.97 (C-D:1) , BC=0.25/0.97 (J-K:1) , WB=0.94/0.97 (D-M:1) , SSI=0.27/1.00 (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
	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 (O) (INPUT = 0.90)
JSI METAL= 0.56 (G) (INPUT = 1.00)



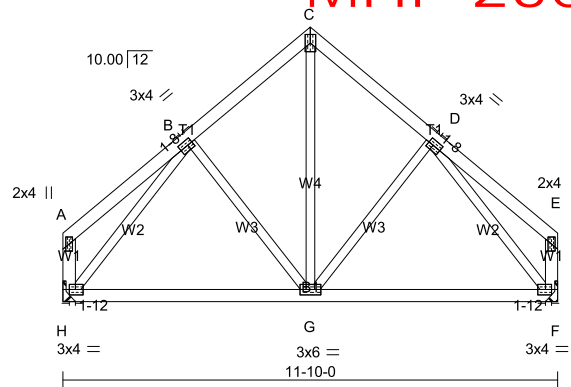
JULY 13, 2023

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 COPY	JOB DESC.	DRWG NO.
IM0723-080	T10	3 Nov 22 2023	TRUSS DESC.	

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Thu Jul 13 08:46:11 2023 Page 1
 ID: QK_tCmQp0_tF2YVqi0sgQdyWVx2-SS1uCn75gkvKBV7jp4iNxsEAo8LGF7IJWhvy7yyYBg
 PER: *Chmora* 0-12 2-10-4 5-11-0 2-10-4 8-9-4 3-0-12 11-10-0
 CHIEF BUILDING OFFICIAL



Scale = 1:55.1

TOTAL WEIGHT = 3 X 54 = 161 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 - A	2x4	DRY	No.2	SPF
F - E	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
A	TMV+p	MT20	2.0	4.0		
B	TMWW-t	MT20	3.0	4.0	1.50	1.50
C	TTW+p	MT20	3.0	5.0		
D	TMWW-t	MT20	3.0	4.0	1.50	1.50
E	TMV+p	MT20	2.0	4.0		
F	BMVW1-t	MT20	3.0	4.0	1.50	1.75
G	BMVWW-t	MT20	3.0	6.0		
H	BMVW1-t	MT20	3.0	4.0	1.50	1.75

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	UPLIFT
H	815	0	815	0
F	815	0	815	0

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	569	412 / 0	0 / 0	0 / 0	0 / 0	157 / 0	0 / 0
F	569	412 / 0	0 / 0	0 / 0	0 / 0	157 / 0	0 / 0

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	0 / 25	-119.4 -119.4	0.16 (1)	10.00	G-C	0 / 391	
B-C	-543 / 0	-119.4 -119.4	0.13 (1)	6.25	G-D	-164 / 0	
C-D	-543 / 0	-119.4 -119.4	0.13 (1)	6.25	B-G	-164 / 0	
D-E	0 / 25	-119.4 -119.4	0.16 (1)	10.00	H-B	-807 / 0	
H-A	-138 / 0	0.0	0.0	0.01 (1)	7.81	D-F	-807 / 0
F-E	-138 / 0	0.0	0.0	0.01 (1)	7.81		
H-G	0 / 499	-18.2	-18.2	0.21 (4)	10.00		
G-F	0 / 499	-18.2	-18.2	0.21 (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 (0.39")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
 ALLOWABLE DEFL.(TL)= L/360 (0.39")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.16/0.97 (D-E:1), BC=0.21/0.97 (F-G:4),
 WB=0.29/0.97 (B-H:1), SSI=0.13/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
	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 (F) (INPUT = 0.90)
 JSI METAL= 0.27 (D) (INPUT = 1.00)



