Job Truss Truss Type Qty 760 OCEAN AVE. B133043 T01 **COMMON TRUSS** 15 1 Job Reference (optional) Mainely Trusses, Inc., Fairfield, ME, Justin Harkins 7.350 s Sep 27 2012 MiTek Industries, Inc. Wed Feb 13 12:59:41 2013 Page 1 ID:oeO5bSp3ukMoHLEYjQH?RmzvBh?-kOs4pF7BmC0ETpKVh9zYMhBxd?fuH?hk?L7T2WzlZ/7n 3-11-14 10-0-0 16-0-2 20-0-0 3-11-14 6-0-2 6-0-2 3-11-14 4x6 = Scale = 1:61.1 3 12.00 12 4x4 // 4x4 N 2x4 | W2 2x4 || 7 4x4 4x4 = 6x10 = 10-0-0 20-0-0 10-0-0 10-0-0 Plate Offsets (X,Y): [6:0-1-8,0-2-0], [7:0-5-0,0-3-4], [8:0-1-8,0-2-0] LOADING(psf) TCLL SPACING CSI DEFL I/defI **PLATES** GRIP TC BC 197/144 0.86 Vert(LL) -0.19 240 MT20 Plates Increase 1.15 7-8 >999 (Ground Snow=60.0) TCDL 10.0 Lumber Increase 0.78 Vert(TL) -0.48 7-8 >495 180 Rep Stress Incr WB 0.50 Horz(TL) 0.02 **BCLL** 0.0 Code IRC2009/TPI2007 Weight: 108 lb FT = 20% (Matrix-M) BCDL LUMBER BRACING Structural wood sheathing directly applied, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing. TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 TOP CHORD BOT CHORD **WEBS** 2x4 SPF No.2 *Except* WEBS 1 Row at midpt 4-7, 2-7 W3: 2x4 SPF 2100F 1.8E MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 8=1095/0-5-8 (min. 0-1-11), 6=1095/0-5-8 (min. 0-1-11) Max Horz 8=-379(LC 5) Max Uplift8=-131(LC 8), 6=-131(LC 7)

FORCES (Ib) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-129/135, 2-9=-881/225, 3-9=-672/244, 3-10=-672/244, 4-10=-881/225, 4-5=-129/135, 1-8=-143/75, 5-6=-143/75
BOT CHORD 7-8=-255/575, 6-7=-40/575

3-7=-152/436, 4-7=-195/266, 2-7=-195/266, 2-8=-1019/146, 4-6=-1019/146 WEBS

1) Wind: ASCE 7-05; 100mph (3-second gust); TCDL=4.2psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

2) TCLL: ASCE 7-05; Pg=60.0 psf (ground snow); Ps=35.6 psf (roof snow); Category II; Exp B; Partially Exp.; Ct=1.1

3) Roof design snow load has been reduced to account for slope.
4) Unbalanced snow loads have been considered for this design.

5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 6. This connection is for uplift only and does not consider lateral forces.

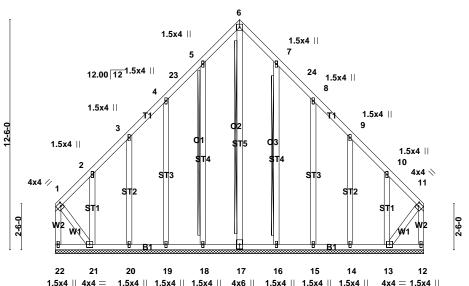
7) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

8) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss. 9) THIS TRUSS DESIGNED WITH A 2' HEEL HEIGHT.

LOAD CASE(S) Standard



Job Truss Truss Type Qty 760 OCEAN AVE. B133043 T01GE 2 Common Truss 1 lob Reference (optional) Mainely Trusses, Inc., Fairfield, ME, Justin Harkins 7.350 s Sep 27 2012 MITek Industries, Inc. Wed Feb 13 12:59:43 2013 Page 1 ID:oeO5bSp3ukMoHLEYjQH?RmzvBh?-gnzrEx9RIpGyi7Uupa?0S6GS7pVcIzZ1Sfca6OzIZ7I 20-0-Ó 10-0-0 10-0-0 10-0-0 Scale = 1:62.6 4x4 =



20-0-0 20-0-0

Plate Offsets (X,Y): [1:0-1-4,0-2-0], [11:0-1-4,0-2-0]				
LOADING(psf) TCLL 35.6 (Ground Snow=60.0) TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING 1-11-4 Plates increase 1.15 Lumber increase 1.15 Rep Stress incr YES Code IRC2009/TPI2007	CSI TC 0.09 BC 0.06 WB 0.22 (Matrix)	DEFL in (loc) I/defl L/d Vert(LL) n/a - n/a 999 Vert(TL) n/a - n/a 999 Horz(TL) 0.01 12 n/a n/a	PLATES GRIP MT20 197/144 Weight: 143 lb FT = 20%

