

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 A190.1-2017**, *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 A190.1-2017, American Standard for wood products - Structural Glued Laminated Timber.
- B. AITC 200-2009 Inspection Manual for Structural Glued Laminated Timber.
- C. AITC 117-2020 Manufacturing.
- D. American Wood Preservers' Association Standards: 2020.
- E. Grading Rules, Southern Pine Inspection Bureau 2014.
- 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 #1 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 to 0.60pcf retention according to *American Wood Protection Association AWPA 2020 Standard U1*: Use Category UC1, UC2, UC3B, UC4A, UC4B, UC4C."
- 2.2 Adhesives
- A. The face joint adhesive shall be wet-use two-part structural urethane hybrid 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 III - MANUFACTURING

- 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 or radio frequency cured, 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 200-2009*:
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.