JULY 13, 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 COPY	JOB DESC.	DRWG NO.
IM0723-080	T11	OF PERMIT PLANS		

ENG-IM0723-080-KT
 Nov 22 2023
 PER: *Chmora*
 CHIEF BUILDING OFFICIAL

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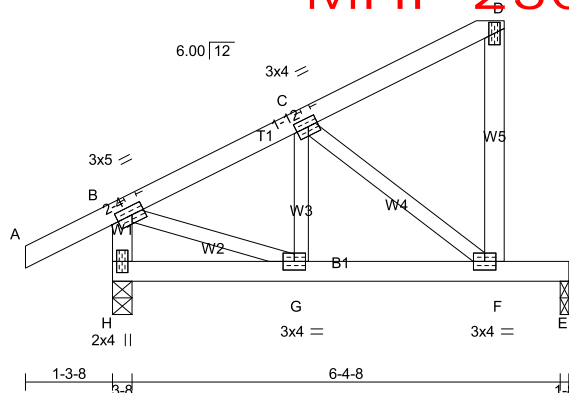
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2-9-12 5-5-0 5-10-0 6-9-8

2-7-4 5-0 11-8

2x4 ||

Scale = 1:34.3



TOTAL WEIGHT = 28 lb

LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4 DRY	No.2	SPF
F - D	2x4 DRY	No.2	SPF
H - B	2x4 DRY	No.2	SPF
H - E	2x4 DRY	No.2	SPF
ALL WEBS	2x3 DRY	No.2	SPF
EXCEPT			

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	3.0	5.0	1.50	2.25
C	TMVW-t	MT20	3.0	4.0	1.50	1.75
D	TMV+p	MT20	2.0	4.0		
F	BMVW-t	MT20	3.0	4.0		
G	BMVW-t	MT20	3.0	4.0		
H	BMV1+p	MT20	2.0	4.0		

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

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ
H	622	0	622	0
E	361	0	361	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. SNOW	MAX./MIN. LIVE	MAX./MIN. PERM.LIVE	WIND	DEAD	SOIL
H	432	326 / 0	0 / 0	0 / 0	0 / 0	106 / 0	0 / 0
E	254	174 / 0	0 / 0	0 / 0	0 / 0	80 / 0	0 / 0

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

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	G-C	0 / 99	0.03 (4)
B-C	-454 / 0	-119.4 -119.4	0.12 (1)	6.25	C-F	-528 / 0	0.12 (1)
C-D	-17 / 0	-119.4 -119.4	0.12 (1)	6.25	B-G	0 / 442	0.10 (1)
F-D	-142 / 0	0.0 0.0	0.04 (1)	7.81			
H-B	-629 / 0	0.0 0.0	0.06 (1)	7.81			
H-G	0 / 0	-18.2 -18.2	0.13 (1)	10.00			
G-F	0 / 423	-18.2 -18.2	0.53 (1)	10.00			
F-E	0 / 0	-18.2 -18.2	0.46 (1)	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 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 (0.23")
 CALCULATED VERT. DEFL.(LL)= L/999 (0.05")
 ALLOWABLE DEFL.(TL)= L/360 (0.23")
 CALCULATED VERT. DEFL.(TL)= L/845 (0.10")

CSI: TC=0.16/0.97 (A-B:1), BC=0.53/0.97 (F-G:1), WB=0.12/0.97 (C-F:1), SSI=0.28/1.00 (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 (PSI)	SECTION (PLI)
MT20	650	371	1747
	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.66 (F) (INPUT = 0.90)
 JSI METAL= 0.17 (B) (INPUT = 1.00)



JULY 13, 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	JOB DESC.	DRWG NO.
IM0723-080	T12		

