

LUMBER				
N. L. G. A. R	ULES			
CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
H - I	2x4	DRY	No.2	SPF
1 - L	2x4	DRY	No.2	SPF
X - B	2x4	DRY	No.2	SPF
M - K	2x4	DRY	No.2	SPF
X - U	2x4	DRY	No.2	SPF
U - S	2x4	DRY	No.2	SPF
S - M	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				

PL/	ATES	(table	is	in	inches)	
IT	TVDE			2	ATEC	

JΤ	TYPE	PLATES	W	LEN	Υ	X
В	TMVW-t	MT20	5.0	8.0	1.75	3.00
С	TMWW-t	MT20	3.0	4.0	1.50	1.75
D	TTWW-m	MT20	5.0	6.0	2.50	2.25
Ε	TMW+w	MT20	2.0	4.0		
F	TTWW-m	MT20	5.0	6.0	2.50	2.25
G	TMWW+t	MT20	3.0	4.0	2.00	0.75
Н	TTWW+m	MT20	6.0	6.0	3.00	2.75
1	TTWW-m	MT20	5.0	8.0	1.75	3.25
J	TMWW-t	MT20	3.0	5.0		
K	TMVW-t	MT20	5.0	6.0	1.75	2.75
M	BMV1+p	MT20	3.0	4.0	2.00	
Ν	BMWW-t	MT20	4.0	6.0	1.75	1.50
0,	Q, V					
0	BMWW-t	MT20	3.0	4.0		
Ρ	BMWW+t	MT20	4.0	4.0	1.75	1.50
R	BMWW+t	MT20	3.0	4.0	1.75	1.50
S	BS-t	MT20	3.0	6.0		
Т	BMWWW-t	MT20	3.0	6.0		
U	BS-t	MT20	3.0	6.0		
W	BMWW-t	MT20	5.0	6.0	2.50	1.75
Χ	BMV1+p	MT20	3.0	4.0	2.00	0.50

DIMENSIONS, SUPPORTS	AND LOADINGS	SPECIFIED BY	FABRICATOR T	O BE VERIFIED BY
BUILDING DESIGNER				
DEADINGS				

	FACTOR	RED	MAXIMUM FACTORED			INPUT	REQRD
	GROSS RE	EACTION	GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
Χ	2422	0	2422	0	0	5-8	4-6
M	2422	0	2422	0	0	5-8	4-6

## UNFACTORED REACTIONS

	1ST LCASE	MAX./I	им. СОМРО	NENT REACTION	NS		
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
X	1690	1237 / 0	0/0	0/0	0/0	453 / 0	0/0
М	1690	1237 / 0	0/0	0/0	0/0	453 / 0	0/0

BEARING MATERIAL TO BE SPE NO 2 OR BETTER AT JOINT(S) X M

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.99 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

LOADING TOTAL LOAD CASES: (4)

Сн	ORDS					W E	BS	
	K. FACTORED	FACTORED	)				MAX. FACTO	DRED
мемв.	FORCE	VERT. LOAD	LC1	MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(PLF)	(	CSI (LC)	UNBRAC		(LBS)	CSI (LC)
FR-TO		FROM TO			LENGTH	FR-TO		
A-B	0 / 36	-119.4 -11	9.4	0.16(1)	10.00	W-C	-307 / 27	0.08 (1)
B- C	-3330 / 0	-119.4 -11				C-V	-603 / 0	0.60(1)
C- D	-2842 / 0	-119.4 -11	9.4	0.69(1)	3.32	V- D	0 / 427	0.10(1)
D- E	-2728 / 0	-119.4 -11	9.4	0.30(1)	3.91	D- T	0 / 433	0.10(1)
E-F	-2728 / 0	-119.4 -11	9.4	0.30(1)	3.91	T-E	-561 / 0	0.50(1)
F- G	-2906 / 0	-119.4 -11				T- F	0 / 281	0.06 (1)
G- H	-3363 / 0	-119.4 -11				R-F		0.16 (1)
H-I	-3149 / 0	-119.4 -11				R- G		0.53 (1)
I- J	-3223 / 0	-119.4 -11				Q- G	0 / 319	0.07 (1)
J- K	-2776 / 0	-119.4 -11				Q- H		0.14 (1)
K-L	0 / 36	-119.4 -11					-1504 / 0	0.32 (1)
X-B	-2373 / 0			0.24 (1)			0 / 1342	0.30 (1)
M-K	-2381 / 0	0.0	0.0	0.24 (1)	5.46	O- I	-45 / 0	0.01 (1)
						O- J	0 / 505	0.11 (1)
X-W	0/0			0.15 (4)		N- J	-862 / 0	0.14 (1)
W-V	0 / 3012			0.54 (1)		B- W		0.68 (1)
V- U	0 / 2513			0.46 (1)		N- K	0 / 2629	0.59 (1)
U- T	0 / 2513			0.46 (1)				
T-S	0 / 2588			0.44 (1)				
S-R	0 / 2588							
R-Q	0 / 3030			0.51 (1)				
Q-P	0 / 3283			0.61 (1)				
P- 0	0 / 2869							
O- N	0 / 2491			0.50(1)				
N- M	0/0	-18.2 -1	8.2	0.06(1)	10.00			

## **DESIGN CRITERIA**

SPEC	IFIED	LOAI	os:		
TOP	CH.	LL	=	34.8	PSF
		DL	=	6.0	PSI
BOT	CH.	LL	=	0.0	PSI
		DL	=	7.3	PSI
TOTA	L LO	AD	=	48.1	PSI

## 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 (1.09")
CALCULATED VERT. DEFL.(LL)= L/999 (0.17")
ALLOWABLE DEFL.(TL)= L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/999 (0.30")

CSI: TC=0.78/0.97 (B-C:1) , BC=0.61/0.97 (P-Q:1) , WB=0.68/0.97 (B-W: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 MAX MIN MAX MIN MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

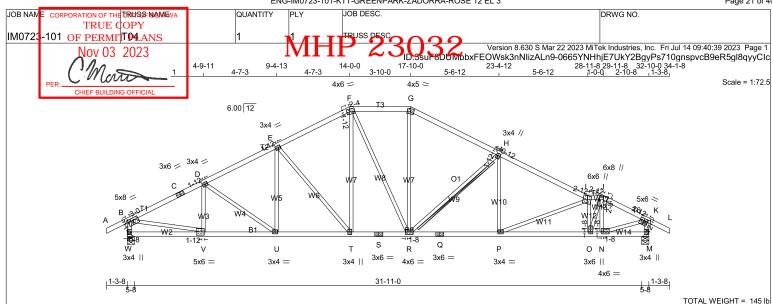
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (J) (INPUT = 0.90) JSI METAL= 0.74 (S) (INPUT = 1.00)





[M][F



LUMBER				
N. L. G. A. R	ULES			
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 - 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	2x3	DRY	No.2	SPF
EXCEPT				

DRY: SEASONED LUMBER.

PL/	PLATES (table is in inches)								
JΤ	TYPE	PLATES	W	LEN	Υ	X			
В	TMVW-t	MT20	5.0	8.0	1.75	3.00			
С	TS-t	MT20	3.0	6.0					
D	TMWW-t	MT20	3.0	4.0	1.50	1.75			
Ε	TMWW-t	MT20	3.0	4.0	1.50	1.75			
F	TTWW-m	MT20	4.0	6.0	1.75	2.25			
G	TTW-m	MT20	4.0	5.0					
Н	TMWW+t	MT20	3.0	4.0	1.75	0.75			
1	TTWW+m	MT20	6.0	6.0	3.00	2.75			
J	TTWW+m	MT20	6.0	8.0	2.50	2.75			
K	TMVW-t	MT20	5.0	6.0	1.75	2.75			
M	BMV1+p	MT20	3.0	4.0	2.00				
N	BMWW-t	MT20	4.0	6.0	1.50	1.50			
0	BMWW+t	MT20	3.0	6.0	1.50	1.50			
Ρ	BMWW-t	MT20	3.0	4.0					
Q	BS-t	MT20	3.0	6.0					
R	BMWWW-t	MT20	4.0	6.0	2.00	1.50			
S	BS-t	MT20	3.0	6.0					
Т	BMWW+t	MT20	3.0	4.0					
U	BMWW-t	MT20	3.0	4.0					
V	BMWW-t	MT20	5.0	6.0	2.50	1.75			
W	BMV1+p	MT20	3.0	4.0	2.00	0.50			

13	PROFESSIONA	2
LICENS	I.MATIJEVIC 100528832	GINEER
13	NINCE OF ONTE	

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.

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

	111100						
	FACTOR		MAXIMUN			INPUT	REQRD
	<b>GROSS RE</b>	ACTION	GROSS F	REACTIO	N	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
N	2422	0	2422	0	0	5-8	4-6
M	2422	0	2422	0	0	5-8	4-6

UNFACTORED REACTIONS

	1ST LCASE	MAX.	MIN. COMPON	ENT REACTION	VS		
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
W	1690 1	1237 / 0	0/0	0/0	0/0	453 / 0	0/0
M	1690 1	1237 / 0	0/0	0/0	0/0	453 / 0	0/0

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

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.10 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

