

**SINGLE COMPONENT
STRUCTURAL REPAIR MATERIAL
USE DOWN TO 32°F**



**ENHANCED FORMULA WITH
CORROSION INHIBITORS**

POWER-CRETE

PRODUCT DESCRIPTION

POWER-CRETE is a single component structural concrete repair material suitable for a wide range of applications. It is Portland cement based with select graded silica, corrosion inhibitors and proprietary modifiers to enhance strength and durability. This unique combination of materials offers a repair material that is extremely strong, dimensionally stable while maintaining structural integrity. To ensure a consistent and reliable bond to existing concrete surfaces, **P-100 PRIMER** should be used in conjunction with **POWER-CRETE**. In applications with extremely poor substrate conditions or heavily trafficked areas, **EP-1000 EPOXY** with sand broadcasted until refusal may also be used to prime surfaces prior to placing **POWER-CRETE**.

PRODUCT APPLICATIONS

POWER-CRETE is a fast setting trowel grade repair material designed for horizontal repairs, however, Power-Crete may be used vertically in form and pour applications.

POWER-CRETE can be used to repair parking decks, bridge structures, pier and deck supports, water and sewage treatment plants, factory and warehouse floors, manholes, and may be used as a concrete topping among other similar applications.

PRODUCT FEATURES

- High Early Strength
- Non-Shrink
- Non-Metallic
- Ready for Service in 8 Hours
- Apply from 1/2" to 6"
- Use in temperatures down to 32°F
- High Compressive and Flexural Strength
- Outstanding Bond
- Wearing Surface
- Interior or Exterior Uses
- Above or Below Grade

PRODUCT TEST RESULTS (Typical)

WORKING TIME: 20 Minutes

COLOR: Light Grey

COMPRESSIVE STRENGTH PSI (ASTM C-109, Air Cured)

<u>1 Day</u>	<u>3 Days</u>	<u>7 Days</u>	<u>28 Days</u>
4265	6925	7775	8900

FLEXURAL STRENGTH PSI (ASTM C-348, Air-Cured)

<u>3 Days</u>	<u>7 Days</u>	<u>28 Days</u>
879	1227	1790

BOND STRENGTH (ASTM C-1042, Air Cured)

	<u>28 Days</u>
P-100 Primer	1490

SHRINKAGE (ASTM C-596)

<u>7 Days</u>	<u>28 Days</u>
0.01%	0.01%

PACKAGING

POWER-CRETE is packaged in 50 lbs. bags with a moisture resistant lining.

COVERAGE

50lb bag of **POWER-CRETE** yields .41 cu.ft. and will cover 45 sq. ft. at 1/8" thickness

SURFACE PREPARATION

Existing concrete surfaces must be clean and structurally sound, free of any oil, grease, dust, sealers, coatings, release agents, curing compounds, etc. Remove all contaminants mechanically by chipping, shotblasting, grinding, or bush hammering. Remove all dust by vacuum or blowing with compressed air.

MIXING INSTRUCTIONS

POWER-CRETE may be mixed with a heavy duty high speed drill and paddle mixer or in a paddle-type mortar mixer for higher volume applications. Place water in mixing container and increase power slowly while mixing. Mix thoroughly for 3 minutes. **Use 3 quarts of water per 50lb bag.**

DO NOT MIX more material than can be placed in a 15 minute time span.

If needed, ice water may be used to extend working time. Integral colors may be added.

INSTALLATION

Use **P-100 Primer** to ensure a good bond. Apply a smooth, even coat and allow to dry before placing **POWER-CRETE**. **P-100 Primer** dries in about 30 minutes at 70° F, may take longer in cooler temperatures. See PRECAUTIONS for temperature limits at installation.

For surfaces with low porosity, extremely poor substrate conditions or heavy traffic, **EP-1000 Epoxy** along with sand broadcasted until refusal is recommended as a surface primer.

Power-Crete placement should be full depth and continuous to avoid cold joints.

DO NOT featheredge **POWER-CRETE**. Saw cut to obtain a straight edge with a minimum of a 1/2" depth.

Finish **POWER-CRETE** to designed surface finish.

Lubricate trowel with water to avoid dragging.

PATCHCRETE ACRYLIC may also be used as a finishing aid.

Repaired area may be open for use after 8 hours, more time may be required in cold weather.

Any required coatings may be applied after 24 hours. Always check moisture content prior to applying any non-breathable coatings, such as an epoxy.

Paints and coatings may be applied over **POWER-CRETE** as you would over concrete.

POWER-CRETE will **NOT** take acid stains. Any water based stains, dyes or sealers may be used.

CURING

Follow proper concrete curing procedures after finishing. In adverse weather conditions, follow ACI recommended procedures for hot or cold weather.

Wet cure after repair material is hard for 24 hours or apply a high solids water based curing compound. Weathering and surface oxidation may cause a bonding concern with exterior applications.

EXTENSION

Addition of pea gravel is not recommended or required for product performance.

PRECAUTIONS

Do not featheredge **POWER-CRETE**.

Do not use below 32°F grouting. Store materials in a dry place. Rate of strength gain is significantly affected by temperature extremes.

- DO NOT featheredge **POWER-CRETE**
- DO NOT use below 32°F
- DO NOT install **P-100 Primer** and **POWER-CRETE** at surface temperatures below 41° F. Air temperature should not drop below 32° F during initial 48 hours of cure.
- Recommended mock up installation under actual jobsite conditions to ensure desired results prior to use on larger areas.
- Contains Portland Cement : Avoid contact with eyes and prolonged contact with skin. Wash thoroughly after handling. In case of eye contact, flush with plenty of water for at least 15 minutes. Consult a physician immediately. Keep out of reach of children.
- Contains Silica Sand and Free Silica: Do not breathe dust. Avoid inhalation by wearing respirator. Continuous exposure and inhalation may cause silicosis. Crystalline silica is classified as a know human carcinogen.

LIMITED WARRANTY

Lyons Manufacturing, Inc. warrants the high quality of its products. However, due to many factors beyond our control during use, such as job conditions, workmanship, etc., the liability of all parties making and selling this product is expressly limited to the refund of purchase price or replacement of the Lyons Manufacturing materials used. Lyons Manufacturing, Inc. will replace any product proven to have a manufacturing defect, FOB Factory, provided Lyons Manufacturing is notified of such defect within one (1) year from the date of shipment. This warranty is lieu of all other warranties, expressed or implied. Lyons Manufacturing, Inc. makes no warranty of suitability of its products for any particular application and sells its products upon the condition that customer shall conduct their own tests to determine the suitability of the product for their specific purposes. Under no circumstances will Lyons Manufacturing, Inc. be liable for economic, special, incidental or consequential damages or losses of any kind.

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