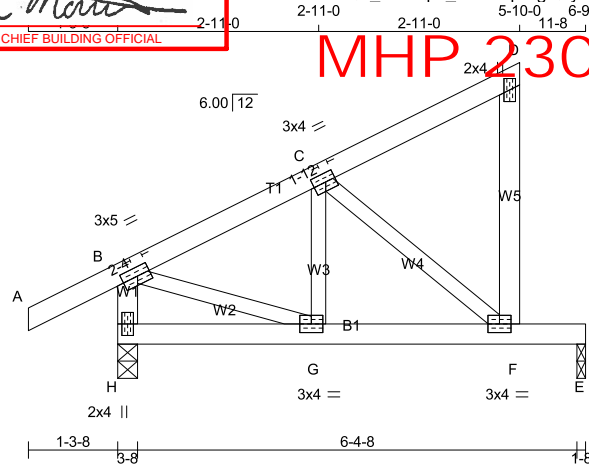
QUANTITY COPY
OF PERMIT PLANS
Nov 22 2023

PER: *Chmora*
CHIEF BUILDING OFFICIAL

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ID: QK_tCmQp0_tF2YVqi0sgQdyWVx2-xfaGQ68jQ21BofivNnDcU3nLeYcb_m1RYAQTUZyyYBf

Scale = 1:33.4



TOTAL WEIGHT = 2 X 28 = 56 lb

LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	3.0	5.0	1.50	2.25
C	TMVW-t	MT20	3.0	4.0	1.50	1.75
D	TMV+p	MT20	2.0	4.0		
F	BMVW-t	MT20	3.0	4.0		
G	BMVW-t	MT20	3.0	4.0		
H	BMV1+p	MT20	2.0	4.0		

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

	FACTORED	MAXIMUM FACTORED	INPUT	REQD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	UPLIFT
H	622	0	622	0
E	361	0	361	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	432	326 / 0	0 / 0	0 / 0	0 / 0	106 / 0	0 / 0
E	254	174 / 0	0 / 0	0 / 0	0 / 0	80 / 0	0 / 0

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

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	G-C	0 / 108	0.03 (4)
B-C	-446 / 0	-119.4 -119.4	0.12 (1)	6.25	C-F	-530 / 0	0.12 (1)
C-D	-18 / 0	-119.4 -119.4	0.12 (1)	6.25	B-G	0 / 432	0.10 (1)
F-D	-134 / 0	0.0 0.0	0.03 (1)	7.81			
H-B	-626 / 0	0.0 0.0	0.06 (1)	7.81			
H-G	0 / 0	-18.2 -18.2	0.12 (1)	10.00			
G-F	0 / 415	-18.2 -18.2	0.53 (1)	10.00			
F-E	0 / 0	-18.2 -18.2	0.46 (1)	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 (0.23")
CALCULATED VERT. DEFL.(LL)= L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.23")
CALCULATED VERT. DEFL.(TL)= L/874 (0.09")

CSI: TC=0.16/0.97 (A-B:1), BC=0.53/0.97 (F-G:1), WB=0.12/0.97 (C-F:1), SSI=0.28/1.00 (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
MT20	650	371	1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.66 (F) (INPUT = 0.90)
JSI METAL= 0.17 (B) (INPUT = 1.00)



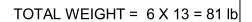
JULY 13, 2023

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.

