AHEP Adjustable Hip-End Purlin

For wood and cold-formed steel trusses, the Simpson Strong-Tie® AHEP is a structural purlin that also serves as an installation lateral restraint and spacer during the truss erection process. The AHEP attaches to the leading edge of stepdown hip trusses, eliminating the need for drop-top chords, 2x lumber or gable aligned with the end jacks, to maintain framing spacing from eave to hip or peak. Roof sheathing/decking attaches directly to the purlin with knurled pneumatic fasteners or low-profile head, self-drilling screws. Adjustable in length, the AHEP is designed to accommodate a pitch range of 3/12 to 9/12 as a structural purlin and up to 12/12 as an installation lateral restraint and spacer.

FEATURES: • A structural purlin to which sheathing can be directly attached - no need to remove temporary bracing

 Accurately spaces the installed trusses and helps meet the temporary top-chord lateral restraint recommendations of WTCA/TPI BCSI on step-down hip ends

· Adjustable in length to accommodate a wide pitch range

MATERIAL: 20 gauge (33 mil) FINISH: Galvanized INSTALLATION: • Use all specified fasteners; see General Notes.

- Prior to installation, the AHEP must be set to the proper length and the two tubes fastened together with four #10x3/4" self-drilling screws through the round holes in the side flanges for pitches between 3/12 and 9/12; and in the triangular and upper round hole when the AHEP will be used as an installation restraint and spacer at pitches 9/12 up to 12/12. • For trusses spaced 24" o.c., the pitch markings on the inner tube may
- be used to line up the tubes to the correct length for a given pitch. For other spacings, the length of the AHEP must be set to the calculated
- To install the AHEPs on wood trusses, use four 10d (.148"x3") nails. The two nails at the bottom of the part (*the yoke end*) must be clinched.
- · Sheathing is attached to the AHEP with knurled pneumatic fasteners or low-profile-head, self-drilling screws.
- For efficiency, the AHEPs should be installed in line with the end jacks so that framing alignment can be maintained from eave to hip/ridge.

CODES: See page 20 for Code Reference Key Chart.

Online Calculator for AHEP Installation

A Web-based calculator is available to help Designers check AHEP applicability based on the actual hip-end roof pitch, input live and dead loads, truss and purlin spacing and the selected sheathing and deflection criteria. To view the calculator, visit www.strongtie.com/webapps/ahep.



SIMPSO

Strong-Tie

Model No.	Fasteners			Allowable Down Loads (lbs.)						
	AHEP Side Flanges	To Hip Trusses	Sheathing Option	3/12 Pitch		3.1/12 Pitch		9/12 Pitch		Code Ref.
				L/180	³ ⁄16"	L/180	³ ⁄16"	L/180	³ ⁄16"	
AHEP	4 - #10	4-10d	None	180	240	180	240	135	150	
			¹⁵ ⁄ ₃₂ " (Min.) Wood Sheathing	250	345	210	275	160	175	

- No load duration increase allowed.
 Allowable loads apply to wood with a specific gravity of 0.42 or greater.
- 3. Designer shall insure attached members are
- adequately designed to resist applied loads. Straight line interpolation can be used to 4 determine allowable loads for pitches between
- 3.1/12 and 9/12. 5. Nails: 10d = 0.148 dia. x 3" long. Screws: $#10 = #10 \times 3$ " long self-drilling screws. See page 24-25 for other nail sizes and information.

TSF Truss Spacer

The TSF is a fast and accurate method for spacing trusses that eliminates lavout marking of top plates and can be left in place under the sheathing. Accuracy is improved, spacing errors are minimized, and it is easy to use. MATERIAL: 24 gauge FINISH: Galvanized

INSTALLATION: • See Installation Sequence below.

 TSF Truss Spacers do not provide bracing of any kind and are not structural members. The TSF is for spacing only. Refer to instructions from architect, engineer, truss manufacturer or other for bracing and installation information.

CODES: See page 20 for Code Reference Key Chart.

Medel		Codo			
No.	w	O.C. Spacing	Total Length	Ref.	
TSF2-16	1½	16	8'	100	
TSF2-24	1½	24	10'	100	



STEP 1 Nail starting notch to first member.





As each successive member is positioned, unfold TSF to next notch. The notch teeth grip member and align it for nailing.



STEP 3 If spacer does not align with end truss, break spacer off at notch. Then, hammer spacer flat, fold it under and nail.

Plated Truss Connectors