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

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 F	IORDS				W E	BS	
MA	X. FACTORED	FACTORED				MAX. FACTO	DRED
MEMB.	FORCE	VERT. LOAD LO	C1 MAX	MAX.	MEMB	. FORCE	MAX
	(LBS)	(PLF)	CSI (LC)	UNBRAC	2	(LBS)	CSI (LC)
FR-TO		FROM TO		LENGTH	I FR-TO		
A-B	0 / 36	-119.4 -119.	4 0.16 (1)	10.00	V- D	-437 / 0	0.09(1)
B- C	-3241 / 0	-119.4 -119.	4 0.47 (1)	3.45	D- U	-175 / 0	0.09(1)
C- D	-3241 / 0	-119.4 -119.	4 0.47 (1)	3.45	U- E	0 / 191	0.04(1)
D- E	-3103 / 0	-119.4 -119.	4 0.39 (1)	3.62	E- T	-734 / 0	0.75(1)
E-F	-2599 / 0	-119.4 -119.	4 0.37 (1)	3.92	T-F	0 / 629	0.14(1)
F- G	-2345 / 0	-119.4 -119.	4 0.29 (1)	4.18	F-R	0 / 82	0.02(1)
G- H	-2649 / 0	-119.4 -119.	4 0.59 (1)	3.59	R- G	0 / 690	0.16(1)
H- I	-3418 / 0	-119.4 -119.	4 0.68 (1)	3.10	R- H	-1013 / 0	0.44(1)
I- J	-3261 / 0	-119.4 -119.	4 0.12 (1)	3.79	P- H	0 / 221	0.06(4)
J- K	-2928 / 0	-119.4 -119.	4 0.22 (1)	3.88	P- I	-270 / 0	0.18(1)
K-L	0 / 36	-119.4 -119.	4 0.16 (1)	10.00	O- I	-1751 / 0	0.28(1)
W-B	-2380 / 0	0.0 0.	0 0.24 (1)	5.46	O- J	0 / 1862	0.42(1)
M-K	-2402 / 0	0.0 0.	0 0.24 (1)	5.45	N- J	-652 / 0	0.11(1)
					B- V	0 / 2965	0.67 (1)
W-V	0/0	-18.2 -18.	2 0.09 (4)	10.00	N-K	0 / 2722	0.61 (1)
V- U	0 / 2918	-18.2 -18.	2 0.51 (1)	10.00			
U- T	0 / 2775	-18.2 -18.	2 0.49 (1)	10.00			
T-S	0 / 2310	-18.2 -18.	2 0.42 (1)	10.00			
S-R	0 / 2310		2 0.42 (1)				
R-Q	0 / 3091	-18.2 -18.	2 0.56 (1)	10.00			
Q-P	0 / 3091	-18.2 -18.	2 0.56 (1)	10.00			
P- 0	0 / 3340		2 0.63 (1)				
O- N	0 / 2586		2 0.45 (1)				
N- M	0/0	-18.2 -18.	2 0.04 (4)	10.00			

**DESIGN CRITERIA** 

SPEC	IFIED	LOAI	DS:		
TOP	CH.	LL	=	34.8	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.3	PSF
TOTA	L LO	AD	=	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 (1.09") CALCULATED VERT. DEFL.(LL)= L/ 999 (0.17") ALLOWABLE DEFL.(TL)= L/360 (1.09") CALCULATED VERT. DEFL.(TL)= L/ 999 (0.30")

CSI: TC=0.68/0.97 (H-I:1) , BC=0.63/0.97 (O-P:1) , WB=0.75/0.97 (E-T:1) , SSI=0.29/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)

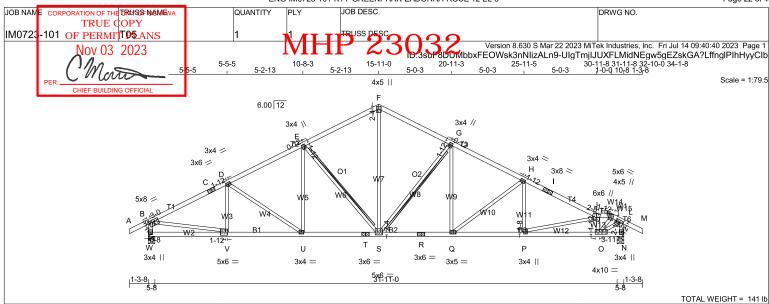
MAX MIN MAX MIN MAX MIN MAX MIN MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (T) (INPUT = 0.90 ) JSI METAL= 0.93 (Q) (INPUT = 1.00)





LUMBER				
N. L. G. A. R	ULES			
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
W - B	2x4	DRY	No.2	SPF
N - L	2x4	DRY	No.2	SPF
W - T	2x4	DRY	No.2	SPF
T - R	2x4	DRY	No.2	SPF
R - N	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				

PL/	PLATES (table is in inches)									
JΤ	TYPE	PLATES	W	LEN	Υ	X				
В	TMVW-t	MT20	5.0	8.0	1.75	3.00				
С	TS-t	MT20	3.0	6.0						
D	TMWW-t	MT20	3.0	4.0	1.50	1.75				
Ε	TMWW+t	MT20	3.0	4.0	1.75	0.75				
F	TTW+p	MT20	4.0	5.0	2.25	2.00				
G	TMWW+t	MT20	3.0	4.0	1.75	0.75				
Н	TMWW-t	MT20	3.0	4.0	1.50	1.75				
1	TS-t	MT20	3.0	8.0						
J	TTWW+m	MT20	6.0	6.0	3.00	2.50				
K	TTW+m	MT20	4.0	5.0	2.75	1.75				
L	TMVW-t	MT20	5.0	6.0	1.75	3.00				
N	BMV1+p	MT20	3.0	4.0	2.00					
0	BMWWW-t	MT20	4.0	10.0	1.75	3.75				
Ρ	BMWW+t	MT20	3.0	4.0	1.50	1.50				
Q	BMWW-t	MT20	3.0	5.0						
R	BS-t	MT20	3.0	6.0						
S	BMWWW-t	MT20	5.0	6.0	2.25	3.00				
Т	BS-t	MT20	3.0	6.0						
U	BMWW-t	MT20	3.0	4.0						
V	BMWW-t	MT20	5.0	6.0	2.50	1.75				
W	BMV1+p	MT20	3.0	4.0	2.00	0.50				



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.

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

	I TIII TOO						
	FACTORED		MAXIMUI	M FACTO	INPUT	REQRD	
	GROSS RE	GROSS REACTION			BRG	BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
W	2419	0	2419	0	0	5-8	4-6
N	2426	0	2426	0	0	5-8	4-6

UNFACTORED REA	ACTIONS

	1ST LCASE	MAX./N	MIN. COMPO	NENT REACTION	NS		
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
W	1688	1235 / 0	0/0	0/0	0/0	453 / 0	0/0
N	1693	1239 / 0	0/0	0/0	0/0	453 / 0	0/0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.18 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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)

	ORDS					W E	BS	
	C. FACTORED						MAX. FACTO	
MEMB.							. FORCE	MAX
	(LBS)						(LBS)	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO		
A-B	0/36	-119.4	-119.4	0.16 (1)	10.00	V- D	-365 / 0	0.09(1)
B- C	-3280 / 0	-119.4	-119.4	0.60(1)	3.29	D- U	-340 / 0	0.24(1)
C- D	-3280 / 0	-119.4	-119.4	0.60(1)	3.29	U- E	0 / 285	0.06(1)
D- E	-2993 / 0	-119.4	-119.4	0.49(1)	3.57	E-S	-891 / 0	0.44(1)
E-F	-2376 / 0	-119.4	-119.4	0.46(1)	3.96	S-F	0 / 1606	0.36(1)
F- G	-2375 / 0	-119.4	-119.4	0.42(1)	4.01	S- G	-1051 / 0	0.52(1)
G- H	-3081 / 0	-119.4	-119.4	0.46(1)	3.56	Q-G	0 / 493	0.11(1)
H- I	-3656 / 0			0.56 (1)		Q- H	-677 / 0	0.48 (1)
I- J	-3656 / 0	-119.4	-119.4	0.56 (1)	3.18	P- H	0 / 94	0.03 (4)
J- K	-2533 / 0			0.08 (1)		P- J	0 / 342	0.08 (1)
K-L	-2267 / 0	-119.4	-119.4	0.17 (1)	4.38	O- J	-2076 / 0	0.30(1)
L- M	0 / 36	-119.4	-119.4	0.16(1)	10.00	0- K	0 / 1163	0.26(1)
W-B	-2373 / 0	0.0	0.0	0.24 (1)	5.48	B- V	0 / 2994	0.67 (1)
N- L		0.0				O- L	0 / 2234	0.50 (1)
				. ,				. ,
W-V	0/0	-18.2	-18.2	0.11(4)	10.00			
V- U	0 / 2957	-18.2	-18.2	0.53 (1)	10.00			
U- T	0 / 2677			0.49 (1)				
T-S	0 / 2677	-18.2	-18.2	0.49 (1)	10.00			
S-R	0 / 2756	-18.2		0.51 (1)				
R-Q	0 / 2756							
Q-P		-18.2						
P- 0	0 / 2964							
0- N		-18.2						
				- ( · )				

**DESIGN CRITERIA** 

SPECIFIED LOADS 34.8 6.0 PSF PSF PSF TOP CH. 0.0 7.3 LL TOTAL LOAD 48.1

### 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

(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

ALLOWABLE DEFL.(LL)= L/360 (1.09") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.18") ALLOWABLE DEFL.(TL)= L/360 (1.09") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.31")

CSI: TC=0.60/0.97 (B-D:1) , BC=0.57/0.97 (P-Q:1) , WB=0.67/0.97 (B-V:1) , SSI=0.27/1.00 (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

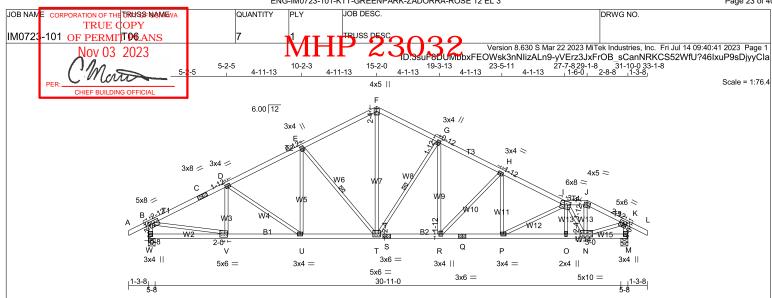
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (K) (INPUT = 0.90 ) JSI METAL= 0.84 (R) (INPUT = 1.00 )





LUMBER				
N. L. G. A. R	ULES			
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
l - 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	2x3	DRY	No.2	SPF
EXCEPT				

PLATES (table is in inches)	PLATES	(table is	in inches)
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JΤ	TYPE	PLATES	W	LEN	Υ	Χ	
В	TMVW-t	MT20	5.0	8.0	2.00	2.75	
С	TS-t	MT20	3.0	8.0			
D	TMWW-t	MT20	3.0	4.0	1.50	1.75	
Е	TMWW+t	MT20	3.0	4.0	2.00	0.75	
F	TTW+p	MT20	4.0	5.0	2.25	2.00	
G	TMWW+t	MT20	3.0	4.0	1.75	0.75	
Н	TMWW-t	MT20	3.0	4.0	1.50	1.75	
1	TTWWW-m	MT20	6.0	8.0	3.00	3.25	
J	TTW-m	MT20	4.0	5.0	1.75	2.50	
K	TMVW-t	MT20	5.0	6.0	2.00	2.75	
M	BMV1+p	MT20	3.0	4.0	2.00		
N	BMWWW-t	MT20	5.0	10.0	2.25	3.00	
0	BMW+w	MT20	2.0	4.0			
Ρ	BMWW-t	MT20	3.0	4.0			
Q	BS-t	MT20	3.0	6.0			
R	BMWW+t	MT20	3.0	4.0	1.75	1.50	
S	BS-t	MT20	3.0	6.0			
Т	BMWWW-t	MT20	5.0	6.0	2.25	3.00	
U	BMWW-t	MT20	3.0	4.0			
V	BMWW-t	MT20	5.0	6.0	2.50	2.00	
W	BMV1+p	MT20	3.0	4.0	2.00	0.50	



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.

