

Echem

A Meridian Brand

Thick Polymer Overlays (3/4" - 10")

EPC



Epoxy Polymer Concrete Overlay System

Safer alternative for thick placements

Description

EPC (Epoxy Polymer Concrete) is an all-in-one, 100% solids, solvent-free, moisture-insensitive, high-performance, multi-purpose epoxy polymer concrete overlay system. This next generation system is easy-to-use and cost-effective, combining a low-modulus epoxy resin system with a high-quality engineered blend of graded aggregate to achieve the optimal set of characteristics for a concrete overlay system, usable at temperatures from 50 °F to 100 °F.

Advantages & Features

- All-in-one, easy-to-use, waterproof paving system
- Pave from 3/4" - 6" cross-sections
- Rapid cure: Open to traffic in < 3 hours (@ 75 °F)
- High tensile strength coupled with high tensile elongation for superior rutting resistance
- 100% solids
- High early strength, high bond strength
- Non-shrink, outstanding workability
- Moisture insensitive
- Water and chemical resistance
- Pre-measured units: no field chemistry required
- May be used in high altitude and high humidity applications

Applications

- Bridge deck overlays / parking deck overlays
- Joint headers / joint edges
- Grade correction / rut filling
- Concrete spalls / concrete floors / loading docks

Compliances & Certifications

- BABA compliant
- ASTM C805 Rebound Hammer (4 hours) 3,000-5,000 psi
- VOC compliant
- No VOCs — organic vapor respirator masks not required

Cure Time
@ 75 °F



ASTM
D1640

2.5 hrs

Compressive Strength
24 hrs with sand



ASTM
C579

5,000 psi

Tensile Elongation
@ 75 °F



ASTM
D638

35-45%

Material Properties

- **Yield:** 1 ft³ = 1.6 gallons of epoxy + 111-114 lbs. of aggregate
- **Gel time (75 °F):** 16-24 minutes
- **Cure rate (75 °F):** 2.5 hours
- **Percent solids:** 100%
- **Bond strength (24 hours):** >500 psi
- **Compressive modulus (neat):** 1,000,000-2,000,000 psi
- **Tensile strength (75 °F):** 2,800-3,200 psi
- **Shelf life:** 2 years in original, unopened containers
- **Color:** Component A - clear; Component B - dark amber
- **Storage:** 50 °F to 95 °F in dry and dark conditions

Packaging

- 0.67 cu. ft. unit
- 1.34 cu. ft. unit
- 2.68 cu. ft. unit
- Bulk (for volumetric mixer)



Patching

Typical Applications



Bridge deck overlay



Joint headers/joint edges



Grade correction

To speak with our technical staff, please call

505-217-2121

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Infrastructure