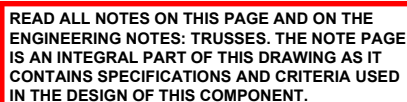


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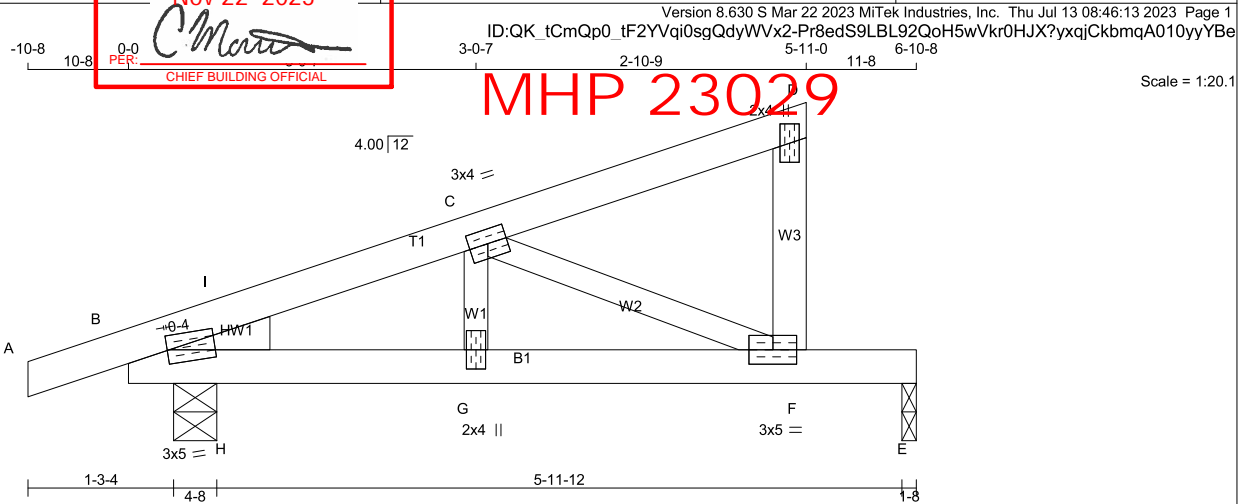
MHP 23029



JSI GRIP= 0.27 (B) (INPUT = 0.90)
JSI METAL= 0.07 (F) (INPUT = 1.00)



JOB NAME	TRUSS NAME	QUANTITY COPY	JOB DESC.	DRWG NO.
IM0723-080	T14	OF PERMIT PLANS		
		Nov 22 2023		



TOTAL WEIGHT = 6 X 22 = 133 lb

LUMBER

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBH1-m	MT20	3.0	5.0	1.50	0.25
C	TMWW-t	MT20	3.0	4.0		
D	TMV+p	MT20	2.0	4.0		
F	BMVW-t	MT20	3.0	5.0		
G	BMW+w	MT20	2.0	4.0		

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

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG	HEEL
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
B	575	0	575	0	0
E	367	0	367	0	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	400	299 / 0	0 / 0	0 / 0	0 / 0	102 / 0	0 / 0
E	258	177 / 0	0 / 0	0 / 0	0 / 0	81 / 0	0 / 0

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

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 8	-119.4 -119.4	0.07 (1)	10.00	G-C	0 / 240	0.05 (1)
B-I	-855 / 0	-119.4 -119.4	0.03 (1)	6.25	C-F	-831 / 0	0.16 (1)
I-C	-805 / 0	-119.4 -119.4	0.07 (1)	6.25	H-I	-45 / 8	0.00 (1)
C-D	-6 / 0	-119.4 -119.4	0.12 (1)	10.00			
F-D	-152 / 0	0.0 0.0	0.02 (1)	7.81			
B-H	0 / 768	-18.2 -18.2	0.15 (1)	10.00			
H-G	0 / 768	-18.2 -18.2	0.23 (1)	10.00			
G-F	0 / 768	-18.2 -18.2	0.59 (1)	10.00			
F-E	0 / 0	-18.2 -18.2	0.47 (1)	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 (0.23")
 CALCULATED VERT. DEFL.(LL)= L/999 (0.06")
 ALLOWABLE DEFL.(TL)= L/360 (0.23")
 CALCULATED VERT. DEFL.(TL)= L/804 (0.10")

CSI: TC=0.12/0.97 (C-D:1), BC=0.59/0.97 (F-G:1)
 , WB=0.16/0.97 (C-F:1), SSI=0.29/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.80 (F) (INPUT = 0.90)
 JSI METAL= 0.24 (C) (INPUT = 1.00)



JULY 13, 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.



