

Floor Panel Installation Provisions for Composite Action (Glued & Nailed)

Boise’s BC Calc® or BC Framer® software gives the user the option of selecting Glued + Nailed when designing Boise’s AJS® / BCI® floor joists. Selecting “Glued + Nailed” increases the AJS® / BCI® joist bending stiffness due to composite action between the joists and the floor sheathing. In order to consider the stiffness increase, the following installation provisions as specified by Boise, and also by APA – The Engineered Wood Association ⁽¹⁾, must be followed:

Span rating (Maximum Joist Spacing) (in)	Panel Performance Category	Fastening: Glued-Nailed: Nail Size and Type
16	19/32, 5/8	6d ring- or screw-shank nails or 8d common nails
24	23/32, 3/4	6d ring- or screw-shank nails or 8d common nails
	7/8	8d ring- or screw-shank nails or 8d common nails

- Install floor panels with the long dimension perpendicular to the Boise’s joists.
- Nails should be spaced 12 inches along intermediate supports and 6 inches along supported panel edges. Check with local building official; some local jurisdictions may require different nail spacing.
- Use only adhesives conforming to CAN-CGSB 71.26-M88 Standard or APA Performance Specification AFG-01 or ASTM D3498 (Check floor panel adhesive label for compliance). If OSB panels with sealed surfaces and edges are used, use only solvent-based glues; check with the panel manufacturer.
- The top surface of the AJS® / BCI® joists shall be free of surface moisture, dirt or any foreign material prior to application.
- Spread only enough glue to lay one or two panels at a time or follow specific recommendations of adhesive manufacture.
- Apply a continuous line of glue (about 1/4” diameter bead) to the joist. Apply two glue lines where panel ends butt.
- Complete all specified nailing before adhesive sets (see adhesive manufacturer’s recommendations for allowable set time).

(1) *Engineered Wood Construction Guide – Form No. E30X*, p. 45, APA, 2019