

JOB NAME: CORPORATION OF THE TRUSS NAME: TRUE COPY
IM0723-100 OF PERMIT 02 ANS
Nov 03 2023
PER: *C. M...*
CHIEF BUILDING OFFICIAL

QUANTITY: 1
PLY: 1
JOB DESC: TRUSS DESC: MHP 23032

DRWG NO.:
Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Fri Jul 14 09:37:36 2023 Page 1
ID: 3sdF6dUMbpxFEOWsk3nNlZALn9-tvZv8o4uq?4RHQZ0S1dxCRxQt5NrUoiM6qaDxyyCLT

Scale = 1:70.8

TOTAL WEIGHT = 145 lb [M][F]

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
R - B 2x4 DRY No.2 SPF
R - O 2x4 DRY No.2 SPF
O - K 2x4 DRY No.2 SPF
K - H 2x3 DRY No.2 SPF
J - 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
B	TMVW-t	MT20	6.0	6.0	1.75	3.00
C	TMVW-t	MT20	3.0	4.0	1.50	1.50
D	TTWW-m	MT20	5.0	6.0	2.25	2.00
E	TMVW-w	MT20	2.0	4.0		
F	TTWW-m	MT20	5.0	6.0	2.25	2.00
G	TMVWW-t	MT20	3.0	10.0		
H	TMV+p	MT20	2.0	4.0		
I	TMB1-m	MT20	5.0	6.0	Edge	1.25
J	BVMVW-t	MT20	8.0	10.0	4.25	5.75
K	BMV+p	MT20	2.0	4.0		
L	BMVW-t	MT20	4.0	6.0	2.00	2.00
M	BMVW-t	MT20	3.0	4.0		
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	4.0	5.0	1.50	1.50
R	BMV1+p	MT20	3.0	4.0	2.00	0.50

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
I	2191	0	2191	0	0	MECHANICAL
R	2355	0	2355	0	5-8	4-3

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. LIVE		PERM. LIVE	WIND	DEAD	SOIL
	SNOW							
I	1531	1108 / 0	0 / 0	0 / 0	0 / 0	0 / 0	423 / 0	0 / 0
R	1643	1204 / 0	0 / 0	0 / 0	0 / 0	0 / 0	440 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.36 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

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)

C H O R D S				W E B S				
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 / 45	-119.4 -119.4	0.16 (1)	10.00	Q-C	-368 / 0	0.13 (1)	
B-C	-2581 / 0	-119.4 -119.4	0.49 (1)	3.80	C-P	-323 / 0	0.27 (1)	
C-D	-2373 / 0	-119.4 -119.4	0.46 (1)	3.96	P-D	0 / 318	0.07 (1)	
D-E	-2314 / 0	-119.4 -119.4	0.62 (1)	3.72	D-N	0 / 612	0.14 (1)	
E-F	-2314 / 0	-119.4 -119.4	0.62 (1)	3.72	N-E	-866 / 0	0.40 (1)	
F-G	-2354 / 0	-119.4 -119.4	0.19 (1)	4.29	N-F	0 / 615	0.14 (1)	
G-H	-3544 / 0	-119.4 -119.4	0.27 (1)	3.51	M-F	0 / 399	0.09 (1)	
H-T	-3620 / 0	-119.4 -119.4	0.35 (1)	3.41	M-G	-363 / 0	0.28 (1)	
T-I	-3705 / 0	-119.4 -119.4	0.32 (1)	3.36	L-G	-782 / 0	0.45 (1)	
R-B	-2313 / 0	0.0	0.0	0.24 (1)	5.54	L-J	0 / 2230	0.50 (1)
					G-J	0 / 1596	0.36 (1)	
R-Q	0 / 0	-18.2 -18.2	0.10 (4)	10.00	B-Q	0 / 2227	0.50 (1)	
Q-P	0 / 2179	-18.2 -18.2	0.41 (1)	10.00	S-T	-43 / 106	0.00 (1)	
P-O	0 / 1943	-18.2 -18.2	0.38 (1)	10.00				
O-N	0 / 1943	-18.2 -18.2	0.38 (1)	10.00				
N-M	0 / 1941	-18.2 -18.2	0.38 (1)	10.00				
M-L	0 / 2108	-18.2 -18.2	0.38 (1)	10.00				
L-K	0 / 44	-18.2 -18.2	0.04 (1)	10.00				
K-J	0 / 24	0.0	0.0	0.14 (1)	10.00			
J-H	-311 / 0	0.0	0.0	0.12 (1)	7.81			
J-S	0 / 2997	-18.2 -18.2	0.52 (1)	10.00				
S-I	0 / 2993	-18.2 -18.2	0.50 (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

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 (1.06")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.13")
ALLOWABLE DEFL.(TL)= L/360 (1.06")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.23")

CSI: TC=0.62/0.97 (D-E:1), BC=0.52/0.97 (J-S:1), WB=0.50/0.97 (J-L:1), SI=0.37/1.00 (I-T: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

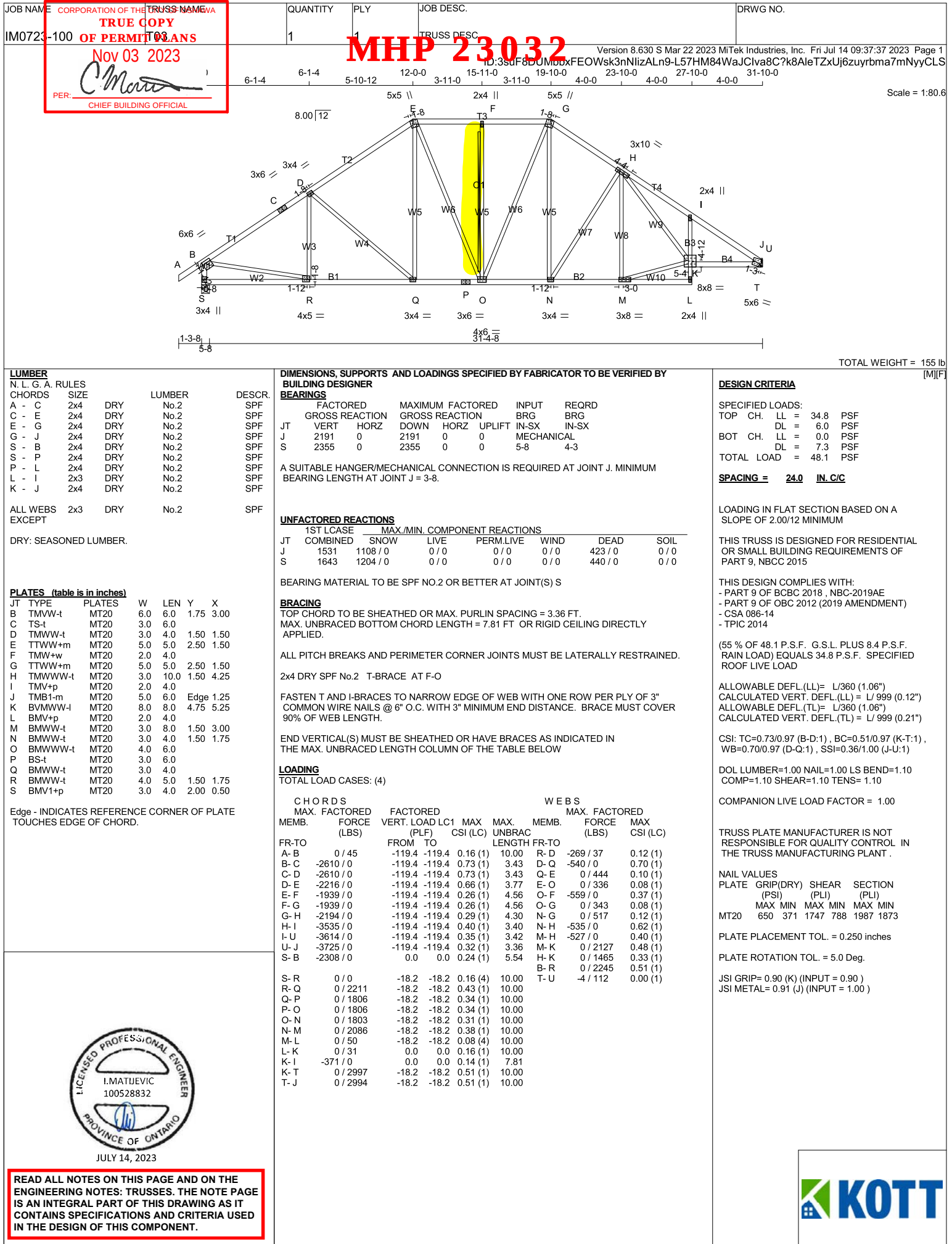
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90)
JSI METAL= 0.91 (I) (INPUT = 1.00)

JULY 14, 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.

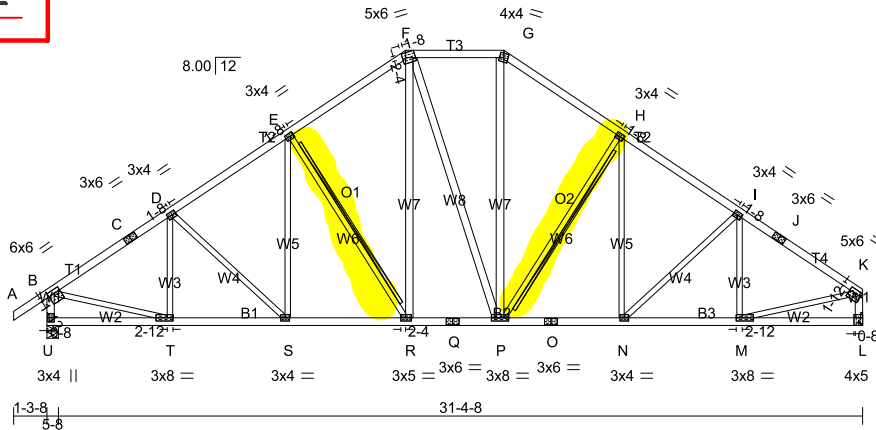


JOB NAME	CORPORATION OF THE TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-100	TRUE COPY OF PERMIT PLANS Nov 03 2023 PER: <i>C. M. M. M.</i> CHIEF BUILDING OFFICIAL	1	1	TRUSS DESC.	

MHP 23032

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Fri Jul 14 09:37:38 2023 Page 1

Scale = 1:89.9



TOTAL WEIGHT = 168 lb

LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
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 - K	2x4	DRY	No.2
U - B	2x4	DRY	No.2
L - K	2x4	DRY	No.2
U - Q	2x4	DRY	No.2
Q - O	2x4	DRY	No.2
O - L	2x4	DRY	No.2

ALL WEBS EXCEPT			
R - F	2x4	DRY	No.2
F - P	2x4	DRY	No.2
P - G	2x4	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMW-t	MT20	6.0	6.0	1.75	3.00
C TS-t	MT20	3.0	6.0		
D, E, H, I					
D TMW-t	MT20	3.0	4.0	1.50	1.50
F TTWW-m	MT20	5.0	6.0	2.25	1.50
G TTW-m	MT20	4.0	4.0		
J TS-t	MT20	3.0	6.0		
K TMW-t	MT20	5.0	6.0	1.75	Edge
L BMV1-t	MT20	4.0	5.0	Edge	0.50
M BMW-t	MT20	3.0	8.0	1.50	2.75
N BMW-t	MT20	3.0	4.0		
O BS-t	MT20	3.0	6.0		
P BMW-t	MT20	3.0	8.0		
Q BS-t	MT20	3.0	6.0		
R BMW-t	MT20	3.0	5.0	1.50	2.25
S BMW-t	MT20	3.0	4.0		
T BMW-t	MT20	3.0	8.0	1.50	2.75
U BMV1-p	MT20	3.0	4.0	2.00	0.50

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				
U 2355	0	2355	0	5-8
L 2191	0	2191	0	4-3

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. SNOW	MIN. COMPONENT LIVE	PERM. LIVE	WIND	DEAD	SOIL
U	1643	1204 / 0	0 / 0	0 / 0	0 / 0	440 / 0	0 / 0
L	1531	1108 / 0	0 / 0	0 / 0	0 / 0	423 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.91 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

