

**Technical Note** 

## BCI® / AJS<sup>TM</sup> Joist, Versa-Lam® / Boise Glulam® Beam <u>Exterior Exposure Policy</u>

Boise Cascade engineered wood products are manufactured with adhesives which comply with ASTM D2559, "Standard Specification for Adhesives for Structural Laminated Wood Products for Use Under Exterior (Wet Use) Exposure Conditions". The purpose of exterior grade adhesives is to insure that the structural integrity of the product is not compromised while directly exposed to the weather during construction. The length of exposure is typically short term during this period.

The building code evaluation reports that govern the use of our products typically refer to the product's application as being approved for "conditions of dry use". Dry use conditions are those environmental conditions represented by sawn lumber in which the moisture content is less than 16 percent. Products used in interior or open, protected applications qualify as conditions of dry use.

Open, protected applications can be defined as areas where members are exposed to outside air but typically do not have contact with moisture when it rains. Such an application is a roof over a carport or deck where the members are protected from direct exposure to the weather above by a roof membrane and from the side by a fascia or overhang. Members supporting a deck constructed with a waterproof membrane would be another acceptable application.

Boise Cascade I-joists and beams are not intended, nor code approved, for permanent exposure to the weather. Permanent exposure to the weather voids Boise Cascade's warranty for the products. Typically, any permanent application that allows the members to get wet when it rains would be considered permanent exposure. Members used for roof or ceiling framing over high moisture areas, such as swimming pool covers, also void the product warranty.

Pressure treatment of our products for direct weather exposure is not allowed, with the exception of Boise Glulam beams (see *Boise Glulam Specifiers Guide* for more information). Painting the members and leaving them exposed to weather is not allowed. Wrapping the members in a waterproof material that allows moisture to build up on the members either through leakage or condensation is not allowed. Any of the preceding applications would again void Boise Cascade's product warranty.

As long as the installation protects the member from direct exposure to the wet-dry cycle of precipitation, the products will perform according to our published specifications. Our Boise Cascade joist and beam products should be used in applications with proper ventilation, normal humidity levels and protection from rain and other sources of moisture, such as those applications that are allowed per the building official for un-treated dimension lumber and solid sawn timbers.

The key to the successful, long term performance of engineered wood products is to be sure that they are not directly exposed to the weather for the duration of their intended use. Exposure during construction is expected and the adhesives that we use protect the integrity of the members during this period.