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

	INITOO						
	FACTORED		MAXIMUN	I FACTO	INPUT	REQRD	
	GROSS RE	GROSS F	REACTIO	BRG	BRG		
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
W	2353	0	2353	0	0	5-8	4-2
M	2353	0	2353	0	0	5-8	4-2

## UNFACTORED REACTIONS

	1ST LCASE	MAX./	MIN. COMPON	IENT REACTION	NS .		
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
W	1642	1203 / 0	0/0	0/0	0/0	440 / 0	0/0
M	1642	1203 / 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 = 3.39 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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 = 132 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	FACTO	RED				MAX. FACTO	RED
MEMB.	FORCE	VERT. LC	OAD LC1	MAX	MAX.	MEMB	. FORCE	MAX
	(LBS)	(PI	LF) (	CSI (LC)	UNBRAC	)	(LBS)	CSI (LC)
FR-TO		FROM	TO		LENGTH	I FR-TO		
A-B	0 / 36	-119.4	-119.4	0.16(1)	10.00	V- D	-375 / 0	0.08 (1)
B- C	-3156 / 0				3.42	D- U	-295 / 0	0.19(1)
C- D	-3156 / 0	-119.4	-119.4	0.53(1)	3.42	U- E	0 / 257	0.06 (1)
D-E	-2910 / 0	-119.4	-119.4	0.44 (1)	3.67	E- T	-834 / 0	0.34 (1)
E-F	-2335 / 0	-119.4	-119.4	0.42(1)	4.05	T- F	0 / 1622	0.37 (1)
F- G	-2331 / 0	-119.4	-119.4	0.29(1)	4.20	T- G	-1059 / 0	0.41(1)
G- H	-2957 / 0	-119.4	-119.4	0.31(1)	3.77	R- G	0 / 634	0.14(1)
H- I	-3555 / 0			0.39(1)		R- H		0.49(1)
I- J	-2523 / 0	-119.4	-119.4	0.10(1)	4.25	P- H	0 / 303	0.07(1)
J- K	-2772 / 0	-119.4	-119.4	0.19(1)	4.00	P-I	-435 / 0	0.16 (1)
K-L	0 / 36			0.16(1)		O- I	0 / 48	0.02(4)
W-B	-2309 / 0			0.23(1)		I- N	-1994 / 0	0.34(1)
M-K	-2325 / 0	0.0	0.0	0.23(1)	5.52	N- J	0 / 996	0.22(1)
						B- V	0 / 2883	0.65 (1)
W-V	0/0	-18.2				N-K	0 / 2589	0.58 (1)
V- U	0 / 2845	-18.2	-18.2	0.51(1)	10.00			
U- T	0 / 2602	-18.2	-18.2	0.48 (1)	10.00			
T-S	0 / 2645	-18.2		0.48 (1)				
S-R	0 / 2645	-18.2	-18.2	0.48 (1)	10.00			
R-Q	0 / 3200	-18.2	-18.2	0.55 (1)	10.00			
Q-P	0 / 3200	-18.2	-18.2	0.55 (1)	10.00			
P- 0		-18.2						
O- N	0 / 3584	-18.2						
N- M	0/0	-18.2	-18.2	0.03 (4)	10.00			

**DESIGN CRITERIA** 

SPEC	IFIED	LOAI	OS:		
TOP	CH.	LL	=	34.8	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.3	PSF
TOTA	L LO	AD	=	48.1	PSF

### SPACING = 24.0 IN. C/C

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

TOTAL WEIGHT = 7 X 140 = 980 lb

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 (0.18") ALLOWABLE DEFL.(TL)= L/360 (1.06") CALCULATED VERT. DEFL.(TL)= L/999 (0.32")

CSI: TC=0.53/0.97 (B-D:1) , BC=0.65/0.97 (O-P:1) , WB=0.65/0.97 (B-V: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 SECTION (PSI) (PLI) (PLI)

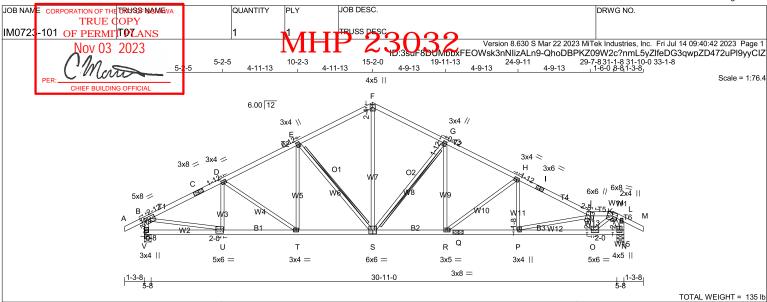
MAX MIN MAX MIN MAX MIN MAX MIN MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (K) (INPUT = 0.90 ) JSI METAL= 0.96 (Q) (INPUT = 1.00)





LUMBER				
N. L. G. A. R	ULES			
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
l - 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 EXCEPT	2x3	DRY	No.2	SPF

PL/	PLATES (table is in inches)										
JT	TYPE	PLATES	W	LEN	Υ	X					
В	TMVW-t	MT20	5.0	8.0	2.00	2.75					
С	TS-t	MT20	3.0	8.0							
D	TMWW-t	MT20	3.0	4.0	1.50	1.75					
Ε	TMWW+t	MT20	3.0	4.0	2.00	0.75					
F	TTW+p	MT20	4.0	5.0	2.25	2.00					
G	TMWW+t	MT20	3.0	4.0	1.75	0.75					
Н	TMWW-t	MT20	3.0	4.0	1.50	1.75					
1	TS-t	MT20	3.0	6.0							
J	TTWW+m	MT20	6.0	6.0	3.00	2.50					
K	TTWW-m	MT20	6.0	8.0	Edge						
L	TMV+p	MT20	2.0	4.0							
Ν	BMVW1+p	MT20	4.0	5.0	2.00	2.00					
0	BMWW-t	MT20	5.0	6.0	2.00	2.00					
Ρ	BMWW+t	MT20	3.0	4.0	1.50	1.50					
Q	BS-t	MT20	3.0	8.0							
R	BMWW-t	MT20	3.0	5.0							
S	BSWWW-I	MT20	6.0	6.0							
Т	BMWW-t	MT20	3.0	4.0							
U	BMWW-t	MT20	5.0	6.0	2.50	2.00					
V	BMV1+p	MT20	3.0	4.0	2.00	0.50					

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



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.

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

	FACTO	RED	MAXIMU	M FACTO	INPUT	REQRD	
	GROSS RI	EACTION	GROSS	REACTIO	BRG	BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
V	2350	0	2350	0	0	5-8	4-2
N	2357	0	2357	0	0	5-8	2-13

UNFACTORED REACTIONS

1S	TLCASE	MAX./MIN.	COMPONE	NT REACTIONS			
JT CC	DMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
V	1640 1	201 / 0	0/0	0/0	0/0	439 / 0	0/0
N	1645 1	205 / 0	0/0	0/0	0/0	440 / 0	0/0

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

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.18 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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)

СН	ORDS		WEBS					
MAX	K. FACTORED	FACTO	RED				MAX. FACTO	RED
MEMB.	FORCE	VERT. LO	AD LC1	MAX	MAX.	MEMB	. FORCE	MAX
	(LBS)	(PL	.F) (	CSI (LC)			(LBS)	CSI (LC)
FR-TO		FROM						
	0 / 36				10.00		-377 / 0	0.09(1)
B- C	-3149 / 0				3.43			0.19 (1)
C- D	-3149 / 0				3.43			0.06 (1)
D- E	-2906 / 0	-119.4	-119.4	0.44 (1)	3.67	E-S	-845 / 0	0.38(1)
E-F	-2323 / 0	-119.4	-119.4	0.42(1)	4.06	S-F	0 / 1580	0.36(1)
F- G	-2322 / 0	-119.4	-119.4	0.39(1)	4.10	S- G	-1095 / 0	0.49(1)
G- H	-3062 / 0			0.42(1)		R- G	0 / 567	0.13 (1)
H- I	-3740 / 0			0.53(1)		R- H	-789 / 0	0.50(1)
I- J	-3740 / 0			0.53(1)		P- H	0 / 155	0.04 (4)
J- K	-3393 / 0			0.15 (1)		P- J	-198 / 0	0.09(1)
	-66 / 0	-119.4	-119.4	0.12(1)		O- J	-1979 / 0	0.28 (1)
L- M	0 / 36	-119.4	-119.4	0.16 (1)	10.00	0- K	0 / 2977	0.67 (1)
	-2305 / 0						0 / 2877	0.65 (1)
N- L	-354 / 0	0.0	0.0	0.04 (1)	7.81	K- N	-2289 / 0	0.33 (1)
V- U	0/0			0.10 (4)				
U- T	0 / 2839			0.50(1)				
T-S	0 / 2598			0.47 (1)				
S-R	0 / 2739	-18.2		0.50 (1)				
R-Q	0 / 3370			0.58 (1)				
Q-P	0 / 3370			0.58 (1)				
P-O	0 / 3561	-18.2		0.67 (1)				
O- N	0 / 1184	-18.2	-18.2	0.26 (1)	10.00			

**DESIGN CRITERIA** 

SPECIFIED LOADS 34.8 6.0 PSF PSF PSF TOP CH. 0.0 7.3 LL TOTAL LOAD 48.1

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

(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

ALLOWABLE DEFL.(LL)= L/360 (1.06") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.19") ALLOWABLE DEFL.(TL)= L/360 (1.06") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.33")

CSI: TC=0.53/0.97 (B-D:1) , BC=0.67/0.97 (O-P:1) , WB=0.67/0.97 (K-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

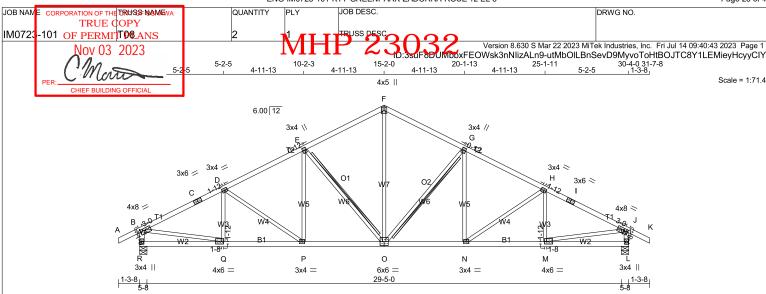
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (O) (INPUT = 0.90) JSI METAL= 0.95 (Q) (INPUT = 1.00 )





