

GUIDE SPECIFICATION FOR INTRALOK®: BONDING AGENT AND INTEGRAL MIX/ADMIXTURE 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: INTRALOK bonding agent is a high solids content, water dispersion of bonding polymers compounded specifically for modifying Portland cement compositions. It is a milky white, non-yellowing liquid ready for use as an interface or intramix bonding agent. When properly mixed and applied, INTRALOK forms a bond between new-to-old concrete that is typically stronger than the concrete.

Cement mortars modified with INTRALOK are hard, tough and durable. It offers superior tensile, flexural, and impact strengths. Also, mortars and concrete modified with INTRALOK typically show greater adhesion. INTRALOK-modified concrete is unaffected by ultraviolet light and will not yellow. INTRALOK's most common uses are for patching and resurfacing, spray and fill coats, repairing precast building panels and beams, industrial flooring, highway and bridge deck repairs.

INTRALOK is ideal for interior or exterior bonding, topping, leveling, patching and dressing of concrete and masonry. As a bonding grout, it improves the adhesion of pneumatically hand-applied concrete or mortar. INTRALOK-modified mortars provide excellent adhesion to a variety of surfaces, including concrete and masonry. The result is a more attractive, durable, uniform and weatherproof concrete finish which costs far less than polishing or rubbing.

INTRALOK is also ideal for use as an interface or intramix bonding agent in bonding slurries, topping mixtures, finishing and mortar mixes.

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 01 33 00 - 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-based 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 four 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 conforms to the ASTM C1059 Type I standard.
- B. Proprietary-Based Specification: INTRALOK Bonding Agent by W. R. MEADOWS.

2.03 ACCESSORIES

- A. Concrete Curing Compound: 1100-CLEAR 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 INTRALOK ratios achieve different physical properties. Select A, B, C, or D based on project requirements.

- A. As a bonding slurry:
 - 1. Blend 2 ½ parts cement, 2 ½ parts sand, and one part bonding agent.
 - 2. Add water until desired thick, creamy consistency is achieved.
 - 3. Do not over-mix.
 - 4. Apply with stiff bristle brush ensuring that bonding slurry is worked into existing concrete pores.
 - 5. Apply while bonding slurry is still soft and plastic.
 - 6. Place concrete or mortar material prior to bond coat becoming tack-free.
 - 7. Immediately cure work zone with a curing compound.
- B. As a topping/shallow patching mix:
 - 1. Mix five parts cement, 15 parts sand, one part bonding agent.
 - 2. Add water until desired trowelable consistency is achieved.
 - 3. Apply topping mix while bonding slurry is still soft and plastic.
- C. As a mortar mix:
 - 1. Mix five parts cement, 15 parts sand, one part bonding agent.
 - 2. Add water until desired consistency is achieved.
 - 3. Apply mortar mix while bonding slurry is still soft and plastic.
- D. As a finish mix for non-traffic surfaces:
 - 1. Mix 10 parts cement, 10 parts fine sand, one part bonding agent.
 - 2. Add water until desired stiff, brushable consistency is achieved.
 - 3. Apply while bonding slurry is still soft and plastic.

END OF SECTION