

3701 Mortar Admix

DS-1046-1114



1. PRODUCT NAME

3701 Mortar Admix

2. MANUFACTURER

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3. PRODUCT DESCRIPTION

3701 Mortar Admix is a specially designed latex admixture for use with thin-set mortars, cement grouts, cement mortar beds, and other cement mixes.

Uses

Used in place of water, 3701 Mortar Admix improves the working and physical properties of any cement mix and provides an economical and easy way to make permanent, trouble-free installations of ceramic tile, brick and natural stone.

Advantages

- Interior and exterior installations.
- Shock, impact, chemical and frost resistant.
- Increased bond and compressive strength.
- Water resistant, suitable for submerged applications.
- Superior flexibility.
- "Extra Heavy Service" rating per TCNA performance levels (Re: ASTM C627 Robinson Floor Test).

Suitable Substrates

- Concrete
- Cement mortar beds
- Ceramic tile and stone
- Cement backer board*
- Gypsum wallboard (interior only)
- Cement plaster
- Brick masonry

- Cement terrazzo
- Concrete masonry
- * Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use.

Packaging

20 litre pail; 32 pails per pallet

Shelf Life

Factory sealed containers of 3701 Mortar Admix are guaranteed to be of first quality for five (5) year if stored at temperatures >0°C and <43°C.

Limitations

- Not for use as a thin-set adhesive additive over exterior glue plywood.
- Use LATAPOXY® 300 Adhesive for installing green marble or water sensitive stone and agglomerates and resin backed tile and stone.
- Use a white thin-set adhesive when installing white or light-coloured stone.
- Adhesives/mastics, mortars and grouts for ceramic tile, pavers, brick and stone are not replacements for waterproof membranes. When a waterproof membrane is required, use a LATICRETE Waterproof Membrane.
- Note: Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, thin brick and similar finishes. Substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed L/360 for thin bed ceramic tile/brick installations or L/480 for thin bed stone installations where L=span length.

Cautions

Consult MSDS for more safety information

- During cold weather, protect finished work from traffic until fully cured
- Wait 14 days after the final grouting before filling water features with water at 21°C
- Keep out of reach of children.

4. TECHNICAL DATA

VOC Product Information

This product has been GREENGUARD Indoor Air Quality Certified® by the GREENGUARD Environmental Institute under the GREENGUARD Standard for Low Emitting Products in finished form <2.39 grams per litre.

Performance Properties

3701 Mortar Admix mixed with 226 Thick Bed Mortar

As per ANSI A118.4

Test	Test method	Results
Water Absorption	A118.6-4.4	<5%
Compressive Strength	A118.4-6.1	33.8 - 34.5 MPa
TCA Service Rating	ASTM C-627	Extra Heavy

Working Properties at 21°C

Pot Life	1 hour
Time to Foot Traffic	12 hours
Time to Heavy Traffic	72 hours
Wet Density	2020 kg/m³

Performance Properties

3701 Mortar Admix mixed with Ultra X8 Polymer Fortified Flexible Adhesive

AS per AS4992.1&2 classified as a C2TES1

Test/Test method	Results
Initial Adhesion	>1.4 MPa
Open Time	30 minutes
Water Immersion	>1.2 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.

5. INSTALLATION

Preparation

All surfaces should be between 4°C and 32°C and structurally sound, clean and free of all laitance, dirt, oil, grease, loose peeling paint, concrete sealers or curing compounds. Rough or uneven concrete surfaces should be made smooth with a LATICRETE 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 5 mm in 3 m. Expansion joints shall be provided through the tile work from all construction or expansion joints in the substrate. Follow Australian Standard requirements for Expansion Joints in AS3958.1 Section 5.4.5 & AS3958.2 Section 4.5 or TCNA detail EJ-171 "Movement Joints — Vertical & Horizontal". Do not cover expansion joints with mortar.

When using wet plaster type mixes for wall renders or thick bed applications to horizontal surfaces, do not apply in greater than 15 mm per lift. Scratch and allow to dry between lifts or coats. Where thicker than 15 mm applications are to be made for horizontal applications, use the semi-dry mortar mix with slurry bond coat method.

