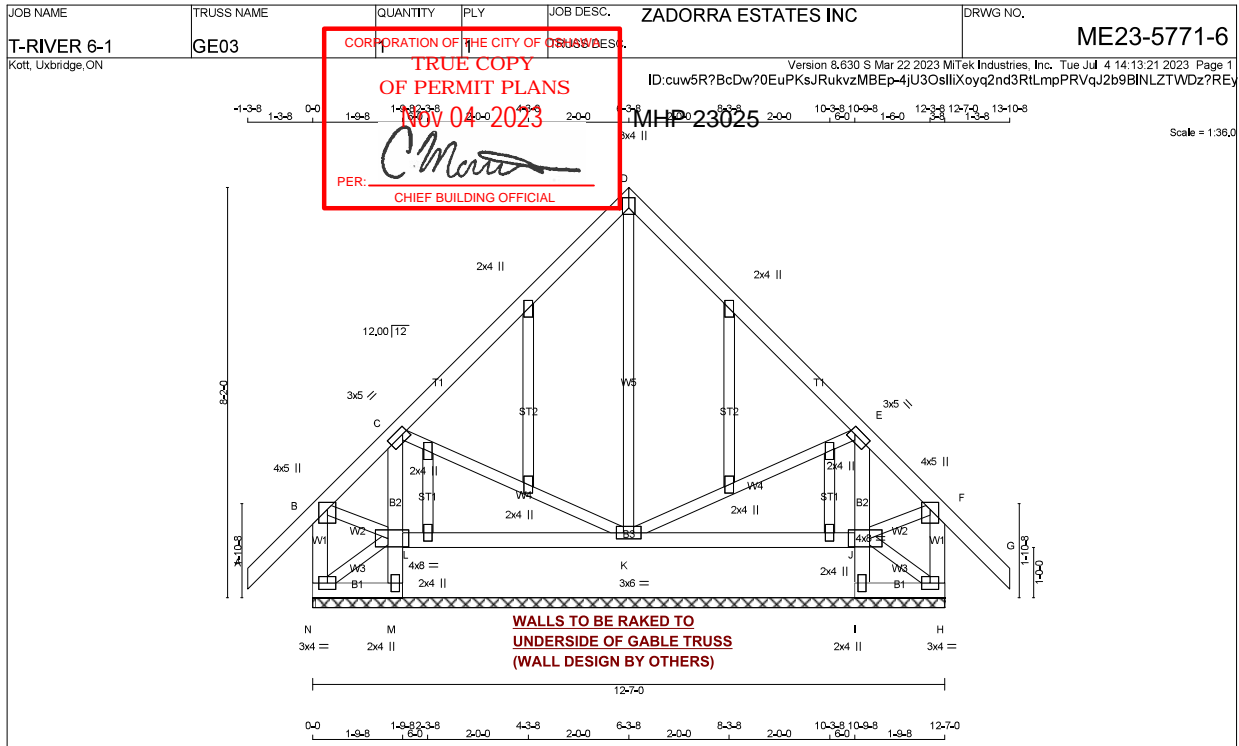


Scale = 1:39.7

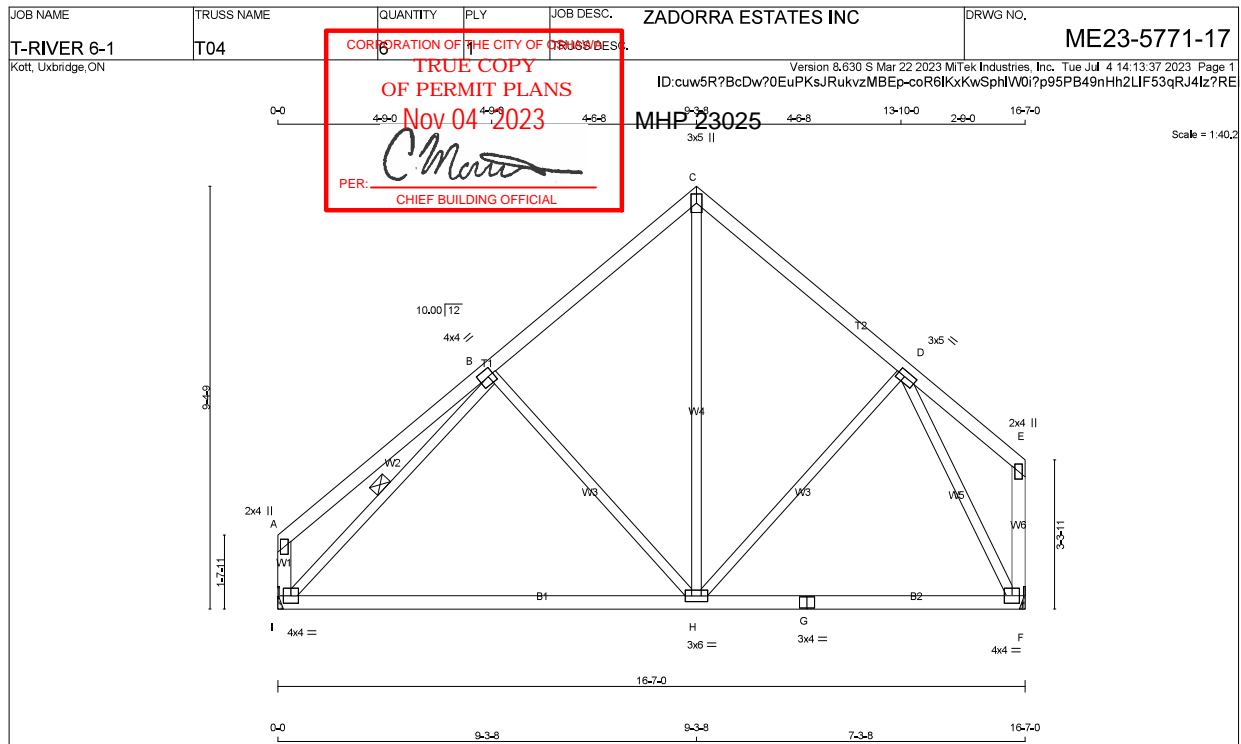
