



**Boise Cascade®**  
ENGINEERED WOOD PRODUCTS

# DEEP DEPTH

## Boise Cascade BCI Joists

### Deep BCI® Joists Can Make A Difference in Your Next Multifamily 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 builders need for multifamily and light commercial structures. But those aren't the only benefits you'll see when you specify BCI® 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.

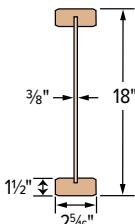
#### STRONGER:

- Deep depth BCI® joists can handle longer clear spans and heavier loads.
- Enhance overall performance by integrating joists with Boise Cascade Versa-Lam® LVL beams, Versa-Stud® LVL walls, and Boise Cascade® Rimboard.

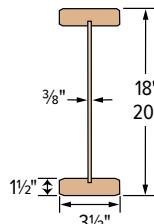
#### EASIER:

- Allowable holes permit larger ductwork than similar-depth open web trusses.
- Achieve a one-hour fire-resistive assembly using BCI® 60 or BCI® 90 joists with a single layer  $\frac{5}{8}$ " gypsum board ceiling with resilient channels, 1x4 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 BCI® joists are offered in the following series and sizes:\***



**BCI® 60 Joists**



**BCI® 90 Joists**



\* Lead times and available sizes may vary by region.

# BCI® Joist Floor Span Table



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Based on Multifamily Dwellings and Hotels: Private Rooms

Joist Depth	Joist Series	40 PSF Live Load, 25 PSF Dead Load							
		L/480 Live Load Deflection				L/600 Live Load Deflection			
		12" o.c.	16" o.c.	19.2" o.c.	24" o.c.	12" o.c.	16" o.c.	19.2" o.c.	24" o.c.
18"	60 2.0	31'-11"	29'-2"	27'-0"	24'-2"	29'-6"	26'-11"	25'-5"	23'-7"
	90 2.0	35'-11"	32'-8"	30'-9"	25'-4"	33'-2"	30'-2"	28'-5"	25'-4"
20"	90 2.0	38'-10"	35'-4"	32'-11"	26'-4"	35'-11"	32'-7"	30'-9"	26'-4"

## TABLE NOTES\*

- Table values are based on:
  - 40 psf live load for floors of multifamily 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 2½" 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.

\* For complete specification and installation information regarding AJS® joists, refer to Boise Cascade's AJS Commercial Guides.

## 1½" Versa-Lam® LVL 1.5E 1800<sup>(1)(2)</sup>

Vertical Load Capacity 16" Max. Depth		Vertical Load Capacity 20" Max. Depth		Vertical Load Capacity 24" Max. Depth		Specific Gravity <sup>(3)</sup>	Closest Allowable Nail Spacing – Narrow Face (in)					
Uniform (PLF)	Point (lb)	Uniform (PLF)	Point (lb)	Uniform (PLF)	Point (lb)		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.

### 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](http://bc.com/terms-conditions/sales-terms-and-conditions)

**With quality products and unsurpassed customer service, Boise Cascade helps you build better structures**

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

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

**WHAT YOU'RE  
MADE OF MATTERS**