



FLEX-CON

ACRYLIC LATEX BONDING ADMIXTURE

DESCRIPTION

FLEX-CON is a water dispersion of an architectural grade acrylic latex specifically designed for modifying portland cement compositions. Mortar modified with FLEX-CON has improved physical strength, and superior adhesion to old concrete, masonry, brick, and many other surfaces.

PRIMARY APPLICATIONS

- Admixture for overlays, repair mortars and leveling materials
- Thin sets, terrazzo, stucco and bond coats
- Repairs utilizing spray or fill coats
- General reconstruction work
- Repairs to precast structural members
- Architectural panels, bridge decks and highway repairs

FEATURES/BENEFITS

- Improves bond strength
- Increases durability under freeze/thaw cycling
- Reduces cracking through increased mortar flexural strength
- Increases mortar wear resistance under rubber wheeled traffic
- Increases mortar tensile strength
- Repair mortar offers greater impact resistance

TECHNICAL INFORMATION

PROPERTY	RESULT
Solids Content (by weight)	24%
Unit Weight	8.4 lb/gal
Compressive Strength of FLEX-CON Modified Repair Mortar ASTM C 109, 2 in (50 mm) cubes	3 days: 3,000 psi (21 MPa) 7 days: 4,000 psi (28 MPa) 28 days: 5,000 psi (34 MPa)
Flexural Strength ASTM C 348	28 days: 1,300 psi (9 MPa)
Bond Strength ASTM C 1042	14 days: 1,300 psi (8.9 MPa)
Appearance	White Liquid

Properties determined at laboratory conditions.

PACKAGING

FLEX-CON is packaged in 55 gal (208 L) drums, 5 gal (19 L) pails and cases of 6/1 gal (3.8 L) units.

SHELF LIFE

1 year in original, unopened package

SPECIFICATIONS/COMPLIANCES

Complies with ASTM C 1059, Type II.

FLEX-CON is classified by The American Concrete Institute as a non-reemulsifiable bonding admixture.

Canadian MTQ

COVERAGE

Cement Bond Coat Coverage*	ft ² /gal (m ² /L)	Cement	Sand	Flex-Con	Repair Mortar	Cement	Sand	Flex-Con
600 to 800 (56 to 74)		94 lb (43 kg)	—	7 to 8 gal (26 to 30 L)	110 to 120 @ 1/2" (10 to 11 @ 13 mm)	94 lb (43 kg)	300 lb (136 kg)	5 to 6 gal (19 to 23 L)

* Projected coverage is an estimate only, and is highly dependent upon concrete texture.

DIRECTIONS FOR USE

Surface Preparation: If using this product as a cement bond coat, the base concrete must be a minimum of 3 days old. The concrete must be clean of all oil, dirt, debris, paint, curing/sealing compounds and unsound concrete must be removed. The surface must be prepared mechanically using a scabber, bushhammer, shotblaster or scarifier, so that the minimum surface profile is 1/8" (3 mm) and exposes the large aggregate of the concrete. NOTE: Acid etching is not acceptable. Finally, clean the concrete of all residue with a vacuum cleaner or pressure washer. Allow the concrete surface to begin drying, and do not place the cement bond coat on standing water. Bond coat should be on a concrete substrate that is saturated surface dry (SSD) to reduce moisture loss.

Bonding: For bonding traffic bearing toppings with this product, The Euclid Chemical Company strongly recommends using a bond coat rather than using this product as a primer by itself. After the surface has been prepared, prime all areas with a bond coat (see above mix design) before the topping is applied. Follow mixing and placing instructions listed below. Place the topping on the bond coat before it dries out.

Mixing: Small quantities may be mixed with a drill and "jiffy" mixer. Use a paddle type mortar mixer for large jobs. All materials should be in the proper temperature range of 40°F (5°C) to 90°F (32°C). Add the appropriate amount of FLEX-CON for the batch size and then add the dry material. Mix a minimum of 3 minutes. The mixed product should be quickly transported to the repair area and placed immediately.

Bond Coat Application: Spread the bond coat with a stiff bristle broom until the suggested coverage rate is achieved. **Topping Application:** For patching, spread with a trowel, come-a-long, or square tipped shovel to a thickness that matches the surrounding concrete. Finish by hand trowelling. On large floor areas, use screed guides in combination with a vibratory screeding to level. Compact and finish by hand or machine trowel.

Finishing: Finish the repair mortar to the desired texture. Typical texture is a broom or sponge float finish, though mortars made with FLEX-CON can be steel trowelled. Do not add additional water to the surface during the finishing operation. If additional liquid is required, use EUCOBAR finishing aid.

Curing: All cement products must be adequately cured. Proper curing procedures are important to ensure the durability and quality of the repair or overlayment. To prevent surface cracking, a moist cure should be maintained for 24 hours followed by use of a curing compound such as DIAMOND CLEAR VOX or AQUA-CURE VOX. NOTE: **Do not use a solvent-based curing compound on latex modified mortars.**

CLEAN-UP

Clean tools and equipment with water before the material hardens.

PRECAUTIONS/LIMITATIONS

- Do not use material at temperatures below 40°F (4°C).
- Do not use FLEX-CON by itself as a bonding agent. It must be mixed with cement.
- No heavy traffic until the repair has cured.
- Protect from freezing.
- Do not use in ready mix concrete.
- For thin topping mixes or large overlays, use SBR LATEX.
- For bonding floor toppings, a slurry bond coat is recommended.
- Use of this product in conjunction with air entrained cement/concrete or with other admixtures may significantly increase total entrained air content. Testing is strongly advised.
- **Do not use a solvent-based curing compound on latex modified mortars.**
- In all cases, consult the Safety Data Sheet before use.

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