LUMBER	LUMBER								
N. L. G. A. R	ULES								
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	2x3	DRY	No.2	SPF					
EXCEPT									

PLA	TES	(table is in inches)	
JT	TYPE	PLATES	

JT	TYPE	PLATES	W	LEN	Υ	X
В	TMVW-t	MT20	4.0	8.0	1.50	3.00
С	TS-t	MT20	3.0	6.0		
D	TMWW-t	MT20	3.0	4.0	1.50	1.75
Е	TMWW+t	MT20	3.0	4.0	2.00	0.75
F	TTW+p	MT20	4.0	5.0		
G	TMWW+t	MT20	3.0	4.0	2.00	0.75
Н	TMWW-t	MT20	3.0	4.0	1.50	1.75
1	TS-t	MT20	3.0	6.0		
J	TMVW-t	MT20	4.0	8.0	1.50	3.00
L	BMV1+p	MT20	3.0	4.0		
M	BMWW-t	MT20	4.0	6.0	1.75	1.50
Ν	BMWW-t	MT20	3.0	4.0		
0	BSWWW-I	MT20	6.0	6.0		
Ρ	BMWW-t	MT20	3.0	4.0		
Q	BMWW-t	MT20	4.0	6.0	1.75	1.50
R	BMV1+p	MT20	3.0	4.0		

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

DEAL	KINGS						
	FACTORED		MAXIMUN	/ FACTO	INPUT	REQRD	
	GROSS RE	ACTION	GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
R	2250	0	2250	0	0	5-8	3-13
L	2250	0	2250	0	0	5-8	3-13

UNFACTORED REACTIONS

	1ST LCASE	MAX./N	IIN. COMPO				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	1570	1150 / 0	0/0	0/0	0/0	420 / 0	0/0
L	1570	1150 / 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 = 3.53 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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)

СН	ORDS			WEBS					
MAX	K. FACTORED	FACTORED	1			MAX. FACT	ORED		
MEMB.	FORCE	VERT. LOAD	LC1 MAX	MAX.	MEMB.	FORCE	MAX		
	(LBS)	(PLF)	CSI (LC	) UNBRA	С	(LBS)	CSI (LC)		
FR-TO		FROM TO		LENGTH	H FR-TO				
A-B	0 / 36	-119.4 -119	9.4 0.16 (	1) 10.00	0- F	0 / 1393	0.31(1)		
B- C	-2982 / 0	-119.4 -119	9.4 0.52 (	1) 3.53	0- G	-859 / 0	0.39(1)		
C- D	-2982 / 0	-119.4 -119	9.4 0.52 (	1) 3.53	N- G	0 / 284	0.06(1)		
D- E	-2715 / 0	-119.4 -119	9.4 0.42 (	1) 3.80	N- H	-319 / 0	0.20(1)		
E-F	-2123 / 0	-119.4 -119	9.4 0.40 (	1) 4.23	M- H	-352 / 0	0.08 (1)		
F- G	-2123 / 0	-119.4 -119	9.4 0.40 (	1) 4.23	E-O	-859 / 0	0.39 (1)		
G- H	-2715 / 0	-119.4 -119	9.4 0.42 (	1) 3.80	P-E	0 / 284	0.06(1)		
H- I	-2982 / 0	-119.4 -119	9.4 0.52 (	1) 3.53	D- P	-319 / 0	0.20(1)		
I- J	-2982 / 0	-119.4 -119	9.4 0.52 (	1) 3.53	Q- D	-352 / 0	0.08 (1)		
J- K	0 / 36	-119.4 -119	9.4 0.16 (	1) 10.00	B- Q	0 / 2726	0.61 (1)		
R-B	-2206 / 0	0.0	0.0 0.22 (	1) 5.65	M- J	0 / 2726	0.61 (1)		
L- J	-2206 / 0	0.0	0.0 0.22 (	1) 5.65					
R- Q	0/0	-18.2 -18	3.2 0.10 (	4) 10.00					
Q-P	0 / 2690	-18.2 -18							
P- 0	0 / 2428	-18.2 -18							
O-N	0 / 2428	-18.2 -18	3.2 0.44 (	1) 10.00					
N- M	0 / 2690		3.2 0.48 (						
M-L	0/0	-18.2 -18	3.2 0.10 (	4) 10.00					

**DESIGN CRITERIA** 

SPEC	IFIED	LOAI	OS:		
TOP	CH.	LL	=	34.8	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.3	PSF
TOTA	L LO	AD	=	48.1	PSF

## SPACING = 24.0 IN. C/C

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

TOTAL WEIGHT = 2 X 129 = 258 lb

THIS DESIGN COMPLIES WITH: - PART 9 OF BCBC 2018 , NBC-2019AE - PART 9 OF OBC 2012 (2019 AMENDMENT)

CSA 086-14

(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 (0.14") ALLOWABLE DEFL.(TL)= L/360 (1.01") CALCULATED VERT. DEFL.(TL)= L/999 (0.26")

CSI: TC=0.52/0.97 (B-D:1) , BC=0.48/0.97 (M-N:1) , WB=0.61/0.97 (B-Q:1) , SSI=0.26/1.00 (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 650 371 1747 788 1987 1873

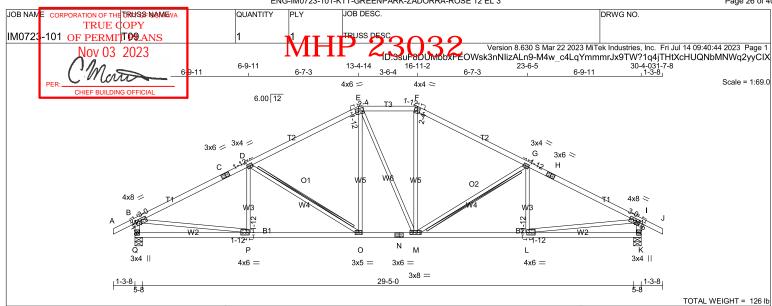
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (I) (INPUT = 0.90 ) JSI METAL= 0.64 (M) (INPUT = 1.00 )







LUMBER				
N. L. G. A. R	ULES			
CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - F	2x4	DRY	No.2	SPF
Ē - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
H - J	2x4	DRY	No.2	SPF
Q - B	2x4	DRY	No.2	SPF
Ř - Ī	2x4	DRY	No.2	SPF
Q - N	2x4	DRY	No.2	SPF
N - K	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				

## PLATES (table is in inches)

J١	TYPE	PLATES	W	LEN	Υ	Х
В	TMVW-t	MT20	4.0	8.0	1.50	3.00
С	TS-t	MT20	3.0	6.0		
D	TMWW-t	MT20	3.0	4.0	1.50	1.75
Е	TTWW-m	MT20	4.0	6.0	1.75	2.25
F	TTW-m	MT20	4.0	4.0	2.25	1.75
G	TMWW-t	MT20	3.0	4.0	1.50	1.75
Н	TS-t	MT20	3.0	6.0		
1	TMVW-t	MT20	4.0	8.0	1.50	3.00
K	BMV1+p	MT20	3.0	4.0		
L	BMWW-t	MT20	4.0	6.0	1.75	1.75
M	BMWWW-t	MT20	3.0	8.0		
Ν	BS-t	MT20	3.0	6.0		
0	BMWW-t	MT20	3.0	5.0		
Ρ	BMWW-t	MT20	4.0	6.0	1.75	1.75
Ω	BMV1+p	MT20	3.0	4.0		

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

DEA	RINGS						
	FACTORED		MAXIMU	M FACTO	INPUT	REQRD	
	GROSS RE	EACTION	GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
Q	2250	0	2250	0	0	5-8	3-13
K	2250	0	2250	0	0	5-8	3-13

## UNFACTORED REACTIONS

	1ST LCASE	MAX./	MIN. COMPO	NENT REACTION	NS		
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
Q	1570	1150 / 0	0/0	0/0	0/0	420 / 0	0/0
K	1570	1150 / 0	0/0	0/0	0/0	420 / 0	0/0

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

**BRACING**TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.73 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

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

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

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

LOADING TOTAL LOAD CASES: (4)

	ORDS C. FACTORED	FACTO	RED			WE	BS MAX. FACTO	RED
MEMB.	FORCE	VERT. LO		1 MAX	MAX.	МЕМВ.		MAX
	(LBS)	(PL	F)	CSI (LC)	UNBRAC	;	(LBS)	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO		
A- B	0 / 36			0.16 (1)		P- D	-210 / 67	0.07 (1)
B- C	-3036 / 0	-119.4	-119.4	0.95 (1)	2.73	D- O	-819 / 0	0.39 (1)
C- D	-3036 / 0	-119.4	-119.4	0.95 (1)	2.73	0- E	0 / 524	0.12 (1)
D- E	-2350 / 0			0.82 (1)			0/3	0.00(1)
E-F	-2070 / 0			0.24 (1)			0 / 528	0.12 (1)
F- G	-2352 / 0			0.82 (1)		M- G	-817 / 0	0.39 (1)
G- H	-3035 / 0			0.95 (1)		L- G	-212 / 66	0.07 (1)
H- I	-3035 / 0			0.95 (1)			0 / 2775	0.62 (1)
I- J				0.16 (1)		L- I	0 / 2774	0.62 (1)
Q-B	-2197 / 0	0.0	0.0	0.22 (1)	5.66			
K- I	-2197 / 0	0.0	0.0	0.22 (1)	5.66			
Q-P	0/0	-18.2	-18 2	0.20 (4)	10.00			
P- 0	0 / 2753	-18.2		0.53 (1)				
O- N	0 / 2069	-18.2		0.40(1)				
N- M	0 / 2069	-18.2		0.40(1)				
M- L	0 / 2753	-18.2		0.53 (1)				
L- K	0/0	-18.2		0.20 (4)				

## **DESIGN CRITERIA**

SPEC	IFIED	LOAI	os:		
TOP	CH.	LL	=	34.8	PSI
		DL	=	6.0	PSI
BOT	CH.	LL	=	0.0	PSI
		DL	=	7.3	PSI
TOTA	L LO	AD	=	48.1	PSI

## 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 (1.01") CALCULATED VERT. DEFL.(LL)= L/999 (0.14") ALLOWABLE DEFL.(TL)= L/360 (1.01") CALCULATED VERT. DEFL.(TL)= L/999 (0.27")

