ACRYL-BINDER
Single component, water based, high-strength, acrylic copolymer, integral admixture and bonding agent for concrete.

HOW IT WORKS
As a polymer modifying admixture, ACRYL-BINDER provides a plasticizing effect which lowers the water/cement ratio and improves cement hydration resulting in substantially improved flexural, compressive and tensile strength properties. As a bonding agent, ACRYL-BINDER improves the bonding properties of freshly placed patching and overlay materials, allowing for effective adhesion in both thin and high build applications.

APPLICATIONS

AS AN ADMIXTURE
◆ For use as an integral admixture in horizontal, vertical and overhead patching and overlay applications.
◆ Use in field blended and factory mixed (prebagged) mortar, grout and concrete.
◆ For use to improve the strength properties and reduce the shrinkage in thin set and stucco applications.
◆ For use in repairing structural and cosmetic defects in precast, tilt-up and cast-in-place concrete and concrete masonry.
◆ For use in interior, exterior, above and below grade applications.

AS A BONDING AGENT
◆ Use to bond fresh concrete to existing concrete in horizontal, vertical and overhead patching and overlay applications.
◆ Use to improve the bond strength of all portland cement based mortar and concrete.

ADVANTAGES
◆ Meets ASTM C1059-85 bond strength requirement for a Type II latex.
◆ Increases the physical strength properties and bond strength of all portland cement based mortar and concrete.
◆ Minimizes shrinkage and increases the durability and service life of delamination and spall repair mortars.
◆ Reduces surface crazing cracks.
◆ Increases resistance to freeze/thaw deterioration.
◆ Improves impact resistance.
◆ Will not re-emulsify.
◆ Increases chemical resistance to mineral and organic acids.

◆ Non-yellowing.
◆ Ready to use.
◆ Non-flammable, non-toxic and DOT classified as non-hazardous.
◆ Green Engineered™ – better for health and the environment.

PRECAUTIONS
◆ Do not use as an admixture in formed concrete applications.
◆ Do not use if the ambient air or concrete temperatures are below 40° F (5° C).
◆ High addition rates in mortar and concrete may retard set and delay development of physical properties.
◆ Do not use with any other air entraining or water reducing admixtures.
◆ Do not use in applications during extreme weather conditions (high temperatures and/or wind) without suitable protection.
◆ Protect from freezing. If allowed to freeze, product packaging may rupture and the emulsion stability of this product may be affected, making it difficult to keep product mixed during application. Product which is suspected of freezing should not be used.
◆ Verify that product is within the “USE BY” date stated on product packaging. Do not use expired product. The use of expired product may result in poor product performance or failure.

USE INSTRUCTIONS
◆ Request current (verify) product literature, labels and safety data sheets from manufacturer in writing and read thoroughly before product use.
◆ Site environmental conditions, substrate conditions, and construction can have a major affect on product selection, application methods, procedures and rates, appearance and performance. Product literature provides general information applicable to some conditions. However, an adequate site test application by the purchaser or installer in advance of field scale use is mandatory (irrespective of any other verbal or written representations) to verify product and quantities purchased can be satisfactorily applied and will achieve desired appearance and
performance under intended use conditions.

SURFACE PREPARATION

- Mechanically prepare the surface using a scabbling, scarifier, bush hammer, shot blaster or chipping hammer to achieve a minimum 1/8 inch (3 mm) surface profile. Sandblasting or acid etching is not acceptable. Remove all loose, deteriorated and unsound concrete.
- Remove all surface contamination, such as oil, grease, dirt, dust, efflorescence, mold, mildew, form release agent, tilt-up bondbreaker or curing compound residue. Vacuum or blow off areas to be covered using oil-free air.
- Pre-wet surfaces to be covered with water and keep wet for a minimum of 4 hours prior to application. Remove all standing water immediately prior to application of ACRYL-BINDER slurry, mortar or concrete.
- Mix ACRYL-BINDER prior to use.

