



**Globally Proven
Construction Solutions**

8510 BONDING ADMIX

8510 BONDING ADMIX is a concentrated acrylic admix for use with portland cement mixes, dramatically improving their workability and physical properties. For conventional mortar beds, dry-set mortars and portland cement grouts.



FEATURES/BENEFITS

- High Strength—improves adhesion, bond and compressive strength of all portland cement mixes.
- Economical—super concentrated.
- Versatile—one product for interior and exterior installations.
- No Damp Curing—cures even in dry climates.

USES

- Crack resistant, weather resistant pool plaster.
- High strength, weather resistant concrete repair mortars.
- High strength masonry mortar.
- Fortifier for thin-set mortars to increase bond strength and flexibility.

MANUFACTURER

LATICRETE EUROPE S.R.L .
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STANDARDS/CERTIFICATIONS

Suitable Substrates

Interior and exterior use on:

- Concrete and Masonry Surfaces
- Cement Backer Board*
- Ceramic Tile And Stone
- Cement Terrazzo

* Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use.

Packaging

5.3 gal (20 L) pail

55 gal (208 L) drum

Coverage

Mixing Liquid Ratio:

1 part 8510 BONDING ADMIX to 2 parts water

Conventional Mortar Bed/Thick Bed

For conventional mortar bed/thick bed applications mix diluted 8510 BONDING ADMIX with 226 Thick Bed Mortar or site mix consisting of 1:3 blend of portland cement and Masonry sand (ASTM C144). Mix approximately 3 quarts (2.8 L) of diluted latex to one 60 lb (27 kg) bag of 226 Thick Bed Mortar; or 5 gal (19 L) of diluted latex with one 94 lb (42.6 kg) bag of portland cement and three 100 lb (45 kg.) bags of masonry sand. A 1 in (25 mm) thick mortar bed will cover 35–40 ft² (3.2–3.7 m²) per 5 gal (19 L) of diluted 8510 BONDING ADMIX.

Thin Patch Resurfacing

For thin patch resurfacing, mix diluted 8510 BONDING ADMIX with 226 Thick Bed Mortar or site mix consisting of 1:3 blend of portland cement and masonry sand (ASTM C-144). Mix approximately 3 qts (2.8 L) of diluted 8510 BONDING ADMIX to one 60 lb. (27 kg) bag of 226 Thick Bed Mortar; or 5.3 gal (20 L) of diluted 8510 BONDING ADMIX with one 94 lb (42.6 kg) bag of portland cement and three 100 lb (45 kg) bags of masonry sand. A 1/4" (6 mm) patch will cover 140–160 ft² (13–14 m²) per 5.3 gal (20 L) of diluted 8510 BONDING ADMIX.

Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for five (5) years if stored at temperatures >32°F (0°C) and <110°F (43°C).

Limitations

- Adhesives/mastics, mortars and grouts for ceramic tile, pavers, brick, and stone are not replacements for waterproofing membranes. When a waterproofing membrane is required, use a LATICRETE® Waterproofing Membrane (see Section 10 FILING SYSTEMS).
- DO NOT bond to particle board, luan, Masonite®, or hardwood surfaces.

Cautions

Consult SDS for more safety information.

- During cold weather, protect finished work from traffic until fully cured.
- May irritate eyes and skin. Avoid contact with eyes or prolonged contact with skin. In case of contact, flush thoroughly with water.
- DO NOT take internally.
- Use LATAPOXY® 300 Adhesive for installing green marble, water sensitive and resin backed tile, stone or agglomerates.
- Wait 14 days after the final grouting period before filing water features with water at 70°F (21°C).
- Use a white thin-set mortar when installing white or light-colored stone.
- Keep out of reach of children.