CSI: TC=0.95/0.97 (B-D:1) , BC=0.53/0.97 (O-P:1) , WB=0.62/0.97 (B-P:1) , SSI=0.35/1.00 (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 MAX MIN MT20 650 371 1747 788 1987 1873

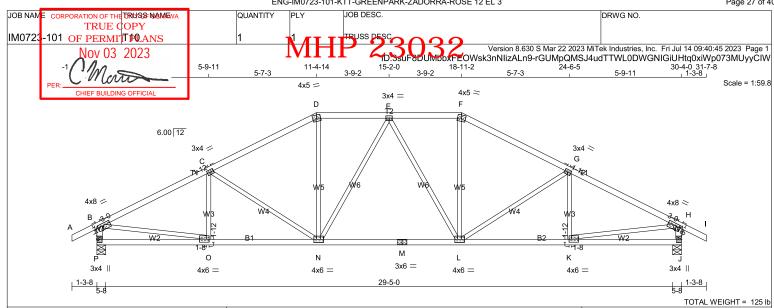
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (P) (INPUT = 0.90) JSI METAL= 0.66 (P) (INPUT = 1.00)







LUMBER				
N. L. G. A. R	ULES			
CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - I	2x4	DRY	No.2	SPF
P - B	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
P - M	2x4	DRY	No.2	SPF
M - J	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				

PLATES	(table	is in	inches)	

J١	TYPE	PLATES	W	LEN	Υ	Х	
В	TMVW-t	MT20	4.0	8.0	1.50	3.00	
С	TMWW-t	MT20	3.0	4.0	1.50	1.75	
D	TTW-m	MT20	4.0	5.0			
Ε	TMWW-t	MT20	3.0	4.0			
F	TTW-m	MT20	4.0	5.0			
G	TMWW-t	MT20	3.0	4.0	1.50	1.75	
Н	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	BMWWW-t	MT20	4.0	6.0			
M	BS-t	MT20	3.0	6.0			
Ν	BMWWW-t	MT20	4.0	6.0			
0	BMWW-t	MT20	4.0	6.0	1.75	1.50	
Р	BMV1+p	MT20	3.0	4.0			

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

	FACTOR	ED	MAXIMUN	/ FACTO	INPUT	REQRD	
	<b>GROSS RE</b>	ACTION	GROSS F	REACTIO	BRG	BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
Р	2250	0	2250	0	0	5-8	3-13
J	2250	0	2250	0	0	5-8	3-13

## UNFACTORED REACTIONS

	1ST LCASE	MAX./I	MIN. COMPO	VENT REACTION	NS .		
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	1570	1150 / 0	0/0	0/0	0/0	420 / 0	0/0
J	1570	1150 / 0	0/0	0/0	0/0	420 / 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 = 3.30 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

LOADING TOTAL LOAD CASES: (4)

		ORDS . FACTORED	FACTO	RED				B S MAX. FACTO	RED
-	MEMB.	FORCE	VERT. LC	AD LC1	MAX	MAX.	MEMB.	FORCE	MAX
-								(LBS)	CSI (LC)
-	FR-TO	( /				LENGTH			()
-	A-B	0 / 36			0.16(1)			-302 / 15	0.08(1)
-		-3022 / 0				3.30		-560 / 0	0.49(1)
	C- D	-2572 / 0			0.60(1)			0 / 704	0.16 (1)
-	D- E	-2278 / 0	-119.4	-119.4	0.26 (1)	4.27	N-E	-308 / 0	0.35 (1)
	E-F	-2278 / 0	-119.4	-119.4	0.26(1)	4.27	E-L	-308 / 0	0.35 (1)
-	F- G	-2572 / 0	-119.4	-119.4	0.60(1)	3.62	L- F	0 / 704	0.16(1)
-	G- H	-3022 / 0	-119.4	-119.4	0.66(1)	3.30	L- G	-560 / 0	0.49(1)
		0 / 36	-119.4	-119.4	0.16(1)	10.00	K- G	-302 / 15	0.08 (1)
	P-B	-2202 / 0				5.65	B-O	0 / 2764	0.62(1)
-	J- H	-2202 / 0	0.0	0.0	0.22 (1)	5.65	K- H	0 / 2764	0.62 (1)
-									
	P- 0	0/0							
-	O- N	0 / 2735			0.53 (1)				
-	N- M	0 / 2428			0.48 (1)				
-	M- L	0 / 2428			0.48 (1)				
-	L- K	0 / 2735	-18.2		0.53 (1)				
-	K- J	0/0	-18.2	-18.2	0.13 (4)	10.00			

## **DESIGN CRITERIA**

SPEC	IFIED	LOA	OS:		
TOP	CH.	LL	=	34.8	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.3	PSF
TOTA	L LO	AD	=	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

ROOF LIVE LOAD

(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

ALLOWABLE DEFL.(LL)= L/360 (1.01")
CALCULATED VERT. DEFL.(LL)= L/999 (0.14")
ALLOWABLE DEFL.(TL)= L/360 (1.01")
CALCULATED VERT. DEFL.(TL) = L/999 (0.28")

CSI: TC=0.66/0.97 (G-H:1) , BC=0.53/0.97 (K-L:1) , WB=0.62/0.97 (H-K:1) , SSI=0.30/1.00 (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) SHEAR SECTION (PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN MAX MIN MT20 650 371 1747 788 1987 1873

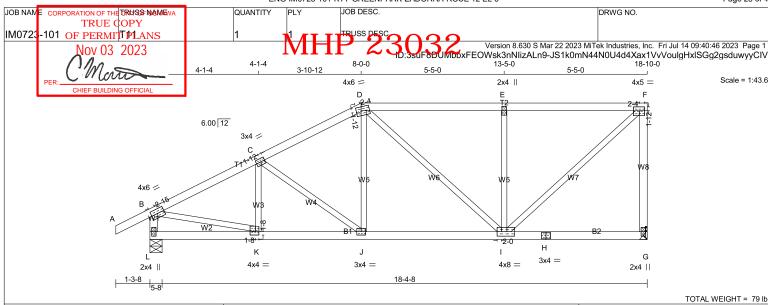
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (J) (INPUT = 0.90) JSI METAL= 0.81 (M) (INPUT = 1.00)







LUMBER				
N. L. G. A. R	ULES			
CHORDS	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
FXCEPT				

PL	PLATES (table is in inches)										
JT	TYPE	PLATES	W	LEN	Υ	X					
В	TMVW-t	MT20	4.0	6.0	2.00	3.00					
С	TMWW-t	MT20	3.0	4.0	1.50	1.75					
D	TTWW-m	MT20	4.0	6.0	1.75	2.25					
Ε	TMW+w	MT20	2.0	4.0							
F	TMVW-t	MT20	4.0	5.0	1.75	2.25					
G	BMV1+p	MT20	2.0	4.0							
Н	BS-t	MT20	3.0	4.0							
1	BMWWW-t	MT20	4.0	8.0	2.00	2.00					
J	BMWW-t	MT20	3.0	4.0							
K	BMWW-t	MT20	4.0	4.0	1.50	1.50					
L	BMV1+p	MT20	2.0	4.0							

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

	NINGS						
	FACTOR	RED	MAXIMUN	M FACTO	INPUT	REQRE	
	GROSS REACTION GROSS REACTION				BRG	BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
G	1296	0	1296	0	0	MECHANIC	CAL
L	1459	0	1459	0	0	5-8	1-9

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

UNFA	CTO	RED	REAC	TIOI	NS	

	1ST LCASE	MAX./N	IIN. COMPO				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	906	656 / 0	0/0	0/0	0/0	250 / 0	0/0
L	1017	750 / 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 = 4.71 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

LOADING TOTAL LOAD CASES: (4)

СН	ORDS		WEBS					
MAX	K. FACTORED	FACTO	RED				MAX. FACTO	RED
MEMB.	FORCE	VERT. LC	AD LC	1 MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(PI	_F)	CSI (LC)	<b>UNBRAC</b>		(LBS)	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO		
A- B	0 / 36	-119.4	-119.4	0.16(1)	10.00	K-C	-246 / 3	0.05(1)
B- C	-1661 / 0	-119.4	-119.4	0.35(1)	4.71	C- J	-346 / 0	0.14(1)
C- D	-1398 / 0	-119.4	-119.4	0.33(1)	5.05	J- D	0 / 292	0.07(1)
D- E	-1122 / 0	-119.4	-119.4	0.63(1)	4.88	D- I	-150 / 0	0.15(1)
E-F	-1122 / 0	-119.4	-119.4	0.63(1)	4.88	I-E	-801 / 0	0.32(1)
G-F	-1255 / 0	0.0	0.0	0.57(1)	7.10	I- F	0 / 1509	0.34(1)
L- B	-1423 / 0	0.0	0.0	0.14(1)	6.76	B-K	0 / 1539	0.35(1)
L- K	0/0	-18.2	-18.2	0.06 (4)	10.00			
K- J	0 / 1507	-18.2	-18.2	0.28 (1)	10.00			
J- I	0 / 1233	-18.2	-18.2	0.26(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				
TOTA	L LO	AD	=	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 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.63")
CALCULATED VERT. DEFL.(TL)= L/999 (0.08")

CSI: TC=0.63/0.97 (E-F:1) , BC=0.28/0.97 (J-K:1) , WB=0.35/0.97 (B-K: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)

MAX MIN MAX MIN MAX MIN MAX MIN

MT20 650 371 1747 788 1987 1873

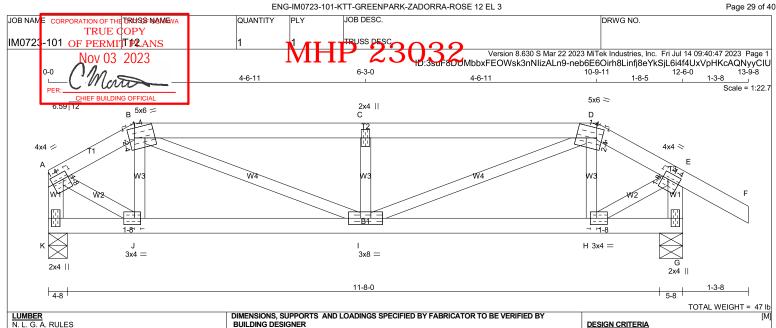
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (I) (INPUT = 0.90) JSI METAL= 0.51 (K) (INPUT = 1.00)







LUMBER				
N. L. G. A. R	ULES			
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 EXCEPT	2x3	DRY	No.2	SPF

