

Technical Tip

Do I Need H-Clips?

When used on a roof, ZIP System® sheathing is a combination wood structural panel and roofing underlayment. ZIP System panels conform to the requirements of PS2, *Performance Standard for Wood-Based Structural-Use Panel*.

Table 2304.7(3) of the IBC, *International Building Code*, highlights the span rating, the panel thicknesses and the corresponding maximum on-center distance between supports with and without edge support (H-clips or similar) for typical wood structural panels. The IBC states that 1/2" thick, PS-2 panels that have a span rating of 32/16 can have an unsupported edge up to 28". 5/8" thick panels having a span rating of 40/20 can have an unsupported edge up to 32". This means that 1/2" and 5/8" thick roofing panels that are supported by roof framing (rafters or trusses) spaced at the typical 16" or 24" o.c. do not require edge support (H-clips).

It should be noted that the use of edge support (H-clips, blocking, tongue-and-groove edges, etc.) does not increase the maximum allowable load on a roof for a given truss or rafter spacing. Edge support only allows for wider on-center spacing of supports under certain conditions. For example: A 1/2" thick roof panel, with roof framing spaced at 24" o.c., can support a maximum allowable design load of 93 psf with or without H-clips. Please see the table below for the recommended maximum allowable loading for ZIP System® sheathing supported at 16", 19.2" and 24" on-center spacing.

ZIP System® Sheathing Maximum Allowable Total Uniform Roof Load (PSF)¹				
Span Rating	Thickness	16" o.c.	19.2" o.c.	24" o.c.
24/16	7/16"	180	125	68
32/16	1/2"	209	145	93
40/20	5/8"	283	232	156
Loads in highlighted areas require the use of panel edge support for roof applications in accordance with ZIP System Sheathing Installation recommendations and load-span tables.				

1. Based on L/180 deflection, normal duration of load, 3-span condition, dry end-use conditions and minimal panel width of 24-inches.

Huber Engineered Woods requires panel edge support for 7/16" ZIP System sheathing installed on roof supports spaced more than 16" on center. Panel Edge support might be blocking, tongue-and-groove edges or panel edge clips (H-clips) that have been approved by Huber Engineered Woods to be used with ZIP System® Sheathing. The use of any other brand or model of clip will void the ZIP System 30-year limited warranty. Panel edge clips approved to be used with ZIP System Sheathing are listed as follows:

- Simpson Strong-Tie® PSCA7/16
- Simpson Strong-Tie® PSCL7/16
- TAMLYN PCS7/16



When taping over H-clips, it is important to make sure that the tape is centered and adequate pressure is applied on all sides of the clip to ensure a proper seal. This is easily achieved using the ZIP System® tape gun or roller. No additional tape is necessary.



Please follow this link for a specific installation video using 7/16" ZIP System sheathing:

<http://www.youtube.com/watch?v=OJ0iQENuOBo>

Please visit zipsystem.com or contact our technical services department at 800-933-9220 Ext. 2716 with any questions or comments.