

Mortartec Hydrxx-1™



Item# RCHY1 Revised: 09/08/2014

Hydraulic Cement Patch, Water Plug & Leak Stopper

1 minute

Description

Epoxytec Mortartec Hydrxx-1™ is a quick setting, industrial-grade hydraulic cement compound designed for structural patching, and as a leak stopper and water plug, which instantly stops running water and/or seepage through concrete or masonry walls and floors. Packaged in dry powder form, Hydrxx-1™ requires only the addition of clean water to make it ready-to-use. Epoxytec Mortartec Hydrxx-1™ contains no metallic fillers, will not shrink or oxidize, and seals. Hydrxx-1™ is designed for an ultra-quick reaction and sets in 60 to 90 seconds, depending upon the temperature of the mixing water, the surface onto which it is applied, and the mass. Low temperatures will retard the set-time. Higher temperature will accelerate the set-time.

Typical Uses

Mainly, but not limited to, grade and subgrade applications - plugging holes, cracks, faults causing leaking and seepage through concrete floors, walls and junctions, general masonry, around inserts such as sleeves, pipes, etc. suitable for any similar architectural or structural concrete application - pits, mines, tunnels, reservoirs, sewers, cisterns, canals, lined ditches, miscellaneous grouting & spot sealing, bolt hold downs, etc.

- 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

Applying Mortartec Hydrxx-1™ is usually a two man job - one mixing small batches and the other placing the material quickly and holding it with pressure until water seepage stops. Force the mixed Hydrxx-1™ into the crack or hole using maximum pressure. When areas of high water pressure are encountered, hold the Hydrxx-1™ in your hand until you can feel the heat generation (the use of gloves is recommended). Immediately push and force the material into the opening and hold firmly in place with palm, trowel or wood block until set. Then shave the surface flush with a sharp pointing tool, knife or trowel. Plug a long-running opening or crack with successive small rolls of Hydrxx-1™. Optimal build is between 1 – 4 inches.

Limitations

Very cold or very hot weather will retard or quicken the setting time. Neither harms its ultimate strength or effectiveness, but special care must be used in mixing and applying the material. Normally, at 70F, both Hydrxx-1™ and the mixing water should be lukewarm.

If applying any coating technology as a top coat, after the Hydrxx-1™ cures, a light brush blast or high pressure water blast will be required to prepare the surface for accepting top coat technologies.



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Clean-up

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

Coverage

1 lb. will fill 18 cubic inches or a crack $\frac{3}{4}$ " x $\frac{3}{4}$ " x 30".

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	
1 Hour	1,500 psi
1 Day	3,500 psi
7 Days	4,900 psi
28 Days	5,500 psi

Bond Strength	
ASTM C882 (mod)	
4 Hours	270 psi
28 Days	880 psi

Flexural Strength	
ASTM C-293	
28 Days	950 psi

Shrinkage	
ASTM C-596	
	<0.01%

Tensile Strength	
ASTM C-4961	
28 Days	650 psi

Freeze / Thaw	
ASTM C666	
	300 cycles - no damage

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

Storage & Handling

- Shelf life: 12 months, sealed.
- Storage: Store in a dry area away from direct sunlight. The product should be conditioned to between 70° F and 95° F before use.

Packaging & Color

- 50 lbs. pail (grey) Item# RCHY1-50



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