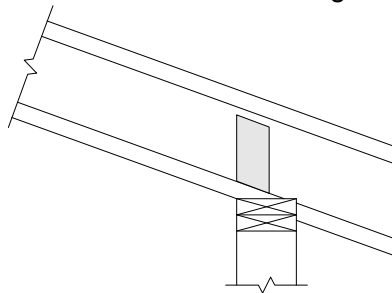


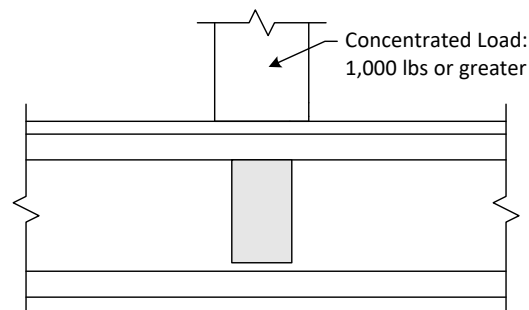


BCI® / AJS® Joist Applications where Web Stiffeners are Required

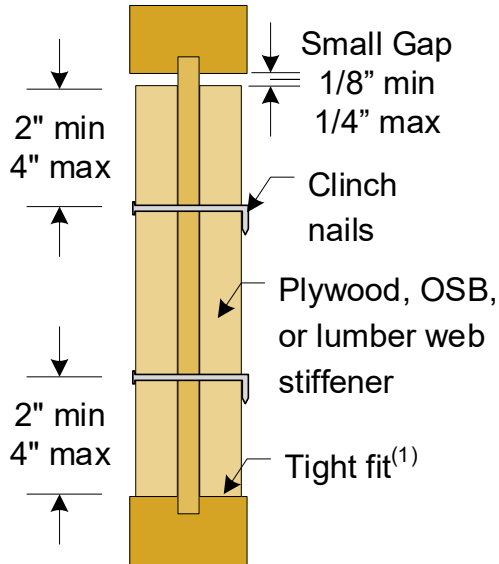
- 1) BCI® / AJS® Designs that Require a Higher Allowable Reaction Value: All of the allowable span and load tables found in Boise Cascade's EWP literature are based upon minimum allowable reaction values. Thus web stiffeners are not required when sized according to these tables (except 18" to 24" deep joists, see note 3 below). Designs that occasionally require a higher reaction value (and thus web stiffeners) include commercial/industrial floors, residential floors with concrete topping, corridor areas in hotels, etc. By using Boise Cascade's BC Calc® sizing software, the designer can determine whether web stiffeners are required at specific bearing locations for heavier-load applications.
- 2) Metal Joist Hangers that Do Not Extend Up to Provide Lateral Resistance for the Top Flange: Consult Boise Cascade's EWP literature or hanger manufacture's literature for web stiffener requirements per hanger. Web stiffeners may also be needed to achieve higher uplift capacities, again consult hanger manufacture's literature.
- 3) 18" to 24" deep BCI® / AJS® joists: Web stiffeners are required at all bearing locations for 18" - 24" BCI® / AJS® joists, regardless of bearing condition or hanger.
- 4) BCI® / AJS® Roof Rafters with Birdsmouth Cuts at the End Wall Support: Per the detail shown, all BCI® and AJS® joists require web stiffeners when attached to the bearing wall in such a manner.



- 5) At Concentrated Loads that Exceed 1000 lbs: Web stiffeners are required at any location along a joist's span where a point load of over 1000 lbs exists. Install the web stiffeners tight to the underside of the top flange in this condition (small gap at the top of bottom flange).



Web Stiffener Size and Nailing Requirements



Web Stiffener Size and Nailing Schedule							
Joist Series	Joist Depth	Thickness		Min. Width	Nailing ^(3,4)		
		In Hanger	No Hanger		End	Intermediate	
BCI® 4500s	9 1/2"	5/8"	5/8" to 1"	2 5/16"	2 – 8d	2 - 8d	
	11 7/8"					3 - 8d	
	14"					5 - 8d	
	16"					6 - 8d	
BCI® 5000 BCI® 5000s	9 1/2"	23/32" or 3/4"	5/8" to 1"	2 5/16"	2 – 8d	2 - 8d	
	11 7/8"					3 - 8d	
	14"					5 - 8d	
	16"					6 - 8d	
BCI® 6000 BCI® 6000s BCI® 60 BCI® 60s	9 1/2"	7/8" ⁽²⁾	23/32" or 3/4" to 1"	2 5/16"	2 – 8d	2 - 8d	
	11 7/8"					3 - 8d	
	14"					5 - 8d	
	16"					6 - 8d	
	18"				3 – 8d	7 – 8d	
AJS® 140 AJS® 150 AJS® 20 AJS® 190	9 1/2"	1" ⁽²⁾	1" to 1 1/2"	2 5/16"	3 – 10d	3 - 10d	
	11 7/8"						
	14"				5 – 10d	5 - 10d	
	16"						
BCI® 6500 BCI® 6500s	9 1/2"	1" ⁽²⁾	23/32" or 3/4" to 1"	2 5/16"	2 – 8d	2 - 8d	
	11 7/8"					3 - 8d	
	14"					5 - 8d	
	16"					6 - 8d	
AJS® 24 AJS® 25 AJS® 30	9 1/2"	2x4 Lumber (vertical) min.			3 – 10d	3 – 10d	
	11 7/8"						
	14"						
	16"						
	18"						
	20"						
	24"					5 – 10d	5 – 10d
BCI® 90 BCI® 90s	11 7/8"	2x4 Lumber (vertical) min.			3 – 16d	3 – 16d	
	14"					5 – 16d	5 – 16d
	16"					6 – 16d	6 – 16d
	18"					7 – 16d	7 – 16d
	20"					8 – 16d	8 – 16d

Notes:

- (1) Install web stiffener tight to underside of top flange with small gap at bottom for concentrated loads applied to top of member that exceed 1000 lbs per note 5 on page 1. For other applications, install web stiffeners as shown above.
- (2) To achieve thickness shown, web stiffener can be made up of multiple layers (except where 2x4 lumber is required). When multiple layers are used, each layer shall be 7/16" thick minimum (e.g.: BCI 6000: Double 7/16" panel OK)
- (3) Nail Sizes (minimums): 8d – 2 3/8" x 0.113, 10d – 3" x 0.125", 16d – 3 1/4" x 0.148"
- (4) Nails shall be equally spaced vertically. Stagger nails slightly within rows with 2x4 min. lumber stiffeners to limit splitting.