Mixing

Stir 3701 Mortar Admix thoroughly before use.

Application

Mortar Bed

Mixing Mortar Bed: Dry Pack Consistency for floors

Mix 20 kg of 226 Thick Bed Mortar to approximately 2 litres of 3701 Mortar Admix. 20 litres of 3701 Mortar Admix mixes with approximately 10 bags of 226 Thick Bed Mortar, yielding approximately 10 m² at 10 mm thick. Mix to a stiff, semi-dry consistency. Mix ratio may vary dependent upon weight of finish.

Bonded Mortar Bed: Installation

Before placing mortar, apply a slurry bond coat made from 335 Premium Flexible Adhesive or 4237 Latex Additive mixed with 211 Crete Filler Powder to the substrate. While the slurry bond coat is wet, spread the mortar and compact well. If placing tile immediately, apply a slurry bond coat, made from either 335 Premium Flexible Adhesive or 4237 Latex Additive mixed with 211 Crete Filler Powder to the mortar. While the slurry bond coat is wet and sticky, place the tile and beat in well. See TDS1009 and contact LATICRETE for further information.

Unbonded Mortar Bed: Installation

Before placing mortar, place a cleavage membrane (e.g. $200 \mu m$ polyethylene sheeting on the substrate. Place mortar over the cleavage membrane (approximately 1/2 the depth of the mortar bed). Next place $25 \mu m \times 25 \mu m$ to $75 \mu m \times 50 \mu m$, $1.2 \mu m$ to $2 \mu m$ diameter galvanized welded wire mesh over the mortar. Then, place the balance of the mortar bed. The wire mesh should be suspended in the middle of the mortar bed. Spread the mortar and compact well. Minimum mortar bed thickness shall be $50 \mu m$. If placing tile immediately, apply a slurry bond coat, made from either $335 \mu m$ Premium Flexible Adhesive or $4237 \mu m$ Latex Additive mixed with $211 \mu m$ Crete Filler Powder to the mortar. While the slurry coat is wet and sticky, place the tile and beat in well.

Note: A slurry bond coat should also be applied to the edges of mortar beds installed from previous work periods.

Application

Wall Renders

Mixing Wall Renders

Mix 20 kg of 226 Thick Bed Mortar to 2.5 litres of 3701 Mortar Additive. 20 litres of 3701 Mortar Admix mixes with 8 bags of 226 Thick Bed Mortar, yielding approximately 8 m² at 10 mm thick. Mix to a plastic consistency.

Wall Renders: Installation

No slurry bond coat is required prior to placing wall renders. Apply wall render with a steel trowel pressing mortar into good contact with the prepared substrate. Apply "scratch coat" first – not to exceed 12 mm thickness. Scratch mortar before it hardens. After "scratch coat" hardens, apply the "float coat" working the mortar into good contact with the scratch coat. Do not exceed 15 mm thickness per lift. Scratch all lifts that will receive additional float coats. Float wall with steel trowel and straight edges to form a plumb and true mortar surface. Allow the completed render coats to cure for 24 hours at 21°C prior to the installation of tile.

Application

Concrete Repair and Resurfacing: Leveling Mortar Consistency

Mixing Leveling Mortars

Mix 20 kg of 226 Thick Bed Mortar to 2.5 litres of 3701 Mortar Admix. 20 litres of 3701 Mortar Admix mixes with approximately 8 bags of 226 Thick Bed Mortar, yielding 4 $\rm m^2$ at 20 mm thick. Mix to plastic consistency. Mix ratio may vary dependent on weight of finish.

Concrete Repair and Resurfacing: Installation

Before placing mortar, apply a slurry bond coat made from 335 Premium Flexible Adhesive or 4237 Latex Additive mixed with 211 Crete Filler Powder. See TDS1009.

Apply a slurry bond coat to all reinforcing steel and existing clean, sound and stable concrete surfaces just prior to placing the mortar. While the slurry bond coat is wet and sticky place the topping mortar. Compact the surface of the mortar with a flat trowel and ensure all voids are filled. Avoid over troweling. Consult LATICRETE for exposed reinforcing steel in work to immersed installations.