C H O R D S				W E B S			
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 / 45	-119.4 -119.4	0.16 (1)	10.00	T-D	-394 / 0	0.12 (1)
B-C	-2556 / 0	-119.4 -119.4	0.42 (1)	3.91	D-S	-190 / 0	0.13 (1)
C-D	-2556 / 0	-119.4 -119.4	0.42 (1)	3.91	S-E	0 / 216	0.05 (1)
D-E	-2419 / 0	-119.4 -119.4	0.36 (1)	4.07	E-R	-683 / 0	0.40 (1)
E-F	-2005 / 0	-119.4 -119.4	0.34 (1)	4.41	R-F	0 / 645	0.10 (1)
F-G	-1652 / 0	-119.4 -119.4	0.26 (1)	4.86	F-P	0 / 4	0.00 (1)
G-H	-2007 / 0	-119.4 -119.4	0.34 (1)	4.41	P-G	0 / 650	0.10 (1)
H-I	-2419 / 0	-119.4 -119.4	0.36 (1)	4.07	P-H	-680 / 0	0.40 (1)
I-J	-2556 / 0	-119.4 -119.4	0.42 (1)	3.91	N-H	0 / 212	0.05 (1)
J-K	-2556 / 0	-119.4 -119.4	0.42 (1)	3.91	N-I	-191 / 0	0.13 (1)
U-B	-2316 / 0	0.0 0.0	0.24 (1)	5.53	M-I	-393 / 0	0.12 (1)
L-K	-2152 / 0	0.0 0.0	0.22 (1)	5.71	B-T	0 / 2204	0.50 (1)
					M-K	0 / 2205	0.50 (1)
U-T	0 / 0	-18.2 -18.2	0.09 (4)	10.00			
T-S	0 / 2151	-18.2 -18.2	0.38 (1)	10.00			
S-R	0 / 2012	-18.2 -18.2	0.36 (1)	10.00			
R-Q	0 / 1651	-18.2 -18.2	0.31 (1)	10.00			
Q-P	0 / 1651	-18.2 -18.2	0.31 (1)	10.00			
P-O	0 / 2011	-18.2 -18.2	0.37 (1)	10.00			
O-N	0 / 2011	-18.2 -18.2	0.37 (1)	10.00			
N-M	0 / 2151	-18.2 -18.2	0.38 (1)	10.00			
M-L	0 / 0	-18.2 -18.2	0.09 (4)	10.00			

DESIGN CRITERIA**SPECIFIED LOADS:**

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = $L/360$ (1.06")

CALCULATED VERT. DEFL.(LL) = $L/999$ (0.10")

ALLOWABLE DEFL.(TL) = $L/360$ (1.06")

CALCULATED VERT. DEFL.(TL) = $L/999$ (0.18")

CSI: TC=0.42/0.97 (I-K:1), BC=0.38/0.97 (M-N:1), WB=0.50/0.97 (K-M:1), SSI=0.22/1.00 (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)
MT20	650	371	1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

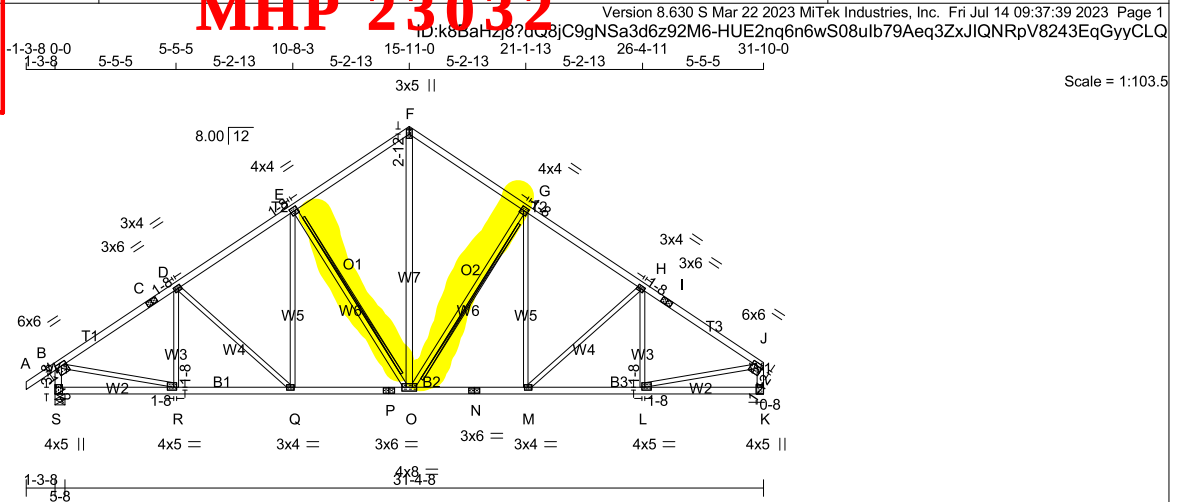
JSI GRIP= 0.90 (B) (INPUT = 0.90)
JSI METAL= 0.67 (B) (INPUT = 1.00)

JULY 14, 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	CORPORATION OF THE TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-100	TRUE COPY OF PERMIT PLANS Nov 03 2023 PER: <i>C. Mante</i> CHIEF BUILDING OFFICIAL	1	1	TRUSS DESC.	



TOTAL WEIGHT = 152 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 - J	2x4	DRY	No.2	SPF
S - B	2x4	DRY	No.2	SPF
K - J	2x4	DRY	No.2	SPF
S - P	2x4	DRY	No.2	SPF
P - N	2x4	DRY	No.2	SPF
N - K	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
O - F	2x4	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

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
S	2355	0	2355	0
K	2191	0	2191	0

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. SNOW	MIN. COMPONENT LIVE	PERM. LIVE	WIND	DEAD	SOIL
S	1643	1204 / 0	0 / 0	0 / 0	0 / 0	440 / 0	0 / 0
K	1531	1108 / 0	0 / 0	0 / 0	0 / 0	423 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.74 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 G-O, E-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)

C H O R D S				W E B S			
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 / 45	-119.4 -119.4	0.16 (1)	O-F	0 / 1489	0.24 (1)	
B-C	-2584 / 0	-119.4 -119.4	0.54 (1)	O-G	-821 / 0	0.63 (1)	
C-D	-2584 / 0	-119.4 -119.4	0.54 (1)	M-G	0 / 305	0.07 (1)	
D-E	-2331 / 0	-119.4 -119.4	0.45 (1)	M-H	-322 / 0	0.30 (1)	
E-F	-1831 / 0	-119.4 -119.4	0.44 (1)	L-H	-326 / 6	0.12 (1)	
F-G	-1831 / 0	-119.4 -119.4	0.44 (1)	E-O	-821 / 0	0.63 (1)	
G-H	-2331 / 0	-119.4 -119.4	0.45 (1)	Q-E	0 / 305	0.07 (1)	
H-I	-2584 / 0	-119.4 -119.4	0.54 (1)	D-Q	-322 / 0	0.30 (1)	
I-J	-2584 / 0	-119.4 -119.4	0.54 (1)	R-D	-326 / 6	0.12 (1)	
S-B	-2312 / 0	0.0	0.24 (1)	B-R	0 / 2220	0.50 (1)	
K-J	-2148 / 0	0.0	0.22 (1)	L-J	0 / 2220	0.50 (1)	
S-R	0 / 0	-18.2 -18.2	0.12 (4)	10.00			
R-Q	0 / 2178	-18.2 -18.2	0.40 (1)	10.00			
Q-P	0 / 1938	-18.2 -18.2	0.38 (1)	10.00			
P-O	0 / 1938	-18.2 -18.2	0.38 (1)	10.00			
O-N	0 / 1938	-18.2 -18.2	0.38 (1)	10.00			
N-M	0 / 1938	-18.2 -18.2	0.38 (1)	10.00			
M-L	0 / 2178	-18.2 -18.2	0.40 (1)	10.00			
L-K	0 / 0	-18.2 -18.2	0.12 (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 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 (1.06")
CALCULATED VERT. DEFL.(LL) = L/999 (0.11")
ALLOWABLE DEFL.(TL) = L/360 (1.06")
CALCULATED VERT. DEFL.(TL) = L/999 (0.19")

CSI: TC=0.54/0.97 (H-J:1), BC=0.40/0.97 (L-M:1), WB=0.63/0.97 (E-O:1), SSI=0.25/1.00 (B-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90)
JSI METAL= 0.68 (B) (INPUT = 1.00)

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	6.0	1.75	3.00
C	TS-t	MT20	3.0	6.0		
D	TMVW-t	MT20	3.0	4.0	1.50	1.50
E	TMVW-t	MT20	4.0	4.0	2.00	1.50
F	TTW+p	MT20	3.0	5.0	2.75	1.50
G	TMVW-t	MT20	4.0	4.0	2.00	1.50
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	1.75	Edge
K	BMV1+t	MT20	4.0	5.0	Edge	0.50
L	BMVW-t	MT20	4.0	5.0	1.50	1.50
M	BMVW-t	MT20	3.0	4.0		
N	BS-t	MT20	3.0	6.0		
O	BMVWW-t	MT20	4.0	8.0		
P	BS-t	MT20	3.0	6.0		
Q	BMVW-t	MT20	3.0	4.0		
R	BMVW-t	MT20	4.0	5.0	1.50	1.50
S	BMV1+t	MT20	4.0	5.0	3.50	

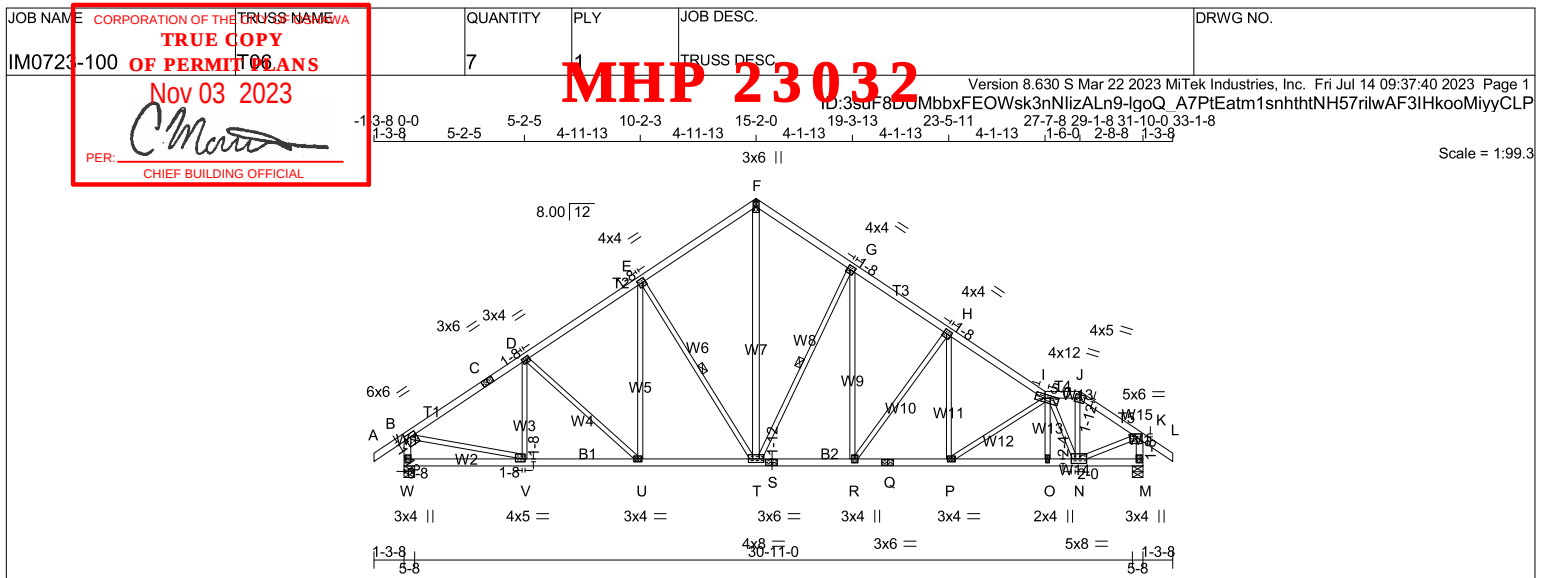
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.



JULY 14, 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.





TOTAL WEIGHT = 7 X 161 = 1127 lb

LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF			
C - F	2x4	DRY	No.2	SPF			
F - I	2x4	DRY	No.2	SPF			
I - J	2x4	DRY	No.2	SPF			
J - L	2x4	DRY	No.2	SPF			
W - B	2x4	DRY	No.2	SPF			
M - K	2x4	DRY	No.2	SPF			
W - S	2x4	DRY	No.2	SPF			
S - Q	2x4	DRY	No.2	SPF			
Q - M	2x4	DRY	No.2	SPF			
ALL WEBS EXCEPT T - F	2x3	DRY	No.2	SPF			
T - 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	1.75	3.00
C TS-t	MT20	3.0	6.0		
D TMVW-t	MT20	3.0	4.0	1.50	1.50
E, G, H					
E TMVW-t	MT20	4.0	4.0	2.00	1.50
F TTVW-p	MT20	3.0	6.0		
I TTVWW-m	MT20	4.0	12.0	2.00	5.00
J TTVW-m	MT20	4.0	5.0	1.75	2.50
K TMVW-p	MT20	5.0	6.0	1.50	3.00
M BMV1+p	MT20	3.0	4.0	2.00	
N BMVWW-t	MT20	5.0	8.0	2.25	2.00
O BMVW-w	MT20	2.0	4.0		
P BMVW-t	MT20	3.0	4.0		
Q BS-t	MT20	3.0	6.0		
R BMVW-t	MT20	3.0	4.0		
S BS-t	MT20	3.0	6.0		
T BMVWW-t	MT20	4.0	8.0	1.75	4.00
U BMVW-t	MT20	3.0	4.0		
V BMVW-t	MT20	4.0	5.0	1.50	1.50
W BMV1+p	MT20	3.0	4.0	2.00	0.50

