

Deep Depth Boise Cascade® AJS® Joists



Deep AJS® Joists Can Make A Difference in Your Next Multi-Family or Light Commercial Project

Apartments | Condominiums | Townhouses | Student Housing Hotels | Government Housing | Assisted Living Facilities

Boise Cascade's deep depth joists provide the long spans and load-carrying capacity for light commercial structures. When matched with 15/16" Versa-Lam® LVL rim board, these deep depth joists help construction run smoothly and efficiently. But those aren't the only benefits you'll see when you specify AJS® joists in your next project.

FASTER

- Ready-to-ship inventory means reduced lead times and fast delivery*.
- Design and create layouts quickly with our BC Framer®, BC FastPlan®, BC Estimator® and BC Calc® software.

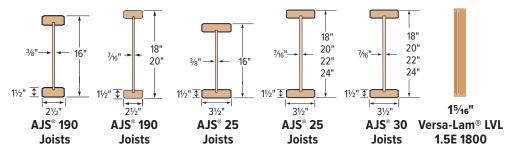
STRONGER

- ▶ Deep depth AJS® joists can handle longer clear spans and heavier loads.
- ▶ AJS joists 18" and deeper have a thicker web for increased shear performance.
- ► Enhance overall performance by integrating joists with Boise Cascade® Versa-Lam® LVL beams, Versa-Stud® LVL walls and Boise Cascade® Rimboard.

EASIER

- ▶ Allowable holes permit larger ductwork than similar-depth open web trusses.
- ► Achieve a one-hour fire-resistive assembly with a single layer 5/8" gypsum board ceiling with resilient channels, 1 × 4 furring strip, and mineral fiber insulation (see APA PR-S201 FR4 for details).
- ▶ "Cut unit" service available from Boise Cascade EWP mills for commercial projects.

Deep Depth AJS® Joists and 15/16" Versa-Lam® LVL Rim Board: Series and Sizes*



 $^{^{}st}$ Lead times and available sizes may vary by region.

AJS® JOIST BENEFITS

- Allows large holes for HVAC system
- Field-trimmable, no special skills or tools needed
- Pre-stamped knockout holes
- Stocked sizes mean reduced lead times and fast delivery
- Easily integrates with Boise Cascade® Rimboard and Versa-Lam® LVL products
- ► Limited lifetime warranty



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AJS® Joist Floor Span Table — Based on Multi-Family Dwellings and Hotels: Private Rooms

AJS® Joist		40 PSF Live Load, 25 PSF Dead Load									
		L	/480 Live Lo	ad Deflectio	n	L/600 Live Load Deflection					
Depth	Series	12" o.c. 16" o.		19.2" o.c.	24" o.c.	12" o.c.	16" o.c.	19.2" o.c.	24" o.c.		
16"	190	28'-10"	22'-7"	18'-10"	15'-0"	26'-8"	22'-7"	18'-10"	15'-0"		
	25	31'-4"	24'-0"	20'-0"	16'-0"	28'-11"	24'-0"	20'-0"	16'-0"		
18"	190	31'-4"	27'-1"	24'-9"	22'-1"	29'-5"	26'-11"	24'-9"	22'-1"		
	25	34'-5"	31'-5"	28'-11"	25'-10"	31'-10"	29'-0"	27'-5"	25'-6"		
	30	35'-6"	32'-4"	30'-6"	28'-4"	32'-10"	29'-10"	28'-2"	26'-2"		
20"	190	33'-1"	28'-8"	26'-2"	23'-4"	31'-11"	28'-8"	26'-2"	23'-4"		
	25	37'-3"	33'-6"	30'-7"	27'-4"	34'-6"	31'-5"	29'-8"	27'-4"		
	30	38'-5"	35'-0"	33'-0"	30'-8"	35'-6"	32'-4"	30'-6"	28'-4"		
22"	25	40'-0"	35'-1"	32'-0"	28'-7"	37'-1"	33'-9"	31'-10"	28'-7"		
	30	40'-0"	37'-8"	35'-6"	32'-0"	38'-3"	34'-10"	32'-10"	30'-7"		
24"	25	40'-0"	36'-7"	33'-4"	29'-10"	39'-7"	36'-1"	33'-4"	29'-10"		
	30	40'-0"	40'-0"	37'-7"	32'-9"	40'-0"	37'-3"	35'-2"	32'-9"		

NOTES*

- ► Table values are based on:
 - 40 psf live load for floors of multi-family dwellings and hotel private rooms per Table 1607.1 of the IBC®.
 - the most restrictive of simple or multiple span applications.
 - minimum 2" end bearing and 3½" intermediate bearing lengths.
- ► Table values are the maximum allowable clear distance between supports and assume ²³/s²" minimum plywood/ OSB-rated sheathing is glued and nailed to joists.
- Spans are limited by allowable moment and reaction values, total load deflection of L/240. Live load deflection limits are as shown, in addition to a maximum actual live load deflection of 1".
- ► It may be possible to exceed the limitations of this table by using BC Calc® sizing software.

Web Stiffener Requirements

Web stiffeners are required at all bearing locations for joist depths of 18" and deeper.

15/16" Versa-Lam® LVL 1.5E 1800 (1) (2)

Vertical Load Capacity 16" Max. Depth		Vertical Load Capacity 20" Max. Depth		Vertical Load Capacity 24" Max. Depth			Closest Allowable Nail Spacing — Narrow Face (in)					
Uniform (PLF)	Point (lb)	Uniform (PLF)	Point (lb)	Uniform (PLF)	Point (lb)	Specific Gravity ⁽³⁾	8d box	8d common	10d or 12d box	16d box	10d or 12d common, or 16d sinker	16d common
6,000	4,450	5,450	4,450	5,200	3,850	0.5	3	3	3	3	4	6

NOTES

- (1) See ICC-ES®/APA® ESR-1040 for further information.
- (2) Maximum lateral capacity (lb/ft): Permitted per building code for all nominal 2" thick framing blocked and unblocked diaphragms.
- (3) Equivalency for lateral fastener design.

With defect-free products and unsurpassed customer service, Boise Cascade helps you build structures

Faster. Stronger. Easier.

Limited Lifetime Warranty

All Boise Cascade BCI® joist, Versa-Lam® LVL, and AJS® joist products are covered by a limited lifetime warranty for the expected life of the structure. View the complete warranty on our website.

bc.com/terms-conditions/sales-terms-and-conditions



The Boise Cascade EWP sales and distribution teams are here to help with your next light commercial project.

For more information go to **bc.com/ewp** or call our support center at **800-232-0788**.

^{*} For complete specification and installation information regarding AJS® joists, refer to Boise Cascade's AJS Commercial Guides. Lead times and available sizes may vary by region.