

# TWO COMPONENT ACRYLIC POLYMER MODIFIED TOPPING AND UNDERLAYMENT OVERHEAD AND WALL REPAIRS

# PATCHCRETE®

- \*Bonds to Virtually Any Concrete Surface
- \*Light Gray to Blend with Existing Concrete
- \*Improved Bond and Compressive Strength

## PRODUCT DESCRIPTION

**PATCHCRETE** is a two component polymer modified concrete repair, topping, and underlayment material. The **PATCHCRETE** liquid is a high solids content Acrylic Polymer. The **PATCHCRETE Powder #1005** is a portland cement based mix with graded silica and special chemical additives. Polymer modified concrete gives improved bonding, improved chemical resistance, improved water resistance and improved tensile, compressive and flexural strengths.

This high strength portland cement/acrylic polymer combination provides a smooth durable semi-resilient surface which can be used as a finished floor in most applications. **PATCHCRETE** is easy to mix and apply, requiring no special tools. It is suitable for use as a screedable topping and underlayment, or as a floor, wall or overhead repair material when mixed to a stiffer trowelable consistency. **PATCHCRETE** has been approved by the USDA for use in most processing plants and may be used where there is exposure to potable water. Use of **PATCHCRETE** can help your project earn LEED Credits. Contact factory for details.

## PRODUCT APPLICATIONS

**PATCHCRETE** is designed to be used both as a topping or underlayment and as a wall, floor, and overhead patching and repair material when mixed to a stiffer consistency. For use as an underlayment, mix to the consistency of a thick pancake batter. Use **PATCHCRETE** to level and smooth rough or rained on concrete. **PATCHCRETE** may be used to level low areas inside or outside. It will bond to and may be used to level virtually any concrete surface.

Mixed as a repair material, **PATCHCRETE** may be used to repair walls, floors, tilt panels, driveways, sidewalks, precast members, etc. **PATCHCRETE** may be applied from featheredge to 2-1/2 inches. Suitable for interior or exterior applications. Suitable for application where there is rubber tired forklift and vehicle traffic.

## PRODUCT FEATURES

- Outstanding Bonding
- Improved Water Resistance
- Interior or Exterior Use
- From Featheredge to 2-1/2 inches
- May Be Used as Screedable Underlayment
- May Be Used as a Trowelable Repair Material
- Improved Compressive Strength
- No Moist Curing Required
- High Solids Acrylic Polymer
- May Be Stained or Used With Integral Color
- May Be Used for Stenciled and Decorative Concrete
- LEED Credits Applicable

## PRODUCT TEST RESULTS

WORKING TIME: Approximately 25 minutes  
COLOR: Light Gray, also available in White  
INITIAL SET: 4 Hours

SCREEDABLE CONSISTENCY: (1 bag to 1 gallon)  
Compressive Strength (ASTM C-109, Air Cured)  
7 Days - 4120 PSI      28 Days - 5500 PSI

Flexural Strength (ASTM C-348, Air Cured)  
7 Days - 1260 PSI      28 Days - 1535 PSI

Slant Shear Bond (ASTM C-1042, Air Cured)  
28 Days - 1250 PSI

TROWELABLE CONSISTENCY: (1 bag to .8 gallon)  
Compressive Strength (ASTM C-109, Air Cured)  
7 Days - 4550 PSI      28 Days - 6000 PSI

Flexural Strength (ASTM C-348, Air Cured)  
7 Days - 1360 PSI      28 Days - 1720 PSI

Slant Shear Bond (ASTM C-1042, Air Cured)  
28 Days - 1550 PSI

**SURFACE PREPARATION** - All surfaces must be clean and structurally sound; free of dust, grease, oil, paint, sealers, etc. Pores of the concrete surface must be open to permit proper bonding, especially on fresh "green" concrete. Any necessary surface preparation may be done by shotblasting, scarifying, sandblasting or acid etching. If acid etch is used, be sure to neutralize surface, clean and brush thoroughly. For heavy traffic applications, mechanical abrasion of the surface is recommended. Concrete surfaces should be surface saturated but dry to touch (SSD).

Do not bridge cracks with **PATCHCRETE**. They will "telegraph" through. Fill cracks prior to placement of **PATCHCRETE**. Expansion joints should be extended through the **PATCHCRETE**. For surfaces with low porosity, **EP-200 EPOXY PRIMER** can be used per installation instructions on the **EP-200 Literature**.

**MIXING - PATCHCRETE** may be mixed in a mortar mixer, with a heavy duty low-to-medium speed drill or by hand. Always use a clean mixing container. Place **PATCHCRETE Acrylic Polymer #1003** in container and add **PATCHCRETE Powder #1005**, mixing while adding powder. **DO NOT ADD WATER**. Added water will reduce strength and bonding. Mix for 2 to 3 minutes until a smooth, lump-free mixture is obtained. Mixing time should not exceed 3 minutes. **DO NOT OVERMIX** and **DO NOT** entrap air while mixing.

**USE OF AGGREGATE** - For areas with a thickness over 1/2", aggregate should be added to **PATCHCRETE**. Add 1 part by volume of 3/8" pea gravel to 2 parts by volume of **PATCHCRETE**. **DO NOT ADD WATER**.

