

VEHICULAR BRIDGE SPECIFICATIONS

SCOPE

All structural glued-laminated timbers shall be furnished as shown on plans and specified herein. Complete shop drawings shall be furnished by the fabricator and shall be approved prior to fabrication.

DESIGN

Design loads shall conform to standard highway design procedures for state, governmental land, or territories that govern. "Standard Specifications for Highway Bridges" adopted by AASHTO, latest edition, shall be used as the design reference source when specified.

QUALITY ASSURANCE

Material standards to comply with "Structural Glued Laminated Timber" ANSI/AITC A190.1 – latest edition. Manufacturer to provide factory-glued timber units, produced by an AITC licensed firm, qualified to issue the AITC "Quality Inspection" mark.

MATERIALS

Laminating lumber shall comply with ANSI/AITC A190.1 and applicable lumber association standards cited herein for grades required to achieve glued laminated timber requirements for allowed stress, appearance, fabrication limitations and species. Manufacturing adhesives shall be wet-use (waterproof) complying with ANSI/AITC A190.01.

PRESERVATIVE TREATMENT

Preservative treatment of materials shall be in accordance with AITC 109 – latest edition and AWPA standards C1, C2, C14, and C28 – latest edition.

HANDLING, STORAGE, & INSTALLATION

Shall be in accordance with manufacturer's recommendations as well as AITC and AASHTO standards.

LONGITUDINAL DECK

Longitudinal glulam deck designs offer low profile structures which are typically used for short spans ranging from 16' to 36' where clearance below deck is limited. Designs consist of deck panels spanning from abutment to abutment. Glulam stiffener beams are used to tie panels together and to distribute wheel loads. Panel thickness varies from 6.75" to 18.25" depending on span and load conditions. Panel lengths up to 80' are available for multi-span decks.

STRINGER & TRANSVERSE DECK

Stringer & Transverse deck systems utilize a series of transverse glulam deck panels or solid sawn timbers supported by straight or slightly curved stringers. Glulam diaphragms are used for bracing. This system is most economical for clear spans ranging from 20' to 80'.