



Plate Offsets (X,Y): [2:0-0-2,Edge], [6:0-0-2,Edge], [8:0-1-8,0-1-8], [10:0-1-8,0-1-8]

<b>SPACING:</b> 2-0-0 <b>LOADING (psf)</b> TCLL 42.3 (Ground Snow=55.0) TCDL 10.0 BCLL 0.0 * BCDL 10.0	<b>SPACING:</b> 1-4-0 <b>LOADING (psf)</b> TCLL 63.5 (Ground Snow=82.5) TCDL 15.0 BCLL 0.0 * BCDL 15.0	<b>SPACING:</b> 1-0-0 <b>LOADING (psf)</b> TCLL 84.7 (Ground Snow=110.0) TCDL 20.0 BCLL 0.0 * BCDL 20.0	<b>SPACING</b> 2-0-0 Plates Increase 1.15 Lumber Increase 1.15 Rep Stress Incr YES Code IBC2009/TPI2007	<b>CSI</b> TC 0.94 BC 0.92 WB 0.62 (Matrix)	<b>DEFL</b> in (loc) l/defl L/d Vert(LL) -0.20 8-10 >999 240 Vert(TL) -0.34 6-8 >838 180 Horz(TL) 0.08 6 n/a n/a	<b>PLATES GRIP</b> MT20 197/144  Weight: 89 lb FT = 0%
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**LUMBER**  
TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x4 SPF Stud

**BRACING**  
TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. [P]

**REACTIONS** (lb/size) 2=1399/0-3-8 (min. 0-2-14), 6=1399/0-3-8 (min. 0-2-14)  
Max Horz 2=414(LC 8)  
Max Uplift 2=828(LC 9), 6=828(LC 10)  
Max Grav 2=1824(LC 19), 6=1824(LC 20)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/122, 2-3=-2444/1083, 3-13=-2034/1101, 4-13=-1871/1117, 4-14=-1871/1117, 5-14=-2034/1101, 5-6=-2444/1083, 6-7=0/122  
BOT CHORD 2-10=-840/1917, 9-10=-375/1264, 9-11=-375/1264, 11-12=-375/1264, 8-12=-375/1264, 6-8=-711/1917  
WEBS 3-10=-801/507, 4-10=-463/1039, 4-8=-463/1039, 5-8=-801/507

**NOTES** (12)  
1) Wind: ASCE 7-05; 120mph (3-second gust) @24in o.c.; TCDL=3.0psf; BCDL=3.0psf; (Alt. 147mph @16in o.c.; TCDL=4.5psf; BCDL=4.5psf); (Alt. 150mph @12in o.c.; TCDL=6.0psf; BCDL=6.0psf); h=30ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60  
2) TCLL: ASCE 7-05; Pg=55.0 psf (ground snow); Ps=42.3 psf (roof snow); Category II; Exp C; 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 greater of min roof live load of 17.0 psf or 2.00 times flat roof load of 42.3 psf on overhangs non-concurrent with other live loads.  
6) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.  
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.  
8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.  
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 828 lb uplift at joint 2 and 828 lb uplift at joint 6.  
10) This truss has been designed in accordance with the 2009 IBC Section 2303.4.6, 2009 IRC Section 802.10.2.  
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).  
12) This truss has been designed to meet the 2003 IBC Section 2308.10.7.1; 2003 IRC R802.10.2

E-signed by Kevin Freeman



The professional engineering seal indicates that a licensed professional has reviewed the design under the standards referenced within this document, not necessarily the current state building code. The engineering seal is not an approval to use in a specific state. The final determination on whether a truss design is acceptable under the locally adopted building code rest with the building official or designated appointee.

**WARNING - Verify design parameters and READ NOTES**  
Universal Forest Products, Inc. 2801 EAST BELTLINE RD, NE  
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This building component has only been designed for the loads noted on this drawing. Construction and lifting forces have not been considered. The builder is responsible for lifting methods and system design. Builder responsibilities are defined under TPI1. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. 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 insure 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 BCSI 1-06 from the Wood Truss Council of America and Truss Plate Institute Recommendation available from WTCA, 6300 Enterprise LN, Madison, WI 53719 J:\support\MitekSupptemplates\ufp.tpe copyright 2013 by: Universal Forest Products, Inc.