TECHNICAL DATA

Physical Properties for High Strength Masonry Mortar

Mortar Proportions

94 lb (42.6 kg) Type I portland cement
200 lb (90.7 kg) masonry sand (ASTM C144)
50 lb (22.7 kg) pulverized limestone, dolomite, or crushed marble dust

5.3 gal (20 l) 8510 BONDING ADMIX

Test	Test Method	Results
28 day Compressive Strength	ASTM C109	4000–4200 psi 27.5–29 MPa

* cured at 70°F (21°C) and 50%RH

Physical Properties for Pool Plaster

Mortar Proportions

94 lb (42.6 kg) Type I portland cement
200 lb (90.7 kg) masonry sand (ASTM C144)
1.6 gal (6 L) 8510 BONDING ADMIX
3.4 gal (13 L) water

Physical Properties for Concrete Repair Patch and Overlays

Mortar Proportions Thin Patch (up to 1/4 in [6 mm])

94 lb (42.6 kg) Type I portland cement
300 lb (136 kg) masonry sand (ASTM C144)
5.3 gal (20 L) 8510 BONDING ADMIX

Mortar Proportions Deeper Patch (over 1 in [25 mm])

94 lb (42.6 kg) Type I portland cement
200 lb (90.7 kg) concrete sand
300 lb (136 kg) coarse aggregate
5.3 gal (20 L) 8510 BONDING ADMIX

Mortar Proportions Overlays (up to 1/2 in [12 mm])

94 lb (42.6 kg) Type I portland cement
300 lb (136 kg) coarse aggregate
5.3 gal (20 L) 8510 BONDING ADMIX

Test	Test Method	Results
28 day Compressive Strength	ASTM C109	4200–4600 psi 29.0–31.7 MPa

From 8510 file

Renders/Plasters

One bag of 226 Thick Bed Mortar mixed with 5 quarts (4.7 L) 8510 BONDING ADMIX (diluted 2 parts water with 1 part latex). Coverage will be approximately 7 ft² (0.6 m²) per mixed bag at 1" (25 mm) thick.

7 day Compressive Strength (ASTM C109)	2500 psi (17.2 MPa)
28 day Compressive Strength (ASTM C109)	3400 psi (23.4 MPa)

Specifications subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

INSTALLATION

Preparation

All surfaces should be between 40°F (4°C) and 90°F (32°C) and structurally sound, clean and free of all dirt, oil, grease, paint, concrete sealers, or curing compounds. Rough or uneven concrete surfaces should be made smooth with latex portland cement underlayment to provide a wood float (or better) finish. Dry, dusty concrete slabs or masonry should be dampened and excess water swept off. Installation may be made on a damp surface.

Note: Latex portland cement mortars do not require a minimum cure time for cement slabs. All slabs must be plumb and true to

within 1/4" (6 mm) in 10 ft (3 m). Expansion joints shall be provided through the tile work from all construction or expansion joints in the substrate. Follow ANSI specification A108.01-3.7 "Requirements for Movement Joints: Preparations by Other Trades" or TCNA detail EJ-171 "Movement Joints—Vertical & Horizontal". Do not cover expansion joints with mortar. Stir 8510 BONDING ADMIX thoroughly before use.

As a Mortar Bed Additive

Use approximately 1 qt (1 L) of 8510 BONDING ADMIX + 1/2 gallon water to a 60 lb (27 kg) bag of 226 Thick Bed Mortar. Add 226 Thick Bed Mortar to pre-diluted 8510 BONDING ADMIX and mix slowly. Adjust mixture to produce a semi-dry consistency.

As a Site Mixed Pumped Mortar for Renders and Plaster

94 lb (42.6 kg) Type I portland cement, 300 to 400 lb (136 to 182 kg) masonry sand (ASTM C144) and 50 lb. (22.7 kg) hydrated lime or liquid plasticizer/pump aid. Confirm with manufacturer for compatibility for latex additives. For pumping site mortar, dilute 8510 BONDING ADMIX 1:1 with water and place in mixer. Then add sand, cement and plasticizer.

Adjust with additional water to provide the correct consistency for pumping mortar. Do not exceed the 1:2 dilution rate for the 8510 BONDING ADMIX to water. Approximate coverage for 450 lb (204.5 kg) of mortar will be 60 ft² (5.5 m²) at 1" (25 mm) thick. Coverage will vary according to mixing, pumping, placement and job site conditions.

