

# Valley Detail - ASCE 7-22: 30' Mean Height, Enclosed, Exp. C, Kzt=1.00

Top Chord 2x4 SP #2N, SPF #1/#2, DF-L #2 or better.  
 Bot Chord 2x4 SP #2N or SPF #1/#2 or better.  
 Webs 2x4 SP #3, SPF #1/#2, DF-L #2 or better.

**\*\* Attach each valley to every supporting truss with:**  
 (2) 16d box (0.135" x 3.5") nails toe-nailed for  
 ASCE 7-22, 30' Mean Height, Enclosed Building, Exp. C,  
 Wind TC DL=5 psf, Kzt = 1.00, Max. Wind Speed based on  
 supporting truss material at connection location:  
 140 mph for SP (G = 0.55, min.),  
 125 mph for DF-L (G = 0.50, min.), or  
 105 mph for HF & SPF (G = 0.42, min.).

Maximum top chord pitch is 10/12 for supporting trusses below valley trusses.

Bottom chord of valley trusses may be square or pitched cut as shown.

Valleys short enough to be cut as solid triangular members from a single 2x6, or larger as required, shall be permitted in lieu of fabricating from separate 2x4 members.

All plates shown are Alpine Wave Plates.

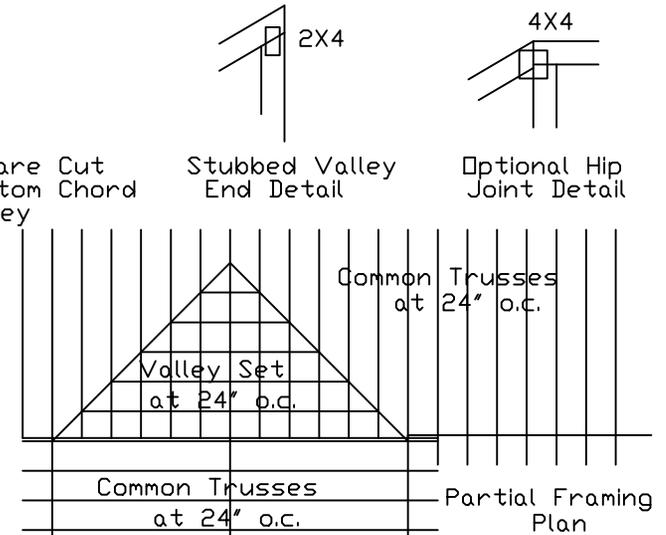
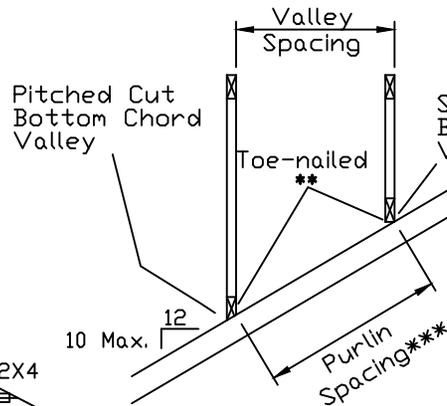
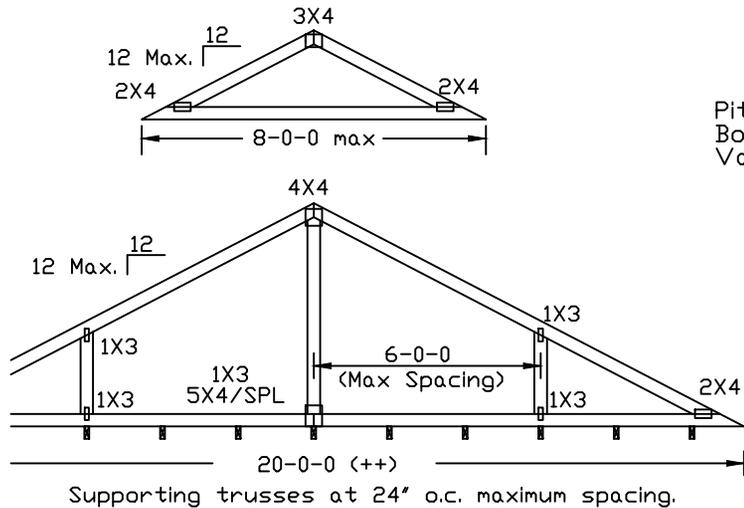
Unless specified otherwise on engineer's sealed design, for vertical valley webs taller than 7-9" apply 2x4 "T" reinforcement, 80% length of web, same species and grade or better, attached with 10d box (0.131" x 3.0") nails at 6" o.c. In lieu of "T" reinforcement, 2x4 Continuous Lateral Restraint applied at mid-length of web is permitted with diagonal bracing as shown in DRWG BRCLBANC1014.

Top chord of truss beneath valley set must be braced with: properly attached, rated sheathing applied prior to valley truss installation.

- Purlins at 24" o.c. or as otherwise specified on engineer's sealed design
- By valley trusses used in lieu of purlin spacing as specified on Engineer's sealed design.

**\*\*\* Note that the purlin spacing for bracing the top chord of the truss beneath the valley is measured along the slope of the top chord.**

**++ Larger spans may be built as long as the vertical height does not exceed 14'-0".**



Rev: 01/23/26



**\*\*\*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 & 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 this Job's general notes page and these web sites:  
 ALPINE: www.alpineitw.com; TPI: www.tpinstr.org; SBCA: www.sbcacomponents.com; ICC: www.iccsafe.org

TC LL	30	30	40PSF	REF	VALLEY DETAIL
TC DL	20	15	7 PSF	DATE	07/03/2023
BC DL	10	10	10 PSF	DRWG	VALTN220723
BC LL	0	0	0 PSF		
TOT. LD.	60	55	57PSF		
DUR.FAC.1.25/1.33	1.15	1.15			
SPACING	24.0"				