

# Form-A-Tube™

## Description

Form-A-Tube™ is a reusable form manufactured using PVC compounds and consists of strips. The strips have a smooth surface on one side, protrusions on the other, and connectors along the edges. The strips are connected at the edge to create a tube of essentially any size. Form-A-Tube™ allows the formation of a shell around an existing column, utility pole, or submerged pile. The annular space between the Form-A-Tube™ and the host structure can be filled with concrete or any other suitable fill materials. After the concrete cures, the tube can be removed and reused. It can also be used as a stay-in-place form, if the protrusions face towards the host structure.

The effective width of Form-A-Tube™ panels is 6.28 in. (160 mm). Thus, the addition of each panel increases the diameter of the tube by exactly 2 inches (51 mm). For example, connecting 6 panels, results in a tube with a diameter of 12 in. (305 mm). Connecting 7 panels, results in a tube with a diameter of 14 in. (356 mm) and so on. The panels weigh 0.29 pounds/ft (433 g/m).

## Uses

- As a reusable form to cast new cylindrical columns and posts
- Repair and protection of underwater piles
- Repair and protection of bridge piers or piles
- Repair and protection of corroded or damaged structural columns
- Repair and protection of utility poles
- Applicable to all materials: concrete, steel and timber

## Advantages

- Make a tube of any diameter or length, on-site
- Easy to store and ship
- Quick to assemble and disassemble
- Can be used as a stay-in-place form with smooth side facing outward
- Eliminates epoxies and chemicals
- Durable and weather resistant
- Economical, green, and sustainable technology

## Shelf Life & Storage

Form-A-Tube™ panels have unlimited shelf life when stored properly. They are manufactured with PVC treated with UV protective additives to offer a long service life.

Physical Properties of Form-A-Tube™		
Weight pounds/ft (grams/m)		0.29 (433)
Specific Gravity, ±0.02	ASTM D-792	1.43
Hardness, Shore D, ±3	ASTM D-2240	79
Tensile Strength at Yield, psi	ASTM D-638	6265
Tensile Modulus, psi	ASTM D-638	372,000
Notched Izod ft-lb/inch	ASTM D-256	14.9
Heat Deflection Temp. @ 264 psi, °F	ASTM D-648	162
Coefficient of Linear Exp., in./in./°F	ASTM D-696	3.2x10 <sup>-5</sup>
Flammability: UL 94		V-0, 5VA
Dart Drop Min Failure, (C.125 TUP), in.-lb./mil	ASTM D-4226	2.4

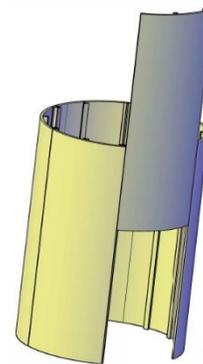
## Packaging

Standard panels are 4 ft. x 7 in. x 0.4 in. (1220 x 178 x 10 mm), with an effective width of 6.28 in. (160 mm). Form-A-Tube™ panels can be custom manufactured for lengths greater than 4 ft. (1220 mm).

## Application

The following steps outline a typical application of the Form-A-Tube™ system. Project-specific requirements may vary.

- 1) Cut the Form-A-Tube™ panels to the desired length.
- 2) Determine the number of panels needed based on the diameter of the tube being made; e.g. 6 panels = 12 in. diameter, 7 panels = 14 in. diameter, 8 panels = 16 in. diameter, etc.
- 3) Slide the Form-A-Tube™ strips together to create a sheet; the width of this sheet represents the circumference of the tube being made.
- 4) If necessary, prepare the surface of the host structure by roughening and cleaning.
- 5) Wrap the Form-A-Tube™ sheet around the host structure and snap the remaining edges together to create a shell (or tube) with an annular space surrounding the host structure.
- 6) Slide the shell to the required location and place zip ties around the shell at regular interval for added safety.
- 7) Fill the annular space with concrete or a suitable fill material.
- 8) If used as stay-in-place form, leave the strips in place.
- 9) If used as reusable form, leave the installation undisturbed for 24 hours before removing the strips.



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