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(Supersedes August 2009)

## INTRALOK®

### Bonding Agent and Integral Mix/Admixture

#### DESCRIPTION

INTRALOK bonding agent is a water-based emulsion admixture suitable for modifying Portland cement compositions. It is also designed for use as a bonding agent between fresh and hardened concrete. It is a milky white, non-yellowing liquid ready for use and requires no onsite dilution. 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. Concrete modified with INTRALOK is unaffected by ultraviolet light and will not yellow.

#### USES

Most common uses for INTRALOK are patching and resurfacing, spray and fill coats, and repairing precast building panels and interior industrial slabs. INTRALOK is ideal for topping, leveling, patching, and dressing of concrete and masonry. As a bonding agent, it improves the adhesion of concrete or mortars. Mortars modified with INTRALOK provide excellent adhesion to a variety of surfaces, including concrete and masonry. The result is a more attractive, durable, uniform concrete finish, which costs far less than polishing or rubbing. INTRALOK is also ideal for use as an interface or integral bonding agent in bonding slurries, topping mixtures, finishing, and mortar mixes.

#### FEATURES/BENEFITS

- Forms an excellent bond to concrete.
- Offers superior flexural, adhesive, and impact strengths plus excellent abrasion resistance.
- Provides a hard, durable finish at far less cost than polishing or rubbing.
- Will not after-yellow.
- Will not stain or discolor concrete.
- Ready to use ... requires no additional mixing.
- Reduces permeability.
- Highly stable at elevated temperatures.

#### PACKAGING

1 Gallon (3.79 L) Units (4 per carton)  
5 Gallon (18.93 L) Pails  
55 Gallon (208.20 L) Drums

#### COVERAGE

As a bond agent, approximately 200 ft.<sup>2</sup>/gal. (4.91 m<sup>2</sup>/L) undiluted. As an integral admixture, please see below mix designs

#### SHELF LIFE

When stored on pallets in a dry, cool area, shelf life is nine months.

#### SPECIFICATIONS/STANDARDS

ASTM C 1059, Type 1 (Re-emulsifiable)

#### FOR BEST PERFORMANCE

Do not apply below 45° F (7.2° C), above 90° F (32° C), or when rain is imminent. Do not wet cure, as this will cause lower strengths. Realize as the product, air, substrate, and mixing liquid temperature decreases, the strength development of the cementitious mix will also decrease. Exceeding liquid requirements shall result in reduced physical properties. Realize that set time will decrease as the product, air, substrate, and mixing liquid temperature increases and will be increased as the temperature decreases. Failure to follow industry standard practices, such as ACI or ICRI standards, will result in decreased material performance. Specifier and user shall determine suitability of product for specific applications and assume all responsibilities. Proper application is the responsibility of the user. Field visits by W. R. MEADOWS personnel are for the purpose of making technical recommendations only, and are not to supervise or provide quality control on the jobsite.

#### APPLICATION

Prepare concrete substrate in accordance with ICRI technical guideline #310.2-1997: Specifying Concrete Surface Preparation for Sealers, Coatings, and Polymer Overlays. Mechanically roughen or high pressure water-jet the existing concrete substrate to a minimum concrete surface profile (CSP) of CSP-4 or higher, depending on substrate condition. Remove all unsound concrete and provide a profiled, porous surface. The substrate must be structurally sound, dust-free, and free of grease, oil, dirt, curing compounds, release agents, or any other surface or penetrated contaminants that will adversely affect the bond. Sanding, wire brushing, or grinding are not approved surface preparation methods. Substrate must be saturated surface dry (SSD) and free of standing water. INTRALOK must be thoroughly worked and scrubbed onto the prepared concrete surface in order to realize maximum bonding efficiency. The cementitious mix should be applied while INTRALOK is still tacky.