LUMBER **TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2** 2x4 SPF No.2 OTHERS 2x4 SPF No.2

BRACING TOP CHORD BOT CHORD WEBS

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

T-Brace: 2 X 4 SPF No.2 - 6-17, 5-18, 7-16

Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c. .with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS (lb/size) 22=128/20-0-0 (min. 0-3-5), 12=128/20-0-0 (min. 0-3-5), 17=159/20-0-0 (min. 0-3-5), 18=223/20-0-0 (min. 0-3-5), 13=215/20-0-0 (min. 0-3-5), 20=214/20-0-0 (min. 0-3-5), 21=202/20-0-0 (min. 0-3-5), 13=202/20-0-0 (min. 0-3-5), 13=202/20-

MAX UDITEQ=-252(LC 5), 12=-167(LC 6), 18=-99(LC 7), 19=-114(LC 7), 20=-107(LC 7), 21=-370(LC 7), 16=-97(LC 8), 15=-115(LC 8), 14=-107(LC 8), 13=-356(LC 8)

Max Grav 22=462(LC 6), 12=377(LC 5), 17=279(LC 8), 18=324(LC 2), 19=227(LC 2), 20=214(LC 1), 21=217(LC 5), 16=324(LC 3), 15=227(LC 3), 14=214(LC 1), 13=202(LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD

1-2=-261/157, 2-3=-193/150, 3-4=-122/139, 4-23=-101/162, 5-23=-46/169, 5-6=-140/231, 6-7=-140/218, 7-24=-33/152, 8-24=-101/146, 8-9=-93/86, 9-10=-139/96, 10-11=-208/103, 1-22=-447/257, 11-12=-363/173

BOT CHORD

21-22=-339/345, 20-21=-113/217, 19-20=-113/217, 18-19=-113/217, 17-18=-113/217, 16-17=-113/217, 15-16=-113/217, 14-15=-113/217, 13-14=-113/217, 15-16=-113/217, 14-15=-113/217, 13-14=-113/217,

12-13=-20/27

6-17=-256/0, 5-18=-286/122, 4-19=-188/137, 3-20=-175/131, 2-21=-184/133, 7-16=-286/121, 8-15=-188/138, 9-14=-175/131, 10-13=-184/133,

1-21=-205/360, 11-13=-147/312

WEBS

- 1) Wind: ASCE 7-05; 100mph (3-second gust); TCDL=4.2psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) gable end zone; cantilever left and
- right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-05; Pg=60.0 psf (ground snow); Ps=35.6 psf (roof snow); Category II; Exp B; Partially Exp.; Ct=1.1 4) Roof design snow load has been reduced to account for slope.
- Unbalanced snow loads have been considered for this design.
- 6) Gable requires continuous bottom chord bearing.
 7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 252 lb uplift at joint 22, 167 lb uplift at joint 12, 99 lb uplift at joint 18, 114 lb uplift at joint 19, 107 lb uplift at joint 20, 370 lb uplift at joint 21, 97 lb uplift at joint 16, 115 lb uplift at joint 15, 107 lb uplift at joint 14 and 356 lb uplift at joint 16, 115 lb uplift at joint 17, 107 lb uplift at joint 18, 114 lb uplift at joint 19, 107 lb uplift at joint 20, 370 lb uplift at joint 21, 97 lb uplift at joint 16, 115 lb uplift at joint 15, 107 lb uplift at joint 14 and 356 lb uplift at joint 16, 115 lb uplift at joint 17, 107 lb uplift at joint 18, 116 lb uplift at joint 19, 107 lb uplift at joint 19, 107 lb uplift at joint 20, 370 lb uplift at joint 21, 97 lb uplift at joint 16, 116 lb uplift at joint 19, 107 lb uplift at joint 20, 370 lb uplift at joint 21, 97 lb uplift at joint 16, 116 lb uplift at joint 19, 107 lb uplift at joint 20, 370 lb uplift at joint 21, 97 lb uplift at joint 16, 116 lb uplift at joint 22, 107 lb uplift at joint 22, 370 lb uplift at joint 21, 97 lb uplift at joint 16, 116 lb uplift at joint 20, 370 lb uplift at joint 21, 97 lb uplift at joint 16, 116 lb uplift at joint 21, 97 lb uplift at joint 22, 370 lb uplift at joint 21, 97 lb uplift at joint 16, 116 lb uplift at joint 22, 370 lb uplift at joint 21, 97 lb uplift at joint 22, 97 lb uplift at joint 21, 97 lb uplift at joint 22, 97 lb uplift at joint 21, 97 lb uplift at joint 22, 97 lb uplift at joint 21, 97 lb uplift at joint 22, 97 lb upl at joint 13.
- 11) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.
- 13) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
 14) THIS TRUSS DESIGNED WITH A 2' HEEL HEIGHT.

Engineered Truss Systems

LOAD CASE(S) Standard