



TOTAL WEIGHT = 6 X 121 = 725 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
1 - 5	2x4	DRY No.2	SPF
5 - 9	2x4	DRY No.2	SPF
1 - 14	2x4	DRY No.2	SPF
14 - 4	2x4	DRY No.2	SPF
13 - 10	2x4	DRY No.2	SPF
10 - 8	2x4	DRY No.2	SPF

REINFORCING MEMBERS
HW1 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
1	TMBMR1-t	MT20	5.0	6.0	2.50	0.50
1	RT-t	MT20	3.0	4.0		
1	RT-t	MT20	3.0	4.0		
3	TMWW-t	MT20	3.0	8.0		
4	TMWW-t	MT20	4.0	6.0	1.50	2.25
5	TTW-p	MT20	5.0	6.0		
6	TMWW-t	MT20	3.0	4.0	1.50	1.50
7	TMWW-t	MT20	4.0	4.0	2.00	1.50
8	TMBMH1-m	MT20	7.0	8.0	Edge	0.50
10	BBW-m	MT20	5.0	6.0	Edge	
11	BMWW-t	MT20	4.0	4.0	2.00	1.75
12	BMWWW-t	MT20	4.0	8.0	1.75	1.50
13	BMWWW-p	MT20	5.0	14.0	2.25	8.00
14	BMV-p	MT20	1.5	4.0		
15	BMWW-t	MT20	4.0	6.0	1.75	1.75

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	REQRD BRG	HEEL WEDGE
	VERT	HORZ	DOWN	HORZ			
1	1382	0	1382	0	0/0	0/0	358/0
8	1452	0	1452	0	0/0	5-8	2x4 R

ALLOW FOR 0.3" OF HORIZONTAL MOVEMENT DUE TO TOTAL LOAD.

UNFACTORED REACTIONS

JT	COMBINED		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
	1ST LCASE	MAX./MIN.						
1	981	623/0	0/0	0/0	0/0	0/0	358/0	0/0
8	1029	662/0	0/0	0/0	0/0	0/0	367/0	0/0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 1, 8

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

LOADING
TOTAL LOAD CASES: (4)

MEMB.	CHORDS			WEBS		
	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC	MEMB. FORCE (LBS)	FACTORED MAX CSI (LC)
FR-TO						
1-17	-2165/0	-75.2	-75.2 0.10 (1)	4.57	15-3	-924/0
17-2	-2277/0	-75.2	-75.2 0.36 (1)	4.21	15-13	0/2970
2-3	-2277/0	-75.2	-75.2 0.36 (1)	4.21	3-13	0/1647
3-4	-4742/0	-75.2	-75.2 0.79 (1)	2.73	4-12	-2604/0
4-5	-3064/0	-75.2	-75.2 0.27 (1)	3.77	12-5	0/1761
5-6	-3056/0	-75.2	-75.2 0.37 (1)	3.71	12-6	-579/0
6-7	-3599/0	-75.2	-75.2 0.45 (1)	3.39	11-6	-85/45
7-19	-3117/0	-75.2	-75.2 0.50 (1)	3.47	11-7	0/506
19-8	-3391/0	-75.2	-75.2 0.50 (1)	3.31	10-7	-476/0
8-9	0/0	-75.2	-75.2 0.04 (1)	10.00	16-17	0/1057
					16-2	-1559/0
1-16	0/1507	-17.5	-17.5 0.39 (1)	10.00	18-19	0/517
16-15	0/2854	-17.5	-17.5 0.61 (1)	10.00		
15-14	0/61	-17.5	-17.5 0.15 (4)	10.00		
14-13	0/53	0.0	0.0 0.20 (1)	10.00		
13-4	0/2129	0.0	0.0 0.53 (1)	10.00		
13-12	0/4689	-17.5	-17.5 0.80 (1)	10.00		
12-11	0/3475	-17.5	-17.5 0.60 (1)	10.00		
11-10	0/2971	-17.5	-17.5 0.55 (1)	10.00		
10-18	0/2930	-17.5	-17.5 0.84 (1)	10.00		
18-8	0/2930	-17.5	-17.5 0.84 (1)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH LL = 20.9 PSF
DL = 5.0 PSF
BOT CH LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 32.9 PSF

SPACING = 24.0 IN.C.C
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(82% OF 23.0 P.S.F. G.S.L. PLUS 2.1 P.S.F. RAIN LOAD)
EQUALS 20.9 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.99")
CALCULATED VERT. DEFL.(LL) = L/999 (0.35")
ALLOWABLE DEFL.(TL)= L/360 (0.99")
CALCULATED VERT. DEFL.(TL) = L/539 (0.66")

CSI: TC=0.79/1.00 (3-4-1), BC=0.84/1.00 (8-18-1),
WB=0.48/1.00 (13-15-1), SSI=0.35/1.00 (8-19-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (4) (INPUT = 0.90)
JSI METAL= 0.83 (13) (INPUT = 1.00)