**Mixing ...** Specific mixing proportions for these various INTRALOK mixes are listed on the container. All precautions, mixing, and application information and directions furnished on container labels should be read and followed. For normal mixing, dry blend the Portland cement and sand. Mix INTRALOK and water together, add the cement-sand mix, and then mechanically blend

**CONTINUED ON THE REVERSE SIDE...**

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the complete mix thoroughly. The quantity of water should be determined by trial mix, where only 50% of the water is first added to INTRALOK before adding to the sand-cement mix. After thorough premixing, add increments of additional water until the desired consistency is obtained. Avoid air entrapment. Approximate work life is 30-40 minutes at 70° F (21° C).

## Application Mixes by Volume

### 1. Bonding Slurry:

1 part INTRALOK  
2.5 parts Portland cement  
2.5 parts fine sand (ASTM C 144)  
Water: Enough for a thick, creamy consistency (Approximately 1 part).

One-gallon unit of INTRALOK used to mix a bonding slurry will yield approximately 0.47 ft.<sup>3</sup> (0.013 m<sup>3</sup>), enough to cover an area of 90.24 ft.<sup>2</sup> (8.45 m<sup>2</sup>) at 1/16" (1.59 mm) thickness or 45 ft.<sup>2</sup> (4.18 m<sup>2</sup>) at 1/8" (3.18 mm) thickness. Apply with a stiff bristle brush; be sure to work bonding slurry into existing concrete pores.

### 2. Topping and Shallow Patching Mix:

1-part INTRALOK  
5 parts Portland cement  
15 parts fine sand (ASTM C 404, Size #2)  
Water: Enough for trowelable consistency (approximately two parts).  
A representative test area should always be applied if INTRALOK is to be used with a pigment to ensure proper color, shading, and resistance to efflorescence.

### 3. Mortar Mix:

1-part INTRALOK  
5 parts Portland cement  
15 parts fine sand (ASTM C 404, Size #2)  
Water: Enough for desired consistency (approximately 1.5 - 2 parts).  
One gallon of INTRALOK used in a topping or mortar mix will yield approximately 1.8 ft.<sup>3</sup> (.05 m<sup>3</sup>) to cover an area of 86 ft.<sup>2</sup> (7.99 m<sup>2</sup>) at 1/4" (6.35 mm) thickness. Topping or mortar mix should be applied while the INTRALOK slurry is still soft and plastic.

### 4. Finish Mix (For Non-Traffic Surfaces):

1-part INTRALOK  
10 parts Portland cement  
10 parts fine sand (ASTM C 404, Size #2)

Water: Enough for stiff, brushable consistency (approximately four parts).

### 5. Concrete Admixture:

Add 2.5 gallons (9.45 L) of INTRALOK per cubic yard of redi-mix or onsite batched concrete. W. R. MEADOWS recommends removing 1.5 gallons (5.67 L) of water per cubic yard of redi-mix to compensate for the water portion of INTRALOK. Do not wet cure concrete modified with INTRALOK.

**Curing** ... Cure the modified cement mix or concrete immediately following application using a suitable water-based curing compound from W. R. MEADOWS, or in accordance with ACI 308. W. R. MEADOWS recommends 1100-CLEAR or 2200-WHITE resin-based curing compounds. Do not use solvent-based curing compounds. Do not wet cure.

### PRECAUTIONS

Keep from freezing. Clean tools with water immediately. Follow all cautions on container labels. Refer to Material Safety Data Sheet for complete health and safety information.

### LEED INFORMATION

May help contribute to LEED credits:

- EQ Credit 4.1: Low-Emitting Materials - Adhesives and Sealants
- MR Credit 2: Construction Waste Management
- MR Credit 5: Regional Materials

**For most current data sheet, further LEED information, and MSDS, visit [www.wrmeadows.com](http://www.wrmeadows.com).**



#### LIMITED WARRANTY

W. R. MEADOWS, INC. warrants at the time and place we make shipment, our material will be of good quality and will conform with our published specifications in force on the date of acceptance of the order. Read complete warranty. Copy furnished upon request.

#### Disclaimer

The information contained herein is included for illustrative purposes only, and to the best of our knowledge, is accurate and reliable. W. R. MEADOWS, INC. cannot however under any circumstances make any guarantee of results or assume any obligation or liability in connection with the use of this information. As W. R. MEADOWS, INC. has no control

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