TOTAL WEIGHT = $2 \times 111 = 221$ lb

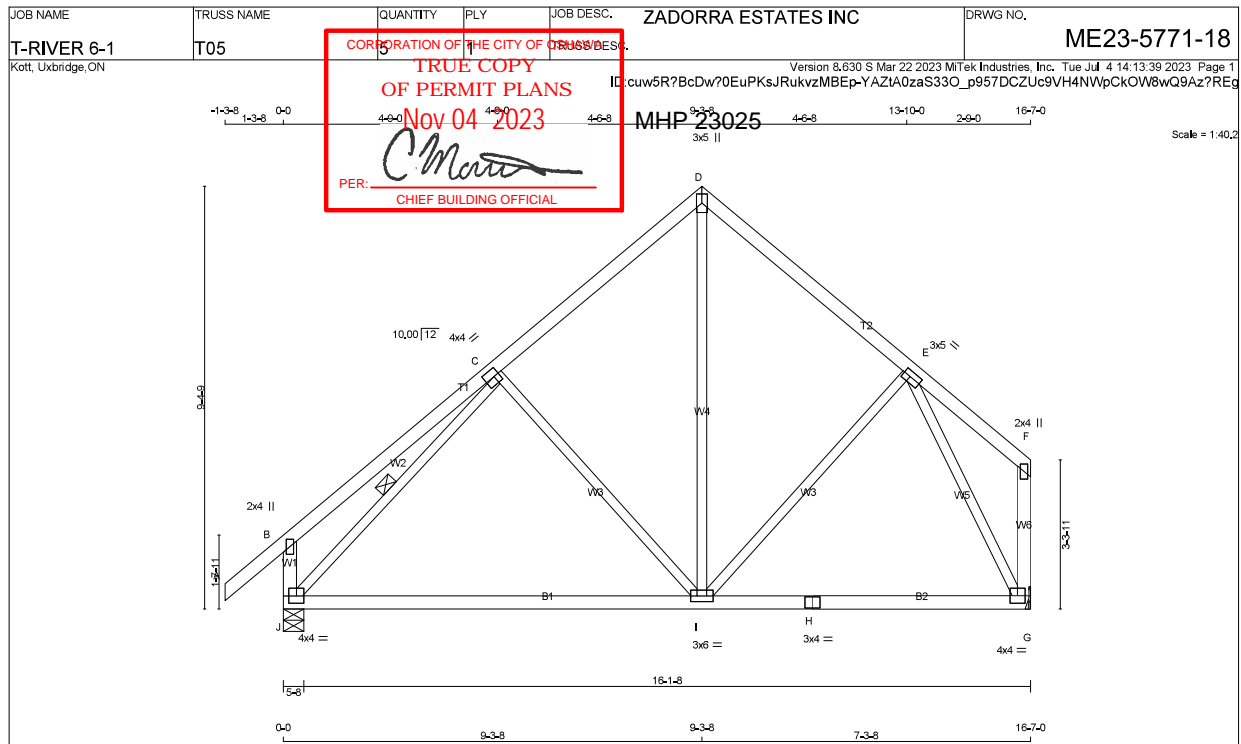
JSI METAL= 0.96 (J) (INPUT = 1.00)