LATES (table is in inches)									
TYPE	PLATES	W	LEN	Υ	Χ				
TMVW-t	MT20	4.0	4.0	1.50	1.25				
TTWW-m	MT20	5.0	6.0	2.25	1.25				
TMW+w	MT20	2.0	4.0						
TTWW-m	MT20	5.0	6.0	2.25	1.25				
TMVW-t	MT20	4.0	4.0	1.50	1.25				
BMV1+p	MT20	2.0	4.0						
BMWW-t	MT20	3.0	4.0	1.50	1.50				
BMWWW-t	MT20	3.0	8.0						
BMWW-t	MT20	3.0	4.0	1.50	1.50				
BMV1+p	MT20	2.0	4.0						
	TYPE TMVW-t TTWW-m TMW+w TTWW-m TMVW-t BMV1+p BMWW-t BMWW-t BMWWV-t	TYPE PLATES TMVW-t MT20 TTWW-m MT20 TTWW-w MT20 TTWW-m MT20 TMVW-t MT20 BMV1+p MT20 BMV1+p MT20 BMWW-t MT20 BMWW-t MT20 BMWW-t MT20 BMWW-t MT20 BMWW-t MT20	TYPE         PLATES         W           TMVW-t         MT20         4.0           TTWW-m         MT20         5.0           TMW+w         MT20         2.0           TTWW-m         MT20         5.0           TMW+t         MT20         4.0           BMV1+p         MT20         2.0           BMWW-t         MT20         3.0           BMWW-t         MT20         3.0           BMWW-t         MT20         3.0	TYPE         PLATES         W         LEN           TMVW-t         MT20         4.0         4.0           TTWW-m         MT20         5.0         6.0           TMW+w         MT20         2.0         4.0           TTWW-m         MT20         4.0         4.0           MW1+p         MT20         2.0         4.0           BMWV+t         MT20         3.0         4.0           BMWW-t         MT20         3.0         8.0           BMWW+t         MT20         3.0         4.0	TYPE         PLATES         W         LEN         Y           TMWV+t         MT20         4.0         4.0         1.50           TTWW-m         MT20         5.0         6.0         2.25           TMW+w         MT20         5.0         6.0         2.25           TMWW-m         MT20         4.0         4.0         1.50           BMV1+p         MT20         2.0         4.0         1.50           BMWW+t         MT20         3.0         4.0         1.50           BMWW+t         MT20         3.0         8.0         BMWH-t           BMWW+t         MT20         3.0         4.0         1.50				

	FACTO	RED	MAXIMU	M FACTO	INPUT	REQRD	
	GROSS RE	EACTION	GROSS	REACTIC	BRG	BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
K	852	0	852	0	0	4-8	1-8
G	1032	0	1032	0	0	5-8	1-8

UNFACTORED REACTIONS

	1ST LCASE	MAX./	MIN. COMPOR				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
K	595	430 / 0	0/0	0/0	0/0	165 / 0	0/0
G	719	535 / 0	0/0	0/0	0/0	183 / 0	0/0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.71 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

LOADING TOTAL LOAD CASES: (4)

СН	ORDS	WEBS							
MA)	K. FACTORED	FACTORE	D				MAX. FACTO	RED	
MEMB.	FORCE	VERT. LOAI	D LC1	MAX	MAX.	MEMB.	FORCE	MAX	
	(LBS)	(PLF)	) (	CSI (LC)	UNBRAC	)	(LBS)	CSI (LC)	
FR-TO		FROM T	0		LENGTH	I FR-TO			
A- B	-808 / 0	-119.4 -1	19.4	0.07(1)	6.25	J- B	-275 / 0	0.04(1)	
B- C	-1544 / 0	-119.4 -1	19.4	0.43(1)	4.71	B- I	0 / 923	0.21(1)	
C- D	-1544 / 0	-119.4 -1	19.4	0.43(1)	4.71	I- C	-657 / 0	0.10(1)	
D- E	-789 / 0	-119.4 -1	19.4	0.16(1)	6.25	I- D	0 / 969	0.22(1)	
E-F	0 / 39	-119.4 -1	19.4	0.16(1)	10.00	H- D	-251 / 0	0.04(1)	
K- A	-856 / 0	0.0	0.0	0.09(1)	7.81	A- J	0 / 794	0.18 (1)	
G-E	-1037 / 0	0.0	0.0	0.11(1)	7.63	H- E	0 / 744	0.17 (1)	
K- J	0/0	-18.2 -	-18.2	0.06(4)	10.00				
J- I	0 / 691	-18.2 -	-18.2	0.16(1)	10.00				
I- H	0 / 648	-18.2 -	18.2	0.16(1)	10.00				
H- G	0/0	-18.2 -	18.2	0.06(4)	10.00				

SPEC	IFIED	LOA	DS:		
TOP	CH.	LL	=	34.8	PSI
		DL	=	6.0	PSI
BOT	CH.	LL	=	0.0	PSI
		DL	=	7.3	PSI
TOTA	L LO	AD	=	48.1	PSI

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

(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 (0.04") ALLOWABLE DEFL.(TL)= L/360 (0.42") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.43/0.97 (B-C:1) , BC=0.16/0.97 (I-J:1) , WB=0.22/0.97 (D-I: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)
MAX MIN MAX MIN MAX MIN
650 371 1747 788 1987 1873

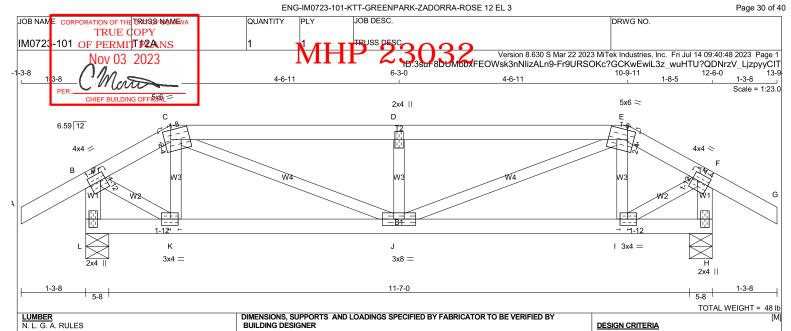
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (I) (INPUT = 0.90 ) JSI METAL= 0.31 (A) (INPUT = 1.00 )







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

PL/	PLATES (table is in inches)										
JT	TYPE	PLATES	W	LEN	Υ	Χ					
В	TMVW-t	MT20	4.0	4.0	1.75	1.25					
С	TTWW-m	MT20	5.0	6.0	2.25	1.50					
D	TMW+w	MT20	2.0	4.0							
Е	TTWW-m	MT20	5.0	6.0	2.25	1.50					
F	TMVW-t	MT20	4.0	4.0	1.75	1.25					
Н	BMV1+p	MT20	2.0	4.0							
1	BMWW-t	MT20	3.0	4.0	1.50	1.75					
J	BMWWW-t	MT20	3.0	8.0							
K	BMWW-t	MT20	3.0	4.0	1.50	1.75					
L	BMV1+p	MT20	2.0	4.0							

	IXIII						
	FACTOR	RED	MAXIMUN	M FACTO	INPUT	REQRD	
	GROSS RE	ACTION	GROSS F	REACTIO	BRG	BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
L	1023	0	1023	0	0	5-8	1-8
Н	1023	0	1023	0	0	5-8	1-8

UNFACTORED REACTIONS

	1ST LCASE	MAX./N	MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL			
L	713	530 / 0	0/0	0/0	0/0	183 / 0	0/0			
Н	713	530 / 0	0/0	0/0	0/0	183 / 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 = 4.75 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

LOADING TOTAL LOAD CASES: (4)

СН	ORDS	WEBS						
MAX	K. FACTORED	FACTORE	D				MAX. FACTO	RED
MEMB.	FORCE	VERT. LOAD	LC.	1 MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(PLF)		CSI (LC)	UNBRAC	2	(LBS)	CSI (LC)
FR-TO		FROM TO	)		LENGTH	I FR-TO		
A- B	0 / 39	-119.4 -1	19.4	0.16(1)	10.00	K- C	-247 / 0	0.04 (1)
B- C	-779 / 0	-119.4 -1	19.4	0.16 (1)	6.25	C- J	0 / 946	0.21 (1)
C- D	-1515 / 0	-119.4 -1 <sup>-</sup>				J- D	-657 / 0	0.10 (1)
D- E	-1515 / 0	-119.4 -1 <sup>-</sup>					0 / 946	0.21 (1)
	-779 / 0	-119.4 -1					-247 / 0	0.04 (1)
F- G	0 / 39	-119.4 -1 <sup>-</sup>					0 / 735	0.17 (1)
L- B	-1028 / 0			0.10 (1)		I- F	0 / 735	0.17 (1)
H- F	-1028 / 0	0.0	0.0	0.10(1)	7.64			
L- K	0/0	-18.2 -	8.2	0.06 (4)	10.00			
K- J	0 / 640	-18.2 -	8.2	0.15 (1)	10.00			
J- I	0 / 640			0.15 (1)				
I- H	0/0	-18.2 -	8.2	0.06 (4)	10.00			



SPEC	IFIED	LOAI	OS:		
TOP	CH.	LL	=	34.8	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.3	PSF
TOTA	L LO	AD	=	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

(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 (0.04") ALLOWABLE DEFL.(TL)= L/360 (0.42") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.42/0.97 (D-E:1) , BC=0.15/0.97 (I-J:1) , WB=0.21/0.97 (C-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)
MAX MIN MAX MIN MAX MIN
650 371 1747 788 1987 1873

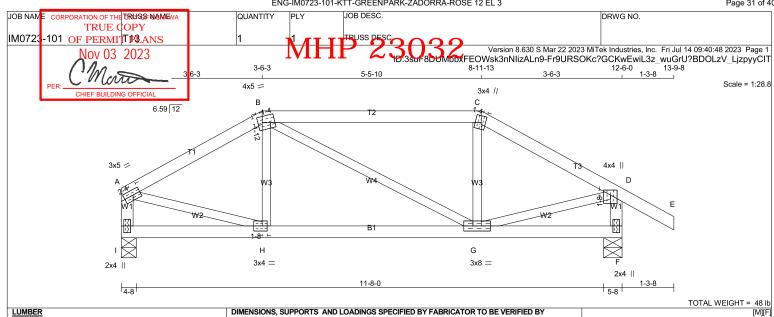
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (C) (INPUT = 0.90 ) JSI METAL= 0.31 (F) (INPUT = 1.00 )







LUMBER				
N. L. G. A. R	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
1 - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				