TOE-NAIL CAPACITY DETAILS

LATERAL AND WITHDRAWAL RESISTANCE OF BEARING ANCHORAGE BY TOE-NAILS

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

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

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

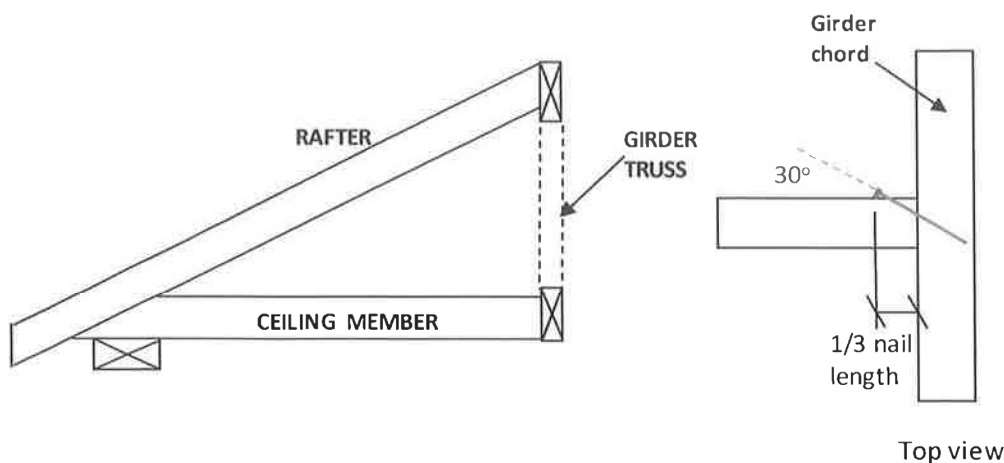
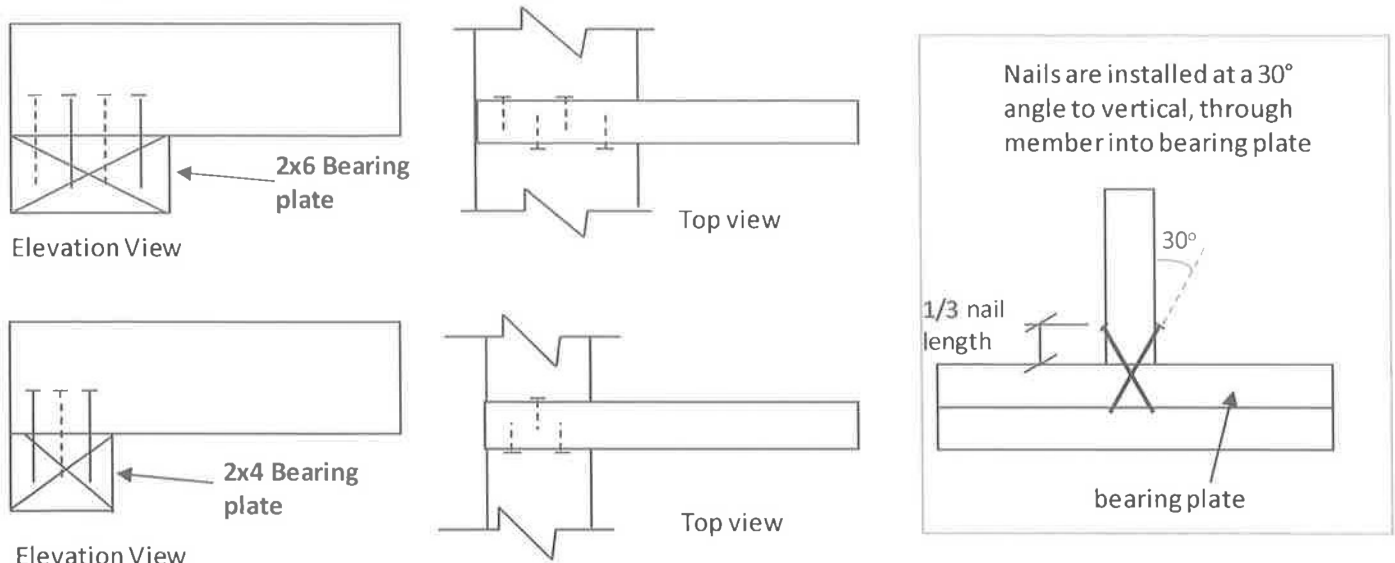


