



3701 Mortar Admix

DS-231-0823

**Globally Proven
Construction Solutions**



1. PRODUCT NAME

3701 Mortar Admix

2. MANUFACTURER

LATICRETE International, Inc.
1 LATICRETE Park North
Bethany, CT 06524-3423 USA

Telephone: +1.203.393.0010, ext. 1235

Toll Free: 1.800.243.4788, ext. 1235

Fax: +1.203.393.1684

Website: laticrete.com

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, 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 and Brick Masonry
- Cement Plaster
- Cement Backer Board (Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use)
- Gypsum Wallboard (Interior use only, non-wet areas)
- Cement Terrazzo
- Ceramic Tile and Stone
- Ceramic Tile and Stone
- Cement Mortar Bed
- Concrete

Packaging

5 US gallon (19 L) pail; 36 pails per pallet.

Limitations

- Not for use as a thin-set mortar additive over exterior glue plywood.
- For veneer installations using this product, consult local building code requirements regarding limitations and installation system specifications.
- 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 mortar when installing white or light-colored stone.
- 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).

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 period before filing water features with water at 70°F (21°C).
- Keep out of reach of children.

4. TECHNICAL DATA

VOC/LEED Product Information

This product has been certified for Low Chemical Emissions (ULCOM/GG UL2818) under the UL GREENGUARD Certification Program for Chemical Emissions for Building Materials, Finishes and Furnishings (UL 2818 Standard) by UL Environment.

Total VOC Content pounds/gallon (grams/liter) of product in unused form is < 0.02 lb/gal (<2.39 g/?).

Applicable Standard

- Conforms to ANSI A118.4

Physical Properties

3701 Mortar Admix mixed (full strength) with:
209 Floor Mud

Test/Test Method	Results
Water Absorption, ANSI A118.6–4.4	< 5%
Compressive Strength, ANSI A118.4–6.1	2500 to 3000 psi (17.2 to 20.7 MPa)

3701 Mortar Admix mixed with:
226 Thick Bed Mortar

Test/Test Method	Results
Water Absorption, ANSI A118.6–4.4	< 5%
Compressive Strength, ANSI A118.4–6.1	4000 to 5000 psi (33.8 to 34.5 MPa)
TCA Service Rating ASTM C–627	Extra Heavy

3701 Mortar Admix mixed with:
272 Mortar

Test	Test Method	Results	ANSI A118.4 Specification
Porcelain Tile Shear Bond 28 day cure	ANSI A118.4–5.2.4	450 to 500 psi (3.1 to 3.4 MPa)	> 200 psi (1.37 MPa)
Porcelain Tile Water Soak Shear Bond	ANSI A118.4–5.2.3	200 to 300 psi (1.37 to 2.07 MPa)	> 150 psi (1 MPa)
Compressive Strength	ANSI A118.4–6.0	2300 to 2500 psi (15.8 to 17.2 MPa)	> 2500 psi (17.2 MPa)

Data from Report HR880

Working Properties

3701 Mortar Admix (full strength) mixed with:

209 Floor Mud (70°F [21°C])

Pot Life	1 hour
Time to Foot Traffic	12 hours
Time to Heavy Traffic	72 hours

3701 Mortar Admix mixed with:
226 Thick Bed Mortar (70°F [21°C])

Pot Life	1 hour
Time to Foot Traffic	12 hours
Time to Heavy Traffic	72 hours
Wet Density	135 lbs/ft ³ (2166 kg/m ³)

3701 Mortar Admix mixed with:
272 Mortar (70°F [21°C])

Open Time	1 hour
Pot Life	5 hours
Time to Heavy Traffic	24 hours
Wet Density	107 lbs/ft ³ (1720 kg/m ³)

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

• Surface 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:

1. *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*
2. *EJ-171 "Movement Joints—Vertical & Horizontal". Do not cover expansion joints with mortar.*

• Mixing

Stir 3701 Mortar Admix thoroughly before use.

• Application

Mortar Bed

Mixing Mortar Bed—Dry Pack Consistency for floors

Mix a 60 lb bag (27 kg) of 209 Floor Mud or 226 Thick Bed Mortar to 0.7 gal (2.7 L) of 3701 Mortar Admix. Five (5) gallons (19 L) of 3701 Mortar Admix mixes with approximately 7 bags of 226 Thick Bed Mortar, yielding approximately 45 ft² (4 m²) at 1" (25 mm) thick. Mix to a stiff, semi-dry consistency (refer to bag for mixing hints). Mix ratio may vary dependent upon weight of finish.

Note: 209 Floor Mud can be used at full concentrate or a dilution rate of 50:50 with water. Lowering the performance. Please refer to DS-209 for more information.

Bonded Mortar Bed—Installation

Before placing mortar, apply a slurry bond coat made from 254 Platinum. 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 254 Platinum. While the slurry bond coat is wet and sticky, place the tile and beat in well. Refer to TDS 143 "Slurry Bond Coats – When & Where to Use" for more information on slurry bond coats.