PL	PLATES (table is in inches)									
JT	TYPE	PLATES	W	LEN	Υ	X				
Α	TMVW-t	MT20	3.0	5.0	1.50	2.25				
В	TTWW-m	MT20	4.0	5.0	1.75	1.25				
С	TTW+m	MT20	3.0	4.0	2.00	1.25				
D	TMVW+p	MT20	4.0	4.0	1.50	2.00				
F	BMV1+p	MT20	2.0	4.0						
G	BMWWW-t	MT20	3.0	8.0						
Н	BMWW-t	MT20	3.0	4.0	1.50	1.50				
	D10/4	MITOO	0.0	4.0						

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

DEA	KINGS						
	FACTORED		MAXIMUN	M FACTO	INPUT	REQRD	
	GROSS RE	ACTION	GROSS F	REACTIO	BRG	BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
1	860	0	860	0	0	4-8	1-8
F	1023	0	1023	0	0	5-8	1-8

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
1	601	435 / 0	0/0	0/0	0/0	166 / 0	0/0
F	713	530 / 0	0/0	0/0	0/0	183 / 0	0/0

BEARING MATERIAL TO BE SPE NO 2 OR BETTER AT JOINT(S) LE

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.09 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

LOADING TOTAL LOAD CASES: (4)

СНС	CHORDS					WEBS			
MAX.	FACTORED	FACTO	RED				MAX. FACTO	RED	
MEMB.	FORCE	VERT. LC	AD LC1	MAX	MAX.	MEMB.	FORCE	MAX	
	(LBS)	(PI	_F) (	CSI (LC)	UNBRAC	;	(LBS)	CSI (LC)	
FR-TO		FROM	TO		LENGTH	FR-TO			
A- B	-886 / 0	-119.4	-119.4	0.20(1)	6.25	H- B	-108 / 46	0.02(1)	
B- C	-771 / 0	-119.4	-119.4	0.46(1)	6.09	B- G	0/0	0.00(1)	
C- D	-885 / 0			0.20(1)		G- C	-109 / 46	0.02(1)	
D- E	0 / 39	-119.4	-119.4	0.16(1)	10.00	A- H	0 / 800	0.18 (1)	
I- A	-836 / 0	0.0	0.0	0.08(1)	7.81	G- D	0 / 800	0.18 (1)	
F- D	-998 / 0	0.0	0.0	0.10(1)	7.74				
I- H	0/0	-18.2		0.08 (4)	10.00				
H- G	0 / 771	-18.2		0.17 (1)					
G- F	0/0	-18.2	-18.2	0.08 (4)	10.00				

## **DESIGN CRITERIA**

SPEC	IFIED	LOAI	DS:		
TOP	CH.	LL	=	34.8	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.3	PSF
TOTA	L LO	AD	=	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 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.42")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.46/0.97 (B-C:1) , BC=0.17/0.97 (G-H:1) , WB=0.18/0.97 (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) SHEAR SECTION (PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN MAX MIN

MT20 650 371 1747 788 1987 1873

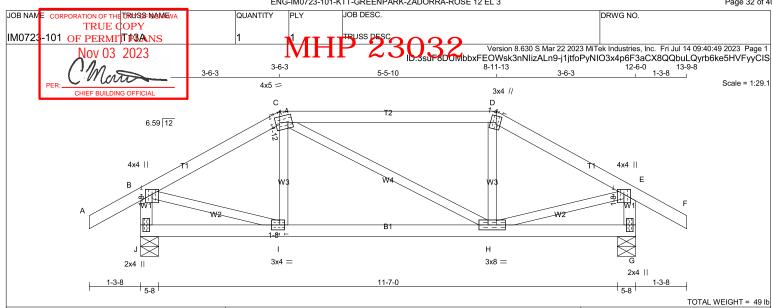
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (A) (INPUT = 0.90) JSI METAL= 0.28 (A) (INPUT = 1.00)







LUMBER				
N. L. G. A. R	ULES			
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				

PL/	PLATES (table is in inches)									
JT	TYPE	PLATES	W	LEN	Υ	Χ				
В	TMVW+p	MT20	4.0	4.0	1.50	2.00				
С	TTWW-m	MT20	4.0	5.0	1.75	1.25				
D	TTW+m	MT20	3.0	4.0	2.00	1.25				
Ε	TMVW+p	MT20	4.0	4.0	1.50	2.00				
G	BMV1+p	MT20	2.0	4.0						
Н	BMWWW-t	MT20	3.0	8.0						
1	BMWW-t	MT20	3.0	4.0	1.50	1.50				
- 1	DM//14n	MT20	2.0	4.0						

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

	FACTO		MAXIMUI		INPUT	REQRD	
	GROSS RE	EACTION	GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
J	1023	0	1023	0	0	5-8	1-8
G	1023	0	1023	0	0	5-8	1-8

UNFACTORED REACTIONS

	1ST LCASE	MAX./	MIN. COMPO				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	713	530 / 0	0/0	0/0	0/0	183 / 0	0/0
G	713	530 / 0	0/0	0/0	0/0	183 / 0	0/0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.09 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

LOADING TOTAL LOAD CASES: (4)

CHC	DRDS	WEBS					
MAX.	FACTORED	FACTORED				MAX. FACTO	RED
МЕМВ.	FORCE	VERT. LOAD LC	1 MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(PLF)	CSI (LC)	UNBRAC	)	(LBS)	CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
A-B	0 / 39	-119.4 -119.4	0.16(1)	10.00	I- C	-109 / 46	0.02(1)
B- C	-886 / 0	-119.4 -119.4	0.20 (1)	6.25	C- H	0/0	0.00 (1)
C-D	-771 / 0	-119.4 -119.4	0.46 (1)	6.09	H- D	-109 / 46	0.02 (1)
D-E	-885 / 0	-119.4 -119.4	0.20(1)	6.25	B- I	0 / 800	0.18 (1)
E-F	0 / 39	-119.4 -119.4	0.16(1)	10.00	H- E	0 / 800	0.18 (1)
J- B	-998 / 0	0.0 0.0	0.10(1)	7.74			
G-E	-998 / 0	0.0 0.0	0.10(1)	7.74			
J-I	0/0	-18.2 -18.2	0.08 (4)	10.00			
I- H	0 / 771	-18.2 -18.2	0.17(1)	10.00			
H- G	0/0	-18.2 -18.2	0.08 (4)	10.00			

## **DESIGN CRITERIA**

SPEC	IFIED	LOAI	DS:		
TOP	CH.	LL	=	34.8	PSF
		DL	=	6.0	PSI
BOT	CH.	LL	=	0.0	PSI
		DL	=	7.3	PSI
TOTA	L LO	AD	=	48.1	PSI

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 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.42")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.46/0.97 (C-D:1) , BC=0.17/0.97 (H-I:1) , WB=0.18/0.97 (B-I:1) , SSI=0.25/1.00 (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 MAX MIN

MT20 650 371 1747 788 1987 1873

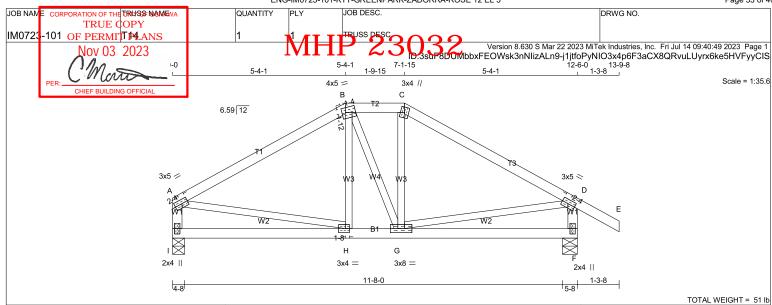
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (B) (INPUT = 0.90) JSI METAL= 0.26 (I) (INPUT = 1.00)







LUMBER				
N. L. G. A. R	ULES			
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
FXCEPT				

PL/	ATES (table i	s in inches)					
JT	TYPE	PLATES	W	LEN	Υ	Χ	
Α	TMVW-t	MT20	3.0	5.0	1.50	2.25	
В	TTWW-m	MT20	4.0	5.0	1.75	1.25	
С	TTW+m	MT20	3.0	4.0			
D	TMVW-t	MT20	3.0	5.0	1.50	2.25	
F	BMV1+p	MT20	2.0	4.0			
G	BMWWW-t	MT20	3.0	8.0			
Н	BMWW-t	MT20	3.0	4.0	1.50	1.50	
1	BMV1+p	MT20	2.0	4.0			

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

	FACTO		MAXIMU		INPUT	REQRD	
	GROSS RI	EACTION	GROSS	REACTIC	BRG	BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
1	860	0	860	0	0	4-8	1-8
F	1023	0	1023	0	0	5-8	1-8

UNF	ACTORED REA	CTIONS			
	1ST LCASE	MAX./N	IIN. COMPO	NENT REACTIO	NS
.IT	COMBINED	SNOW	LIVE	PERMIIVE	v

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
1	601	435 / 0	0/0	0/0	0/0	166 / 0	0/0		
F	713	530 / 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 = 6.08 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

LOADING TOTAL LOAD CASES: (4)

СНС	CHORDS				WEBS				
MAX.	FACTORED	FACTO	RED				MAX. FACTO	RED	
MEMB.	FORCE	VERT. LC	AD LC1	MAX	MAX.	MEMB.	FORCE	MAX	
	(LBS)	(PI	_F) (	CSI (LC)	UNBRAC		(LBS)	CSI (LC)	
FR-TO		FROM	TO		LENGTH	FR-TO			
A-B	-791 / 0	-119.4	-119.4	0.44 (1)	6.09	H- B	-47 / 46	0.02(4)	
B- C	-692 / 0	-119.4	-119.4	0.06(1)	6.25	B- G	0/2	0.00(4)	
C- D	-792 / 0	-119.4	-119.4	0.44(1)	6.08	G- C	-45 / 48	0.02(4)	
D- E	0 / 39	-119.4	-119.4	0.16(1)	10.00	A- H	0 / 703	0.16 (1)	
I- A	-818 / 0	0.0	0.0	0.08(1)	7.81	G- D	0 / 704	0.16 (1)	
F- D	-980 / 0	0.0	0.0	0.10(1)	7.78				
I- H	0/0	-18.2	-18.2	0.11 (4)	10.00				
H- G	0 / 692	-18.2		0.17 (1)					
G-F	0/0	-18.2	-18.2	0.11 (4)	10.00				

## **DESIGN CRITERIA**

SPEC	IFIED	LOAI	DS:		
TOP	CH.	LL	=	34.8	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.3	PSF
TOTA	L LO	AD	=	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 (0.04")