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

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	UPLIFT
W	2355	0	2355	0
M	2355	0	2355	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. SNOW	MIN. COMPONENT LIVE	PERM. LIVE	WIND	DEAD	SOIL
W	1643	1204 / 0	0 / 0	0 / 0	0 / 0	440 / 0	0 / 0
M	1643	1204 / 0	0 / 0	0 / 0	0 / 0	440 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.79 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 E-T, G-T. DBS = 20-0-0. CBF = 124 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				
MAX. FACTORED		FACTORED		MAX. FACTORED				
MEMB.	FORCE	VERT. LOAD	LC1	MAX	MAX.	MEMB.	MAX. FORCE	MAX
	(LBS)	(PLF)	CSI (LC)	UNBRAC			(LBS)	CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO			
A-B	0 / 45	-119.4 -119.4	0.16 (1)	10.00	V-D	-351 / 0		0.12 (1)
B-C	-2575 / 0	-119.4 -119.4	0.49 (1)	3.81	D-U	-273 / 0		0.23 (1)
C-D	-2575 / 0	-119.4 -119.4	0.49 (1)	3.81	U-E	0 / 268		0.06 (1)
D-E	-2367 / 0	-119.4 -119.4	0.41 (1)	4.05	E-T	-763 / 0		0.46 (1)
E-F	-1905 / 0	-119.4 -119.4	0.40 (1)	4.43	T-F	0 / 1636		0.26 (1)
F-G	-1900 / 0	-119.4 -119.4	0.27 (1)	4.59	T-G	-995 / 0		0.62 (1)
G-H	-2403 / 0	-119.4 -119.4	0.28 (1)	4.16	R-G	0 / 644		0.14 (1)
H-I	-2888 / 0	-119.4 -119.4	0.34 (1)	3.79	R-H	-725 / 0		0.68 (1)
I-J	-1938 / 0	-119.4 -119.4	0.07 (1)	4.77	P-H	0 / 320		0.07 (1)
J-K	-2290 / 0	-119.4 -119.4	0.17 (1)	4.36	P-I	-389 / 0		0.17 (1)
K-L	0 / 45	-119.4 -119.4	0.16 (1)	10.00	O-I	0 / 47		0.02 (4)
W-B	-2314 / 0	0.0 0.0	0.24 (1)	5.54	I-N	-1867 / 0		0.37 (1)
M-K	-2333 / 0	0.0 0.0	0.24 (1)	5.52	N-J	0 / 1027		0.23 (1)
					B-V	0 / 2216		0.50 (1)
					N-K	0 / 2036		0.46 (1)
W-V	0 / 0	-18.2 -18.2	0.11 (4)	10.00				
V-U	0 / 2169	-18.2 -18.2	0.39 (1)	10.00				
U-T	0 / 1968	-18.2 -18.2	0.38 (1)	10.00				
T-S	0 / 1999	-18.2 -18.2	0.39 (1)	10.00				
S-R	0 / 1999	-18.2 -18.2	0.39 (1)	10.00				
R-Q	0 / 2429	-18.2 -18.2	0.43 (1)	10.00				
Q-P	0 / 2429	-18.2 -18.2	0.43 (1)	10.00				
P-O	0 / 2748	-18.2 -18.2	0.51 (1)	10.00				
O-N	0 / 2748	-18.2 -18.2	0.49 (1)	10.00				
N-M	0 / 0	-18.2 -18.2	0.03 (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 ALL FLAT SECTIONS 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 (1.06")
CALCULATED VERT. DEFL.(LL) = L/999 (0.13")
ALLOWABLE DEFL.(TL) = L/360 (1.06")
CALCULATED VERT. DEFL.(TL) = L/999 (0.23")

CSI: TC=0.49/0.97 (B-D:1), BC=0.51/0.97 (O-P:1), WB=0.68/0.97 (H-R:1), SSI=0.24/1.00 (B-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90)
JSI METAL= 0.94 (I) (INPUT = 1.00)



JULY 14, 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.



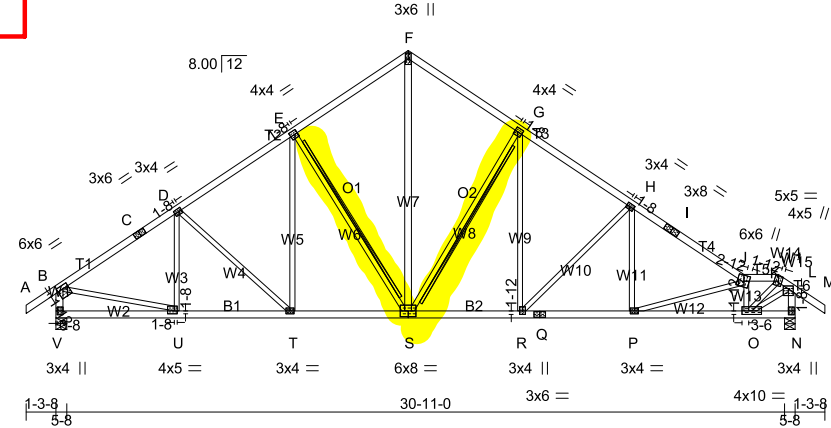
JOB NAME	CORPORATION OF THE TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-100	TRUE COPY OF PERMIT PLANS Nov 03 2023 PER: <i>C. Monte</i> CHIEF BUILDING OFFICIAL	1	1	TRUSS DESC.	

MHP 23032

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Fri Jul 14 09:37:41 2023 Page 1

ID: 3sur 8DumBxFeOWsk3nNlZALn9-DsMoCW81eXikOBR_EaC6vUelc64uvi_RVOYLv9yCLO

Scale = 1:99.3



TOTAL WEIGHT = 155 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 - I	2x4	DRY	No.2	SPF	
I - J	2x4	DRY	No.2	SPF	
J - K	2x4	DRY	No.2	SPF	
K - M	2x4	DRY	No.2	SPF	
V - B	2x4	DRY	No.2	SPF	
N - L	2x4	DRY	No.2	SPF	
V - S	2x4	DRY	No.2	SPF	
S - Q	2x4	DRY	No.2	SPF	
Q - N	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
S - 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	1.75	3.00
C	TS-t	MT20	3.0	6.0		
D	TMVW-t	MT20	3.0	4.0	1.50	1.50
E	TMVW-t	MT20	4.0	4.0	2.00	1.50
F	TTW+p	MT20	3.0	6.0		
G	TMVW-t	MT20	4.0	4.0	2.00	1.50
H	TMVW-t	MT20	3.0	4.0	1.50	1.50
I	TS-t	MT20	3.0	8.0		
J	TTW+m	MT20	6.0	6.0	3.00	2.75
K	TTW+m	MT20	4.0	5.0	Edge	1.75
L	TMVW-p	MT20	5.0	5.0	1.50	2.50
N	BMV1+p	MT20	3.0	4.0	2.00	
O	BMVWW-t	MT20	4.0	10.0	1.75	3.25
P	BMVW-t	MT20	3.0	4.0		
Q	BS-t	MT20	3.0	6.0		
R	BMVW+t	MT20	3.0	4.0	1.75	1.50
S	BSWWW-t	MT20	6.0	8.0		
T	BMVW-t	MT20	3.0	4.0		
U	BMVW-t	MT20	4.0	5.0	1.50	1.50
V	BMV1+p	MT20	3.0	4.0	2.00	0.50

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	MAXIMUM FACTORED	INPUT	REQD
GROSS REACTION	GROSS REACTION	BRG	BRG	
JT VERT	HORZ	DOWN	HORZ	UPLIFT
V	2352	0	2352	0
N	2359	0	2359	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS	WIND	DEAD	SOIL
V	1641	1202 / 0	0 / 0	439 / 0	0 / 0
N	1646	1206 / 0	0 / 0	440 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.56 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-S, G-S

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.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH	MEMB.	FORCE (LBS)	MAX. UNBRACED LENGTH	
FR-TO		FROM TO		FR-TO			
A-B	0 / 45	-119.4 -119.4	0.16 (1)	10.00	U-D	-353 / 0	0.12 (1)
B-C	-2570 / 0	-119.4 -119.4	0.49 (1)	3.81	D-T	-270 / 0	0.23 (1)
C-D	-2570 / 0	-119.4 -119.4	0.49 (1)	3.81	T-E	0 / 282	0.06 (1)
D-E	-2363 / 0	-119.4 -119.4	0.41 (1)	4.05	E-S	-774 / 0	0.53 (1)
E-F	-1894 / 0	-119.4 -119.4	0.40 (1)	4.44	S-F	0 / 1593	0.26 (1)
F-G	-1893 / 0	-119.4 -119.4	0.37 (1)	4.48	S-G	-1008 / 0	0.70 (1)
G-H	-2490 / 0	-119.4 -119.4	0.39 (1)	3.99	R-G	0 / 580	0.13 (1)
H-I	-3045 / 0	-119.4 -119.4	0.48 (1)	3.56	R-H	-692 / 0	0.59 (1)
I-J	-3045 / 0	-119.4 -119.4	0.48 (1)	3.56	P-H	0 / 174	0.04 (4)
J-K	-2372 / 0	-119.4 -119.4	0.09 (1)	4.38	P-J	-238 / 0	0.11 (1)
K-L	-1979 / 0	-119.4 -119.4	0.16 (1)	4.64	O-J	-1993 / 0	0.29 (1)
L-M	0 / 45	-119.4 -119.4	0.16 (1)	10.00	O-K	0 / 1367	0.31 (1)
V-B	-2310 / 0	0.0	0.0	2.21	B-U	0 / 2211	0.50 (1)
N-L	-2333 / 0	0.0	0.0	2.21	O-L	0 / 1797	0.40 (1)
V-U	0 / 0	-18.2 -18.2	0.10 (4)	10.00			
U-T	0 / 2164	-18.2 -18.2	0.40 (1)	10.00			
T-S	0 / 1965	-18.2 -18.2	0.37 (1)	10.00			
S-R	0 / 2071	-18.2 -18.2	0.39 (1)	10.00			
R-Q	0 / 2563	-18.2 -18.2	0.45 (1)	10.00			
Q-P	0 / 2563	-18.2 -18.2	0.45 (1)	10.00			
P-O	0 / 2789	-18.2 -18.2	0.52 (1)	10.00			
O-N	0 / 0	-18.2 -18.2	0.05 (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 ALL FLAT SECTIONS 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

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 (1.06")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.13")
ALLOWABLE DEFL.(TL)= L/360 (1.06")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.23")CSI: TC=0.49/0.97 (B-D:1), BC=0.52/0.97 (O-P:1),
WB=0.70/0.97 (G-S:1), SSI=0.24/1.00 (B-D:1)DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90)
JSI METAL= 0.72 (Q) (INPUT = 1.00)

JULY 14, 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.



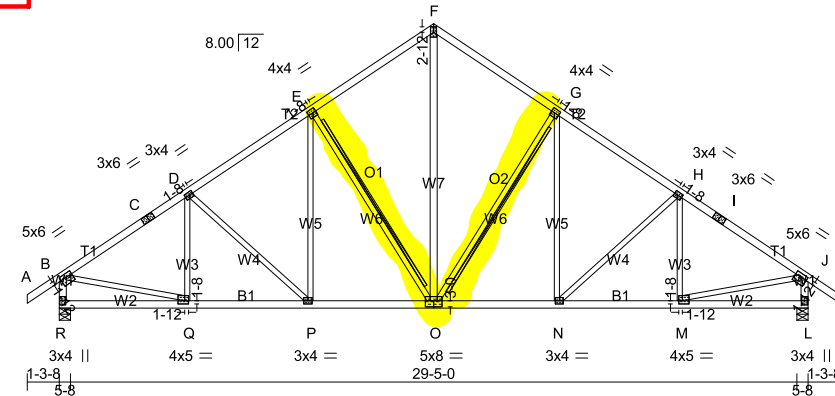
JOB NAME	CORPORATION OF THE TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-100	TRUE COPY OF PERMIT PLANS Nov 03 2023 PER: <i>C. Motta</i> CHIEF BUILDING OFFICIAL	2	1	TRUSS DESC.	

