

**ARCH SUSPENSION**  
**SPECIFICATIONS FOR THE ARCH SUSPENSION**  
**PEDESTRIAN & LIGHT VEHICULAR BRIDGE PACKAGE**

**Manufacturer:** Bridge shall be designed and furnished by EnWood Structures, LLC, Morrisville, NC.

**Bridge Design:** Bridge design system shall be EnWood's ARCH SUSPENSION.

**Manufacture:** Manufacture of the structural glued laminated wood components shall conform to the manufacturing requirements of the American Institute of Timber Construction Standards and Standard Specifications for Glued Laminated Timber, AITC 117. Quality control shall be provided in accordance with ANSI/AITC A190.1- latest edition and AITC inspection manual, AITC 200. AITC quality marks shall be used for identification. An AITC certificate of conformance shall be furnished upon request.

**Manufacturer's and Fabricator's Certification:** Bridge's manufacturer, and fabricator, shall be a member of, and hold full certification from, The American Institute of Timber Construction (AITC).

**Quality Control:** Quality Control shall be provided in accordance with ANSI/AITC A190.1-latest edition, American National Standard for Wood Products- Structural Glued Laminated Timber, and the American Institute of Timber Construction Inspection Manual AITC-200.

**Lumber:** Laminating lumber shall be kiln-dried, with 15% moisture content, Southern Yellow Pine graded to meet the requirements of Standard Specifications for Structural Glued Laminated Timber, AITC 117. Lumber combination shall be determined by the design requirements for each component and designated on the fabricator's shop drawings.

**Appearance Grade:** Laminated components shall be per AITC architectural appearance grade. Solid sawn lumber for decking shall be Southern Yellow Pine graded in accordance with SPIB.

**Preservative Treatment:** The preservative treatment for glulam components shall consist of pressure treated laminated lumber, treated prior to gluing, with pentachlorophenol Type C in accordance with AWWA and AITC 109 Standards, All glulam components shall be either .3pcf or .6pcf retention. Solid sawn decking shall be pressure treated in accordance with AWWA Standard for above ground use.

**Adhesives:** Adhesives shall be wet-use (waterproof) complying with ANSI/AITC A190.1- lasted edition.

**Hardware:** All connecting steel and hardware shall be furnished by the manufacturer. Material shall be hot dipped galvanized.

Note: Anchor bolts/leveling plates are supplied by others.

**Penetrating Sealer:** All glulam materials to receive one factory applied coat of clear penetrating sealer. Optional factory staining is available.

**Foundations:** The purchaser shall secure all necessary information about the site and soil conditions. Information as to the bridge support reactions, anchor bolt location and placement, will be supplied by the fabricator. Actual design and construction of the bridge supporting foundation (abutments, pier or footings) shall be the responsibility of the purchaser. EnWood Structures can provide foundation designs as an option if all pertinent soil data is supplied.

**Storage and Erection:** The client or installer is responsible for protection of materials after arrival at destination. If materials are stored temporarily, they should be placed on blocks well off the ground and separated with wood strips so air can circulate between members. Cover top and bottom with moisture resistant paper. Use non-marring slings when handling the materials.

**Shop Drawings:** A complete set of shop drawings shall be furnished by the fabricator detailing all member sizes and connections.

For additional information or for available options to the  
ARCH SUSPENSION bridge package, please contact:

**EnWood Structures, LLC 919.467.6155**