

LUMBER

N. L. G. A. RULES	CHORDS	SIZE	DRY	LUMBER	DESCR.
A - D	2x4	DRY	1650F 1.5E	SPF	
D - E	2x4	DRY	No.2	SPF	
E - F	2x4	DRY	No.2	SPF	
F - I	2x4	DRY	1650F 1.5E	SPF	
B - K	2x4	DRY	No.2	SPF	
K - H	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
TMB1-m	MT20	5.0	8.0	Edge	0.50
C	MT20	4.0	5.0		
D	TS-t	3.0	8.0		
E	TTW-p	5.0	6.0		
F	TS-t	3.0	8.0		
G	TMWW-t	4.0	5.0		
H	TMB1-m	5.0	8.0	Edge	0.50
J	BMW+w	1.5	4.0		
K	BS-t	4.0	8.0		
L	BMWW-t	4.0	10.0		
M	BMW+w	1.5	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	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
B	2195	0	2195	118
H	2195	0	2195	0

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 514 LBS. FACTORED UPLIFT
 PROVIDE ANCHORAGE AT BEARING JOINT H FOR 514 LBS. FACTORED UPLIFT

NOTE: ANCHORAGE REQUIRED FOR LARGE UPLIFT FORCES, SHALL BE PROVIDED BY BLDG. DESIGNER

PROVIDE FOR 118 LBS. FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

JT	1ST LCASE	MAX. / MIN. COMPONENT REACTIONS	LIVE	WIND	DEAD
B	1717	1066 / 0	290 / 0	0 / -599	361 / 0
H	1717	1066 / 0	290 / 0	0 / -599	361 / 0

HORIZONTAL REACTIONS
 B --- 0 / 0 0 / 0 84 / -84 0 / 0

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

BRACING
 MAX. UNBRACED TOP CHORD LENGTH = 2.92FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 6.12FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF C-L, G-L.

LOADING
 TOTAL LOAD CASES: (17)

MEMB.	CHORDS			WEBS		
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED MAX. CSI (LC)	MEMB. UNBRAC LENGTH	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO		FROM TO		FR-TO		
A-B	0 / 19	-114.0 -114.0	0.12 (2)	10.00	M-C 0 / 351	0.06 (5)
B-O	-4950 / 917	-114.0 -114.0	0.38 (1)	3.36	L-E -239 / 1416	0.23 (1)
O-C	-4797 / 1084	-114.0 -114.0	0.84 (2)	3.09	J-G 0 / 351	0.06 (6)
C-D	-3217 / 723	-114.0 -114.0	0.87 (1)	2.92	C-L -1903 / 555	0.48 (2)
D-E	-3217 / 723	-114.0 -114.0	0.87 (1)	2.92	L-G -1903 / 556	0.48 (3)
E-F	-3217 / 723	-114.0 -114.0	0.87 (1)	2.92	N-O -208 / 591	0.00 (1)
F-G	-3217 / 723	-114.0 -114.0	0.87 (1)	2.92	P-Q -208 / 591	0.00 (1)
G-Q	-4797 / 1085	-114.0 -114.0	0.84 (3)	3.09		
Q-H	-4950 / 918	-114.0 -114.0	0.38 (1)	3.36		
H-I	0 / 19	-114.0 -114.0	0.12 (3)	10.00		

B-N	-1021 / 4561	-27.5	-27.5	0.74 (1)	6.12
N-M	-1021 / 4561	-27.5	-27.5	0.93 (1)	6.12
M-L	-1021 / 4561	-27.5	-27.5	0.88 (1)	6.18
L-K	-935 / 4561	-27.5	-27.5	0.88 (1)	6.25
K-J	-935 / 4561	-27.5	-27.5	0.88 (1)	6.25
J-P	-935 / 4561	-27.5	-27.5	0.93 (1)	6.25
P-H	-935 / 4561	-27.5	-27.5	0.74 (1)	6.25

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (7.7) PSF AT (40-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM). INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.