MHP 23032

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Fri Jul 14 09:37:42 2023 Page 1

ID: 3suF6UUMbXFEOWsk3nNlIZALn9-h3wAPs8fPrqb?L0AoHkLSiBTZVTPeBfbk2HuRbyyCLN

Scale = 1:93.3



TOTAL WEIGHT = 2 X 147 = 294 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 - I	2x4	DRY	No.2	SPF	
I - K	2x4	DRY	No.2	SPF	
R - B	2x4	DRY	No.2	SPF	
L - J	2x4	DRY	No.2	SPF	
R - O	2x4	DRY	No.2	SPF	
O - L	2x4	DRY	No.2	SPF	
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF	
O - 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	5.0	6.0	1.75	3.00
C	TS-t	MT20	3.0	6.0		
D	TMVW-t	MT20	3.0	4.0	1.50	1.50
E	TMVW-t	MT20	4.0	4.0	2.00	1.50
F	TTW+p	MT20	3.0	5.0	2.75	1.50
G	TMVW-t	MT20	4.0	4.0	2.00	1.50
H	TMVW-t	MT20	3.0	4.0	1.50	1.50
I	TS-t	MT20	3.0	6.0		
J	TMVW-t	MT20	5.0	6.0	1.75	3.00
L	BMV1+p	MT20	3.0	4.0		
M	BMVW-t	MT20	4.0	5.0	1.50	1.75
N	BMVW-t	MT20	3.0	4.0		
O	BSVWW-t	MT20	5.0	8.0	3.00	4.00
P	BMVW-t	MT20	3.0	4.0		
Q	BMVW-t	MT20	4.0	5.0	1.50	1.75
R	BMV1+p	MT20	3.0	4.0		

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

	FACTORED	MAXIMUM FACTORED	INPUT	REQD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	UPLIFT
R	2252	0	2252	0
L	2252	0	2252	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
R	1571	1151 / 0	0 / 0	0 / 0	0 / 0	420 / 0	0 / 0	
L	1571	1151 / 0	0 / 0	0 / 0	0 / 0	420 / 0	0 / 0	

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.92 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

2x4 DRY SPF No.2 T-BRACE AT G-O, E-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. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	0 / 45	-119.4 -119.4	0.16 (1)	O-F	0 / 1405	0.23 (1)	
B-C	-2433 / 0	-119.4 -119.4	0.48 (1)	O-G	-786 / 0	0.54 (1)	
C-D	-2433 / 0	-119.4 -119.4	0.48 (1)	N-G	0 / 295	0.07 (1)	
D-E	-2208 / 0	-119.4 -119.4	0.40 (1)	N-H	-291 / 0	0.24 (1)	
E-F	-1732 / 0	-119.4 -119.4	0.39 (1)	M-H	-329 / 0	0.11 (1)	
F-G	-1732 / 0	-119.4 -119.4	0.39 (1)	E-O	-786 / 0	0.54 (1)	
G-H	-2208 / 0	-119.4 -119.4	0.40 (1)	P-E	0 / 295	0.07 (1)	
H-I	-2433 / 0	-119.4 -119.4	0.48 (1)	D-P	-291 / 0	0.24 (1)	
I-J	-2433 / 0	-119.4 -119.4	0.48 (1)	Q-D	-329 / 0	0.11 (1)	
J-K	0 / 45	-119.4 -119.4	0.16 (1)	B-Q	0 / 2095	0.47 (1)	
R-B	-2210 / 0	0.0	0.0 0.23 (1)	M-J	0 / 2095	0.47 (1)	
L-J	-2210 / 0	0.0	0.0 0.23 (1)				
R-Q	0 / 0	-18.2 -18.2	0.10 (4)				
Q-P	0 / 2051	-18.2 -18.2	0.38 (1)				
P-O	0 / 1836	-18.2 -18.2	0.35 (1)				
O-N	0 / 1836	-18.2 -18.2	0.35 (1)				
N-M	0 / 2051	-18.2 -18.2	0.38 (1)				
M-L	0 / 0	-18.2 -18.2	0.10 (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

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 (1.01")
CALCULATED VERT. DEFL.(LL) = L/999 (0.10")
ALLOWABLE DEFL.(TL) = L/360 (1.01")
CALCULATED VERT. DEFL.(TL) = L/999 (0.18")

CSI: TC=0.48/0.97 (H-J:1), BC=0.38/0.97 (M-N:1),
WB=0.54/0.97 (G-O:1), SSI=0.24/1.00 (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)
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= 0.64 (B) (INPUT = 1.00)



JULY 14, 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.



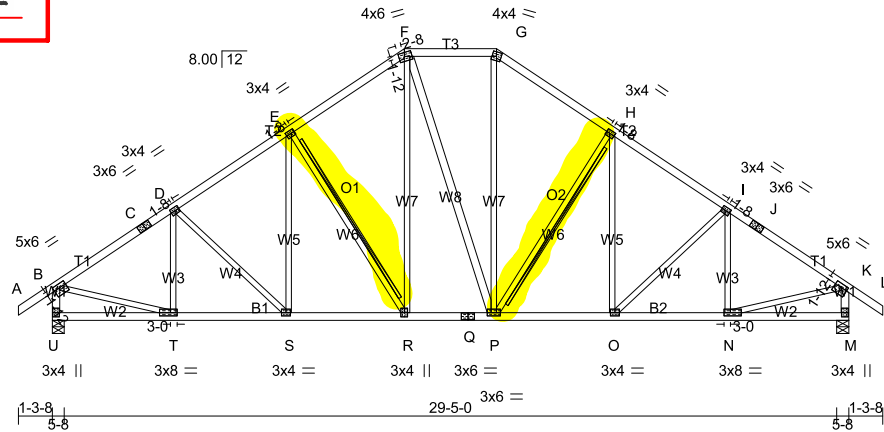
JOB NAME	CORPORATION OF THE TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-100	TRUE COPY OF PERMIT PLANS Nov 03 2023 PER: <i>C. M. M.</i> CHIEF BUILDING OFFICIAL	1	1	TRUSS DESC.	

MHP 23032

Version 8.630 S Mar 22 2023 MITek Industries, Inc. Fri Jul 14 09:37:43 2023 Page 1

ID: 35dF8DUMboxFEOWsk3nNliZALn9-AFUyCB9HA9ySdVbMM?Fa_vjgxvpwNf2kzi1Sz1yyCLM

Scale = 1:87.7



TOTAL WEIGHT = 156 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	
U - B	2x4	DRY	No.2	SPF	
M - K	2x4	DRY	No.2	SPF	
U - Q	2x4	DRY	No.2	SPF	
Q - M	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
F - P	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	6.0	1.75	3.00
C	TS-t	MT20	3.0	6.0		
D, E, H, I						
D	TMVW-t	MT20	3.0	4.0	1.50	1.50
F	TTWW-m	MT20	4.0	6.0	1.75	2.50
G	TTW-m	MT20	4.0	4.0		
J	TS-t	MT20	3.0	6.0		
K	TMVW-t	MT20	5.0	6.0	1.75	3.00
M	BMV1+p	MT20	3.0	4.0		
N	BMVW-t	MT20	3.0	8.0	1.50	3.00
O	BMVW-t	MT20	3.0	4.0		
P	BMVW-t	MT20	3.0	6.0		
Q	BS-t	MT20	3.0	6.0		
R	BMVW-t	MT20	3.0	4.0		
S	BMVW-t	MT20	3.0	4.0		
T	BMVW-t	MT20	3.0	8.0	1.50	3.00
U	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
U	2252	0	2252	0
M	2252	0	2252	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS			
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
U	1571	1151 / 0	0 / 0	0 / 0	0 / 0	420 / 0
M	1571	1151 / 0	0 / 0	0 / 0	0 / 0	420 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.06 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-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	FACTORED	VERT. LOAD	MEMB.	MAX. FACTORED	FACTORED	VERT. LOAD
	FORCE (LBS)	(PLF)	LC1 (LC)		FORCE (LBS)	(PLF)	LC1 (LC)
FR-TO		FROM TO	LENGTH	FR-TO		FROM TO	LENGTH
A-B	0 / 45	-119.4 -119.4	0.16 (1)	T-D	-389 / 0	0.12 (1)	
B-C	-2406 / 0	-119.4 -119.4	0.37 (1)	D-S	-171 / 0	0.11 (1)	
C-D	-2406 / 0	-119.4 -119.4	0.37 (1)	S-E	0 / 201	0.05 (1)	
D-E	-2285 / 0	-119.4 -119.4	0.32 (1)	E-R	-648 / 0	0.35 (1)	
E-F	-1897 / 0	-119.4 -119.4	0.31 (1)	R-F	0 / 611	0.14 (1)	
F-G	-1561 / 0	-119.4 -119.4	0.22 (1)	F-P	0 / 6	0.00 (1)	
G-H	-1899 / 0	-119.4 -119.4	0.31 (1)	P-G	0 / 618	0.14 (1)	
H-I	-2285 / 0	-119.4 -119.4	0.32 (1)	P-H	-643 / 0	0.35 (1)	
I-J	-2407 / 0	-119.4 -119.4	0.37 (1)	O-H	0 / 195	0.04 (1)	
J-K	-2407 / 0	-119.4 -119.4	0.37 (1)	O-I	-173 / 0	0.11 (1)	
K-L	0 / 45	-119.4 -119.4	0.16 (1)	N-I	-388 / 0	0.12 (1)	
U-B	-2214 / 0	0.0	0.0 0.23 (1)	B-T	0 / 2080	0.47 (1)	
M-K	-2214 / 0	0.0	0.0 0.23 (1)	N-K	0 / 2080	0.47 (1)	

U-T	0 / 0	-18.2	-18.2	0.08 (4)	10.00
T-S	0 / 2025	-18.2	-18.2	0.36 (1)	10.00
S-R	0 / 1900	-18.2	-18.2	0.34 (1)	10.00
R-Q	0 / 1559	-18.2	-18.2	0.30 (1)	10.00
Q-P	0 / 1559	-18.2	-18.2	0.30 (1)	10.00
P-O	0 / 1900	-18.2	-18.2	0.35 (1)	10.00
O-N	0 / 2025	-18.2	-18.2	0.36 (1)	10.00
N-M	0 / 0	-18.2	-18.2	0.08 (4)	10.00

DESIGN CRITERIA**SPECIFIED LOADS:**

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF 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 (1.01")
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (1.01")
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.16")

CSI: TC=0.37/0.97 (I-K:1), BC=0.36/0.97 (N-O:1),
WB=0.47/0.97 (K-N:1), SSI=0.21/1.00 (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)
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= 0.63 (K) (INPUT = 1.00)



JULY 14, 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 CORPORATION OF THE TRUSS NAME
IM0723-100 **TRUE COPY**
OF PERMIT PLANS
Nov 03 2023
C. M...
PER: CHIEF BUILDING OFFICIAL

QUANTITY 1
PLY 1
TRUSS DESC MHP 23032

JOB DESC.
Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Fri Jul 14 09:37:44 2023 Page 1
ID:3suF8DUM0xFEOWsk3nNlZALn9-eR2xqXAvxS4JfAYwimpX7GneJ8a65ltCMm?VUyyCLL

DRWG NO.
30-4-0 31-7-8
1-3-8

Scale = 1:77.6

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
Q - B 2x4 DRY No.2 SPF
J - H 2x4 DRY No.2 SPF
Q - 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	6.0	1.75	3.00
C	TMWW-t	MT20	3.0	4.0	1.50	1.50
D	TTWW+m	MT20	5.0	5.0	2.50	1.50
E	TMW+w	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	5.0	2.50	1.50
G	TMWW-t	MT20	3.0	4.0	1.50	1.50
H	TMVW-t	MT20	5.0	6.0	1.75	3.00
J	BMV1+p	MT20	3.0	4.0		
K	BMWW-t	MT20	4.0	5.0	1.50	1.75
L	BMWW-t	MT20	3.0	4.0		
M	BS-t	MT20	3.0	6.0		
N	BMWW-t	MT20	3.0	8.0		
O	BMWW-t	MT20	3.0	4.0		
P	BMWW-t	MT20	4.0	5.0	1.50	1.75
Q	BMV1+p	MT20	3.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
Q	2252	0	2252	0	5-8	3-13
J	2252	0	2252	0	5-8	3-13

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
Q	1571	1151 / 0	0 / 0	0 / 0	0 / 0	420 / 0	0 / 0
J	1571	1151 / 0	0 / 0	0 / 0	0 / 0	420 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.66 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. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 45	-119.4 -119.4	0.16 (1)	10.00	P-C	-273 / 31	0.11 (1)
B-C	-2460 / 0	-119.4 -119.4	0.63 (1)	3.66	C-O	-498 / 0	0.57 (1)
C-D	-2102 / 0	-119.4 -119.4	0.58 (1)	3.98	O-D	0 / 417	0.09 (1)
D-E	-1840 / 0	-119.4 -119.4	0.24 (1)	4.68	D-N	0 / 320	0.07 (1)
E-F	-1840 / 0	-119.4 -119.4	0.24 (1)	4.68	N-E	-536 / 0	0.32 (1)
F-G	-2102 / 0	-119.4 -119.4	0.58 (1)	3.98	N-F	0 / 320	0.07 (1)
G-H	-2460 / 0	-119.4 -119.4	0.63 (1)	3.66	L-F	0 / 417	0.09 (1)
H-I	0 / 45	-119.4 -119.4	0.16 (1)	10.00	L-G	-498 / 0	0.57 (1)
Q-B	-2207 / 0	0.0	0.0	2.23 (1)	K-G	-273 / 31	0.11 (1)
J-H	-2207 / 0	0.0	0.0	2.23 (1)	B-P	0 / 2119	0.48 (1)
					K-H	0 / 2119	0.48 (1)
Q-P	0 / 0	-18.2 -18.2	0.14 (4)	10.00			
P-O	0 / 2084	-18.2 -18.2	0.40 (1)	10.00			
O-N	0 / 1713	-18.2 -18.2	0.32 (1)	10.00			
N-M	0 / 1713	-18.2 -18.2	0.32 (1)	10.00			
M-L	0 / 1713	-18.2 -18.2	0.32 (1)	10.00			
L-K	0 / 2084	-18.2 -18.2	0.40 (1)	10.00			
K-J	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, NBC2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC2018, 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 (1.01")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (1.01")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.16")

CSI: TC=0.63/0.97 (G-H:1) , BC=0.40/0.97 (K-L:1) , WB=0.57/0.97 (G-L:1) , SSI=0.28/1.00 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

