

# Half Log Bench

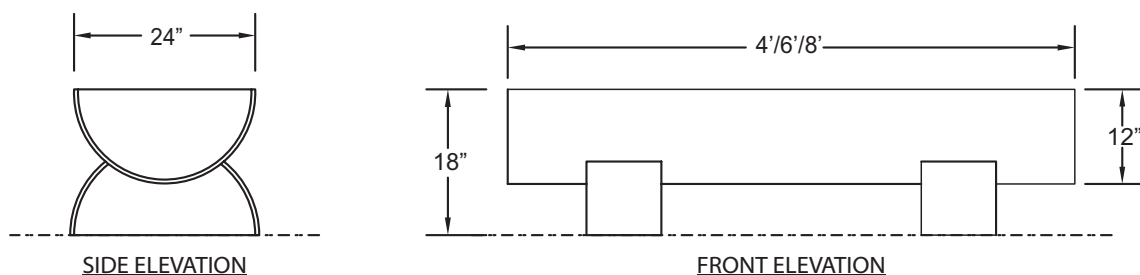


Themed with a natural tree appearance, the outside of the log resembles a tree with bark. The seating surface is a kid friendly smooth wood grain finish.

## SPECIFICATIONS AND DESCRIPTION - 4', 6', 8'

Manufactured from color integrated Glass Fiber Reinforced Concrete (GFRC). Glass fiber is Alkali Resistant (AR) type glass formulated for concrete. GFRC shall be 1,500 pounds per square inch in tension, 5,000 lbs per square inch in compression. Hardened GFRC is colored with an integral color, remainder of log is sealed with a V-Seal. Final coloring is achieved with a latex stain made for concrete. GFRC is readily repairable no matter the age of the material.

## Custom Sizes Available



The estimated delivery date will be confirmed within 24 hours prior to shipping. If delivery date is changed a service charge of 10% of the shipping charge will be added to the rescheduled shipping. It is the responsibility of the installation contractor to coordinate with the driver to insure timely offloading.

## INSTALLATION

Read installation instructions thoroughly before starting installation process.

**STEP 1:** Benches are shipped in 3 pieces to the site. Benches should be placed on a concrete foundation. Determine and mark location of the bench bases.

**STEP 2:** Apply supplied polymer adhesive on the bottom surface of the bases according to manufacturer's instructions. Set bases with adhesive to the concrete base, maintain straight lines and widths.

**STEP 3:** Apply supplied polymer adhesive to the top surface of the base cradles according to manufacturer's instructions. Set the bench top in the installed position while maintaining equal spacing, be sure top is level. Do not disturb the bench during the cure time (24 hrs.) Wipe away any spilled adhesive before it cures.

A soft, resilient surface should be placed around all climbers, extending at least six feet in all directions surrounding the climber. NEVER INSTALL PLAY EQUIPMENT ON CONCRETE OR ASPHALT. A fall on a hard surface can result in serious injury to the equipment user.

## Efflorescence on Concrete

Efflorescence is caused when soluble salts and other water dispersible materials come to the surface of concrete and mortars. It's induced by low temperatures, moist conditions, condensation, rain, dew, and water added to the surface of fresh concrete to assist embossing. It can occur very soon after exposure to moist or cool conditions or gradually, especially when it comes from within the concrete. Any material containing portland cement results in efflorescence. The most usual reaction occurs when calcium hydroxide (lime) formed in the hydration reaction of portland cement (approximately 140 pounds per cubic yard of concrete) is transported by water to the surface through capillaries in the concrete. There it combines with carbon dioxide from the air to produce calcium carbonate (an insoluble material) and water.

The easiest time to remove calcium hydroxide efflorescence is before it combines with carbon dioxide. Up to this time it will dissolve in water, so pressure washing or wet scrubbing will put it in solution with water so it can be rinsed away.

Note: All concrete has naturally occurring hairline cracks and these are not product defects or structural in any way. Some of the small micro cracking may be more visible due to the efflorescence exposing it.