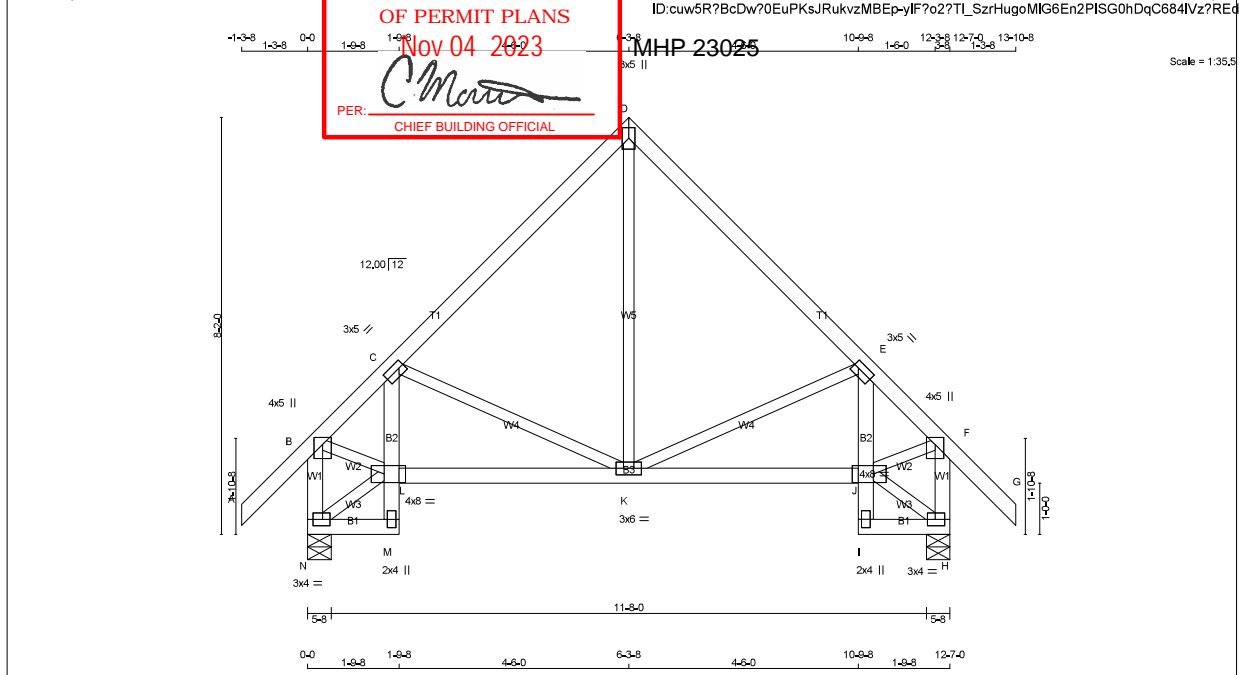


LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER A - D 2x4 DRY No.2 D - G 2x4 DRY No.2 N - B 2x4 DRY No.2 H - F 2x4 DRY No.2 N - M 2x4 DRY No.2 M - C 2x4 DRY No.2 L - J 2x4 DRY No.2 I - E 2x4 DRY No.2 I - H 2x4 DRY No.2 ALL WEBS 2x3 DRY No.2 EXCEPT ALL GABLE WEBS 2x3 DRY No.2 DRY: SEASONED LUMBER. GABLE STUDS SPACED AT 2'-0" OC. PLATES (table is in inches) JT TYPE PLATES W LEN Y X B TMVW+p MT20 4.0 5.0 1.75 2.00 C TMVW+ MT20 3.0 5.0 1.50 1.25 D TMV+p MT20 3.0 4.0 Edge E TMVW+ MT20 3.0 5.0 1.50 1.25 F TMVW+p MT20 4.0 5.0 1.75 2.00 H BMVW+ MT20 3.0 4.0 I BMV+p MT20 2.0 4.0 J BVVW+ MT20 4.0 8.0 2.00 5.00 K BMVW+ MT20 3.0 6.0 L BVVW+ MT20 4.0 8.0 2.00 5.00 M BMV+p MT20 2.0 4.0 N BMV+ MT20 3.0 4.0 O P, Q, R, S, T, U, V O NP+w 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 REQD JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX M 457 0 457 0 0 12'-7" (1'-9" 1'-8") I 457 0 457 0 0 12'-7" (1'-9" 1'-8") K 450 0 450 0 0 12'-7" (1'-9" 1'-8") N 351 0 351 0 0 12'-7" (1'-9" 1'-8") H 351 0 351 0 0 12'-7" (1'-9" 1'-8") VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH BEVELED PLATE OR SHIM REQUIRED TO PROVIDE FULL BEARING SURFACE WITH TRUSS CHORD AT JT(S): K UNFACTORED REACTIONS 1ST LCASE MAX/MIN COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL M 317 241 / 0 0 / 0 0 / 0 76 / 0 0 / 0 I 317 241 / 0 0 / 0 0 / 0 76 / 0 0 / 0 K 320 199 / 0 0 / 0 0 / 0 121 / 0 0 / 0 N 242 195 / 0 0 / 0 0 / 0 47 / 0 0 / 0 H 242 195 / 0 0 / 0 0 / 0 47 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) M, I, K, N, H BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 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. LOADING