Unbonded Mortar Bed—Installation

Before placing mortar, place a cleavage membrane (e.g. 4 mil thick polyethylene sheeting or 15 lbs, builder felt) on the substrate. Place mortar over the cleavage membrane (approximately 1/2 the depth of the mortar bed). Next, place 2" x 2" (50 mm x 50 mm), 16 gauge 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 2" (50 mm). If placing tile immediately, apply a slurry bond coat, made from either 254 Platinum. While the slurry bond 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 a 60 lb bag (27 kg) of 226 Thick Bed Mortar to 1 gal (3.8 L) of 3701 Mortar Admix. Five (5) gallons (19 L) of 3701 Mortar Admix mixes with approximately 5 bags of 226 Thick Bed Mortar, yielding approximately 64 ft² (5.8 m²) at 1/2" (12 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 substrate. Apply "scratch coat" first – not to exceed 1/2" (12 mm) thickness. Scratch mortar before it hardens. After "scratch coat" hardens, apply the "brown or float coat" working the mortar into good contact with the scratch coat. Do not exceed 5/8" (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 70°F (21° C) prior to the installation of tile.

• Application

Concrete Repair and Resurfacing—Leveling Mortar Consistency

Mixing Leveling Mortars

Mix a 60 lb bag (27 kg) of 226 Thick Bed Mortar to 1 gal (3.8 L) of 3701 Mortar Admix. Five (5) gallons (19 L) of 3701 Mortar Admix mixes with approximately 5 bags of 226 Thick Bed Mortar, yielding approximately 64 ft² (5.8 m²) at 1/2" (12 mm) thick. Mix to a plastic consistency. Mix ratio may vary dependent upon weight of finish.

Concrete Repair and Resurfacing—Installation

Before placing mortar, apply a slurry bond coat made from 254 Platinum. 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.

• Application

Thin-Set Mortar

Mixing As a Thin-Set Additive

Use approximately 1.5–1.75 gallons (5.7–6.6 ?) of 3701 Mortar Admix to a 50 lbs (22.7 kg) of Thin-Set Mortar. Place 3701 Mortar Admix in a clean plastic pail. Do not dilute. Add Thin-Set Mortar to 3701 Mortar 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.

• Installation

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

Note: Use the proper sized notched trowel to ensure full bedding of the tile. Spread as much mortar as can be covered with tile in 15–20 minutes. Back butter large tiles >8" x 8" (>200 x 200 mm) to provide full bedding and firm support. Place tiles into wet, sticky mortar and beat in using a beating block and rubber mallet to embed tile and adjust level. Check mortar for complete coverage by periodically removing a tile and inspecting bedding mortar transfer onto back of tile. If mortar is skinned over (not sticky), remove and replace with fresh mortar.

Cold Weather Note:

1. 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.
2. For faster setting mortar use 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 mortars is accelerated by hot, dry conditions. Apply to dampened surfaces and protect freshly spread mortar and finished work when installing in temperatures over 90°F (32°C).

- **Cleaning**

Mortar

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

6. AVAILABILITY AND COST

Availability

LATICRETE materials are available worldwide.

For Distributor Information, Call:

Toll Free: 1.800.243.4788

Telephone: +1.203.393.0010

For on-line distributor information, visit LATICRETE at laticrete.com

Cost

Contact a LATICRETE Distributor in your area.

7. WARRANTY

See 10. FILING SYSTEM:

- 1 Year Product Warranty (US - English)
- 5 Year System Warranty (US - English)
- 10 Year System Warranty (US - English)
- 25 Year System Warranty (US - English)
- LATICRETE Lifetime System Warranty (US - English)

8. MAINTENANCE

LATICRETE and LATAPOXY materials are premium quality construction products requiring no maintenance to ensure performance. For aesthetic/hygienic reasons, LATICRETE and LATAPOXY grouts can be routinely cleaned with soap and water.

9. TECHNICAL SERVICES

Technical Assistance

Information is available by calling the LATICRETE

Technical Service Hotline:

Toll Free: 1.800.243.4788, ext. 1235

Telephone: +1.203.393.0010, ext. 1235

Fax: +1.203.393.1948

Technical and Safety Literature

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

10. FILING SYSTEM

Additional product information is available on our website at laticrete.com. The following is a list of related documents:

- 1 Year Product Warranty (US - English)
- 5 Year System Warranty (US - English)
- 10 Year System Warranty (US - English)
- 25 Year System Warranty (US - English)
- LATICRETE Lifetime System Warranty (US - English)
- DS 239.1: 226 Thick Bed Mortar
- DS 256.0: 1500 Sanded Grout
- DS 259.0: 272 Mortar
- DS 633.0: LATAPOXY 300 Adhesive
- DS 663.0: HYDRO BAN®
- DS 677.0: 254 Platinum

LATICRETE International, Inc.

One LATICRETE Park North, Bethany, CT 06524-3423 USA • 1.800.243.4788 • +1.203.393.0010 • www.laticrete.com

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