Portable Timber Bridge for Truck Traffic

Simplified Longitudinal Glued-Laminated Timber Bridge for portable bridge applications

Bridge Design Specifications

Bridge Application: Used by truck traffic in logging operations or other temporary bridge applications.

Design Vehicle: AASHTO HS20 truck.

Design Deflection Limitation: none.

Curb / Rail Requirements: curb designed for delineation.

Supplemental Wearing Surface: none.

Bridge Material: glued-laminated timbers, southern pine Combination 48, creosote preservative treatment.

Bridge Length: 35 ft – 0 in.  Bridge Width: 12 ft – 0 in.

Bridge Module Width: 5 ft – 0 in.  Bridge Module Depth: 10.5 in.

Installation Equipment: Excavators, loaders, crawler tractors or similar construction or forestry equipment.

Installation Time: Less than two hours.

Installation Procedures: Excavators can pick up the modules using lifting rings on the sides of the modules. The modules can then be carried to the stream crossing and placed side by side on the stream banks. Crawler tractors can also winch the modules into place. The modules are typically placed on spread footings to prevent settling into the soil. For most installations, cables should be used to secure the bridge modules to nearby trees or deadmen.


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