TOTAL LOAD CASES: (4) CHORDS MAX. FACTORED VERT. LOAD LC1 MAX. MAX. W E B S MAX. FACTORED MEMB. FORCE (LBS) (PLF) CSI (LC) UNBRAC LENGTH FR-TO MEMB. FORCE MAX (LBS) CSI (LC) FR-TO FROM TO A-B 0 / 59 -119.4 -119.4 0.17 (1) 10.00 K-D -311 / 0 0.27 (1) B-C -109 / 0 -119.4 -119.4 0.32 (1) 6.25 K-E -45 / 0 0.02 (1) C-D -137 / 0 -119.4 -119.4 0.32 (1) 6.25 C-K -45 / 0 0.02 (1) D-E -137 / 0 -119.4 -119.4 0.32 (1) 6.25 N-L -1 / 0 0.00 (1) E-F -108 / 0 -119.4 -119.4 0.32 (1) 6.25 J-H -1 / 0 0.00 (1) F-G 0 / 59 -119.4 -119.4 0.17 (1) 10.00 B-L 0 / 116 0.03 (1) N-B -335 / 0 0.0 0.0 0.04 (1) 7.81 J-F 0 / 116 0.03 (1) H-F -335 / 0 0.0 0.0 0.04 (1) 7.81 N-M 0 / 1 -18.2 -18.2 0.01 (4) 10.00 M-L -442 / 0 0.0 0.0 0.00 (1) 7.81 L-C -438 / 0 0.0 0.0 0.00 (1) 7.81 L-K 0 / 112 -18.3 -18.3 0.12 (4) 10.00 K-J 0 / 112 -18.2 -18.2 0.12 (4) 10.00 I-J -442 / 0 0.0 0.0 0.00 (1) 7.81 J-E -438 / 0 0.0 0.0 0.00 (1) 7.81 I-H 0 / 1 -18.2 -18.2 0.01 (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. G.C. 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 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 CSI: TC=0.32/1.00 (C-D-1), BC=0.12/1.00 (K-L-4), WB=0.27/1.00 (D-K-1), SSI=0.18/1.00 (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= 0.47 (D) (INPUT = 0.90) JSI METAL= 0.10 (B) (INPUT = 1.00)
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LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. A - D 2x4 DRY No.2 SPF D - F 2x4 DRY No.2 SPF J - B 2x4 DRY No.2 SPF G - F 2x4 DRY No.2 SPF J - H 2x4 DRY No.2 SPF H - 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 FACTORED GROSS REACTION MAXIMUM FACTORED GROSS REACTION INPUT REQD JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX