

RIGIDPLY RAFTERS GLULAM COLUMN SPECIFICATIONS

Part I - General

1.1 System Description

- A. Columns shall be timbers of glued laminated Southern Yellow Pine (SYP) with preservative treated SYP on the ground contact end as manufactured by Rigidply Rafters, Inc., Richland, PA 17087

1.2 Quality Assurance

- A. Manufacturer Qualifications:
 - 1. Minimum of 10 years experience in manufacturing glued laminated timbers.
 - 2. Quality control system in compliance with **ANSI/AITC A190.1-2002**, *American National Standard for Wood Products - Structural Glued Laminated Timber*. ANSI is the American National Standards Institute and AITC is the American Institute for Timber Construction.
- B. Installer Qualifications:
 - 1. Minimum of 3 years experience in post frame construction.

1.3 References

- A. ANSI/AITC A190.1-2002, American Standard for wood products - Structural Glued Laminated Timber.
- B. AITC 200-2004 Inspection Manual for Structural Glued Laminated Timber.
- C. AITC 117-2004 Manufacturing.
- D. American Wood Preservers' Association Standards: 1995.
- E. Grading Rules, Southern Pine Inspection Bureau 1994.
- F. American Society for Testing and Materials (ASTM) "Standard D2559 Standard Specification for Adhesives for Structural Laminated Wood Products.

1.4 Handling, Storage, and Installation

- A. Handle only with web belted slings. Use cleats or blocking to protect corners at pickup points.
- B. Store all columns properly and adequately to protect from damage on jobsite.
- C. Protect columns from adverse conditions (for example, moisture) prior to installation.¹
- D. Where appearance is important, coat columns with waterproof sealer.
- E. Proper installation of columns is the responsibility of the installer.

Part II - Materials

2.1 Lumber

- A. Untreated lumber shall be #2 K.D. 19 SYP further dried to 16% or less moisture content.
- B. Preservative treated lumber shall be #1 K.D. 19 SYP further dried to 14% or less after treatment.
 - 1. Preservative treatment shall be with CCA at 0.60pcf retention according to *American Wood Preservers' Standard, 1995*. "C15 Commercial - Residential", "C16 Farms", "C28 Glulam."

2.2 Adhesives

- A. The face joint adhesive shall be wet-use phenol-resorcinol adhesive conforming to "ASTM D 2559."
- B. The end joint (finger joint) adhesive shall be a wet-use melamine adhesive conforming to "ASTM D 2559."

Part II - Materials

3.1 Process

- A. All Lumber shall be regarded and checked for moisture content by the manufacturer.
- B. The laminations shall be made to length by finger jointing the individual pieces together. These structural finger joints shall be radio frequency cured.
- C. The laminations shall be surfaced, glued, and then clamped. The clamp-up shall be maintained at room temperature at a minimum pressure of 100 PSI.
- D. The columns shall be surfaced after gluing on the narrow faces of the laminations.

3.2 Quality Control

- A. Each lot shall be qualified by the following tests as described in *AITC 200-2004*:
 - 1. "AITC Test T107 Shear Test."
 - 2. "AITC Test T110 Cyclic Delamination Test."
 - 3. "AITC Test T119 End Joint Tension Test."
- B. Each order shall be inspected to verify that columns comply with the shop order.

¹ Rigidply Rafters Glulam Columns are supplied with waterproof sealer applied to the ends. Additional sealing or staining is available.