TECHNICAL DATA SHEET

STRONG BOND

Acrylic Bonding Agent and Admixture

DESCRIPTION

Strong Bond is 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.

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 freeze-thaw cycles and to chloride ion penetration
- Minimizes cracks in concrete, stucco and plaster when used as an admixture
- Eliminates the need for separate air-entraining agents
- VOC compliant; VOC content < 5 g/L

COMPLIANCE/STANDARDS

- ASTM C1042, Bond Strength of Latex Systems Used with Concrete – Type 2
- ASTM C1059, Latex Agents for Bonding Fresh to Hardened Concrete – Type II

APPLICATION

Surface Preparation: Mechanically abrade the existing substrate to remove all unsound concrete. The substrate must be structurally sound and free of grease, oil, dirt or any other contaminants that may adversely affect the bond. The prepared surface must be dust-free, have sufficient profile to ensure adequate mechanical lock, and be saturated surface-dry (SSD) with no standing water.

Mixing and Application Guidelines: Mix designs vary with specific job requirements; different proportions of sand, cement and Strong Bond (diluted or neat) achieve different physical properties. To avoid trapping air, do not over-mix. Place the modified mortar/repair material and finish appropriately, taking care not to overwork it. Once finishing is complete, undiluted Strong Bond can be used as a cure.

The application instructions highlight typical conditions. When in doubt, always apply a test patch.

Admixture: Strong Bond can be diluted up to 3 parts potable water to 1 part Strong Bond; for increased durability and performance, use 2:1 or 1:1 dilutions. Typically, blend 1 part cement to 3 parts sand, then add enough Strong Bond to reach the desired consistency.

Bond Coat: Mix 1 part cement to 2 parts sand, then add enough Strong Bond diluted 1:1 with water to make a slurry. Work the slurry into the repair area or concrete substrate with a stiff masonry brush, coating the entire area and paying special attention to corners, sides and any exposed rebar. Place concrete or mortar before the bond coat becomes tack-free.

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 immediately, before the applied surface dries.

COVERAGE

Neat application rate ranges from 75 to 125 sq ft/gal (1.8–3.1 m^2/L), depending on the roughness/porosity of the concrete substrate.

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TECHNICAL DATA INFORMATION

Compressive Strength, Strong Bond-Modified Mortar (ASTM C109)

3 days.....3,150 psi (21.7 MPa)

7 days.....4,250 psi (29.3 MPa)

28 days.....5,500 psi (37.9 MPa)

Bond Strength (ASTM C1042)

28 days.....2,250 psi (15.5 MPa)

Flexural Strength (ASTM C348)

28 days..... 1,285 psi (8.9 MPa)

Scaling Resistance (ASTM C672)

25 cycles.....0% loss

Data shown are typical for controlled laboratory conditions. Reasonable variation can be expected due to the type and quantity of cement and the sand gradation of the mortar mix. When testing field-mixed material, other factors such as variations in mixing, water content, temperature and curing conditions should be considered.

PACKAGING

55-gallon drums (208.2 L)

5-gallon pails (18.9 L)

1-gallon jugs, 4 per case (3.8 L)

SHELF LIFE

Shelf life of Strong Bond in the original, tightly closed container is one year from the date of manufacture.

Do not allow Strong Bond to freeze.

LIMITATIONS

- Do not allow to freeze.
- Do not apply over frozen surfaces, water-soluble paints, rust or peeling paint.
- Strong Bond is not recommended as a waterproofing agent.
- Until the topping is placed, protect the Strong Bond film or bond coat from dirt and other jobsite contaminants.

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

TECHNICAL SERVICES

For assistance, contact Technical Services at 866-791-8700 or 816-968-5600.

WARRANTY

NOTICE – READ CAREFULLY

CONDITIONS OF SALE

SpecChem offers this product for sale subject to and limited by the warranty which may only be varied by written agreement of a duly authorized corporate officer of SpecChem. No other representative of or for SpecChem is authorized to grant any warranty or to waive limitation of liability set forth below.

WARRANTY LIMITATION

SpecChem 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, SpecChem will replace the defective product with new product without charge to the purchaser. SpecChem makes no other warranty, either expressed or implied, concerning this product. There is no warranty of merchantability. NO CLAIM OF ANY KIND SHALL BE GREATER THAN THE PURCHASE PRICE OF THE PRODUCT IN RESPECT OF WHICH DAMAGES ARE CLAIMED.

INHERENT RISK

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

Revised 09/30/26