J 1307 0 1307 0 0 5-8 1-8 G 1142 0 1142 0 0 MECHANICAL A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT G, MINIMUM BEARING LENGTH AT JOINT G = 1-8. UNFACTORED REACTIONS 1ST LOASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL J 911 674 / 0 0 / 0 0 / 0 237 / 0 0 / 0 G 798 577 / 0 0 / 0 0 / 0 221 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) J 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. 1 LATERAL BRACE(S) AT 1/2 LENGTH OF C-J. 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 LC1 MAX. MAX. MEMB. MAX. FACTORED FORCE (LBS) MAX. FACTORED FORCE (LBS) FR-TO FROM TO LENGTH FR-TO A-B 0 / 53 -119.4 -119.4 0.16 (1) 10.00 C-I -361 / 0 0.33 (1) B-C 0 / 43 -119.4 -119.4 0.43 (1) 10.00 I-D 0 / 447 0.10 (1) C-D -736 / 0 -119.4 -119.4 0.33 (1) 6.25 I-E 0 / 49 0.02 (4) D-E -725 / 0 -119.4 -119.4 0.30 (1) 6.25 J-C -1161 / 0 0.37 (1) E-F 0 / 55 -119.4 -119.4 0.32 (1) 10.00 E-G -1150 / 0 0.64 (1) J-B -374 / 0 0.0 0.0 0.04 (1) 7.81 G-F -72 / 0 0.0 0.0 0.01 (1) 7.81 J-I 0 / 775 -18.2 -18.2 0.42 (4) 10.00 I-H 0 / 524 -18.2 -18.2 0.41 (4) 10.00 H-G 0 / 524 -18.2 -18.2 0.41 (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. G/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 (0.55") CALCULATED VERT. DEFL.(LL) = L/999 (0.02") ALLOWABLE DEFL.(TL)= L/360 (0.55") CALCULATED VERT. DEFL.(TL) = L/999 (0.19") CSI: TC=0.43/1.00 (B-C:1), BC=0.42/1.00 (I-J:4), WB=0.64/1.00 (E-G:1), SSI=0.21/1.00 (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) (FLI) 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 (I) (INPUT = 0.90) JSI METAL= 0.39 (C) (INPUT = 1.00)			
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TOTAL WEIGHT = 67 lb [M]F

