

## NAIL REINFORCEMENT FOR PLATE DETAIL

This detail may be used when the required number of connector teeth in a truss member exceeds the actual number of teeth in the given member. Nails may be driven through the connector plate(s) in truss members using the nail type specified below to increase the lateral resistance of the connector plate(s) having a shortage of required effective teeth.

### Nail Type

Duo-Fast CS157 1.5" x 0.105" Smooth Shank Coil Nail

Material	Connector Plates	Substitution
SP, DF-L, HF, SPF (SG >= 0.42)	Alpine 20-gage Wave	1 Nail replaces 2 teeth
	Alpine 20-gage H	1 Nail replaces 2 teeth
	Alpine 18-gage S	1 Nail replaces 2 teeth

### Nail Type

0.131" x 1.5" Box or Gun Nail

Material	Connector Plates	Substitution
SP, DF-L, HF, SPF (SG >= 0.42)	Alpine 20-gage Wave	1 Nail replaces 3 teeth
	Alpine 20-gage H	1 Nail replaces 3 teeth
	Alpine 18-gage S	1 Nail replaces 3 teeth

Nails shall be driven through solid steel at a distance no closer than 1 inch to the joint line. Nails may also be driven through the tooth slots, but shall be located at the end of the slot farthest from the joint line.

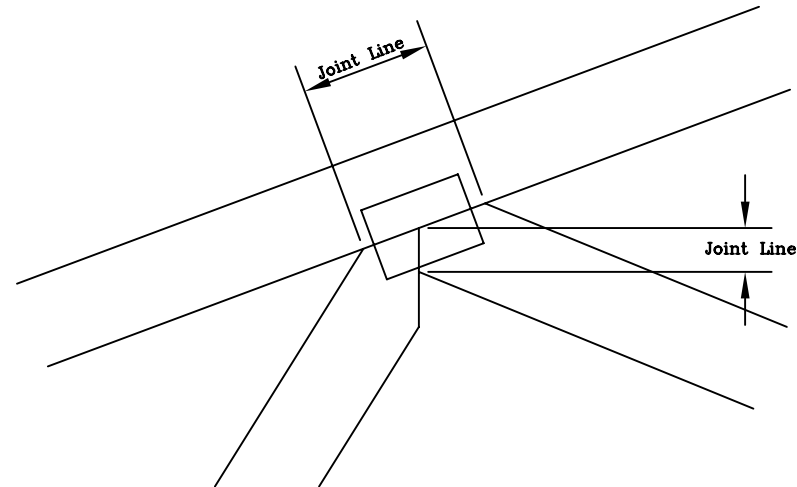
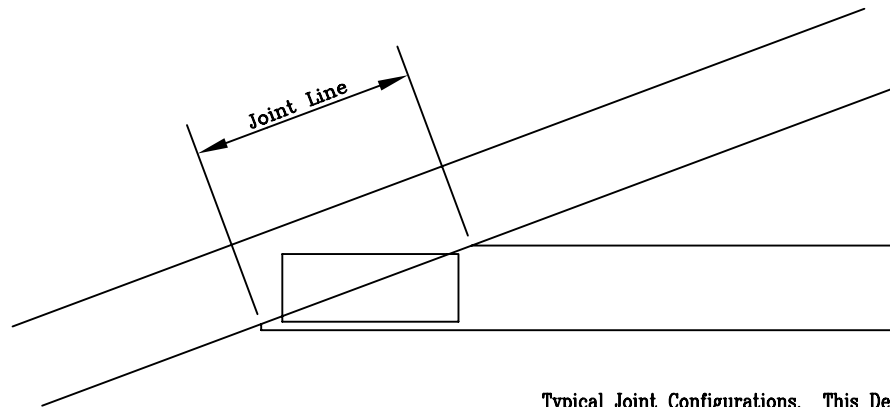
Use a maximum of 2 nails per square inch of plate area.

Nails shall be driven through connector plate having shortage of required effective teeth. Nails may be driven through connector plate on each face of joint if each plate has a shortage of required effective teeth.

Nails shall be fully embedded into wood areas free of defects.

This detail is applicable only on joints where the connector plate has been offset no more than 1/2" from the design position shown on the truss design drawing.

This detail is applicable for trusses with lumber oriented vertically (2x\_) and trusses with lumber oriented horizontally (3x2 and 4x2).



Typical Joint Configurations. This Detail Applies To Any Joint Configuration.

This Detail Is Applicable Only On Joints Where The Connector Plate Has Been Offset No More Than 1/2" From The Design Position Shown On The Truss Design Drawing.



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**\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET**  
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow BCSI (Building Component Safety Information, by TPI and WTCA) 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 panels 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. See this job's general notes page for more information.

**\*\*IMPORTANT\*\* FURNISH COPY OF THIS DESIGN TO INSTALLATION CONTRACTOR.**  
ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design, any failure to build the truss in conformance with TPI, or fabricating, handling, shipping, installing & bracing of trusses. ITWBCG connector plates are made of 20/18/18GA (W.H./S/S) ASTM A653 grade 37/40/60 (K/W/H/S) galv. steel. Apply plates to each face of truss, positioned as shown above and on Joint Details. A seal on this drawing or cover page indicates acceptance and professional engineering responsibility solely for the truss component design shown. The suitability and use of this component for any building is the responsibility of the Building Designer per ANST/TPI 1 Sec. 2.

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