Figure 1: Toe-Nailing Rafter / Ceiling Member to Girder Truss

TOE-NAIL CAPACITY DETAILS

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



NOTES:

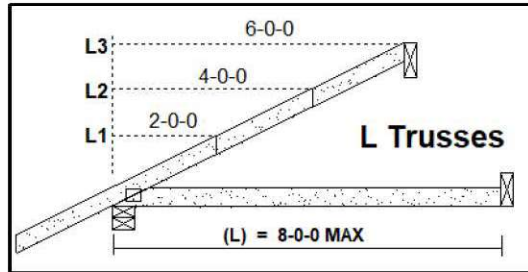
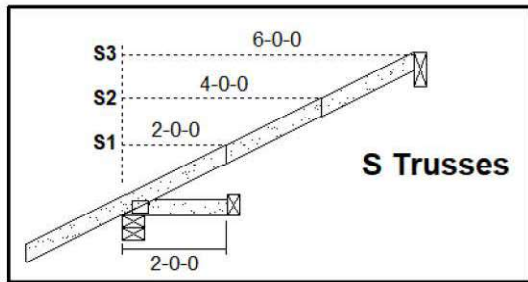
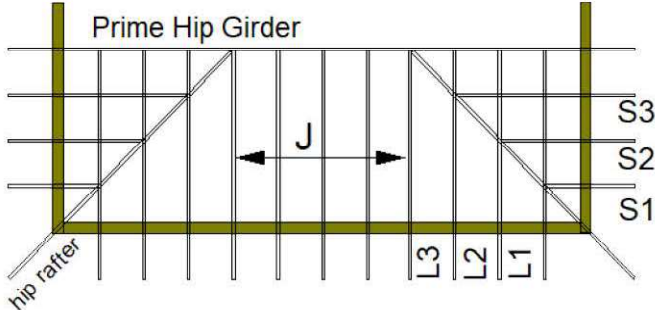
1. Rafter and ceiling members may be connected to top and bottom chords of girder truss by toe-nailing the members into the girder chords (see fig. 1), provided the factored vertical reactions of the supported members do not exceed the lateral resistance of the toe-nails. Mechanical connectors (hangers) are required if factored vertical reactions exceed the toe-nail capacity, or if the connection must resist horizontal loads (loads perpendicular to the face of girder or rafter).
2. Trusses, rafters or ceiling members may be anchored to the bearing plate with toe-nails (see fig. 2), provided that the factored uplift reactions due to **wind or earthquake loads** do not exceed the **withdrawal resistance of the toe-nails**. Mechanical anchors (tie-downs) are required for reactions that exceed the toe-nail withdrawal capacity. Toe-nail anchorage to bearing plates is **NOT** permitted if uplift reactions are generated from gravity loads (snow, floor live, dead).
3. Tabulated toe-nail resistances on page 1 are for **one** toe-nail. Multiply unit values by the number of nails used in the connection. Maximum number of nails in a connection shall not exceed the tabulated limits shown on page 1 for a given lumber size /species.
4. Nail values are based on specific gravity of $G = 0.42$ (SPF) and $G = 0.49$ (D. Fir).
5. Toe-nails shall be driven at approximately $1/3$ the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member.
6. For wind / earthquake loads, tabulated lateral resistances may be multiplied by 1.15 (K_D factor). No increases are permitted for tabulated withdrawal resistances.
7. Lumber must be dry ($< 19\%$ moisture content) at the time of nail installation.
8. Nail values in this table comply with CSA O86-19, Clause 12.9.