N, L, G, A, RULES					BUILDING DESIGNER										DESIGN CRITERIA		
CHORDS	SIZE	LUMBER	DESCR.	BEARINGS	FACTORED		MAXIMUM FACTORED		INPUT	REQRD		SPECIFIED LOADS:					
A - D	2x4	DRY	No.2	SPF	GROSS REACTION		GROSS REACTION		BRG	BRG		TOP CH.	LL	= 34.8 PSF			
D - G	2x4	DRY	No.2	SPF	JT	VERT	DOWN	HORZ	PLIFT	IN-5X	IN-5X	DL	= 0.0 PSF				
N - B	2x4	DRY	No.2	SPF	N	1033	0			5-8	1-8	BOT CH.	LL	= 0.0 PSF			
H - F	2x4	DRY	No.2	SPF	H	1033	0		0	5-8	1-8	DL	= 7.3 PSF				
N - M	2x4	DRY	No.2	SPF	UNFACTORED REACTIONS										TOTAL LOAD = 48.1 PSF		
M - C	2x4	DRY	No.2	SPF													
L - J	2x4	DRY	No.2	SPF													
I - E	2x4	DRY	No.2	SPF													
I - H	2x4	DRY	No.2	SPF													
1ST CASE					MAX./MIN. COMPONENT REACTIONS										SPACING = 240 IN. C/C		
COMBINED					JT	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC2015					
N					719	535/0	0/0	0/0	0/0	184/0	0/0						
H					719	535/0	0/0	0/0	0/0	184/0	0/0						
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF													

DRY: SEASONED LUMBER.

PLATES (table is in inches)						UNFACTORED REACTIONS										DESIGN CRITERIA	
JT TYPE	PLATES	W	LEN	Y	X	1ST CASE	MAX/MIN	COMPONENT REACTIONS	PERM	LIVE	WIND	DEAD	SOIL	THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015		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	
B TMVW+p	MT20	4.0	5.0	1.75	2.00	JT	COMBINED	SNOW	0/0	0/0	0/0	184/0	0/0	ALLOWABLE DEFL.(LL)= L/960 (0.42")			
C TMVW+4	MT20	3.0	5.0	1.50	1.25	N	719	535/0	0/0	0/0	0/0	184/0	0/0	CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")		ALLOWABLE DEFL.(TL)= L/360 (0.42")	
D TTW+p	MT20	3.0	5.0			H	719	535/0	0/0	0/0	0/0	184/0	0/0	ALLOWABLE DEFL.(TL)= L/360 (0.42")			
E TMVW+4	MT20	3.0	5.0	1.50	1.25											CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")	
F TMVW+p	MT20	4.0	5.0	1.75	2.00												
H BMVW+4	MT20	3.0	4.0	1.50	1.75											CSI TC=0.31/1.00 (C-D-1) BC=0.16/1.00 (J-K-1) WB=0.15/1.00 (F-J-1) SSI=0.18/1.00 (C-D-1)	
I BMV+p	MT20	2.0	4.0														
J BMVW+4	MT20	4.0	8.0	2.00	5.00											DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10	
K BMVW+4	MT20	3.0	6.0														
L BMVW+4	MT20	4.0	8.0	2.00	5.00											COMPANION LIVE LOAD FACTOR = 1.00	
M BMV+p	MT20	2.0	4.0														
N BMVW+4	MT20	3.0	4.0	1.50	1.75											TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .	