As a Thin-Set Additive

Pre-dilute 1 part 8510 BONDING ADMIX to 2 parts clean potable water. Use approximately 2 gal (8 ℓ) of pre-diluted 8510 BONDING ADMIX to 50 lb (22.7 kg) bag of Thin-Set mortar. Place 8510 BONDING ADMIX in a clean plastic pail. Add a Thin-Set Mortar to pre-diluted 8510 BONDING ADMIX and mix to a smooth, trowelable consistency. Allow mortar to slake for 5–10 minutes. Adjust consistency if necessary. Remix and apply with the proper sized notched trowel.

As a Grout Additive

Pre-dilute 1 part 8510 BONDING ADMIX to 2 parts water. Use approximately 1/2 gal (2 L) of pre-diluted 8510 BONDING ADMIX to a 25 lb. (11.3 kg) bag of 1500 Sanded Grout. Add 1500 Sanded Grout to 8510 BONDING ADMIX and mix to a smooth, stiff consistency. Pre-dilute 1/4 gal. (1 L) 8510 BONDING ADMIX and 1/4 gal. (1 L) water mixed with a 25 lb.

(11.3 kg) bag of 1500 Sanded Grout.

Application

Grout

Before starting to grout remove spacers and debris in grout joints and remove dust and dirt using a wet sponge. Do not leave water standing in joints. Apply grout release or sealer if necessary. Grout installation after a minimum of 24 hours curing time at 70°F (21°C). Dampen tile surface with water. Spread with a sharp, firm rubber grout float. Work the grout paste into the joints until completely filled. Use diagonal strokes to pack the joints. Ensure that joint is filled and grout is not just sitting on top (i.e. “bridging the joint”).

Cold Weather Note: The setting of portland cement mortars and grouts are retarded by low temperatures. Protect finished work for an extended period when installing in cold weather. Do not set tile when surface temperature is below freezing or when substrate is frozen.

Hot Weather Note: The evaporation of moisture in portland cement mortars is accelerated by hot, dry conditions. Apply to dampened surfaces and protect freshly spread mortar and finished work when installing in hot temperatures.

Cleaning

Mortar—Clean tools and tile work with water while mortar is fresh.

Grout Primary Cleaning—Remove excess grout from the face of the tiles with the edge of the grout float. Hold the float at a 90° angle and pull it diagonally across the joints and tile to avoid pulling out the material.

Grout Secondary Cleaning—Remove remaining grout with a damp sponge (not wet) or a damp towel. Work diagonally to the joints. Allow to dry. When the grout joints are firm polish the surface with a coarse nylon pad or coarse cloth and minimal water.

Note: Use caution when polishing soft glazed tiles or polished stone

AVAILABILITY AND COST

Availability

LATICRETE® materials are available worldwide. For distributor information, please contact LATICRETE EUROPE S.r.l. Telephone +39 059557680. For on-line distributor information, visit www.laticrete.com

Cost

Contact a LATICRETE® closer distributor to obtain complete information and cost.

WARRANTY

The supplier warrants that the product will not deteriorate under normal conditions and use. The warranty validity of one (1) year.

Contact Technical Support for further information.

MAINTENANCE

LATICRETE® products are of high quality designed to achieve lasting installations and avoid maintenance, however performance and durability may depend on properly maintaining products, depending of the cleaning products used.

TECHNICAL SERVICES

Technical assistance

For information contact: +39 059557680

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Technical and safety literature

To obtain technical and safety literature, please visit our website at www.laticrete.com

Warning

The information and the instructions in the data sheet, although based on knowledge gained through years of applications, are indicative. LATICRETE® unable to directly control the installation conditions and modalities of application of products, do not assume any liability arising from their implementation. Those who want to use the LATICRETE® products must conduct adequate tests to determine the site specifications. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation method and site conditions.