

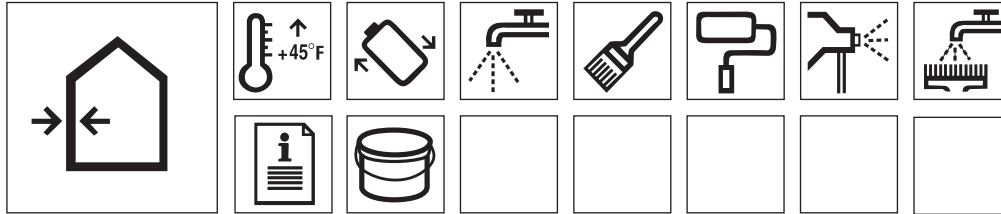
Sto Bonding Agent and Admixture

CR245

Division 3

bonding agent
latex additive
stable, not re-emulsifiable

acrylic-based, using proprietary StoCryl technology



Sto Bonding Agent and Admixture is an acrylic latex for bonding new concrete, mortar or stucco to hardened concrete. It can also be used as an admixture in fresh concrete, mortar and stucco to increase adhesion and durability.

Technical Data

REPORT	TEST METHOD	CRITERIA	TEST RESULTS	
			Sand/ Cement	Bonding/ Admixture
Shear Bond Strength (psi)	ASTM C-39	28 days	50	900
Compressive Strength (psi)	ASTM C-109	1 day		1100
		3 days		2500
		7 days		3000
		28 days	2200	3100
Tensile Strength (psi)	ASTM C-190	1 day		150
		3 days		300
		7 days		350
		28 days	300	600
Flexural Strength (psi)	ASTM C-78	1 day		300
		3 days		400
		7 days		600
		28 days	400	700

*Typical values for material cured at 73° F (23° C) and 50% R.H.
Note: To convert psi to megapascal (MPa) multiply by 0.0069.

Coverage

Bonding Agent: 200-300 ft² per gal, depending on substrate's porosity (19-28 m² per 3.8 L).

Usage Ratio

Admixture: Combine 1 part by volume of admixture with 2 parts by volume of water to achieve the appropriate total liquid volume.

Packaging

1 gal plastic jug,
4 jugs per case (3.8 L)
5 gal pail (19 L)

Shelf Life

12 months in original, unopened, properly stored container.

Storage

Store in a dry area, between 50° F (10° C) and 85° F (29° C). Protect from direct sunlight, extreme heat [90° F (32° C)] and freezing.

Features	Benefits
1 Bonding agent	Improves adhesion
2 Admixture	Increases durability, improves freeze-thaw resistance
3 High-solids content	Increases performance; ensures film formation
4 Not re-emulsifiable	Stable in wet environments; does not lose strength
5 Cleans up with water	Tools can be reused; no hazardous solvent needed; environmentally friendly

Surface Preparation

BONDING AGENT

Remove loose and deteriorated materials by sand-blasting, water-blasting or mechanical wire brushing. Make sure surfaces are sound, clean, and free of all bond-inhibiting materials including oil, dust, dirt, laitance and standing water.

ADMIXTURE

Remove loose and deteriorated materials by sand-blasting, water-blasting or mechanical wire brushing. Make sure surfaces are sound, clean, and free of all bond-inhibiting materials including oil, dust, dirt, laitance and standing water.

Mixing

BONDING AGENT

Use Sto Bonding Agent and Admixture at a preconditioned temperature of $70 \pm 5^\circ \text{F}$ ($21 \pm 3^\circ \text{C}$). Shake well before using.

ADMIXTURE

Use Sto Bonding Agent and Admixture at a preconditioned temperature of $70 \pm 5^\circ \text{F}$ ($21 \pm 3^\circ \text{C}$). Shake well before using.

Mix 1 part Sto Bonding Agent and Admixture with 2 parts clean water by volume to achieve appropriate total volume liquid for stucco, mortar or concrete.

Application

Apply only to sound and clean, dry, properly prepared, frost-free surfaces.

BONDING AGENT

Apply uniformly by brush, spray or roller, allowing material to penetrate the surface. Avoid applying in excess, causing the product to run down the wall or puddle. Extremely porous substrates may require a second coat. Apply fresh concrete, mortar or stucco while the bonding agent is still WET.

ADMIXTURE

Dampen the area to be repaired so that the pores of the concrete are filled with water. Remove any ponding or glistening water from the surface (saturated surface dry/SSD).

Work a scrub coat of the mixed material into the substrate to ensure intimate contact and establish bond. Apply the final sand and cement mixture while the scrub coat is still WET. Consolidate it and trowel to the desired finish. Applications made during temperatures below 50°F (29°C) or above 85°F (10°C) should follow the ACI application guidelines.

Limitations

- Apply only when surface and ambient temperatures are $45\text{--}50^\circ \text{F}$ ($7\text{--}10^\circ \text{C}$) and rising. Consult Technical Services when applications will be made during temperatures below 45°F (7°C) or above 90°F (32°C).

How It's Used

Sto Bonding Agent and Admixture provides an easy way to improve the adhesion of cement-based materials to concrete, stucco and masonry block. Use it as an additive in cement-based materials to improve their durability. Its convenient packaging is ready to use on the job-site. Tools and equipment clean up with water.

Health And Safety

Health Precautions

Product is water-based. As with any chemical construction product, exercise care when handling.

Safety Precautions

Use adequate ventilation. Use of a NIOSH/MSA-approved dust respirator, safety goggles and protective gloves are recommended.

First Aid

SKIN CONTACT: Wash hands thoroughly with soap and water

EYE CONTACT: Flush immediately with water for 10-15 minutes and contact a physician.

RESPIRATORY PROBLEMS: Remove affected person to fresh air immediately and contact a physician.

HYGIENE: Wash hands immediately after use. Wash clothing before reuse.

Spills

Collect with suitable absorbent material such as cotton rags.

Disposal

Dispose of in accordance with local, state or federal regulations.

Warning

KEEP CONTAINER CLOSED WHEN NOT IN USE. KEEP OUT OF THE REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY. Consult the Material Safety Data Sheet for further health and safety information.

LIMITED WARRANTY

THIS PRODUCT IS SUBJECT TO A WRITTEN LIMITED WARRANTY WHICH CAN BE OBTAINED FREE OF CHARGE FROM: Sto Corp., 3800 Camp Creek Parkway, Building 1400, Suite 120, Atlanta, GA 30331; Tel: 404-346-3666; Fax: 404-346-3119

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