AS AN ADMIXTURE

- Replace all or part of the mixing water with ACRYL-BINDER in portland cement based patching and overlay mix designs. Typical mix designs consist of 2-5 gallons (8-19 L) of ACRYL-BINDER per 94 lb (43 kg) sack of cement.
- Mix small quantities with a low-speed, mechanical type mixer for approximately 2 minutes or until a lump-free consistency is achieved. Mix larger quantities in a paddle-type mortar mixer.
- Slowly add the appropriate amount of ACRYL-BINDER to the dry cement mix. Add additional ACRYL-BINDER or water to achieve the desired consistency. Avoid the incorporation of excess air into the mix.
- Promptly place concrete mixture while prime coat is still wet and finish with a wood float, rubber float or magnesium trowel. A broom finish can be applied to achieve a rougher final finish.
- Do not add additional water to aid in finishing. If crusting occurs, use Nox-Crete’s MONOFILM evaporation reducer and finishing aid.
- Wet cure for 24 hours using burlap and polyethylene. After 24 hours, allow surface to air dry for the remaining curing period.

AS A BONDING AGENT

- Mix undiluted ACRYL-BINDER with portland cement to form a lump-free bonding slurry using a low-speed mechanical type mixer. Recommended mix ratio is 1 part ACRYL-BINDER to 1 - 1 1/2 parts by volume portland cement.
- Scrub the slurry into the prepared concrete substrate with a broom just prior to placement of the patching or overlay material. Do not allow slurry to dry before placement of concrete. If drying occurs, it must be removed by high pressure power wash or sandblasting. Recoat with fresh bonding slurry.
- Apply bonding slurry at the rate of 50-100 sf/gal. (1.2-2.5 sm/L). Brush out all puddles. Do not over apply.

SUGGESTED MIX DESIGNS (BY VOLUME)

<table>
<thead>
<tr>
<th>Mix Type</th>
<th>Portland Cement</th>
<th>Sand</th>
<th>Gravel</th>
<th>ACRYL-BINDER</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonding Slurry</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1 - 1 1/2</td>
<td>0</td>
</tr>
<tr>
<td>Patching Mortar</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>1/4 - 1/2</td>
<td>As Needed</td>
</tr>
<tr>
<td>Topping/Overlay</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1/4 - 1/2</td>
<td>As Needed</td>
</tr>
</tbody>
</table>

TECHNICAL DATA

- Color: Milky White
- Clarity: Opaque
- Bulk Density: 9.1 lbs./gal. (1090 g/L)
- Odor: Pleasant
- Freeze Point: 32° F (0° C)
- VOC: 0 g/L

Suggested Mix Designs (By Volume)

- Mix ACRYL-BINDER prior to use.

PACKAGING

Product is packaged in plastic 1 gal (3.8 L) jugs and 5 gal (19 L) pails.

SHELF LIFE

Shelf life is one year. Use before the “USE BY” date stated on product packaging.

HANDLING/STORAGE

Store in a dry location within a temperature range between 40° F (4° C) and 100° F (38° C).

AVAILABILITY & TECHNICAL SERVICES

In addition to corporate offices in Omaha, Nebraska, NOX-CRETE INC. maintains regional offices and distribution centers in principal markets throughout the world. For source or technical information, call 800-669-2738 or 402-341-2080.

LIMITED WARRANTY

NOTICE-READ CAREFULLY

CONDITIONS OF SALE

NOX-CRETE offers this product for sale subject to, and Buyer and all users are deemed to have accepted, the following conditions of sale and limited warranty which may only be varied by written agreement of a duly authorized corporate officer of NOX-CRETE. No other representative of or for NOX-CRETE is authorized to grant any warranty or to waive limitation of liability set forth below.

WARRANTY LIMITATION

NOX-CRETE warrants this product to be free of manufacturing defects. If the product when purchased was defective and was within use period indicated on container or carton, when used, NOX-CRETE will replace the defective product with new product without charge to the purchaser.

NOX-CRETE makes NO OTHER WARRANTY, either express or implied, concerning this product. There is NO WARRANTY OF MERCHANTABILITY. In no case shall NOX-CRETE be liable for special, indirect or consequential damages resulting from the use or handling of the product and no claim of any kind shall be greater in amount than the purchase price of the product in respect of which damages are claimed.

INHERENT RISKS

NOX-CRETE MAKES NO WARRANTY WITH RESPECT TO THE PERFORMANCE OF THE PRODUCT AFTER IT IS APPLIED BY THE PURCHASER, AND PURCHASER ASSUMES ALL RISKS ASSOCIATED WITH THE USE OR APPLICATION OF THE PRODUCT.