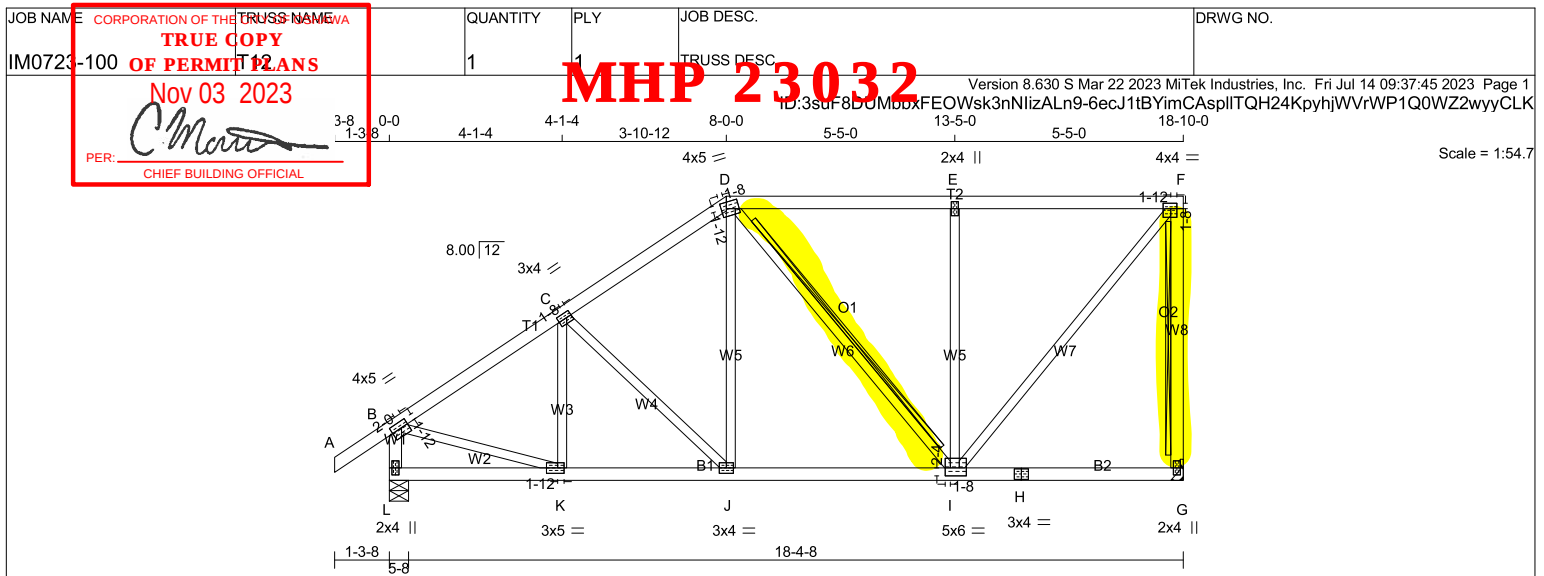
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

TOTAL WEIGHT = 144 lb [M]F

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.



TOTAL WEIGHT = 88 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	5.0	1.75	2.00
C	TMVW-t	MT20	3.0	4.0	1.50	1.50
D	TTWW-m	MT20	4.0	5.0	1.75	1.50
E	TMVW-w	MT20	2.0	4.0		
F	TMVW-t	MT20	4.0	4.0	1.50	1.75
G	BMV1+p	MT20	2.0	4.0		
H	BS-t	MT20	3.0	4.0		
I	BMVWW-t	MT20	5.0	6.0	2.25	1.50
J	BMVW-t	MT20	3.0	4.0		
K	BMVW-t	MT20	3.0	5.0	1.50	1.75
L	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	UP
G	1296	0	1296	0
L	1460	0	1460	0

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	906	656 / 0	0 / 0	0 / 0	0 / 0	250 / 0	0 / 0
L	1018	751 / 0	0 / 0	0 / 0	0 / 0	267 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.10 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-G, D-I

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)

C H O R D S				W E B S			
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 / 45	-119.4 -119.4	0.16 (1)	10.00	K-C	-230 / 8	0.06 (1)
B-C	-1356 / 0	-119.4 -119.4	0.35 (1)	5.10	C-J	-310 / 0	0.16 (1)
C-D	-1150 / 0	-119.4 -119.4	0.34 (1)	5.44	J-D	0 / 300	0.07 (1)
D-E	-849 / 0	-119.4 -119.4	0.61 (1)	5.46	D-I	-130 / 0	0.07 (1)
E-F	-849 / 0	-119.4 -119.4	0.61 (1)	5.46	I-E	-801 / 0	0.61 (1)
G-F	-1256 / 0	0.0 0.0	0.31 (1)	7.81	I-F	0 / 1320	0.30 (1)
L-B	-1426 / 0	0.0 0.0	0.15 (1)	6.75	B-K	0 / 1192	0.27 (1)
L-K	0 / 0	-18.2 -18.2	0.06 (4)	10.00			
K-J	0 / 1153	-18.2 -18.2	0.23 (1)	10.00			
J-I	0 / 933	-18.2 -18.2	0.21 (1)	10.00			
I-H	0 / 0	-18.2 -18.2	0.13 (4)	10.00			
H-G	0 / 0	-18.2 -18.2	0.13 (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 (0.63")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.63")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.61/0.97 (E-F:1), BC=0.23/0.97 (J-K:1),
WB=0.61/0.97 (E-I:1), SSI=0.31/1.00 (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)
MT20	650	371	1747
	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (I) (INPUT = 0.90)
JSI METAL= 0.43 (B) (INPUT = 1.00)



JULY 14, 2023

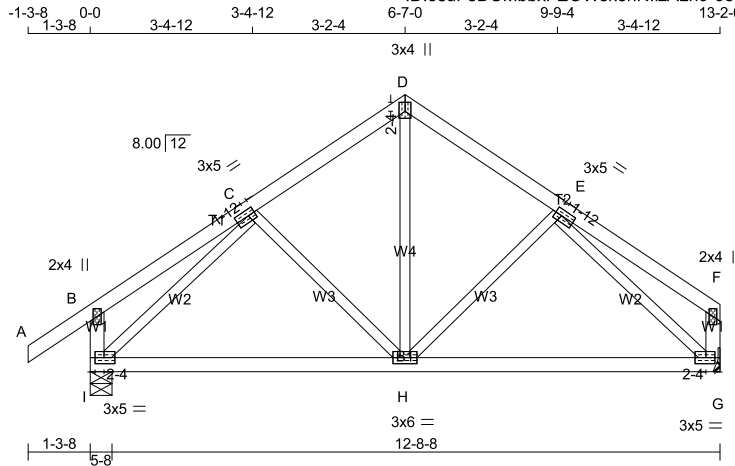
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: TRUSSES. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



JOB NAME	CORPORATION OF THE TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-100	TRUE COPY OF PERMIT PLANS Nov 03 2023 PER: <i>C. Motta</i> CHIEF BUILDING OFFICIAL	3	1	TRUSS DESC.	

MHP 23032

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Fri Jul 14 09:37:45 2023 Page 1
ID: 3suF6dUMboxFEOWsk3nNizALn9-6ecJ1tBYimCAsplITQH24Kp28jVqraV1Q0WZ2wyCLK



TOTAL WEIGHT = 3 X 56 = 167 lb

LUMBER

N. L. G. A. RULES

CHORDS SIZE

A - D 2x4 DRY No.2

D - F 2x4 DRY No.2

I - B 2x4 DRY No.2

G - F 2x4 DRY No.2

I - G 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	TMV+p	MT20	2.0	4.0		
C	TMWW-t	MT20	3.0	5.0	1.50	1.75
D	TTW+p	MT20	3.0	4.0	2.25	1.50
E	TMWW-t	MT20	3.0	5.0	1.50	1.75
F	TMV+p	MT20	2.0	4.0		
G	BMVW1-t	MT20	3.0	5.0	1.50	2.25
H	BMVWW-t	MT20	3.0	6.0		
I	BMVW1-t	MT20	3.0	5.0	1.50	2.25

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
I 1070 0	1070 0	0	5-8	1-8
G 906 0	906 0	0	MECHANICAL	

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS			
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
I	745	554 / 0	0 / 0	0 / 0	0 / 0	192 / 0
G	633	458 / 0	0 / 0	0 / 0	0 / 0	175 / 0

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

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 CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH
FR-TO					FR-TO		
A-B	0 / 45	-119.4 -119.4	0.16 (1)	10.00	H-D	0 / 442	0.10 (1)
B-C	0 / 25	-119.4 -119.4	0.20 (1)	10.00	H-E	-210 / 0	0.07 (1)
C-D	-700 / 0	-119.4 -119.4	0.16 (1)	6.25	C-H	-210 / 0	0.07 (1)
D-E	-700 / 0	-119.4 -119.4	0.16 (1)	6.25	I-C	-1003 / 0	0.34 (1)
E-F	0 / 24	-119.4 -119.4	0.20 (1)	10.00	E-G	-1003 / 0	0.34 (1)
I-B	-316 / 0	0.0 0.0	0.03 (1)	7.81			
G-F	-152 / 0	0.0 0.0	0.02 (1)	7.81			
I-H	0 / 711	-18.2 -18.2	0.27 (4)	10.00			
H-G	0 / 711	-18.2 -18.2	0.27 (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 (0.44")

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")

ALLOWABLE DEFL.(TL)= L/360 (0.44")

CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CSI: TC=0.20/0.97 (B-C:1) , BC=0.27/0.97 (H-I:4) , WB=0.34/0.97 (C-I:1) , SSI=0.16/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

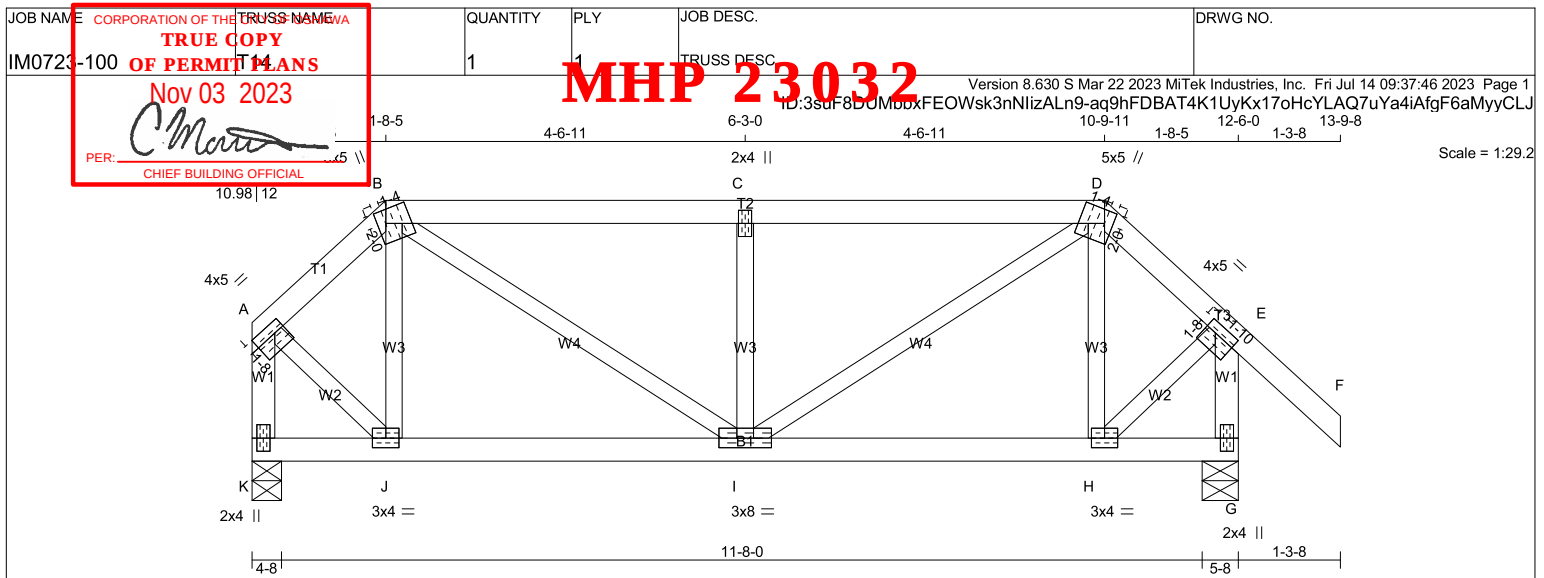
JSI METAL= 0.27 (E) (INPUT = 1.00)



JULY 14, 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.