CSI: TC=0.44/0.97 (C-D:1) , BC=0.17/0.97 (G-H:1) , WB=0.16/0.97 (D-G:1) , SSI=0.22/1.00 (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 MAX MIN

MT20 650 371 1747 788 1987 1873

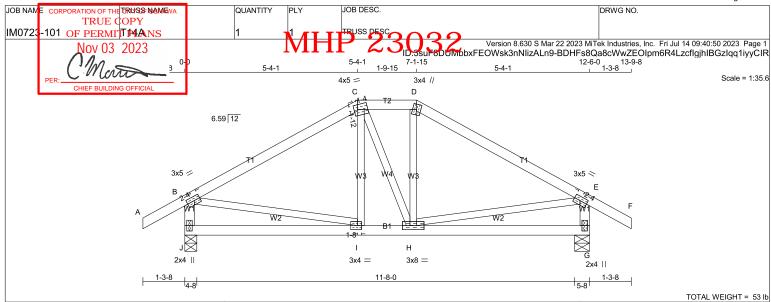
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (D) (INPUT = 0.90) JSI METAL= 0.29 (D) (INPUT = 1.00)







LUMBER				
N. L. G. A. R	ULES			
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				

PL	PLATES (table is in inches)										
JT	TYPE	PLATES	W	LEN	Υ	Χ					
В	TMVW-t	MT20	3.0	5.0	1.50	2.25					
С	TTWW-m	MT20	4.0	5.0	1.75	1.25					
D	TTW+m	MT20	3.0	4.0							
Ε	TMVW-t	MT20	3.0	5.0	1.50	2.25					
G	BMV1+p	MT20	2.0	4.0							
Н	BMWWW-t	MT20	3.0	8.0							
1	BMWW-t	MT20	3.0	4.0	1.50	1.50					
.1	BMV/1+n	MT20	2.0	4.0							

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

	FACTO	RED	MAXIMU	M FACTO	INPUT	REQRD	
	GROSS RE	EACTION	GROSS I	REACTIO	BRG	BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
J	1023	0	1023	0	0	4-8	1-8
G	1023	0	1023	0	0	5-8	1-8

UNFACTORED REACTIONS

	1ST LCASE	MAX./I	MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL			
J	713	530 / 0	0/0	0/0	0/0	183 / 0	0/0			
G	713	530 / 0	0/0	0/0	0/0	183 / 0	0/0			

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.08 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

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

LOADING TOTAL LOAD CASES: (4)

CHC	DRDS	WEBS					
MAX.	FACTORED	FACTORED				MAX. FACTO	RED
MEMB.	FORCE	VERT. LOAD LC	1 MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)
FR-TO		FROM TO		LENGTH	I FR-TO		
A- B	0 / 39	-119.4 -119.4	0.16 (1)	10.00	I- C	-47 / 46	0.02 (4)
B- C	-791 / 0	-119.4 -119.4	0.44 (1)	6.09	C- H	0/2	0.00 (4)
C- D	-692 / 0	-119.4 -119.4	0.06(1)	6.25	H- D	-45 / 48	0.02 (4)
D- E	-792 / 0	-119.4 -119.4			B- I	0 / 703	0.16 (1)
E-F	0 / 39	-119.4 -119.4	0.16 (1)	10.00	H- E	0 / 704	0.16 (1)
J- B	-981 / 0	0.0 0.0	0.10 (1)	7.78			
G-E	-980 / 0	0.0 0.0	0.10 (1)	7.78			
J- I	0/0		0.11 (4)				
I- H	0 / 692		0.17 (1)				
H- G	0/0	-18.2 -18.2	0.11 (4)	10.00			

## **DESIGN CRITERIA**

SPEC	IFIED	LOAI	OS:		
TOP	CH.	LL	=	34.8	PSI
		DL	=	6.0	PS
BOT	CH.	LL	=	0.0	PSI
		DL	=	7.3	PSI
TOTA	L LO	AD	=	48.1	PSI

## 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

(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 (0.04")

CSI: TC=0.44/0.97 (D-E:1) , BC=0.17/0.97 (H-I:1) , WB=0.16/0.97 (E-H:1) , SSI=0.22/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)

MAX MIN MAX 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= 0.29 (E) (INPUT = 1.00)





Scale = 1:31.2



JOB DESC DRWG NO.

Version 8.630 S Mar 22 2023 MiTek Industries, Inc. Fri Jul 14 09:40:51 2023 Page 1 nd.3sar-8DumibbxFEOWsk3nNlizALn9-fQrd4URDuwenBOzVNUdgcZWrlh20QnVPCyaNZ8yyClQ 2-10-0 3-3-8 , 5-8 2-10-0 2x4 ||

D 10.00 12 3x4 // 4x6 // Н

TOTAL WEIGHT = 4 X 19 = 76 lb

LUMBER				
N. L. G. A. R	ULES			
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	No.2	SPF
EXCEPT				

DRY: SEASONED LUMBER.

## PLATES (table is in inches)

ı	JT	TYPE	PLATES	W	LEN	Υ	X
l	В	TMVWW-t	MT20	4.0	6.0	1.50	2.75
l	С	TMWW-t	MT20	3.0	4.0	1.50	1.25
l	D	TMV+p	MT20	2.0	4.0		
l	F	BMVW1-t	MT20	3.0	4.0		
l	G	BWMW*-I	MT20	3.0	6.0		2.00
l	Н	BMWW-t	MT20	3.0	4.0		
ı	1	BMV1+p	MT20	2.0	4.0		

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

	FACTOR		MAXIMUN			INPUT	REQRD
	<b>GROSS RE</b>	ACTION	GROSS F	REACTIO	N	BRG	BRG
T	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
=	184	0	222	0	0	5-8	1-8
	398	0	398	0	0	3-8	1-8
=	-17	0	0	0	-19	5-8	1-8

## PROVIDE ANCHORAGE AT BEARING JOINT E FOR 150 LBS FACTORED UPLIFT

## UNFACTORED REACTIONS

QUANTITY

	1ST LCASE	MAX./	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
F	131	107 / -25	0/0	0/0	0/0	49 / 0	0/0		
1	275	218 / 0	0/0	0/0	0/0	58 / 0	0/0		
E	-12	2 / -7	0/0	0/0	0/0	0 / -7	0/0		
-	-12	21-1	070	070	070	07-7	070		

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

MAX. UNBRACED INTERIOR CHORD LENGTH = 10.00 FT

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

LOADING TOTAL LOAD CASES: (7)

CHC	CHORDS				WEBS			
MAX.	FACTORED	FACTO	RED				MAX. FACTO	RED
MEMB.	FORCE	VERT. LC	AD LC1	MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(Pl	.F) (	CSI (LC)	UNBRAC		(LBS)	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO		
A-B	0 / 53	-119.4	-119.4	0.17 (5)	10.00	B- G	-45 / 119	0.03 (6)
B- C	-153 / 0	-119.4	-119.4	0.16 (5)	6.25	H- G	0 / 15	0.01 (6)
C- D	-10 / 11	-119.4	-119.4	0.04(1)	10.00	G- C	0 / 26	0.01 (4)
F- D	-85 / 0	0.0	0.0	0.01(1)	7.81	B- H	-2 / 1	0.00 (5)
I- B	-386 / 0	0.0	0.0	0.04(1)	7.81	C-F	-160 / 63	0.02 (6)
I- H	0/0	-18.2	-18.2	0.01 (4)	10.00			
G-F	-48 / 121	-18.2	-18.2	0.03(6)	6.25			
F-E	0/0	-18.2	-18.2	0.01 (6)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.

## **DESIGN CRITERIA**

SPEC	IFIED	LOADS	S:	
TOP	CH.	LL =	34.8	PSF
		DL =	6.0	PSF
BOT	CH.	LL =	0.0	PSF
		DL =	7.3	PSF
TOTA	L LO	AD =	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

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

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

CSI: TC=0.17/0.97 (A-B:5) , BC=0.03/0.97 (F-G:6) , WB=0.03/0.97 (B-G:6) , SSI=0.10/1.00 (A-B:5)

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) MAX MIN MAX MIN MAX MIN 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.28 (G) (INPUT = 0.90 ) JSI METAL= 0.08 (I) (INPUT = 1.00 )





Page 1 of 2



Client: Project: Address:

Input by: MHP 2303 Job Name: B1 Project #

Date:

6/7/2023

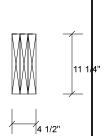
ВВ

Level: Level

00<mark>0" X 12.000"</mark> 3-Ply - PASSED

1 SPF 0-3-8 2 SPF 0-3-8

> 9'4 7/8' 9'4 7/8'



## Member Information

**B1** 

Туре:	Girder
Plies:	3
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	360
Importance:	Normal - II

Application: Roof (Residential) Slope: 0/12 Design Method: LSD

**NBCC 2015 Building Code:** OBC 2012(2020 Update)

Load Sharing: Deck: Not Checked

Not Checked Vibration:

# **Unfactored Reactions UNPATTERNED Ib (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 Ib	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 <b>l</b> b	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.

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JULY 14, 2023

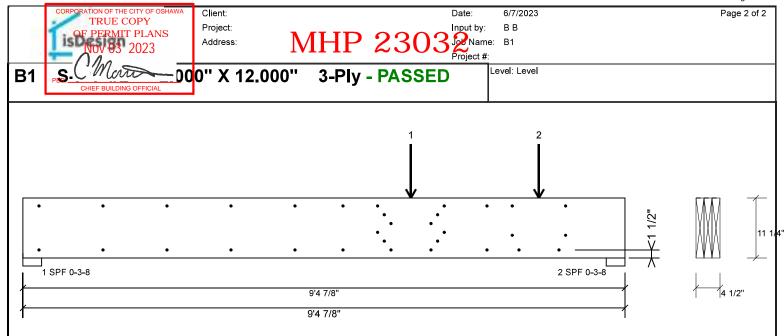
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: TRUSSES. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

١	8 Lateral siende	erness ratio based on full se	ction wiath.							
	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



# **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.

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Capacity Load	93.9 %		
Load	2217.8 b.		
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		

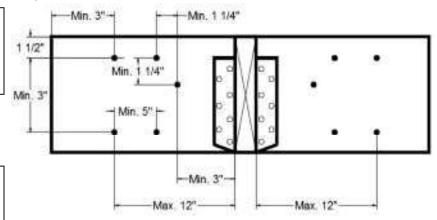
# **Concentrated Load**

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 Load	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

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.

# Min/Max fastener distances for Concentrated Side Loads





This design is valid until 4/17/2026

