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|---|---|--|---|
| <b>Loading Criteria</b> (psf)   | <b>Wind Criteria</b>  | <b>Snow Criteria</b> (Pg, Pf in PSF)   | <b>Defl/CSI Criteria</b>  |
| TCLL: 20.00<br>TCDL: 10.00<br>BCLL: 0.00<br>BCDL: 10.00<br>Des Ld: 40.00<br>NCBCLL: 10.00<br>Soffit: 2.00<br>Load Duration: 1.15<br>Spacing: 24.0 " | Wind Std: ASCE 7-16<br>Speed: 120 mph<br>Enclosure: Closed<br>Risk Category: II<br>EXP: C Kzt: NA<br>Mean Height: 15.00 ft<br>TCDL: 5.0 psf<br>BCDL: 5.0 psf<br>MWFRS Parallel Dist: 0 to h/2<br>C&C Dist a: 3.00 ft<br>Loc. from endwall: Any<br>GCpi: 0.18<br>Wind Duration: 1.60 | Pg: 25.0 Ct: 1.1 CAT: II<br>Pf: 19.2 Ce: 1.0<br>Lu: - Cs: 1.00<br>Snow Duration: 1.15<br><br>Building Code:<br>IRC 2015<br>TPI Std: 2014<br>Rep Fac: Yes<br>FT/RT/PT:20(0)/5(0)/2(0)<br>Plate Type(s):<br>18SS, WAVE | PP Deflection in loc L/defl L/#<br>VERT(LL): 0.488 G 681 240<br>VERT(CL): 1.007 G 330 240<br>HORZ(LL): 0.390 J - -<br>HORZ(TL): 0.805 J - -<br>Creep Factor: 2.0<br>Max TC CSI: 0.461<br>Max BC CSI: 0.739<br>Max Web CSI: 0.723<br>Mfg Specified Camber:<br><br>VIEW Ver: 21.02.01.1216.15 |

| <b>▲ Maximum Reactions (lbs)</b>              |               |            |                       |        |      |             |  |
|---|---------------|------------|-----------------------|--------|------|-------------|--|
| Gravity                                       |               |            | Non-Gravity           |        |      |             |  |
| Loc   | R+            | /R-        | /Rh                   | /Rw    | /U   | /RL         |  |
| P   | 1232          | -          | -                     | /709   | /390 | /175        |  |
| J   | 1232          | -          | -                     | /709   | /390 | -           |  |
| Wind reactions based on C&C                   |               |            |                       |        |      |             |  |
| P   | Brg Wid = 3.5 |            | Min Req = 1.5 (Truss) |        |      |             |  |
| J   | Brg Wid = 3.5 |            | Min Req = 1.5 (Truss) |        |      |             |  |
| Bearings P & J are a rigid surface.           |               |            |                       |        |      |             |  |
| <b>Maximum Top Chord Forces Per Ply (lbs)</b> |               |            |                       |        |      |             |  |
| Chords  |               | Tens.Comp. |                       | Chords |      | Tens. Comp. |  |
| A - B   | 30            | 0          | F - G                 | 1344   | -    | 4684        |  |
| B - C   | 1431          | -5100      | G - H                 | 1222   | -    | 4621        |  |
| C - D   | 1230          | -4673      | H - I                 | 1207   | -    | 4673        |  |
| D - E   | 1245          | -4621      | I - J                 | 1418   | -    | 5100        |  |
| E - F   | 1384          | -4684      | J - K                 | 30     | -    | 0           |  |

**Lumber**  
Top chord: 2x4 SP SS Dense;  
Bot chord: 2x4 SP SS Dense; B2 2x4 SP #2;  
Webs: 2x4 SP #2;

**Loading**  
Bottom chord checked for 10.00 psf non-concurrent  
bottom chord live load applied per IRC-15 section 301.5.  
Truss designed for unbalanced snow loads.

**Wind**  
Wind loads based on MWFRS with additional C&C member design & reactions.  
Wind loading based on both gable and hip roof types.

**Additional Notes**  
Top Chord overhang(s) may be field trimmed.

| <b>Maximum Bot Chord Forces Per Ply (lbs)</b> |      |            |       |        |   |             |  |
|---|------|------------|-------|--------|---|-------------|--|
| Chords  |      | Tens.Comp. |       | Chords |   | Tens. Comp. |  |
| B - O   | 4712 | -1264      | M - L | 4766   | - | 1238        |  |
| O - N   | 4766 | -1280      | L - J | 4712   | - | 1222        |  |
| N - M   | 2098 | -374       |       |        |   |             |  |
| <b>Maximum Web Forces Per Ply (lbs)</b>       |      |            |       |        |   |             |  |
| Webs  |      | Tens.Comp. |       | Webs   |   | Tens. Comp. |  |
| O - C   | 82   | -66        | F - M | 2945   | - | 770         |  |
| C - N   | 283  | -364       | G - M | 244    | - | 416         |  |
| N - E   | 244  | -416       | M - I | 275    | - | 364         |  |
| N - F   | 2945 | -800       | I - L | 83     | - | 66          |  |

**\*\*WARNING\*\*** READ AND FOLLOW ALL NOTES ON THIS DRAWING!  
**\*\*IMPORTANT\*\*** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions.

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

For more information see these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCA: [sbccomponents.com](http://sbccomponents.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)