

GUIDE SPECIFICATION FOR ACRY-LOK: ACRYLIC POLYMER, BOND ENHANCING ADMIXTURE

SECTION 03 05 00

COMMON WORK RESULTS FOR CONCRETE

Specifier Notes: This guide specification is written according to the Construction Specifications Institute (CSI) Format. The section must be carefully reviewed and edited by the Architect or Engineer to meet the requirements of the project. Coordinate this section with other specification sections and the drawings.

Specifier Notes: ACRY-LOK is a high solids, acrylic polymer latex bonding agent and admixture. This milky white liquid is non-yellowing in Portland cement mortars and concrete. When used as an admixture, ACRY-LOK provides increased abrasion and crack resistance, flexural strength, and freeze/thaw tolerance. Permeability is reduced, allowing more protection from chloride intrusion. As a bonding agent, ACRY-LOK enhances the bond between existing concrete and placement of the fresh repair. It will not re-emulsify. Since ACRY-LOK will not re-emulsify, concrete repairs/mortars fortified with ACRY-LOK are ideal for interior, exterior and moisture-related applications. Typical areas that would benefit from properties of this product include toppings, mortars, grouts, vertical, horizontal and overhead patching. For enhanced bonding, use ACRY-LOK as an additive in bond coats. Only use ACRY-LOK neat for bonding repairs or very small bonding applications.

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Surface preparation.
- B. Application of acrylic polymer latex bonding agent.

1.02 RELATED SECTIONS

Specifier Notes: Edit the list of related sections as required for the project. List other sections dealing with work directly related to this section.

- A. Section 03 01 30.61 – Resurfacing of Cast-in-Place Concrete.
- B. Section 03 01 30.71 – Rehabilitation of Cast-in-Place Concrete.

1.03 REFERENCES

- A. ASTM C1059 - Standard Specification for Latex Agents for Bonding Fresh To Hardened Concrete.

1.04 SUBMITTALS

- A. Comply with Section 01330 - Submittal Procedures.
- B. Submit manufacturer's product data and application instructions.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Store materials in a clean dry area in accordance with manufacturer's instructions.
- C. Keep product from freezing.
- D. Avoid direct contact with this product as it may cause mild to moderate irritation of the eyes and/or skin.
- E. Protect materials during handling and application to prevent damage or contamination.
- F. Avoid the use of solvent base curing compounds.

1.06 ENVIRONMENTAL REQUIREMENTS

- A. Do not apply product when air, surface, or material temperatures are expected to fall below 40°F (4°C) within 4 hours of expected application.

PART 2 PRODUCTS

2.01 MANUFACTURER

- A. W.R. Meadows, Inc., PO Box 338, Hampshire, Illinois 60140-0338. (800) 342-5976. (847) 683-4500. Fax (847) 683-4544. Web Site www.wrmeadows.com.

2.02 MATERIALS

- A. Performance Based Specification: Concrete bonding agent shall be a high solids, acrylic polymer latex bonding agent and admixture that is non re-emulsifiable.
- B. Proprietary Based Specification: ACRY-LOK Bonding Agent by W.R. Meadows.

2.03 ACCESSORIES

- A. Concrete Curing Compound: SEALTIGHT 1100 CURING COMPOUND, 1220 WHITE PIGMENTED CURING COMPOUND or VOCOMP 20 CURING AND SEALING COMPOUND.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine surfaces to receive bonding agent. Notify Architect if surfaces are not acceptable. Do not begin surface preparation or application until unacceptable conditions have been corrected.

3.02 SURFACE PREPARATION

- A. Protect adjacent surfaces not designated to receive bonding agent.
- B. Mechanically abrade existing substrate to remove all unsound concrete ensuring excessive force is not used.
- C. Ensure substrate is structurally sound and free of grease, oil, dirt or any other contaminants that can adversely affect the bond.

- D. Ensure prepared surface is dust-free and has a sufficient profile to ensure adequate mechanical lock.
- E. Ensure substrate must be saturated surface dry (SSD) and free of standing water.

3.03 APPLICATION

Specifier Notes: Mix designs vary with specific job requirements. Proportioning of sand, cement and ACRY-LOK (Diluted or neat) ratios achieve different physical properties.

- A. As an admixture:
 - 1. Blend one part cement to three parts sand then add enough bonding agent until desired consistency is achieved.
 - 2. Do not over-mix.
 - 3. Place modified mortar/repair material and finish appropriately, careful not to overwork the material.
 - 4. Immediately cure work zone with undiluted bonding agent or one of several water-base curing compounds.
- B. As a bond coat:
 - 1. Mix one-part cement to two parts sand, then add enough undiluted bonding agent to make a slurry consistency.
 - 2. Work slurry into the repair area or concrete substrate with a stiff masonry brush, coating the entire area, paying special attention to the corners, sides and any exposed rebar.
 - 3. Place concrete or mortar material prior to bond coat becoming tack-free.
- C. As a bonding agent:
 - 1. Apply bonding agent undiluted by brush, roller or garden type sprayer on to prepared surface.
 - 2. Place concrete or mortar before applied bonding agent surface dries.
 - 3. Use bonding agent neat only on very small applications.

END OF SECTION