

# ACRYLIC BONDCRETE

## ACRYLIC BONDING AGENT AND ADDITIVE

### DESCRIPTION

ACRYLIC BONDCRETE is a 100% acrylic latex liquid used as a high-strength admixture and bonding agent for cement mortar and concrete. It provides excellent resistance to impact, abrasion, moisture and attack by acids or other water-soluble chemicals. As a polymer modifier, it provides improved cement hydration and bonding properties that allow for applications as thin as a feather edge. When used as a bonding slurry, the bond strength is retained even in damp exterior conditions. It can be used for bonding fresh mortar or concrete to existing concrete or other sound substrates, such as brick or block, in nonstructural applications.

### APPLICATIONS

- Concrete
- Stucco
- Terrazzo
- Repair mortars
- Masonry
- Cement sand mixes

### ADVANTAGES

- Improves flexural strength
- Minimizes cracking
- Improves bond and impact strength
- Resists moisture
- Improves resistance to freeze/thaw cycling
- Ideal additive for concrete, plaster and stucco

### SHELF LIFE / STORAGE

12 months from the date of manufacture, when unopened, undamaged original container is properly stored in a cool and dry place, unexposed to moisture and sunlight. Always tightly reseal container after use. DO NOT ALLOW TO FREEZE!

### PACKAGING

1-gallon (3.8-l) jugs and 5-gallon (19-l) pails.

### DIRECTIONS FOR USE

#### Surface preparation:

When using as a bonding agent, surfaces must be clean, sound, dry, minimum 50°F (10°C), and free of oil, gypsum compounds, wax, grease, sealers, curing compounds, urethane, paint, asphalt, dirt, loose surface material or any contaminant that will act as a bond breaker. Never use acid or mastic removers on any surface where a Penetron Specialty products will be applied. Mechanically prepare all surfaces to a minimum Concrete Surface Profile (CSP) 4 to 5, as per ICRI Guideline No. 310.2-1997. Unsound concrete surfaces must be prepared to solid sound concrete by additional means and methods, as per ICRI Guideline No. 310.2R-2013 "Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays, and Concrete Repair."

**NOTE:** Moisten patch area thoroughly to a Surface Saturated Dry (SSD) condition with no standing water, keep continuously damp, for at least 1 hour before placement of the ACRYLIC BONDCRETE slurry, mortar or concrete mix. Remove all standing water prior to placement.

#### Mixing:

Agitate and thoroughly mix the ACRYLIC BONDCRETE liquid immediately prior to use.

#### For use as an admixture:

ACRYLIC BONDCRETE can be used in horizontal, vertical and overhead patching applications. It may be used to replace all or part of the mixing water in cement mortar or concrete. Use 2 gl (7.6 l) minimum of ACRYLIC BONDCRETE per 94 lb (43 kg) bag of cement. Add additional ACRYLIC BONDCRETE or water to achieve the desired consistency.

#### For use as a bonding agent:

**Slurry bond coat:** For optimum bond strength, mix undiluted ACRYLIC BONDCRETE with cement. A ratio of 1 part by volume of ACRYLIC BONDCRETE to 1.5 parts by volume of cement is suggested to provide a creamy thick bonding slurry. The prepared bonding slurry should be scrubbed with a broom into the prepared concrete substrate just ahead of the repair material replacement. If the bonding slurry dries before the concrete or mortar is placed, it must be removed by wire brushing or water blasting and then recoated with fresh bonding slurry after the residual water is removed.

**Neat bond coat:** Apply ACRYLIC BONDCRETE to properly prepared concrete substrate by roller, brush, or sprayer at a coverage rate of 200-250 ft<sup>2</sup>/gallon (5-6 m<sup>2</sup>/l), using more or less depending on the porosity. Wait at least 40 minutes, until the bonding film is clear and dry to the touch, before applying mortar or concrete.

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**IMPORTANT:** Film must be dry to touch (not tacky) before pouring concrete. A neat, bonding coat of ACRYLIC BONDCRETE will retain its ability to bond effectively for up to 2 weeks if it is kept dry and clean.

## Curing:

ACRYLIC BONDCRETE used in modified mortars, concretes or bonded applications generally require damp curing, followed by drying, in order to achieve full physical properties. Alternatively, after placement, a good quality water-based curing compound may be used. Increasing wet cure period improves physical properties and minimizes chances of cracking.

Contact Penetron Specialty Products Technical Support for additional information.

## APPLICATION TOOLS

Mixing pail, mixing paddle, 1/2" heavy duty drill, screed and hand trowels. Mortar mixer may be used for larger installations.

## CLEAN UP

Clean all tools and equipment with water immediately after use, prior to material hardening.

## SPECIAL CONSIDERATIONS

- Do not use neat as a bonding agent for any vertical, overhead or structural application or with rapid setting cementitious products
- Penetron Specialty Products recommends installing a test area, ensuring suitability of ACRYLIC BONDCRETE for intended use
- ACRYLIC BONDCRETE is not a vapor barrier
- Do not use for patching asphalt
- Substrate must have a minimum direct tensile bond test reading of 72 psi per ASTM C1583
- Protect patched areas from vibration, rain, wind, freezing and loading until desired strength is achieved

## JOB MOCKUPS

Penetron Specialty Products recommends that when our products are used in any application or as part of any system that includes other manufacturers' products, the installer and/or design professional shall test all the system components collectively for compatibility, performance and long-term intended use in accordance with pertinent and accepted industry standards prior to any installation. Written documentation of the tests performed shall be satisfactory to the design professional and installer. Test results must include the means and methods of application, products used, project specific conditions being addressed, and standardized tests performed for each proposed system or variation.

## SAFE HANDLING INFORMATION

Before using this product, review the ACRYLIC BONDCRETE Safety Data Sheet (SDS) that can be found on the Penetron Specialty Products website: [www.penetronsp.com](http://www.penetronsp.com). Avoid contact with eyes and wear suitable protective eyewear. Avoid prolonged or repeated contact with skin. Wear gloves and suitable protective clothing. Do not breathe dusts and mists. In case of insufficient ventilation, wear respiratory equipment. For additional information regarding first aid and emergency procedures, refer to the product Safety Data Sheet (SDS).

## Waste disposal:

This product, when discarded or disposed of, is not listed as a hazardous waste in federal regulations. Dispose in a landfill in accordance with local regulations.

KEEP OUT OF REACH OF CHILDREN

**WARRANTY:** PENETRON SPECIALTY PRODUCTS INC. warrants that the products manufactured by it shall be free from material defects and will conform to formulation standards and contain all components in their proper proportion. Should any of the products be proven defective, the liability to PENETRON SPECIALTY PRODUCTS INC. shall be limited to replacement of the material proven to be defective and PENETRON SPECIALTY PRODUCTS INC. shall in no case be liable otherwise or for incidental or consequential damages. **PENETRON SPECIALTY PRODUCTS INC. MAKES NO WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED.** User shall determine the suitability of the product for its intended use and assume all risks and liability in connection therewith.

This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about and guidelines for the proper use and application of Penetron Specialty Products under normal environmental and working conditions. Because each project is different, PENETRON SPECIALTY PRODUCTS INC. cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

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