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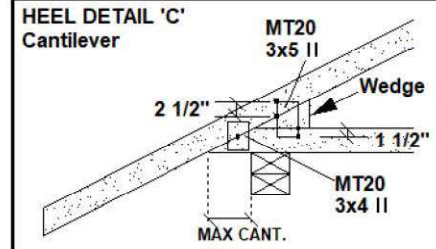
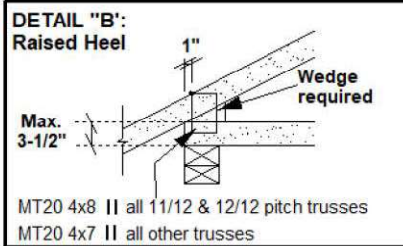
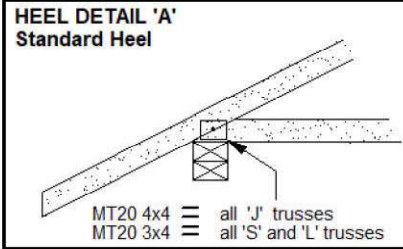
STANDARD HIP END FRAMING

PLAN VIEW



Specified Load Rating:

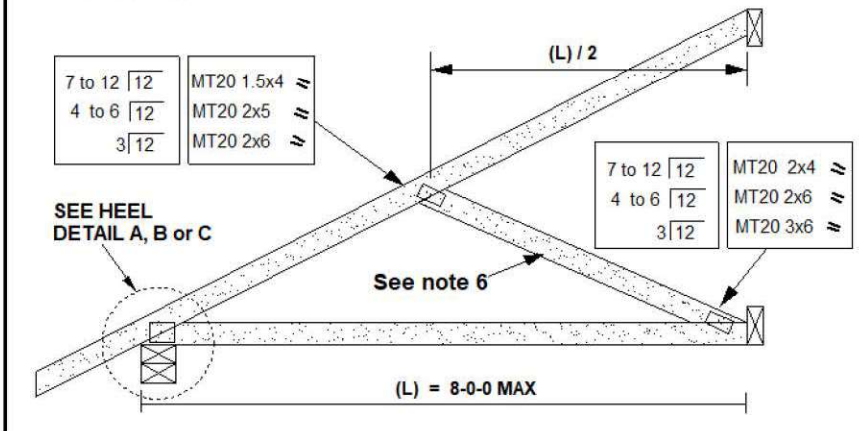
Top chord Live:	51.0 PSF or less
Top chord Dead:	6.0 PSF or less
Bottom chord Live:	0.0 PSF
Bottom chord Dead:	7.3 PSF or less



CANTILEVER DETAIL 'C'

SLOPE	MAX CANT.	WEDGE PLATE	WEDGE SIZE
3/12	17"	3 X 5	2 X 3
4/12	14"	3 X 5	2 X 3
5/12	12"	3 X 5	2 X 4
6/12	10"	3 X 5	2 X 4
7/12	9"	3 X 5	2 X 6
8/12	8.5"	3 X 5	2 X 6
9/12	8"	3 X 5	2 X 6
10/12	7.5"	3 X 5	2 X 6

J Trusses



NOTES:

