

Hoover Pyro-Guard Treating Specification for Rosboro Douglas fir Glulam

February 26, 2019

Scope: The following specifications apply to the fire retardant treatment of Rosboro Douglas fir glued laminated (glulam) beam products produced by Rosboro Company, LLC (Rosboro) with Pyro-Guard produced and applied by Hoover Treated Wood Products, Inc. (Hoover)

1. Material Preparation for Treatment

- a) Rosboro glulams delivered to Hoover will be manufactured from Douglas fir-Larch.
- b) Rosboro will ship glulam products to Hoover bundled as units. Units will typically be 20' long with pieces stacked on the wide face. Targeted unit size will be 2' wide by 4' high (2 pcs. wide max.). Unstamped face of glulam will be oriented to the outside of each unit to facilitate stamping prior to treatment. Units will be banded with plastic strapping.
- c) Rosboro will place stickers between each beam in a unit to minimize Hoover's handling prior to treatment. Stickers shall be standard 3/4" thick kiln stickers across the wide face of each beam.
- d) All glulam products will be shipped unwrapped on tarped trucks or will be load/unit wrapped. Rosboro will make best efforts to ship product unwrapped and specifying to the shipping company that product must be kept dry. If wrapped, Hoover shall remove and dispose of any paper prior to treatment.
- e) Hoover will visually inspect glulam prior to treatment for dirt and marks upon arrival and immediately notify Rosboro of any apparent handling or manufacturing damage.
- f) Hoover will stamp each beam prior to treatment with ink, on bottom face (opposite face from that which is stamped with Rosboro grade stamps) of each beam in a maximum of eight-foot increments, with Pyro-Guard treatment stamp. (See Exhibit A for stamp detail). The UL stamp for "Treated Rosboro Glu Lam" (Exhibit A) shall **only** be applied to beams provided directly to Hoover by Rosboro and in no case shall it be used otherwise.

2. Pyro Guard Treatment Specification

- a) Treatment Specifications: Treatment to be applied by vacuum / pressure impregnation process pursuant to Hoover's proprietary treatment process. Pressure not to exceed 150 psig.
- b) Penetration and Retention Requirements: Penetration and Retention requirements to be certified as compliant with Underwriters Laboratories (UL) Evaluation Report UL ER7002-01 and UL Listing BPVV.R7002 and in all manners consistent with the

treatment provided on glulams treated by Hoover in January 2019 and provided to APA for structural testing.

- c) Treatment shall include Hoover standard red dye to allow for easy visual differentiation from non-treated product.

3. Quality Assurance

- a) Hoover shall test (and retain sufficient records to prove) that all product, prior to shipment, meet all specifications set forth herein.
- b) Prior to shipment of finished goods, Hoover shall make reasonable effort to inspect for the following and inform Rosboro if out of standard:
 - a. Excessive checking greater than 4 feet long and deeper than 1 inch
 - b. Excessive swelling greater than 0.25 inch


4. Post Treatment Handling

- a) Following treatment all units will be kiln dried by Hoover to an average moisture content of $\leq 19\%$.
- b) When dry, Hoover will re-wrap units with Rosboro branded wrap on the top, 2 sides and both ends to prevent exposure to moisture and dirt during transportation and storage. Rosboro will provide Hoover with rolls of wrap at no cost.
- c) Loads will be organized and loaded and shipped as indicated on Rosboro purchase order(s).

5. Warranties

- a) Hoover agrees to provide their Pyro-Guard Interior Fire Retardant Treated Lumber, Plywood, and Glulam Warranty to Rosboro and any subsequent purchasers and/or end-users of the product produced under this agreement. Rosboro shall be considered a full beneficiary of this warranty.
- b) Rosboro will provide an additional Warranty to purchasers and/or end users to cover defects in manufacturing of the glulam.

Exhibit A

<p>PYRO-GUARD® — HOOVER —</p> <p>TREATED WOOD PRODUCTS, INC. THOMSON, GA MILFORD, VA WINSTON, OR PINE BLUFF, AR DETROIT, MI BAKERSFIELD, CA</p> <p>PROCESS CONTROL STANDARD 2200P</p> <p>UL ER7002-01 LA-RR25150</p> <p>19 KDAT 20</p>	<p>CLASSIFIED </p> <p>TREATED ROSBORO GLU LAM 17P0 R7003 DOUGLAS FIR</p> <p>SURFACE BURNING CHARACTERISTICS: FLAME SPREAD: FRS SMOKE DEVELOPED: FRS 30 MINUTE TEST</p>
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