PermaTuffCote™

Fiberglass Epoxy Coating System

PermaTuffCote™ provides a durable protective coating for the prevention of external erosion or corrosion on piping, structures and vessels. Often used for soil-to-air interface conditions.

PermaTuffCote™ is furnished with everything needed to apply the coating system. It is conformable to any contour and can be used to protect reduces, tees, elbow or complex geometric shapes encountered in industry.

PermaTuffCote™ once applied and cured, the coating system is impervious to fuels, most chemicals and solvents.

PermaTuffCote™ permanently bonds to a wide variety of materials such as metals, composites and concrete.

Product features:	
Provides excellent abrasion resistance	Prevents premature erosion
Extends service life	Manufactured in the U.S.A.
Operating temperature to 175˚F (80˚C)	Excellent toughness
Professional customer service	Resists cracking
Cost effective	30-40 minutes working time

Available sizes: PermaTuffCote™ are packaged in 2, 4, 6 and 12-inch material width kits to work with any diameter pipe.

PermaTuffCote™

Material Properties

Material: Woven Fiberglass/Epoxy Matrix	Tensile Strength: 34,760 psi circumferential	ASTM D3039
Orientation: Bi-axial fabric 0˚ and 90˚	Tensile Modulus: 3.1 x 106 psi circumferential	ASTM D3039
Nominal Ply Thickness: .011 inches (11 mils)	Tensile Strength: 11,350 psi axial direction	ASTM D3039
Total Layers: 2 - 4-layer kits	Shear Strength: 1,283 psi	ASTM D5379
Color: Light Gray	Shear Modulus: 3.19 x 105 psi	ASTM D5379
Mix Ratio by Volume: 1 : 1	Flexural Strength: 46,700 psi	ASTM D790
Working Time: 30 – 40 minutes	Flexural Modulus: 2.7 x 106 psi	ASTM D790
Set Time: 2 hours	Poisson's Ratio: .138	ASTM D3039
Cure Time: 24 hours temperature dependent	Thermal Expansion: 8.2 x 10-5 (in/in/˚F)	ASTM E831
Minimum Application Temp: 45°F (7°C)	Glass Transition Temperature: 210˚F (99˚C)	ASTM D7028
Temperature Range: -40˚F to 175˚F	Dielectric Strength: 434 v/mil	ASTM D149
Durometer Hardness Shore D: 85 ASTM 2240	Impact Resistance > 318 ft/lbs	ASTM D256
Lap Shear: 1,726 psi ASTM D5868	Abrasion Resistance: 2.96 mils/sec	ASTM D4060

Material: Unfilled 2-part epoxy having medium viscosity for applications requiring excellent resistance to acids, bases, many organic compounds and water

Cure is normally achieved at room temperature although an elevated cure can be used to reach final properties quickly by applying heat to the repair.

Chemical Resistance: Crude Oil, Solvents, Gasoline, Hydrochloric Acid 10% (complete list on request)

Surface prep pipe to white metal

Apply epoxy 10-15 mils thick

Overwrap fabric with 50% overlap

Apply a second layer of epoxy

Allow to cure a minimum 2 hrs.

Finished wrap