**USE AS UNDERLAYMENT OR TOPPING** - For use as an underlayment, mix to desired screedable consistency, no more liquid than 1 bag to 1 gallon of polymer. As an underlayment, apply from featheredge to 2-1/2". Material may be screeded for low places or spread into place with a squeegee. When using as a wearing surface topping, install at least 3/8" thick. **DO NOT FEATHEREDGE** as a wearing surface topping. For areas over 1/2" in depth aggregate is required.

**USE AS A TROWELABLE NON-SAG REPAIR MATERIAL**- For floor, wall and overhead repairs, mix about 3/4 to 7/8 of liquid polymer to a bag of powder to get a stiffer, trowelable non-sag consistency. Make a trial batch to get desired consistency. Lubricate trowel with polymer to prevent dragging. For wall applications such as coating or filling concrete block, **PATCHCRETE** may be applied with a hopper gun and then floated smooth.

**INSTALLATION** - To insure proper bonding, use **P-100 PRIMER** or apply a bond slurry coat scrubbed into the surface. The **P-100 PRIMER** will give more reliable and consistent results. Allow the **P-100 PRIMER** to dry (30-45 minutes) and install **PATCHCRETE** material. Material may be applied up to 24 hours after the **P-100 PRIMER**. The **P-100 PRIMER** will re-emulsify one time and may be used for inside and outside applications.

**CONTAINS PORTLAND CEMENT**. Avoid eye contact or 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 the reach of children.

The bond slurry coat is a syrup-like consistency mix of **PATCHCRETE Powder** and **PATCHCRETE Acrylic Polymer**. Scrub the slurry coat into the SSD surface. Place **PATCHCRETE** and smooth and spread while slurry coat is still damp. **DO NOT LET SLURRY COAT DRY**. Screed off to get a smooth flat surface. Use a trowel for touch-up and featheredging. **DO NOT OVERTROWEL**. Lubricate trowel with polymer to prevent dragging. The **#1003 Polymer** makes the materials darker. Less polymer will give a lighter finished surface. For best results, smooth and spread into place and touch-up as needed. A latex film will form when **PATCHCRETE** begins to set. This is normal and will disappear.

Normally floor coverings may be applied the next day. With thick applications or cold or damp weather, another day may be required. No heavy traffic should be permitted for 4 to 5 days. When used as an underlayment, always follow the directions of floor covering manufacturers concerning maximum moisture content and perform required tests. Over interior plywood floors, use two coats of **P-100 PRIMER** applied at right angles. Allow **P-100 PRIMER** to dry between coats. Floor must be rigid and sound. Anchor metal lathe into wood. This will help hold the **PATCHCRETE** in place.

**PATCHCRETE** is more resistant to moisture penetration than regular concrete. Breathable water based sealers may be applied over **PATCHCRETE** as soon as 24 hours. Paints and coatings may be applied over **PATCHCRETE** as you would over concrete. For solvent based sealers and coatings, wait 3-4 days for the **PATCHCRETE** to harden. For non-breathable coatings, ensure moisture has left **PATCHCRETE**. A simple poly test can be performed over the deepest areas. Always follow manufacturer recommendations and testing for applying over fresh concrete.

**PRECAUTIONS** - Do not use below 40°F. The best temperature to use is 60°-90°F. **DO NOT LET PATCHCRETE ACRYLIC POLYMER #1003 FREEZE**. Always make a trial installation first under actual job conditions to be sure you get the desired results before using on larger areas.

**CONTAINS SILICA SAND AND FREE SILICA**. Do not breathe dust. Avoid inhalation by wearing respirator. Continuous exposure and inhalation may cause silicosis and crystalline silica is classified as a known human carcinogen.

**CURING** - In general, **PATCHCRETE** will air cure without any need for curing products. However, care should be taken in areas where **PATCHCRETE** is exposed to wind or direct sunlight, sometimes these can cause cracking as the top dries before the bottom has cured. For these fast drying situations, the **PATCHCRETE** should be covered with damp burlap or plastic for 48 hours.

**COVERAGE - PATCHCRETE Powder #1005** is packaged in 45 lb. moisture resistant bags. **PATCHCRETE Acrylic Polymer #1003** is packaged in 1 gallon jugs, 4 to a carton. One 45 lb. bag of **PATCHCRETE Powder #1005** and one gallon of **PATCHCRETE Acrylic Polymer #1003** will cover 45 sq. ft. at 1/8" thickness.

#### LIMITED WARRANTY

Lyons Manufacturing, Inc. warrants the high quality of its products. However, because of many factors beyond our control in their use, such as job conditions, workmanship, etc., the liability of all parties making and selling this product is expressly limited to the refund of the purchase price or replacement of the Lyons material used. Lyons Manufacturing, Inc. will replace any product proven to have a manufacturing defect, FOB Factory, provided Lyons Manufacturing, Inc. is notified of such defect within one (1) year from the date of shipment from the factory. This warranty is in lieu of all other warranties, express 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 test to determine the suitability of the products for their 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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