

# Mortartec Cladliner



## PRODUCT PROFILE

### GENERIC DESCRIPTION

Epoxy Modified Cement Liner

### COMMON USAGE

Epoxytec Mortartec Cladliner is a stand-alone epoxy-modified cement lining system. A highly advanced, formulated epoxy blend incorporating cutting-edge epoxide technology with proprietary engineered curing, combined with a specific balance of Portland cement, high-density graded silica aggregate, and synthetic fibers. Once mixed, it results in a smooth mortar application and cures with suitable acid resistance to protect from corrosion derived from mild-to-moderate hydrogen sulfide (H<sub>2</sub>S) conditions. This coating is designed as a stand-alone system for moderate H<sub>2</sub>S environments (up to 100 ppm) and is great for protecting concrete, brick, and masonry sanitary sewer manholes, and wastewater system assets.

### COLORS

Blue. **Note:** Due to the product's cement content, color variations can occur. However, these changes in color are aesthetic only and will not affect performance or certifications.

## COATING SYSTEM

### PRIMERS

Self-priming

## SURFACE PREPARATION

### CONCRETE

Prepare concrete surfaces in accordance with NACE No. 6/SSPC-SP13 Joint Surface Preparation Standards and ICRI Technical Guidelines. Abrasive blast, shot-blast, water jet or mechanically abrade concrete surfaces to remove laitance, curing compounds, hardeners, sealers and other contaminants and to provide a minimum ICRI-CSP 5 surface profile.

### CMU

Allow mortar to cure for 28 days. Level protrusions and mortar spatter.

### PAINTED SURFACES

Not recommended.

### ALL SURFACES

Must be clean, dry and free of oil, grease and other contaminants.

## TECHNICAL DATA

### VOLUME SOLIDS

100%

### RECOMMENDED DFT

1/4" / 250 mils / 6.3mm to 1" / 1,000 mils / 25.4 mm per pass.

### CURING TIME

Temperature	To Touch	Full Cure
77°F (25°C)	3-4 hours	36 hours

### VOLATILE ORGANIC COMPOUNDS (VOCs)

0.00 lbs/gal (0 g/l)

### THEORETICAL COVERAGE

1,604 mil sq ft/gal (39.3 m<sup>2</sup>/L at 25 microns). See APPLICATION for coverage rates.

### NUMBER OF COMPONENTS

Three: Part A (epoxy), Part B (amine) and Part C (cement blend).

### PACKAGING

	Part A	Part B	Part C	Yield (mixed)
UniPack †	1 gallon jug	16 oz jar	40 lb bag	2.73 gallons (10.3 L)

† All components are packaged in a 5 gallon pail.



**TECHNICAL DATA (cont.)**

**STORAGE TEMPERATURE**

Minimum 40°F (4°C) Maximum 110°F (43°C)  
 For optimum handling and application characteristics, all material components should be stored or conditioned between 70°F to 80°F (21°C to 27°C) 48 hours prior to use. Protect Parts A & B from freezing; discard if frozen. Protect Part C from moisture; store in dry environment off ground.

**TEMPERATURE RESISTANCE**

(Dry) Continuous 170°F (77°C) Intermittent 200°F (93°C)

**SHELF LIFE**

12 months at recommended storage temperature.

**FLASH POINT - SETA**

>230°F (110°C)

**HEALTH AND SAFETY**

This product contains chemical ingredients which are considered hazardous. Read container label warning and Safety Data Sheet for important health and safety information prior to the use of this product. **Keep out of the reach of children.**

**APPLICATION**

**COVERAGE RATES**

Thickness	Coverage/Kit (0.39 ft³) (theoretical)
1/4" / 250 mils / 6.3 mm	17.5 sq ft (1.6 m²)
1/2" / 500 mils / 12.7 mm	8.75 sq ft (0.81 m²)
3/4" / 750 mils / 19.1 mm	5.9 sq ft (0.55 m²)
1" / 1000 mils / 25.4 mm	4.4 sq ft (0.41 m²)

**MIXING**

Pour liquid Part B into new, empty bucket. Any remaining Part B shall be removed by adding 3 to 5 oz. (88.7 to 147.9 ml) of liquid Part A, re-sealing lid and shaking quart can for 5 to 10 seconds; pour contents into bucket. Add remaining liquid Part A into bucket and blend for 30 seconds. Under agitation, slowly sift Part C powder into the mixed liquids taking care

not to deposit entire contents of Part C at once. Mix for two minutes or until the cement-sand is thoroughly wetted and a smooth consistency is achieved. **Important: Do not add additional Part C.**

**THINNING**

If Mortartec Cladliner begins to thicken in pail during use, drill mix for an additional 20 to 30 seconds to drop the viscosity. Do not add additional water.

**Hand Application:** Do not add water.

**Low-Pressure Spray Application:** To transfer the material, may thin up to 6 oz. (177.4 ml) per kit. **Note:** Use only potable water.

**APPLICATION**

When using Mortartec Cladliner, surface should be "pre-wet" or dampened with potable water to a Saturated Surface Dry (SDD) condition; the concrete is darkened by water but there is no pooling on the surface. Do not oversaturate the surface.

**APPLICATION EQUIPMENT**

Mortar Hawk, steel, stiff concrete finishing trowels, broad knives and rubber floats are recommended.

**APPLICATION**

For troweling inside and outside corners, the use of a radius or margin trowel is recommended. Material can be transferred to the surface by utilizing hydraulic spray equipment (i.e. WIWA 410 9:1 or 600 12:1 pump, Graco M680 Mortar Pump 10:1, Graco ToughTek Piston Pump) followed by troweling to seal the material. No special ACI 308 curing requirements - ambient cure only. For a smoother finished appearance, trowel licks may be reduced by using a 1/4" (6.35 mm) nap roller cover lightly dampened with water over the sealed Cladliner material. **Note:** If white liquid is brought to the surface during this process, the Cladliner material is being overworked and/or oversaturated. Overworking or oversaturating the surface may have an adverse effect on the adhesion of subsequent coatings applied. Let Cladliner cure and remove surface deposit using concrete rub brick.

**POT LIFE**

1 hour at 77°F (24°C)

**APPLICATION (cont.)****SURFACE TEMPERATURE**

Minimum of 45°F (7°C), optimum 65°F to 80°F (18°C to 27°C), maximum of 90°F (32°C). Application should be performed out of direct sunlight and during times when the surface temperature of the concrete is stable or in a descending pattern. To minimize outgassing, concrete temperature should be stabilized or in a descending temperature mode.

**MATERIAL TEMPERATURE**

For optimum application, handling and performance, the material temperature during application should be between 70°F and 90°F (21°C and 32°C). Temperature will affect the workability. Cool temperatures increase viscosity and decrease workability. Warm temperatures will decrease viscosity and shorten pot life.

**CLEANUP**

Flush and clean all equipment immediately after use with warm water.