Application

Thin-Set Mortar

Mixing as a Thin-Set Additive

Use approximately 5 litres of 3701 Mortar Admix to 20 kg of Ultra X8 Polymer Fortified Flexible Adhesive. Place 3701 Mortar Admix

in a clean plastic pail. Do not dilute. Add LATICRETE Thin-Set Adhesive to 3701 Mortar Admix and mix to a smooth, trowelable consistency. Allow adhesive to slake for 5 – 10 minutes. Adjust consistency if necessary. Remix and apply with the proper sized notched trowel. Can be used with any thin-set adhesive. Check individual thin-set adhesive bag for cautions and limitations.

Installation

Apply adhesive to the substrate with the flat side of the trowel, pressing firmly to work into surface. Comb on additional adhesive with the notched side.

Note: Use the proper sized notched trowel to ensure full bedding of the tile. Spread as much adhesive as can be covered with tile in 15-20 minutes. Back butter large tiles >200 mm x 200 mm to provide full bedding and firm support. Place tiles into wet, sticky adhesive and beat in using a beating block and rubber mallet to embed tile and adjust level. Check adhesive for complete coverage by periodically removing a tile and inspecting bedding adhesive transfer onto back of tile. If adhesive is skinned over (not sticky), remove and replace with fresh adhesive.

Application

Grout Mixing

As a Grout Additive

Use approximately 1.75 litres of 3701 Mortar Admix to 10 kg of Sanded Grout. Add Sanded Grout to the 3701 Mortar Admix and mix to a smooth, stiff consistency.

Use 3701 Mortar Admix full strength for exterior applications: dilute 1:1 with clean water for interior use.

Installation

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. Refer to TDS1005 "LATICRETE Grout Guide" for more information on grouting. Grout installation after a minimum of 24 hours curing time at 21°C. Dampen tile surface with water. Spread with 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 the grout is not just sitting on top (i.e. "bridging the joint").

Grout Primary Cleaning

Remove excess grout from the face of the tiles with the edge of the grout float. Hold the float at 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 glaze tiles or polished stone.

Do not allow grout to dry on the face of the tile particularly when full strength 3701 Mortar Admix is used in grouts.

Cold Weather Note

The setting of Portland cement adhesives, mortars and grouts are retarded by low temperatures. Protect finished work for an extended period when installing in cold weather.

For faster setting adhesive use LATICRETE Thin-Sets with 101 Rapid Latex Admix. 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 adhesives and mortars is accelerated by hot, dry conditions. Apply to dampened surfaces and protect freshly spread mortar and finished work when installing in temperatures over 32°C

Cleaning

Clean tools and tile work with water while adhesive is fresh.

6. AVAILABILITY AND COST

Availability

LATICRETE and LATAPOXY® materials are available worldwide.

For Distributor information:

Toll Free: 1800 331 012 Telephone: 07 3865 1599

For online distributor information, visit LATICRETE at www.laticrete.com.au

Cost

Contact a LATICRETE Distributor in your area.

7. MAINTENANCE

LATICRETE and LATAPOXY grouts require routine cleaning with a neutral pH soap and water. All other LATICRETE and LATAPOXY materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

8. TECHNICAL SERVICES

Technical assistance

Information is available by calling

Toll Free: 1800 331 012 Telephone: 07 3865 1599 Fax: 07 3865 2250

Technical and safety literature

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

9. DISCLAIMER

- The information contained in this document is given in good faith and to the best of our knowledge is true and accurate.
- This information is subject to change without notice and it is the responsibility of the user to obtain up to date and current information.
- The use of this product is beyond our control and LATICRETE is not responsible for any loss or damage arising from incorrect usage of this product.
- Efflorescence is a normal condition of Portland cement and is not covered by any warranty. The use of LATAPOXY 310 Stone Adhesive, LATAPOXY 300 Adhesive, SPECTRALOCK® PRO Grout and SPECTRALOCK 2000 IG will not contribute to any noticeable efflorescence.

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