TOTAL WEIGHT = 270 X 98 = 26381 lb [M][F]

DESIGN CRITERIA

SPECIFIED LOADS:
 TOP CH. LL = 33.9 PSF
 DL = 5.0 PSF
 BOT CH. LL = 10.0 PSF
 DL = 7.0 PSF
 TOTAL LOAD = 55.8 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBC 2005

THIS DESIGN COMPLIES WITH:
 - PART 4 OF OBC 2006, BCBC 2006, ABC 2006
 - CSA 086-01
 - TPIC 2007

DESIGN ASSUMPTIONS
 - SLOPE REDUCTION FACTOR USED

(80% OF 39.7 P.S.F. G.S.L. PLUS 2.1 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.9 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.97")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.31")
 ALLOWABLE DEFL.(TL)= L/180 (1.93")
 CALCULATED VERT. DEFL.(TL) = L/810 (0.43")

CSI: TC=0.87 (C-E:1), BC=0.93 (M-N:1), WB=0.48 (C-L:2), SSI=0.54 (H-Q:1)

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

SNOW LOAD IMPORTANCE FACTOR = 1.00
 WIND LOAD IMPORTANCE FACTOR = 1.00
 COMPANION LIVE LOAD FACTOR = 0.50

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

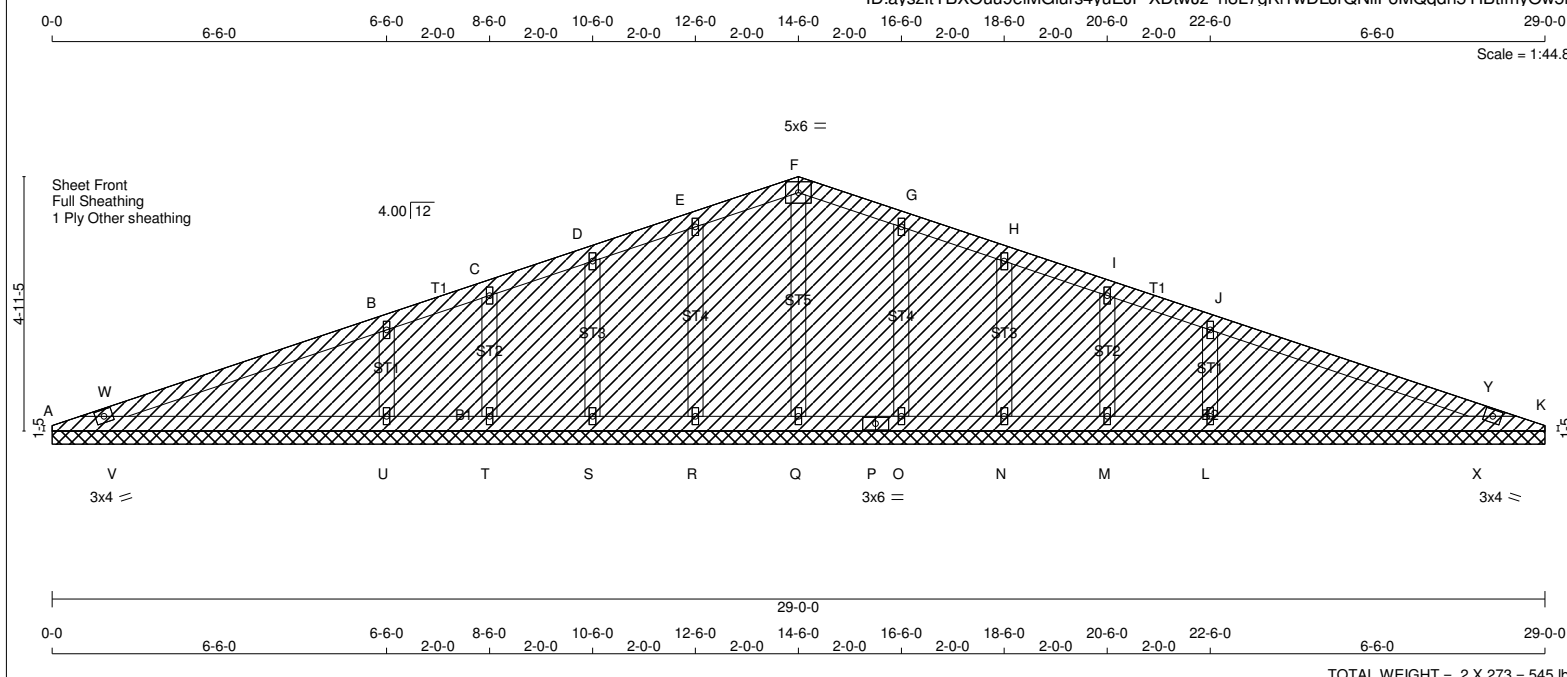
NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - F	2x4	DRY No.2	SPF
F - K	2x4	DRY No.2	SPF
A - P	2x4	DRY No.2	SPF
P - K	2x4	DRY No.2	SPF