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

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MiTek



STANDARD DETAIL MSD2015-K

MHP 23029

Issued: MARCH 1, 2022

Expiry: APRIL 30, 2024

STANDARD GABLE END DETAIL

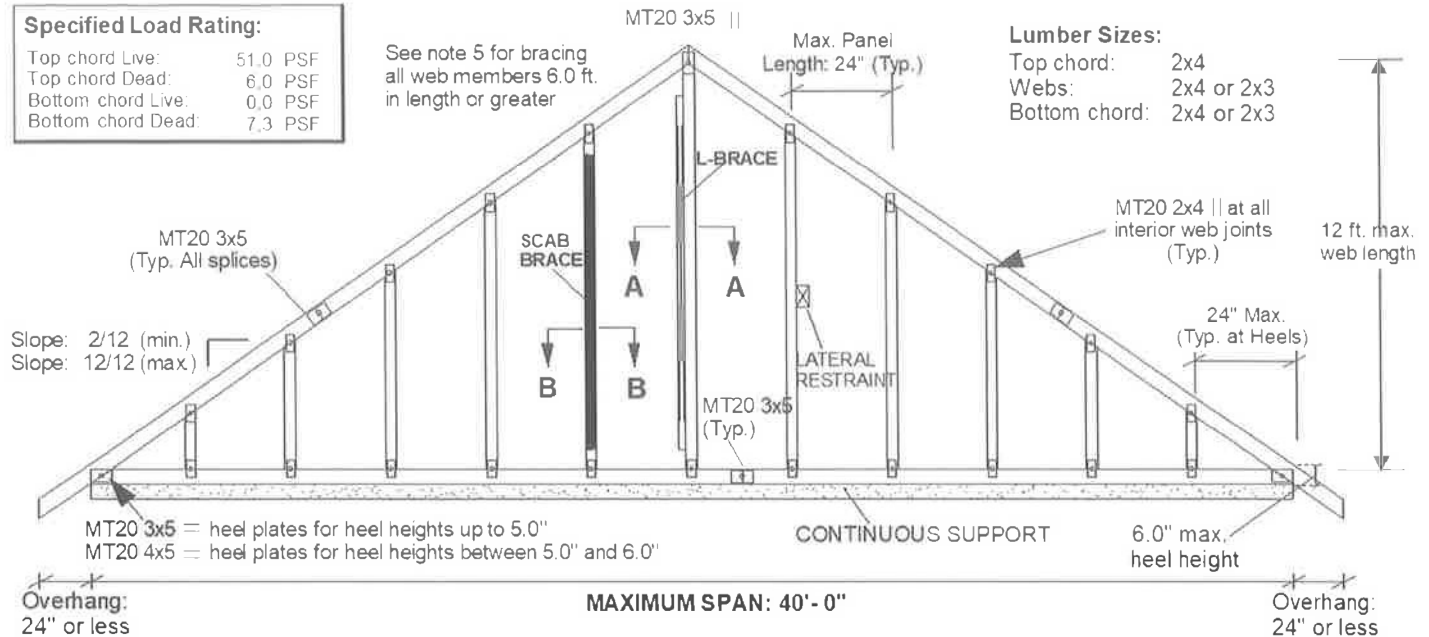
Specified Load Rating:

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

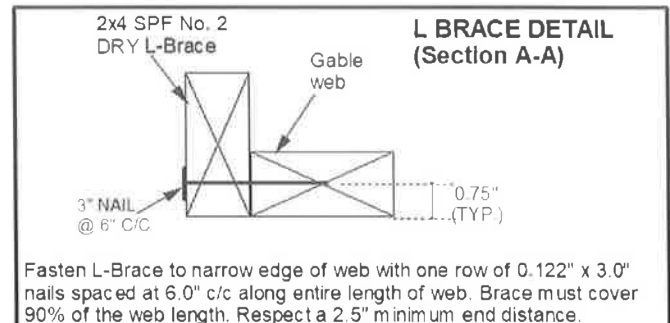
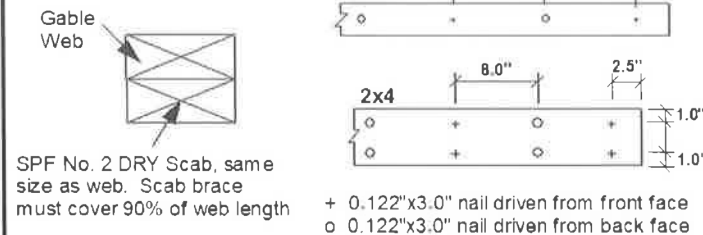
See note 5 for bracing all web members 6.0 ft. in length or greater

Lumber Sizes:

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



SCAB BRACE DETAIL (Section B-B)



Notes:

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

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