

## MortarTec Modified™



Item# RCHA3 Revised: 11/23/2009

### **High Density, Polymer Modified Mortar**

#### **Description**

Epoxytec MortarTec Modified™ is a one part, polymer modified, fast setting, silica fume, fiber reinforced mortar designed for vertical and overhead repairs from ¼" to 2" in one application. The product may be applied by hand or sprayed with a low-pressure pump.

#### **Typical Uses**

Overhead and vertical repairs to spalled areas or broken concrete walls, columns, beams, concrete pipe, piers, and other masonry surfaces where forming is impractical.

- Industrial infrastructure repair / resurfacing
- Sanitary sewers / manholes / lift stations
- Wastewater treatment plants

#### **Surface Preparation**

Remove all loose concrete, brick or mortar from affected area by mechanical means. Surfaces shall be free of paints, oils, dirt, dust, curing compounds, sealers, form release agents or any material that would prevent mortar from coming into contact with the open pores of the concrete. Shot blasting, sandblasting, chipping and high pressure water blasting (3,500 psi) are all excellent surface preparation methods. Smooth concrete surfaces may require etching with muriatic or sulfamic acid, then thoroughly cleaned with pressure washer.

Dampen area to achieve a saturated, surface dry condition (SSD). Leaving no puddles.

#### **Application Method**

Place clean cool water in mixing pail then add powder and mix with trowel to reach desired consistency. Place material on patch area and smooth with flat trowel or wood float. Let material set a few minutes, then finish with float trowel or brush for desired texture. Water demand is approximately 1 gallon to 50 lb. material. Use a curing compound or damp cure area after finishing.

Before each application, a slurry bond coat should be applied to areas patch is to bond to. The slurry consists of water and powder mixed to a soupy consistency. Dampen area to be patched with water (DO NOT LEAVE PUDDLES). Apply slurry bond coat to patch area with paint brush or masonry brush and scrub into all crevices. (NOTE: apply patch while slurry is still damp).

#### **Clean-up**

Clean up is simple and easy with soap and water. Rinse tools before material hardens.

#### **Limitations**

Place material in temperatures between 40° F and 100° F.

**COLD PLACEMENT:** warm material, water and patch area and keep above 40° F for 24 hours after placement. Do not allow patch to freeze for 48 hours after placement.

**HOT PLACEMENT:** mix patch with cold water or ice water. Store patch in cool or shaded area before mixing.



## MortarTec Modified™

### Storage & Handling

- Shelf life: 12 months, sealed.
- Storage: Store in a dry area away from direct sunlight. The product should be conditioned to between 40° F and 95° F before use.

### Packaging & Color

- 50 lb. polylined bag (grey) Item# RCHA3-50B
- 50 lb. plastic pail. (grey) Item# RCHA3-50P

### Coverage

Volume yields .45 cubic feet per 50 lb. bag.

### Health & Safety

**Health Precautions:** This product contains Portland cement-avoid eye contact or prolonged contact with skin, Wash thoroughly after handling. In case of eye contact, flush with water for at least 15 minutes. Consult a physician immediately. Keep out of reach of children. Contains free silica- DO NOT breathe dust. May cause delayed lung injury. Follow OSHA safety and health standards for crystalline silica (quartz).

**Safety Precautions:** Use adequate ventilation. Use of a NIOSH/ MSA approved dust respirator, safety goggles and chemical resistant gloves are strongly recommended. Remove contaminated clothing immediately.

**First Aid:** Skin Contact: wash thoroughly with soap and water. Eye Contact: flush immediately with water and contact a physician. Respiratory Problems: remove affected person to fresh air immediately and contact a physician. Hygiene: wash hands immediately after use. Wash clothing before reuse.

**Disposal:** Dispose of in accordance with local, state or federal regulations.

**Warning:** KEEP CONTAINER CLOSED WHEN NOT IN USE. KEEP OUT OF REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY BY A QUALIFIED TECHNICIAN. Consult the Material Safety Data Sheet for further health and safety information.

### Technical Properties

Compressive Strength	
ASTM C-109	
6 Hours	2,400 psi
1 Day	3,250 psi
28 Days	6,800 psi
Flexural Strength	
ASTM C-293	
7 Days	600 psi
28 Days	990 psi
Bond Strength	
ASTM C-882 (mod)	
1 Day	350 psi
7 Days	1000 psi
28 Days	1600 psi
Shrinkage (inch/inch)	
ASTM C-596	
1 Day	0.048
7 Days	0.061
28 Days	0.076
Abrasion Resistance Grams lost	
1/4" APCI	
28 Day	1
Freeze / Thaw	
ASTM C666	
	300 cycles - no damage
Setting Times 77° F	
Initial Set	35 min.
Final Set	50 min.

\* Safety: Consult Material Safety Data Sheet for all material safety information.



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