ALL WEBS 2x4 DRY No.2 SPF

ALL GABLE WEBS 2x4 DRY No.2 SPF

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A TBM1-h	MT20	3.0	4.0		
B, C, D, E, G, H, I, J					
B TMW+w	MT20	1.5	4.0		
F TTW-p	MT20	5.0	6.0		
K TBM1-h	MT20	3.0	4.0		
L, M, N, O, Q, R, S, T, U					
L BMW1+w	MT20	1.5	4.0		
P BS-t	MT20	3.0	6.0		

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

PROVIDE ANCHORAGE AT ALL BEARING JOINTS FOR 150 LBS FACTORED UPLIFT EXCEPT U:301 LBS, L:298 LBS.

PROVIDE FOR 108 LBS FACTORED HORIZONTAL REACTION AT JOINT A

HORIZONTAL REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	WIND	DEAD
A	---	0/0	0/0	77/-77	0/0

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

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 6.25FT.

MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (17)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CS1 (LC)
FR-TO		FROM TO			FR-TO		
A-W	-210 / 327	-114.0 -114.0	0.16 (4)	6.25	Q-F	-419 / 30	0.11 (1)
B-W	-148 / 368	-114.0 -114.0	0.60 (2)	6.25	R-E	-283 / 122	0.06 (2)
B-C	-48 / 297	-114.0 -114.0	0.59 (2)	6.25	S-D	-317 / 132	0.05 (2)
C-D	-39 / 375	-114.0 -114.0	0.14 (1)	6.25	T-C	0 / 38	0.01 (5)
D-E	0 / 363	-114.0 -114.0	0.13 (1)	10.00	U-B	-783 / 303	0.09 (2)
E-F	0 / 360	-114.0 -114.0	0.12 (1)	10.00	O-G	-283 / 121	0.06 (3)
F-G	0 / 360	-114.0 -114.0	0.12 (1)	10.00	N-H	-317 / 132	0.05 (3)
G-H	0 / 363	-114.0 -114.0	0.13 (1)	10.00	M-I	0 / 38	0.01 (6)
H-I	0 / 375	-114.0 -114.0	0.14 (1)	10.00	L-J	-783 / 302	0.09 (3)
I-J	-9 / 297	-114.0 -114.0	0.59 (3)	10.00	V-W	-285 / 174	0.00 (1)
J-Y	-99 / 368	-114.0 -114.0	0.60 (3)	6.25	X-Y	-285 / 177	0.00 (1)
Y-K	-162 / 327	-114.0 -114.0	0.16 (4)	6.25			
A-V	-351 / 171	-27.5 -27.5	0.42 (2)	6.25			
V-U	-326 / 163	-27.5 -27.5	0.42 (2)	6.25			
U-T	-342 / 168	-27.5 -27.5	0.34 (2)	6.25			
T-S	-341 / 168	-27.5 -27.5	0.10 (1)	6.25			
S-R	-345 / 169	-27.5 -27.5	0.07 (1)	6.25			
R-Q	-348 / 170	-27.5 -27.5	0.05 (1)	6.25			
Q-P	-348 / 170	-27.5 -27.5	0.05 (1)	6.25			
P-O	-348 / 170	-27.5 -27.5	0.05 (1)	6.25			
O-N	-345 / 169	-27.5 -27.5	0.07 (1)	6.25			
N-M	-341 / 167	-27.5 -27.5	0.10 (1)	6.25			
M-L	-342 / 167	-27.5 -27.5	0.34 (3)	6.25			
L-X	-326 / 159	-27.5 -27.5	0.42 (3)	6.25			
X-K	-351 / 171	-27.5 -27.5	0.42 (3)	6.25			

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DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 33.9 PSF
DL = 5.0 PSF

BOT CH. LL = 10.0 PSF
DL = 7.0 PSF

TOTAL LOAD = 55.8 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2005

THIS DESIGN COMPLIES WITH:
- PART 4 OF OBC 2006, BCBC 2006, ABC 2006
- CSA 086-01
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DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED

(80% OF 39.7 P.S.F. G.S.L. PLUS
2.1 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS
33.9 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.60 (J-Y:3), BC=0.42 (U-V:2), WB=0.11 (F-Q:1), SSI=0.32 (J-Y:3)

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

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
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= 0.57 (J) (INPUT = 0.90)
JSI METAL= 0.19 (U) (INPUT = 1.00)