



CPD

CUSTOM POLYMER DESIGNS

Infrastructure Guide

Infrastructure Repair Epoxy Resin Systems

Composite repairs are a proven method for rehabilitating our infrastructure efficiently with long-lasting results. CPD offers products that will save you time and labor working on infrastructure repair. State of the art reinforced fiber polymer technology provides a leg up projecting lead times and navigating labor needs. Composite repairs have been proven to be a sustainable repair method and can be performed efficiently. We have products specifically designed for concrete repair, underwater repair and pipe repair.

Epoxy Primer System

CPD 4324A with 6003B is an epoxy primer system designed with a low viscosity to penetrate your substrate and prepare it for repair.

Resin	Hardener	Mix Ratio (by Volume)	Gel Time (150g at 77°F)	HDT ¹ (Heat Deflection Temperature)
4324A	6003B	2 to 1	150 minutes	150°F

Tack Coat and Adhesive

CPD 9498A/B is a flexible adhesive formulated for superior adhesion to a variety of substrates including metal and concrete. It can be used as a tack coat on vertical or overhead surfaces to hold fabric in place during repairs.

Resin	Hardener	Mix Ratio (by Volume)	Gel Time (150g at 77°F)	Tg ¹ (Glass Transition Temperature)
9498A	9498B	1 to 1	40 minutes	189°F

Laminating Resin System

CPD 4212A/4286B laminating system is designed to be used with carbon fiber or other fabrics to create fiber reinforced infrastructure repairs.

Resin	Hardener	Mix Ratio (by Volume)	Gel Time (150g at 77°F)	HDT ¹ (Heat Deflection Temperature)
4212A	4286B	4 to 1	60 minutes	218°F

Underwater Laminating Resin System

CPD 2110T/9257B is designed to be used with carbon fiber to create fiber reinforced concrete repairs underwater. It is suitable for bridge and underwater piling repair applications. The faster gel time allows for a proper cure to take place in moving currents.

Resin	Hardener	Mix Ratio (by Volume)	Gel Time (150g at 77°F)	HDT ¹ (Heat Deflection Temperature)
2110T	9257B	4.2 to 1	18 minutes	200°F

¹ Ultimate HDT and Tg listed, elevated post cure required.

Specialty Infrastructure Repair Systems

High Heat Resistance Resin System

For high temperature repairs look to CPD 2135A with 9274B or 9276B. It is excellent for pipe wrap repairs and seams. Its high temperature resistance makes it suitable for steam pipes.

Resin	Hardener	Mix Ratio (by Volume)	Gel Time (150g at 77°F)	HDT ¹ (Heat Deflection Temperature)
2135A	9274B	6 to 1	30 minutes	235°F
	9276B	6 to 1	50 minutes	235°F

Chemical Resistant Resin System

CPD 4497A with 4497B or 9305B is a system resistant to sulfuric acid and has been used for non-slip coatings with the addition of broadcast sand or grit. The high cross-link density of the epoxy promotes resistance to acids, bases, fuels and solvents. It can be used for pipe wrap repair and seams that require chemical resistance.

Resin	Hardener	Mix Ratio (by Volume)	Gel Time (150g at 77°F)	HDT ¹ (Heat Deflection Temperature)
4497A	4497B	4 to 1	20 minutes	178°F
	9305B	4 to 1	60 minutes	180°F

One-Part Moisture Cured Polyurethane

9650A is a one-component moisture cured polyurethane prepolymer designed for pipe wrap repair and seaming. The high viscosity, which provides excellent tack, and water-activated cure make it a convenient product for onsite repairs.

Prepolymer	Mix Ratio	Working Time
9650A	One-part	20-30 minutes

Cured In Place Pipe

In addition to these infrastructure repair products, we offer epoxy, cured in place pipe (CIPP) systems. These “no-dig” or trenchless pipe repairs save time and labor efforts. Our CIPP products offer:

- One resin with different speed hardeners to give flexibility in the field.
- Low-odor unlike styrene based systems, which means you can complete repairs while buildings are still occupied.
- All products will cure without the addition of UV light or heat below ground, or can be sped up using steam.

To learn more ask us or visit
www.epoxi.com/custom-polymer-designs

¹ Ultimate HDT listed, elevated post cure required.

About CPD & Polytek

Vast Library of Products and Custom Formulations

CPD (Custom Polymer Designs) has been custom formulating and manufacturing epoxy resin systems for over 25 years. We in-house manufacture our products so we can keep up with your changing needs. You can expect that you will get not only an excellent epoxy system from us, but also excellent technical and customer service. This is a sampling of our most popular products for infrastructure repair, if you do not see exactly what you are looking for please call us so we help you find something in our vast library of product formulas. You can trust us with your because we care about the success of our customers.

Private Labeling

Start, grow and sell your own private-labeled brand of epoxy, silicone, urethane or latex products. We provide materials in bulk or as finished goods, depending on your needs. We have a vast library of existing products for you to choose from and can customize to your needs. We also offer in-house design services for labels or can your artwork.

If you are interested in a quote or want to learn more please visit www.private-label.polytek.com.



About Polytek

Started in 1984, Polytek Development Corporation, is a leading manufacturer of specialty polymers including, polyurethane elastomers, casting resins, silicones, epoxies and latex systems.

Polytek's collective mission is to design and manufacture the highest-performance line of liquid rubbers and related casting products and to provide our customers with unmatched, industry-setting technical support and customer service. In doing so, we are committed to helping our customers realize the greatest value from the use of our products and resources.



In the end, our success is defined by yours.



www.epoxi.com
www.polytek.com

info@epoxi.com
sales@polytek.com

(800) 755-8568

55 Hilton Street
Easton, PA 18042