



TOTAL WEIGHT = 74 lb [M][F]

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

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBMH1-m	MT20	7.0	8.0	Edge	0.50
C	TMW+w	MT20	2.0	4.0		
D	TTWW+m	MT20	4.0	6.0		
E	TMW+w	MT20	2.0	4.0		
F	TMBMH1-m	MT20	7.0	8.0	Edge	0.50
H	BMWW-t	MT20	4.0	4.0		
I	BS-t	MT20	3.0	6.0		
J	BMWW-t	MT20	4.0	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**

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX	HEEL WEDGE
	VERT	HORZ	DOWN	HORZ			
B	1499	0	1499	0	3-8	3-8	2x4 L
F	1499	0	1499	0	3-8	3-8	2x4 R

**UNFACTORED REACTIONS**

JT	COMBINED	1ST LCASE MAX./MIN. COMPONENT REACTIONS						
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
B	1037	812 / 0	0 / 0	0 / 0	0 / 0	226 / 0	0 / 0	
F	1037	812 / 0	0 / 0	0 / 0	0 / 0	226 / 0	0 / 0	

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

**BRACING**  
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.41 FT.  
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

**LOADING**  
 TOTAL LOAD CASES: (4)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD				MAX. UNBRAC LENGTH	MEMB. FR-TO	WEBS MAX. FACTORED FORCE (LBS)	
		FROM	TO	LC1	MAX			CS	LC
A-B	0 / 0	-109.6	-109.6	0.06 (1)	10.00	C-J	-619 / 0	0.09 (1)	
B-L	-3229 / 0	-109.6	-109.6	0.48 (1)	3.41	J-D	0 / 680	0.11 (1)	
L-C	-2961 / 0	-109.6	-109.6	0.50 (1)	3.57	D-H	0 / 680	0.11 (1)	
C-D	-2494 / 0	-109.6	-109.6	0.53 (1)	3.81	H-E	-619 / 0	0.09 (1)	
D-E	-2494 / 0	-109.6	-109.6	0.53 (1)	3.81	K-L	0 / 403	0.00 (1)	
E-N	-2961 / 0	-109.6	-109.6	0.50 (1)	3.57	M-N	0 / 403	0.00 (1)	
N-F	-3229 / 0	-109.6	-109.6	0.48 (1)	3.41				
F-G	0 / 0	-109.6	-109.6	0.06 (1)	10.00				
B-K	0 / 2800	-17.5	-17.5	0.72 (1)	10.00				
K-J	0 / 2800	-17.5	-17.5	0.72 (1)	10.00				
J-I	0 / 1916	-17.5	-17.5	0.43 (1)	10.00				
I-H	0 / 1916	-17.5	-17.5	0.43 (1)	10.00				
H-M	0 / 2800	-17.5	-17.5	0.72 (1)	10.00				
M-F	0 / 2800	-17.5	-17.5	0.72 (1)	10.00				

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
 TOP CH. LL = 34.1 PSF  
 DL = 3.0 PSF  
 BOT CH. LL = 0.0 PSF  
 DL = 7.0 PSF  
 TOTAL LOAD = 44.0 PSF

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:  
 - PART 9 OF OBC 2012, BCBC 2012, ABC 2014  
 - CSA 086-09  
 - TPIC 2011

(55% OF 54.3 P.S.F. G.S.L. PLUS 4.2 P.S.F. RAIN LOAD) EQUALS 34.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEF.LL = L/360 (0.73")  
 CALCULATED VERT. DEF.LL = L/999 (0.23")  
 ALLOWABLE DEF.LL = L/360 (0.73")  
 CALCULATED VERT. DEF.LL = L/715 (0.37")

CSI: TC=0.53/1.00 (D-E:1), BC=0.72/1.00 (H-M:1), WB=0.11/1.00 (D-J:1), SSI=0.36/1.00 (F-N: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 = 0.50

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	618	354	1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.82 (B) (INPUT = 0.90)  
 JSI METAL= 0.67 (I) (INPUT = 1.00)

