

# PWI Joist Web Stiffener Requirements

Web stiffeners are pairs of small blocks, cut from panels or 2x4s, that are nailed to the joist web to stiffen a deep web, increase reaction capacity or accommodate a special connector. Web stiffeners are not required when joists are sized by means of the tables in this guide, with the following exceptions:

1. Web stiffeners are required at the ends of joists set in hangers that are not deep enough to laterally support the top flanges of the joists. Refer to the hanger manufacturer's installation instructions.
2. Web stiffeners are required to accommodate special connector nailing requirements. Refer to the connector manufacturer's installation instructions.
3. Web stiffeners are required at birdsmouth cuts at the low end supports of sloped joists.
4. Web stiffeners are required at all supports on 22- and 24-inch joists.

When joists are sized by means of sizing software, or otherwise engineered for an application, web stiffeners are required as follows:

1. Web stiffeners are required for high reactions at supports. Refer to a code report.
2. Web stiffeners are required under concentrated loads applied to the tops of joists between supports, or along cantilevers beyond the support, when the concentrated load exceeds 1500 pounds.

## NUMBER OF WEB STIFFENER NAILS REQUIRED

Joist Depth	24" & 20"	18" & 16"	14" & Less
All Other Conditions	10	6	4

## WEB STIFFENER SIZE REQUIRED

Flange Width	Minimum Dimensions		
	Web Stiffeners		Nails
	Thickness	Width	
1 3/4"	1 9/32"	2 5/16"	2 1/2" x 0.131"
2 1/16"	2 3/32"	2 5/16"	2 1/2" x 0.131"
2 5/16"	2 3/32"	2 5/16"	2 1/2" x 0.131"
3 1/2"	1 1/2"	3 1/2"	3 3/4" x 0.131"

Web stiffener length is approximately 1/8" less than the clear distance between flanges.

