ROSBORO™
BUILDING BETTER

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Use of TRU-CORE Treatment on Structural Glued Laminated Timbers

A new pressure treatment technology known as the TRU-CORE Process is being offered in the preservative treatment of structural glued laminated timbers (glulam). This process was developed to provide a deeper penetration into hard-to-treat wood species, including Douglas-Fir Larch, by way of a physical-chemical infusion process. According to developer of this process, the penetration of the chemicals into the wood fiber is completed with wood acid inhibitors and very little water.

Glulam members treated with waterborne preservatives have been known to experience discoloration, excessive checking of the wood fiber and raised or swollen grain. Due to the construction of the ANSI glulam lay-ups, there is also a potential for warping (cupping) to occur in the top and bottom laminations as they tend to dry away from the bond line between individual laminations.

The TRU-CORE Process documentation states that treated members can experience a water mass rise of 5% to 7%. Although this moisture retention level is much less than previous waterborne pressure treatment methods, the rise in moisture content can still prove detrimental to the strength and appearance of glulam products.

Moisture Content in Structural Glued Laminated Timbers

Rosboro glulam members are manufactured in conformance with ANSI Standard A190.1, American National Standard for Structural Glued Laminated Timber. ANSI A190.1 specifies that the lumber used for laminating glulam members must be kiln dried to a moisture content of 16% or less prior to gluing. Due to this relatively low moisture content, glulam members are typically more stable to in-service moisture conditions but can also be more susceptible to the effects of rapid moisture intrusion. The rapid rise in moisture content of 5% to 7% can affect the dimensional and structural properties of glulam members.

Rosboro Glulam Warranty

In accordance with APA-The Engineered Wood Association recommendations, Rosboro only recommends the use of oil-based preservative treatments on Rosboro glulam products. Oil-based preservative treatments have been tested and proven not to cause dimensional instabilities in or to reduce the structural properties of glulam members.

Companies treating Rosboro glulam products through waterborne preservative treatment processes, including TRU-CORE, are solely responsible for the performance of the glulam products that have been treated with their product/process. The performance of the TRU-CORE treated products are the responsibility of the treating company and their certification agency. The treater's responsibility includes but is not limited to determining design value adjustment factors, parameters for dimensional changes and the potential for checking of each product treated. Rosboro cannot assume liability for issues related to any TRU-CORE pressure treatment.

Rosboro will continue to warrant glulam products for claims that arise solely from non-conformities due to manufacturing, provided the Rosboro glulam products are transported, treated, stored, handled and installed in accordance with the Rosboro warranty.