**LUMBER**

N. L. G. A. RULES

CHORDS SIZE

LUMBER	DESCR.
A - B 2x4 DRY No.2	SPF
B - D 2x4 DRY No.2	SPF
D - F 2x4 DRY No.2	SPF
K - A 2x4 DRY No.2	SPF
G - E 2x4 DRY No.2	SPF
K - G 2x4 DRY No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	5.0	1.50	Edge
B	TTWW+m	MT20	5.0	5.0	2.00	1.25
C	TMW+w	MT20	2.0	4.0		
D	TTWW+m	MT20	5.0	5.0	2.00	1.25
E	TMVW-t	MT20	4.0	5.0	1.50	1.50
G	BMV1+p	MT20	2.0	4.0		
H	BMVW-t	MT20	3.0	4.0		
I	BMWWW-t	MT20	3.0	8.0		
J	BMWW-t	MT20	3.0	4.0		
K	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	REQD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ
K	851	0	851	0
G	1036	0	1036	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS
	COMBINED	SNOW	LIVE
K	595	430 / 0	0 / 0
G	721	537 / 0	0 / 0

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

BRACINGTOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.62 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY
APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED	FACTORED		MEMB.	MAX. FACTORED		
	FORCE	VERT. LOAD			FORCE		
	(LBS)	(PLF)	CS1 (LC)		(LBS)	MAX	CS1 (LC)
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	-598 / 0	-119.4 -119.4	0.06 (1)	6.25	J-B	-266 / 0	0.05 (1)
B-C	-974 / 0	-119.4 -119.4	0.42 (1)	5.62	B-I	0 / 652	0.15 (1)
C-D	-974 / 0	-119.4 -119.4	0.42 (1)	5.62	I-C	-660 / 0	0.13 (1)
D-E	-605 / 0	-119.4 -119.4	0.16 (1)	6.25	I-D	0 / 686	0.15 (1)
E-F	0 / 56	-119.4 -119.4	0.17 (1)	10.00	H-D	-243 / 0	0.05 (1)
K-A	-851 / 0	0.0	0.09 (1)	7.81	A-J	0 / 556	0.13 (1)
G-E	-1036 / 0	0.0	0.11 (1)	7.63	H-E	0 / 519	0.12 (1)
K-J	0 / 0	-18.2 -18.2	0.05 (4)	10.00			
J-I	0 / 429	-18.2 -18.2	0.11 (1)	10.00			
I-H	0 / 400	-18.2 -18.2	0.10 (1)	10.00			
H-G	0 / 0	-18.2 -18.2	0.05 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/CLOADING IN FLAT SECTION BASED ON A
SLOPE OF 2.00/12 MINIMUMTHIS TRUSS IS DESIGNED FOR RESIDENTIAL
OR SMALL BUILDING REQUIREMENTS OF
PART 9, 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 LOADALLOWABLE DEFL.(LL)= L/360 (0.42")
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.42")
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.03")CSI: TC=0.42/0.97 (C-D:1), BC=0.11/0.97 (I-J:1),
WB=0.15/0.97 (D-I:1), SSI=0.26/1.00 (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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (B) (INPUT = 0.90)

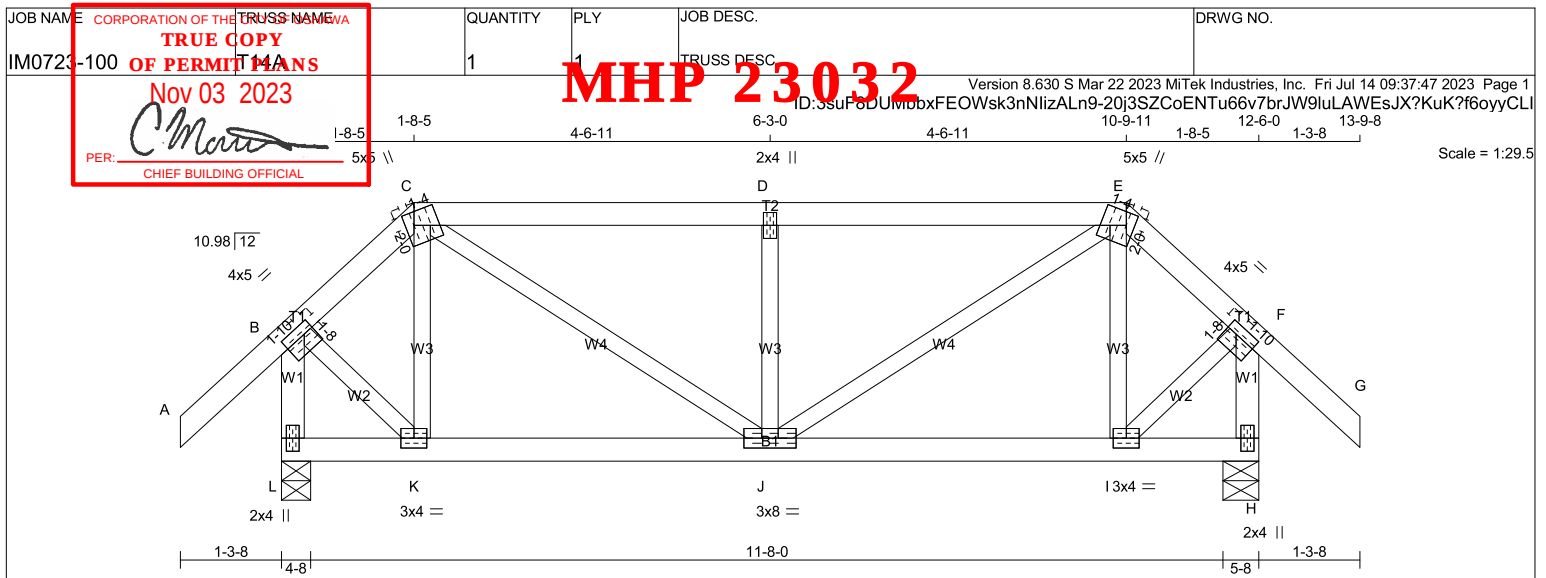
JSI METAL= 0.22 (E) (INPUT = 1.00)



JULY 14, 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.



**LUMBER**

N. L. G. A. RULES

CHORDS SIZE

A - C 2x4 DRY

C - E 2x4 DRY

E - G 2x4 DRY

L - B 2x4 DRY

H - F 2x4 DRY

L - H 2x4 DRY

LUMBER

No.2

No.2

No.2

No.2

No.2

No.2

DESCR.

SPF

SPF

SPF

SPF

SPF

SPF

ALL WEBS 2x3 DRY

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	5.0	1.50	1.50
C	TTWW+m	MT20	5.0	5.0	2.00	1.25
D	TMW+w	MT20	2.0	4.0		
E	TTWW+m	MT20	5.0	5.0	2.00	1.25
F	TMVW-t	MT20	4.0	5.0	1.50	1.50
H	BMV1+p	MT20	2.0	4.0		
I	BMWW-t	MT20	3.0	4.0		
J	BMWWW-t	MT20	3.0	8.0		
K	BMWW-t	MT20	3.0	4.0		
L	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	DOWN	UPLIFT	IN-SX
L	1026	0	1026	0
H	1026	0	1026	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS
L	COMBINED	SNOW	LIVE
L	715	532 / 0	0 / 0
H	715	532 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.66 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 FACTORED CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX FACTORED CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 56	-119.4 -119.4	0.17 (1)	10.00	K-C	-239 / 0	0.05 (1)
B-C	-597 / 0	-119.4 -119.4	0.16 (1)	6.25	C-J	0 / 670	0.15 (1)
C-D	-955 / 0	-119.4 -119.4	0.42 (1)	5.66	J-D	-661 / 0	0.13 (1)
D-E	-955 / 0	-119.4 -119.4	0.42 (1)	5.66	J-E	0 / 670	0.15 (1)
E-F	-597 / 0	-119.4 -119.4	0.16 (1)	6.25	I-E	-239 / 0	0.05 (1)
F-G	0 / 56	-119.4 -119.4	0.17 (1)	10.00	B-K	0 / 512	0.12 (1)
L-B	-1027 / 0	0.0 0.0	0.11 (1)	7.65	I-F	0 / 512	0.12 (1)
H-F	-1027 / 0	0.0 0.0	0.11 (1)	7.65			
L-K	0 / 0	-18.2 -18.2	0.05 (4)	10.00			
K-J	0 / 395	-18.2 -18.2	0.10 (1)	10.00			
J-I	0 / 395	-18.2 -18.2	0.10 (1)	10.00			
I-H	0 / 0	-18.2 -18.2	0.05 (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

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 (0.42")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.42")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.42/0.97 (C-D:1), BC=0.10/0.97 (J-K:1), WB=0.15/0.97 (E-J:1), SSI=0.26/1.00 (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	MIN
MT20	650	371	1747

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (C) (INPUT = 0.90)

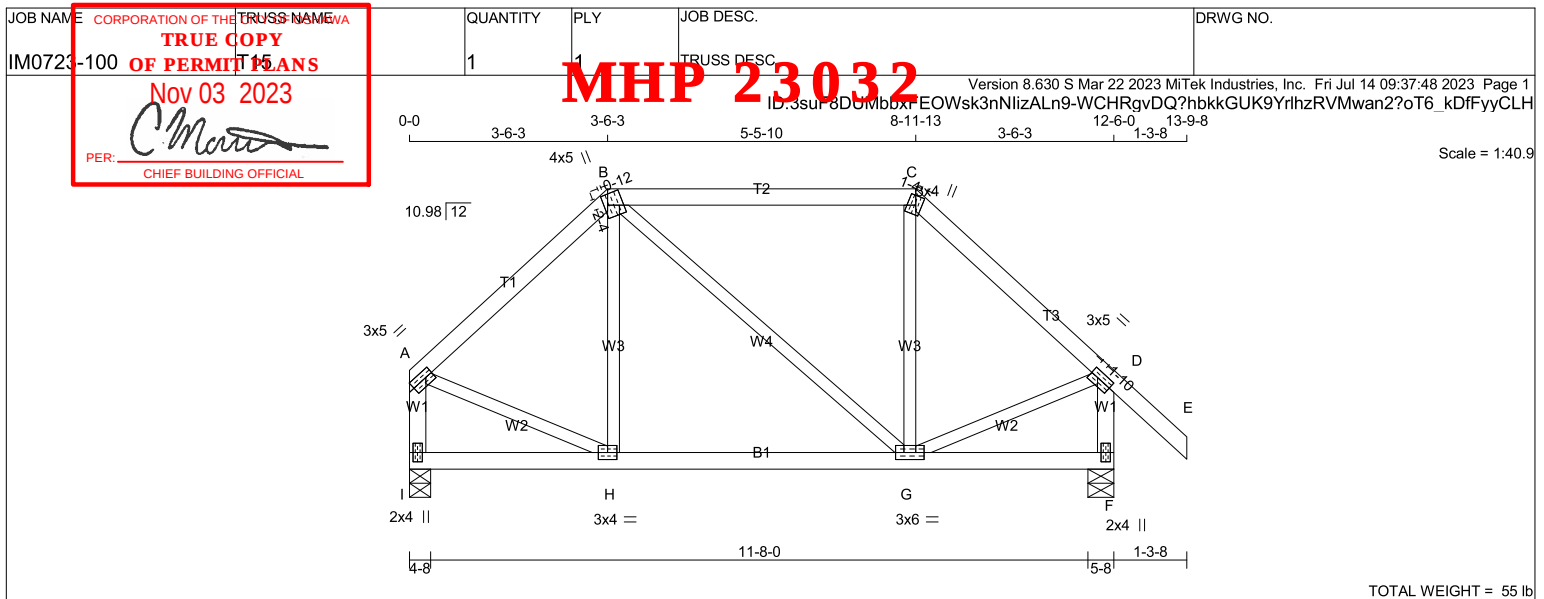
JSI METAL= 0.22 (F) (INPUT = 1.00)



JULY 14, 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.





LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - B	2x4	DRY	No.2
B - C	2x4	DRY	No.2
C - E	2x4	DRY	No.2
I - A	2x4	DRY	No.2
F - D	2x4	DRY	No.2
I - F	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
A	TMVW-t	MT20	3.0	5.0	1.50	Edge
B	TTWW+m	MT20	4.0	5.0	2.25	0.75
C	TTW+m	MT20	3.0	4.0	2.00	1.25
D	TMVW-t	MT20	3.0	5.0	1.50	1.50
F	BMV1+p	MT20	2.0	4.0		
G	BMVWW-t	MT20	3.0	6.0		
H	BMVW-t	MT20	3.0	4.0		
I	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 GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	UPLIFT	IN-SX
I	860	0	860	0
F	1026	0	1026	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. SNOW	MAX./MIN. LIVE	MAX./MIN. PERM.LIVE	WIND	DEAD	SOIL
I	601	435 / 0	0 / 0	0 / 0	0 / 0	166 / 0	0 / 0
F	715	532 / 0	0 / 0	0 / 0	0 / 0	183 / 0	0 / 0

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

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	-650 / 0	-119.4 -119.4	0.19 (1)	6.25	H-B	-95 / 49	0.03 (1)
B-C	-476 / 0	-119.4 -119.4	0.46 (1)	6.25	B-G	0 / 0	0.00 (1)
C-D	-650 / 0	-119.4 -119.4	0.19 (1)	6.25	G-C	-96 / 50	0.03 (1)
D-E	0 / 56	-119.4 -119.4	0.17 (1)	10.00	A-H	0 / 513	0.12 (1)
I-A	-837 / 0	0.0	0.09 (1)	7.81	G-D	0 / 513	0.12 (1)
F-D	-1003 / 0	0.0	0.11 (1)	7.72			
I-H	0 / 0	-18.2	-18.2	0.09 (4)	10.00		
H-G	0 / 476	-18.2	-18.2	0.12 (1)	10.00		
G-F	0 / 0	-18.2	-18.2	0.09 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.42")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.42")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.46/0.97 (B-C:1) , BC=0.12/0.97 (G-H:1) , WB=0.12/0.97 (A-H:1) , SSI=0.25/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY) (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= 0.89 (G) (INPUT = 0.90)
JSI METAL= 0.26 (D) (INPUT = 1.00)



