#### TECHNICAL DATA

# STRONG BOND

Acrylic Bonder
Acrylic bonding agent and admixture



# **DESCRIPTION**

An acrylic admixture and bonding agent designed to improve the adhesion and durability of concrete, masonry, stucco, terrazzo and Portland cement-sand mixes to horizontal and vertical concrete and other surfaces. May contribute to LEED credits.

#### FEATURES / BENEFITS

- Improves the flexural strength, bond strength and impact resistance of mortars and concrete.
- Concrete and mortar fortified with STRONG BOND exhibit excellent resistance to cycles of freezing and thawing and to penetration of chloride ions.
- Minimizes cracks in concrete, stucco and plaster when used as an admixture
- Eliminates the need for separate air entraining agents
- VOC compliant. VOC content: <5g/l</li>

#### SPECIFICATIONS/COMPLIANCES

Meets specifications:

- ASTM C 1042 Bond Strength of Latex Systems Used With Concrete - Type 2
- ASTM C 1059 Latex Agents for Bonding Fresh to Hardened Concrete - Type II

#### **APPLICATION**

**Surface Preparation:** Mechanically abrade existing substrate to remove all unsound concrete. Substrate must be structurally sound and free of grease, oil, dirt or any other contaminants that may adversely affect the bond. Prepared surface must be dust-free and must have sufficient profile to ensure adequate mechanical lock. **Substrate must be saturated, surface dry (SSD) and free of standing water.** 

**Mixing and Application Guidelines:** Mix designs vary with specific job requirements. Proportioning of sand, cement and STRONG BOND (diluted or neat) ratios achieve different physical properties. To avoid trapping air, do not over-mix. Place modified mortar/repair material and finish appropriately, taking care not to overwork the material. Once the finishing process is completed, undiluted STRONG BOND can be used as a cure. The application instructions highlight typical conditions. (When in doubt, always apply a test patch).

**Admixture:** When used as an admixture, STRONG BOND can be diluted up to 3 parts with potable water to 1 part STRONG BOND. For increased durability and performance, dilution rates of 2 to 1 and 1 to 1 can be used. Typically, blend one part cement to three parts sand then add enough STRONG BOND until a desired consistency is achieved.

**Bond Coat:** Mix one part cement to two parts sand, then add enough STRONG BOND diluted 1 to 1 with water to make a slurry consistency. Work slurry into 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. Place concrete or mortar material before the STRONG BOND bond coat becomes tack-free.

#### **APPLICATION** (con't)

**Bonding Agent (Neat):** Apply undiluted STRONG BOND to the prepared surface by brush, roller or garden type sprayer. If spray applied, brush or broom into the substrate. Place concrete or mortar before applied surface dries.

#### **APPLICATION RATE**

Application Rate (neat) ranges from 75 to 125 sq-ft per gal depending on the roughness/porosity of the concrete substrate.

#### **PACKAGING**

55 gallon drums (208.2 L) 5 gallon pails (18.9L)

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1 gallon jugs (3.8L) (4 to a case)

#### **TYPICAL TEST DATA**

Compressive Strength of STRONG BOND modified mortar (ASTM C-109)	
3 day	3150 psi
7 days	4250 psi
28 days	5500 psi
Bond Strength (ASTM C 1042)	
28 days	2250 psi
Freeze-Thaw (ASTM C-672)	
Scaling Resistance	25 cycles=0% loss
Flexural Strength (ASTM C-348)	
28 days	1285 psi

Note: The data shown is typical for controlled laboratory conditions. Reasonable variation from these results can be expected due to variation in type and quantity of cement, and sand gradation of the mortar mix. When testing the field mixed material, other factors such as variations in mixing, water content, temperature and curing conditions should be considered.

### SHELF LIFE / STORAGE

Shelf life of STRONG BOND in the original tightly closed container is 1 year from the date of manufacture. Do not allow StrongBond to freeze.



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#### LIMITATIONS/PRECAUTIONS

Do not allow to freeze

Do not apply over frozen surfaces, water soluble paints, rust or peeling paints.

Do not apply where excessive hydrostatic pressure is present. STRONG BOND is not recommended as a waterproofing agent.

Until topping is placed, protect STRONG BOND film or bond coat from dirt and other job site contaminants.

Avoid hazards by following all precautions found in the Safety Data Sheets (SDS), product labels, and technical literature.

# **TECHNICAL SERVICES**

For assistance, contact technical services at: 866-791-8700 816-968-5600 www.specchemllc.com

#### **WARRANTY**

#### NOTICE-READ CAREFULLY CONDITIONS OF SALE

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#### INHERENT RISK

Purchaser assumes all risk associated with the use or application of the product.



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