CHORDS					WEBS										NAIL VALUES	
MEMB.	FORCE (LBS)	VERT.	LOAD	MAX	MAX.	MEMB.	FORCE (LBS)	MAX	FACTORED	MAX	FACTORED	MAX	FACTORED	MAX	FACTORED	MAX
FR-TO	FROM	TO	PLF	CSI (LC)	UNBRAC	FR-TO	FROM	TO	PLF	CSI (LC)	UNBRAC	FR-TO	FROM	TO	PLF	CSI (LC)
A-B	0/59	-119.4	-119.4	0.17 (1)	10.00	K-D	0/319	0.07 (1)								
B-C	-856/0	-119.4	-119.4	0.24 (1)	6.25	K-E	-284/0	0.12 (1)								
C-D	-584/0	-119.4	-119.4	0.31 (1)	6.25	C-K	-284/0	0.12 (1)								
D-E	-584/0	-119.4	-119.4	0.31 (1)	6.25	N-L	-21/0	0.00 (1)								
E-F	-856/0	-119.4	-119.4	0.24 (1)	6.25	J-H	-21/0	0.00 (1)								
F-G	0/59	-119.4	-119.4	0.17 (1)	10.00	B-L	0/659	0.15 (1)								
N-B	-1006/0	0.0	0.0	0.11 (1)	7.80	J-F	0/659	0.15 (1)								
H-F	-1006/0	0.0	0.0	0.11 (1)	7.80											
N-M	0/18	-18.2	-18.2	0.02 (4)	10.00											
M-L	0/17	0.0	0.0	0.03 (1)	10.00											
L-C	-119/10	0.0	0.0	0.02 (1)	7.81											
L-K	0/647	-18.3	-18.3	0.16 (1)	10.00											
K-J	0/647	-18.2	-18.2	0.16 (1)	10.00											
I-J	0/17	0.0	0.0	0.03 (1)	10.00											
J-E	-119/10	0.0	0.0	0.02 (1)	7.81											
I-H	0/18	-18.2	-18.2	0.02 (4)	10.00											

CHORDS					WEBS										NAIL VALUES	
MEMB.	FORCE (LBS)	VERT.	LOAD	MAX	MAX.	MEMB.	FORCE (LBS)	MAX	FACTORED	MAX	FACTORED	MAX	FACTORED	MAX	FACTORED	MAX
FR-TO	FROM	TO	PLF	CSI (LC)	UNBRAC	FR-TO	FROM	TO	PLF	CSI (LC)	UNBRAC	FR-TO	FROM	TO	PLF	CSI (LC)
A-B	0/59	-119.4	-119.4	0.17 (1)	10.00	K-D	0/319	0.07 (1)								
B-C	-856/0	-119.4	-119.4	0.24 (1)	6.25	K-E	-284/0	0.12 (1)								
C-D	-584/0	-119.4	-119.4	0.31 (1)	6.25	C-K	-284/0	0.12 (1)								
D-E	-584/0	-119.4	-119.4	0.31 (1)	6.25	N-L	-21/0	0.00 (1)								
E-F	-856/0	-119.4	-119.4	0.24 (1)	6.25	J-H	-21/0	0.00 (1)								
F-G	0/59	-119.4	-119.4	0.17 (1)	10.00	B-L	0/659	0.15 (1)								
N-B	-1006/0	0.0	0.0	0.11 (1)	7.80	J-F	0/659	0.15 (1)								
H-F	-1006/0	0.0	0.0	0.11 (1)	7.80											
N-M	0/18	-18.2	-18.2	0.02 (4)	10.00											
M-L	0/17	0.0	0.0	0.03 (1)	10.00											
L-C	-119/10	0.0	0.0	0.02 (1)	7.81											
L-K	0/647	-18.3	-18.3	0.16 (1)	10.00											
K-J	0/647	-18.2	-18.2	0.16 (1)	10.00											
I-J	0/17	0.0	0.0	0.03 (1)	10.00											
J-E	-119/10	0.0	0.0	0.02 (1)	7.81											
I-H	0/18	-18.2	-18.2	0.02 (4)	10.00											

MODULUS ENGINEERING LTD.

REVIEW FOR TRUSS COMPONENT ONLY

NOTE: ALTERING THIS DOCUMENT
VOIDS THE ENGINEERS SEAL

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED IN MODULUS ENGINEERING LTD. NOTES ME-TCDD1 (VER 06/2017) BEFORE USE.

Design valid for use only with Mitek connectors. This design is based only upon parameters shown, and is for individual building components. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult

TPIC Appendix G - Minimum quality Manufacturing Criteria available from www.tpica.ca and BCSI-CANADA (Building Component Safety Information) available from TPI, 781 N. Lee Street, Suite 312, Alexandria, VA 22314 or www.sbindustry.com