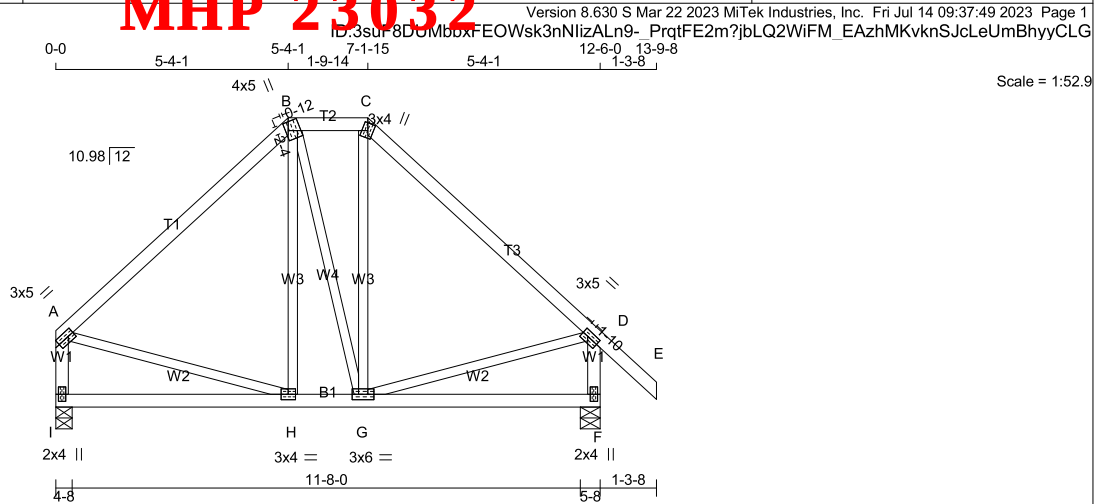
JULY 14, 2023

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	CORPORATION OF THE TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.																																																																																																																																												
IM0723-100	TRUE COPY OF PERMIT PLANS Nov 03 2023 CHIEF BUILDING OFFICIAL	1	1	TRUSS DESC																																																																																																																																													
Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Fri Jul 14 09:37:48 2023 Page 1 ID: 3sur-8Dumbbx-EOWsk3nNlzlALn9-WCHRgyDQ?hbkkGUK9YrhZRVmwan2oT6_kDfFyyCLH																																																																																																																																																	
Scale = 1:40.9																																																																																																																																																	
TOTAL WEIGHT = 57 lb [M][F]																																																																																																																																																	
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. A - C 2x4 DRY No.2 SPF C - D 2x4 DRY No.2 SPF D - F 2x4 DRY No.2 SPF J - B 2x4 DRY No.2 SPF G - E 2x4 DRY No.2 SPF J - G 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.		DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><thead><tr><th></th><th>FACTORED GROSS REACTION</th><th>MAXIMUM FACTORED GROSS REACTION</th><th>INPUT BRG</th><th>REQRD BRG</th></tr><tr><th>JT</th><th>VERT HORZ</th><th>DOWN HORZ UPLIFT</th><th>IN-SX</th><th>IN-SX</th></tr></thead><tbody><tr><td>J</td><td>1026 0</td><td>1026 0 0</td><td>5-8</td><td>1-8</td></tr><tr><td>G</td><td>1026 0</td><td>1026 0 0</td><td>5-8</td><td>1-8</td></tr></tbody></table> UNFACTORED REACTIONS <table><thead><tr><th>JT</th><th>COMBINED</th><th>SNOW</th><th>LIVE</th><th>PERM.LIVE</th><th>WIND</th><th>DEAD</th><th>SOIL</th></tr></thead><tbody><tr><td>J</td><td>715</td><td>532 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>183 / 0</td><td>0 / 0</td></tr><tr><td>G</td><td>715</td><td>532 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>183 / 0</td><td>0 / 0</td></tr></tbody></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) J, G BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. LOADING TOTAL LOAD CASES: (4) <table><thead><tr><th colspan="4">CHORDS</th><th colspan="4">WEBS</th></tr><tr><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>MAX LC1 CSI (LC)</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX LC1 CSI (LC)</th><th></th></tr></thead><tbody><tr><td>A-B</td><td>0 / 56</td><td>-119.4</td><td>-119.4 0.17 (1)</td><td>I-C</td><td>-95 / 49</td><td>0.03 (1)</td><td></td></tr><tr><td>B-C</td><td>-650 / 0</td><td>-119.4</td><td>-119.4 0.19 (1)</td><td>C-H</td><td>0 / 0</td><td>0.00 (1)</td><td></td></tr><tr><td>C-D</td><td>-476 / 0</td><td>-119.4</td><td>-119.4 0.46 (1)</td><td>H-D</td><td>-96 / 50</td><td>0.03 (1)</td><td></td></tr><tr><td>D-E</td><td>-650 / 0</td><td>-119.4</td><td>-119.4 0.19 (1)</td><td>B-I</td><td>0 / 513</td><td>0.12 (1)</td><td></td></tr><tr><td>E-F</td><td>0 / 56</td><td>-119.4</td><td>-119.4 0.17 (1)</td><td>H-E</td><td>0 / 513</td><td>0.12 (1)</td><td></td></tr><tr><td>J-B</td><td>-1003 / 0</td><td>0.0</td><td>0.0 0.11 (1)</td><td></td><td></td><td></td><td></td></tr><tr><td>G-E</td><td>-1003 / 0</td><td>0.0</td><td>0.0 0.11 (1)</td><td></td><td></td><td></td><td></td></tr><tr><td>J-I</td><td>0 / 0</td><td>-18.2</td><td>-18.2 0.09 (4)</td><td></td><td></td><td></td><td></td></tr><tr><td>I-H</td><td>0 / 476</td><td>-18.2</td><td>-18.2 0.12 (1)</td><td></td><td></td><td></td><td></td></tr><tr><td>H-G</td><td>0 / 0</td><td>-18.2</td><td>-18.2 0.09 (4)</td><td></td><td></td><td></td><td></td></tr></tbody></table>					FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	JT	VERT HORZ	DOWN HORZ UPLIFT	IN-SX	IN-SX	J	1026 0	1026 0 0	5-8	1-8	G	1026 0	1026 0 0	5-8	1-8	JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	J	715	532 / 0	0 / 0	0 / 0	0 / 0	183 / 0	0 / 0	G	715	532 / 0	0 / 0	0 / 0	0 / 0	183 / 0	0 / 0	CHORDS				WEBS				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 CSI (LC)		A-B	0 / 56	-119.4	-119.4 0.17 (1)	I-C	-95 / 49	0.03 (1)		B-C	-650 / 0	-119.4	-119.4 0.19 (1)	C-H	0 / 0	0.00 (1)		C-D	-476 / 0	-119.4	-119.4 0.46 (1)	H-D	-96 / 50	0.03 (1)		D-E	-650 / 0	-119.4	-119.4 0.19 (1)	B-I	0 / 513	0.12 (1)		E-F	0 / 56	-119.4	-119.4 0.17 (1)	H-E	0 / 513	0.12 (1)		J-B	-1003 / 0	0.0	0.0 0.11 (1)					G-E	-1003 / 0	0.0	0.0 0.11 (1)					J-I	0 / 0	-18.2	-18.2 0.09 (4)					I-H	0 / 476	-18.2	-18.2 0.12 (1)					H-G	0 / 0	-18.2	-18.2 0.09 (4)				
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG																																																																																																																																													
JT	VERT HORZ	DOWN HORZ UPLIFT	IN-SX	IN-SX																																																																																																																																													
J	1026 0	1026 0 0	5-8	1-8																																																																																																																																													
G	1026 0	1026 0 0	5-8	1-8																																																																																																																																													
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL																																																																																																																																										
J	715	532 / 0	0 / 0	0 / 0	0 / 0	183 / 0	0 / 0																																																																																																																																										
G	715	532 / 0	0 / 0	0 / 0	0 / 0	183 / 0	0 / 0																																																																																																																																										
CHORDS				WEBS																																																																																																																																													
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 CSI (LC)																																																																																																																																											
A-B	0 / 56	-119.4	-119.4 0.17 (1)	I-C	-95 / 49	0.03 (1)																																																																																																																																											
B-C	-650 / 0	-119.4	-119.4 0.19 (1)	C-H	0 / 0	0.00 (1)																																																																																																																																											
C-D	-476 / 0	-119.4	-119.4 0.46 (1)	H-D	-96 / 50	0.03 (1)																																																																																																																																											
D-E	-650 / 0	-119.4	-119.4 0.19 (1)	B-I	0 / 513	0.12 (1)																																																																																																																																											
E-F	0 / 56	-119.4	-119.4 0.17 (1)	H-E	0 / 513	0.12 (1)																																																																																																																																											
J-B	-1003 / 0	0.0	0.0 0.11 (1)																																																																																																																																														
G-E	-1003 / 0	0.0	0.0 0.11 (1)																																																																																																																																														
J-I	0 / 0	-18.2	-18.2 0.09 (4)																																																																																																																																														
I-H	0 / 476	-18.2	-18.2 0.12 (1)																																																																																																																																														
H-G	0 / 0	-18.2	-18.2 0.09 (4)																																																																																																																																														
PLATES (table is in inches) <table><thead><tr><th>JT</th><th>TYPE</th><th>PLATES</th><th>W</th><th>LEN</th><th>Y</th><th>X</th></tr></thead><tbody><tr><td>B</td><td>TMVW-t</td><td>MT20</td><td>3.0</td><td>5.0</td><td>1.50</td><td>1.50</td></tr><tr><td>C</td><td>TTWW+m</td><td>MT20</td><td>4.0</td><td>5.0</td><td>2.25</td><td>0.75</td></tr><tr><td>D</td><td>TTW+m</td><td>MT20</td><td>3.0</td><td>4.0</td><td>2.00</td><td>1.25</td></tr><tr><td>E</td><td>TMVW-t</td><td>MT20</td><td>3.0</td><td>5.0</td><td>1.50</td><td>1.50</td></tr><tr><td>G</td><td>BMV1+p</td><td>MT20</td><td>2.0</td><td>4.0</td><td></td><td></td></tr><tr><td>H</td><td>BMWVV-t</td><td>MT20</td><td>3.0</td><td>6.0</td><td></td><td></td></tr><tr><td>I</td><td>BMWW-t</td><td>MT20</td><td>3.0</td><td>4.0</td><td></td><td></td></tr><tr><td>J</td><td>BMV1+p</td><td>MT20</td><td>2.0</td><td>4.0</td><td></td><td></td></tr></tbody></table>		JT	TYPE	PLATES	W	LEN	Y	X	B	TMVW-t	MT20	3.0	5.0	1.50	1.50	C	TTWW+m	MT20	4.0	5.0	2.25	0.75	D	TTW+m	MT20	3.0	4.0	2.00	1.25	E	TMVW-t	MT20	3.0	5.0	1.50	1.50	G	BMV1+p	MT20	2.0	4.0			H	BMWVV-t	MT20	3.0	6.0			I	BMWW-t	MT20	3.0	4.0			J	BMV1+p	MT20	2.0	4.0																																																																																			
JT	TYPE	PLATES	W	LEN	Y	X																																																																																																																																											
B	TMVW-t	MT20	3.0	5.0	1.50	1.50																																																																																																																																											
C	TTWW+m	MT20	4.0	5.0	2.25	0.75																																																																																																																																											
D	TTW+m	MT20	3.0	4.0	2.00	1.25																																																																																																																																											
E	TMVW-t	MT20	3.0	5.0	1.50	1.50																																																																																																																																											
G	BMV1+p	MT20	2.0	4.0																																																																																																																																													
H	BMWVV-t	MT20	3.0	6.0																																																																																																																																													
I	BMWW-t	MT20	3.0	4.0																																																																																																																																													
J	BMV1+p	MT20	2.0	4.0																																																																																																																																													
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	CORPORATION OF THE TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-100	TRUE COPY OF PERMIT PLANS Nov 03 2023 PER: <i>C. Motta</i> CHIEF BUILDING OFFICIAL	2	1	TRUSS DESC.	



TOTAL WEIGHT = 2 X 62 = 124 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
C - E	2x4	DRY	No.2	SPF
I - A	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
I - 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	TMVW-t	MT20	3.0	5.0	1.50	Edge
B	TTWW+m	MT20	4.0	5.0	2.25	0.75
C	TTW+m	MT20	3.0	4.0		
D	TMVW-t	MT20	3.0	5.0	1.50	1.50
F	BMV1+p	MT20	2.0	4.0		
G	BMVWW-t	MT20	3.0	6.0		
H	BMVW-t	MT20	3.0	4.0		
I	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	IN-SX	IN-SX
I	860	0	4-8	1-8
F	1026	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS				
I	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
I	601	435 / 0	0 / 0	0 / 0	0 / 0	166 / 0	0 / 0
F	715	532 / 0	0 / 0	0 / 0	0 / 0	183 / 0	0 / 0

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	-576 / 0	-119.4 -119.4	0.44 (1)	6.25	H-B	-36 / 49	0.03 (1)
B-C	-423 / 0	-119.4 -119.4	0.05 (1)	6.25	B-G	0 / 1	0.00 (4)
C-D	-576 / 0	-119.4 -119.4	0.44 (1)	6.25	G-C	-38 / 51	0.03 (1)
D-E	0 / 56	-119.4 -119.4	0.17 (1)	10.00	A-H	0 / 438	0.10 (1)
I-A	-819 / 0	0.0	0.09 (1)	7.81	G-D	0 / 438	0.10 (1)
F-D	-985 / 0	0.0	0.11 (1)	7.77			
I-H	0 / 0	-18.2	-18.2	0.11 (4)	10.00		
H-G	0 / 424	-18.2	-18.2	0.14 (4)	10.00		
G-F	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 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 (0.42")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.42")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")CSI: TC=0.44/0.97 (A-B:1) , BC=0.14/0.97 (G-H:4)
, WB=0.10/0.97 (A-H:1) , SSI=0.18/1.00 (A-B:1)DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

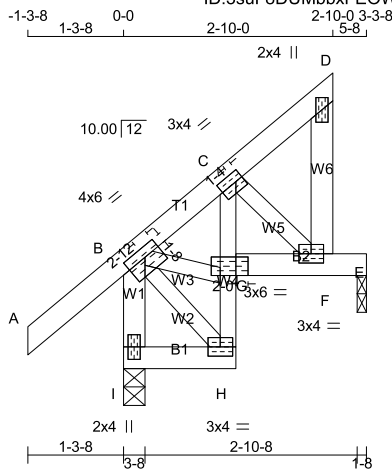
JSI GRIP= 0.82 (D) (INPUT = 0.90)
JSI METAL= 0.26 (D) (INPUT = 1.00)

JULY 14, 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	CORPORATION OF THE TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
IM0723-100	TRUE COPY OF PERMIT PLANS Nov 03 2023 PER: <i>C. Motta</i> CHIEF BUILDING OFFICIAL	4	1	TRUSS DESC.	



Scale = 1:31.2

TOTAL WEIGHT = 4 X 19 = 76 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
I - B	2x4	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
G - E	2x4	DRY	No.2	SPF

ALL WEBS 2x3 DRY EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVWW-t	MT20	4.0	6.0	1.50	2.75
C	TMWW-t	MT20	3.0	4.0	1.50	1.25
D	TMV+p	MT20	2.0	4.0		
F	BMVW-t	MT20	3.0	4.0		
G	BMVW-t	MT20	3.0	6.0		2.00
H	BMVW-t	MT20	3.0	4.0		
I	BMV1+p	MT20	2.0	4.0		

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

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	UPLIFT
I	424	0	424	0
E	142	0	172	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
I	293	229 / 0	0 / 0	0 / 0	0 / 0	64 / 0	0 / 0
E	100	85 / -20	0 / 0	0 / 0	0 / 0	36 / 0	0 / 0

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

BRACING

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

MAX. UNBRACED INTERIOR CHORD LENGTH = 10.00 FT

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

LOADING

TOTAL LOAD CASES: (7)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (CS)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH
FR-TO					FR-TO		
A-B	0 / 53	-119.4	-119.4	0.17 (5)	10.00	B-G	-44 / 152
B-C	-198 / 0	-119.4	-119.4	0.16 (5)	6.25	H-G	0 / 15
C-D	-9 / 11	-119.4	-119.4	0.04 (1)	10.00	G-C	0 / 71
F-D	-86 / 0	0.0	0.0	0.01 (1)	7.81	B-H	-2 / 2
I-B	-411 / 0	0.0	0.0	0.04 (1)	7.81	C-F	-199 / 62
I-H	0 / 0	-18.2	-18.2	0.01 (4)	10.00		
G-F	-47 / 150	-18.2	-18.2	0.13 (6)	6.25		
F-E	0 / 0	-18.2	-18.2	0.10 (6)	10.00		

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.

DESIGN CRITERIA**SPECIFIED LOADS:**

TOP CH. LL = 34.8 PSF
DL = 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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

ALLOWABLE DEFL.(LL) = L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL) = L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.17/0.97 (A-B:5), BC=0.13/0.97 (F-G:6),
WB=0.03/0.97 (B-G:6), SSI=0.13/1.00 (E-F:6)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX MIN	MAX MIN	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= 0.36 (G) (INPUT = 0.90)
JSI METAL= 0.09 (I) (INPUT = 1.00)



JULY 14, 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

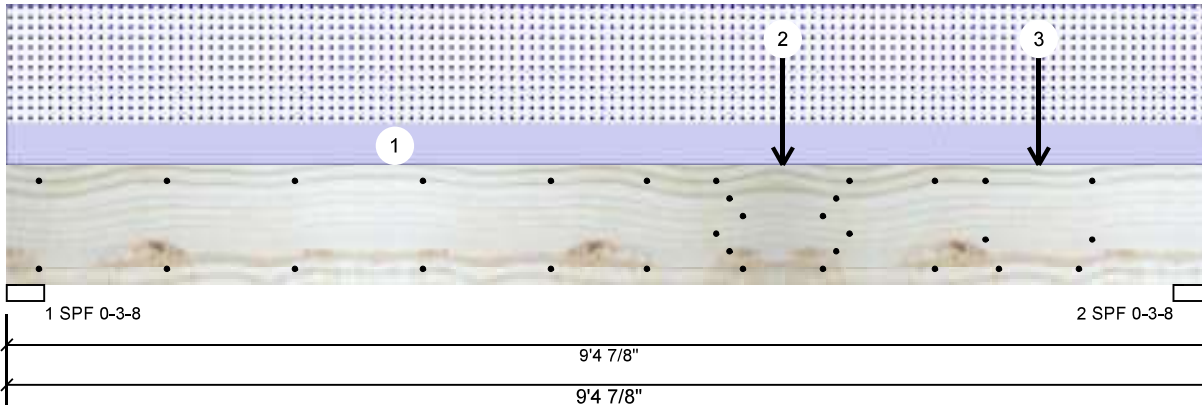
TRUE COPY

OF PERMIT PLANS

Nov 03 2023

Client:
Project:
Address:Date: 6/7/2023
Input by: B B
Job Name: B1
Project #:

Page 1 of 2

MHP 23032B1 **000" X 12.000" 3-Ply - PASSED** Level: Level**Member Information**

Type:	Girder	Application:	Roof (Residential)
Plies:	3	Slope:	0/12
Moisture Condition:	Dry	Design Method:	LSD
Deflection LL:	360	Building Code:	NBCC 2015
Deflection TL:	360		OBC 2012(2020 Update)
Importance:	Normal - II	Load Sharing:	Yes
		Deck:	Not Checked
		Vibration:	Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind
1	Vertical	0	688	1932	0
2	Vertical	0	1071	2936	0

Bearings and Factored Reactions

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	39%	860 / 2898	3758	L	1.25D+1.5S
2 - SPF	3.500"	Vert	59%	1338 / 4404	5742	L	1.25D+1.5S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	12407 ft-lb	6' 3/4"	13399 ft-lb	0.926 (93%)	1.25D+1.5S	L
Unbraced	12407 ft-lb	6' 3/4"	13283 ft-lb	0.934 (93%)	1.25D+1.5S	L
Shear	5591 lb	8'2 1/8"	7267 lb	0.769 (77%)	1.25D+1.5S	L
LL Defl inch	0.113 (L/949)	4'11 1/8"	0.298 (L/360)	0.379 (38%)	S	L
TL Defl inch	0.154 (L/696)	4'11 1/8"	0.298 (L/360)	0.517 (52%)	D+S	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 2 rows of 16d Common nails (.162x3.5") at 12" o.c. Maximum end distance not to exceed 6". Nail from both sides.
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Concentrated load fastener specification is in addition to hanger fasteners if a hanger is present.
- 5 Girders are designed to be supported on the bottom edge only.
- 6 Top must be laterally braced at end bearings.
- 7 Bottom must be laterally braced at end bearings.
- 8 Lateral slenderness ratio based on full section width.



JULY 14, 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.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Uniform			Near Face	92 PLF	0 PLF	269 PLF	0 PLF	
2	Point	6-0-12		Far Face	643 lb	0 lb	1682 lb	0 lb	
3	Point	8-0-12		Far Face	250 lb	0 lb	656 lb	0 lb	

Manufacturer Info

Kott Group
14 Anderson Blvd., On
L4A7X4
905-642-4400



This design is valid until 4/17/2026

CORPORATION OF THE CITY OF OSHAWA

TRUE COPY

OF PERMIT PLANS

Nov 03 2023

Client:

Project:

Address:

Date: 6/7/2023

Input by: B B

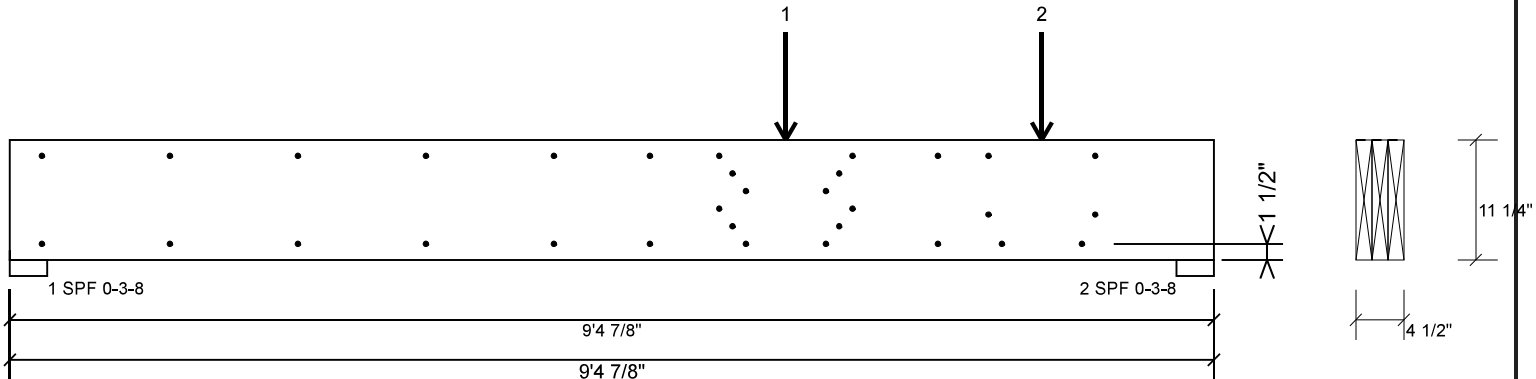
Job Name: B1

Project #:

Page 2 of 2

MHP 23032**B1** **000" X 12.000" 3-Ply - PASSED**

Level: Level

**Multi-Ply Analysis**

Fasten all plies using 2 rows of 16d Common nails (.162x3.5") at 12" o.c., except for regions covered by concentrated load fastening. Nail from both sides. Maximum end distance not to exceed 6".

Capacity	87.8 %
Load	345.7 PLF
Yield Limit per Foot	393.6 PLF
Yield Limit per Fastener	196.8 lb.
Yield Mode	g
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	1.25D+1.5S
Duration Factor	1.00

Concentrated Load

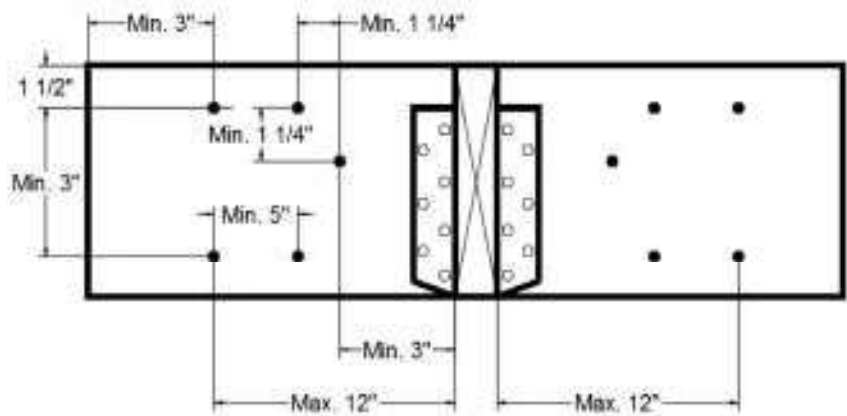
Fasten at concentrated side load at 6-0-12 with a minimum of (12) – 16d Common nails (.162x3.5") in the pattern shown. Nail from both sides.

Capacity	93.9 %
Load	2217.8lb.
Total Yield Limit	2361.6 lb.
Yield Limit per Fastener	196.8 lb.
Yield Mode	g
Load Combination	1.25D+1.5S
Duration Factor	1.00

Concentrated Load

Fasten at concentrated side load at -0-12 with a minimum of (6) – 16d Common nails (.162x3.5") in the pattern shown. Nail from both sides.

Capacity	73.2 %
Load	864.3lb.
Total Yield Limit	1180.8 lb.
Yield Limit per Fastener	196.8 lb.
Yield Mode	g
Load Combination	1.25D+1.5S
Duration Factor	1.00

Min/Max fastener distances for Concentrated Side Loads

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.

This design is valid until 4/17/2026

Manufacturer Info

Kott Group
14 Anderson Blvd., On
L4A7X4
905-642-4400

