

Globally Proven
Construction Solutions

# 3701 Fortified Mortar Bed

3701 Fortified Mortar is a polymer-fortified blend of carefully selected polymers, portland cement and graded aggregates. 3701 Fortified Mortar does not require the use of latex admix, you only need to add water to produce thick bed mortar with exceptional strength. 3701 Fortified Mortar is an approved substitute for 226 Thick Bed Mortar mixed with 3701 Mortar Admix.





## FEATURES/BENEFITS

- Polymer fortified no need for latex additives
- Premixed no job site blending of powders required
- Economical saves time and money
- High strength formula
- Pumpable for large scale veneer projects
- Exceeds ASTM C270 requirements
- For use as a scratch or finish coat in place of Type S or Type N mortar
- Excellent for ramping and pitching can be used in a bonded mortar bed assembly with a slurry bond coat of 254 Platinum down to a feather edge

## **MANUFACTURER**

## LATICRETE Middle East LLC.

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## USES

- Interior and exterior applications
- Wet and dry applications
- Bonded and non-bonded thick bed mortar applications
- Conventional thick bed mortar applications
- Concrete repairs

## **STANDARDS**

#### Applicable Standards

BS EN 13892-2 | BS EN 13813 | ANSI A 118.7.3.4 | ASTM C270/ BS 7533

#### **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 ULEnvironment

## **Packaging**

20 kg bags;

Pallet: 72 bags per pallet

#### **Suitable Substrates**

- Concrete
- Ceramic tile & stone
- Concrete masonry
- Brick masonry
- Exterior glue plywood\*
- Cement mortar beds
- Cement backer board\*\*
- Cement plaster
- Cement terrazzo

**Approximate Coverage** 

Approximate cororage
0.8 M <sup>2</sup> at 12 mm
0.41 M <sup>2</sup> at 25 mm
0.22 M <sup>2</sup> at 50 mm

#### **Shelf Life**

Factory sealed containers of this product are guaranteed to be of first quality for one (1) year if stored at temperatures >0°C and <43°C.

## Limitations

- Use LATAPOXY® 300 Adhesive for installing green marble or moisture sensitive stone, agglomerates, and resin backed tile or stone.
- For veneer installations using this product, consult local building code requirements regarding limitations & installation system specifications.
- 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).

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 (except where local building codes specify more stringent deflection requirements)

#### **Cautions**

Consult SDS for more safety information.

- During cold weather, protect finished work from traffic until fully cured.
- Allow a minimum 14-day cure at 21°C after the final grouting period prior to filling water features with water.
- Contains Portland cement and silica sand. 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. Avoid breathing dust. Wear a respirator in dusty areas.
- Keep out of reach of children.

#### **TECHNICAL DATA**

## **Physical Properties**

Physical Properties	Result
Water Absorption	5%
28 Day Compressive Strength	> 45 MPa
Flexural Strength	> 9 MPa
Shrinkage 7 Day Cure	0 %
TCNA Service Rating	Extra Heavy
Absorption Strength ( Pull off)	> 0.9 MPa

## **Working Properties**

Pot Life	2 hours
Time to Foot Traffic	16 hours
Time to Heavy	72 hours

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**

## **Surface Preparation**

All surfaces should be between 4°C and 32°C and structurally sound, clean and free of all dirt, oil, grease, laitance, paint, concrete sealers or curing compounds. Dry dusty concrete slabs or masonry should be dampened and excess water swept off. Installation may be made on a damp surface. 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.

## **Application**

#### Mortar Bed

 Mixing Mortar Bed—Dry Pack Consistency for Floors

Mix a 20 kg of 3701 Fortified Mortar to approx.  $2-2.5 \ \ell$  of water. Mix to a stiff, semi-dry

<sup>\*</sup> For interior only, over cleavage membrane with wire reinforcing min. 2" (50 mm) thick

<sup>\*\*</sup> Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use

consistency. Mix ratio may vary dependent upon weight of finish.

#### Bonded Mortar Bed - Installation

Before placing mortar, apply a slurry bond coat made from 254 Platinum or 4237 Latex Additive mixed with 211 Powder. 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 or 4237 Latex Additive mixed with 211 Powder to the mortar. While the slurry bond coat is wet and sticky, place the tile and beat in well. Refer to TDS 143 "Slurry Bond Coats – When & What 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 lb, builder felt) on the substrate. Place mortar over the cleavage membrane (approximately 1/2 the depth of the mortar bed). Next, place 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 50 mm. If placing tile immediately, apply a slurry bond coat, made from either 254 Platinum or 4237 Latex Additive mixed with 211 Powder to the mortar. While the slurry bond coat is wet and sticky, place the tile and beat in well.

## **Wall Renders**

## Mixing Wall Renders

Mix a 20 kg bag of 3701 Fortified Mortar to approx. 2 -2.5 L of water. 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 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 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.

## As a Pumped Mortar for Renders and Plaster

Pumping of 3701 Fortified Mortar should be done when using a liquid plasticizer/pump aid. Confirm with manufacturer of pump aid for compatibility with polymer fortified mortar mixes. Approximate coverage for 7 x 20 kg bags of mortar will be 3m² at 25 mm thick. Coverage will vary according to mixing, pumping, placement, job site conditions and rebound. Do not exceed 15 mm thickness per lift/application of pumped render. Scratch up previous lift prior to placing subsequent lifts.

## **Application**

Concrete Repair and Resurfacing – Leveling Mortar Consistency Mixing Leveling Mortars Mix a 20 kg of 3701 Fortified Mortar to 2 – 2.5 L of water. 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 or 4237 Latex Additive mixed with 211 Powder. 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.

#### 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.

#### Hot Weather Note

The evaporation of moisture in portland cement mortars is accelerated by hot, dry conditions. Apply mortar to dampened surfaces and protect freshly spread mortar and finished work when installing in temperatures over 32°C.

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

## Cleaning

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

#### **AVAILABILITY AND COST**

#### **Availability**

LATICRETE® materials are available worldwide.

## For distributor information,

please contact us by email at: <a href="mailto:enquiry@laticrete.me">enquiry@laticrete.me</a>
or, visit <a href="mailto:www.laticrete.me">www.laticrete.me</a>

#### Cost

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

#### **WARRANTY**

The supplier warrants this product will not deteriorate under normal conditions and use, the warranty validity of one (1) year. The product subject to the terms and conditions stated in the LATICRETE® Product Warranty.

Please consult our technical support for further information on the system warranty and extended warranty.

#### **TECHNICAL SERVICES**

#### **Technical assistance**

For information contact us by email at:

# enquiry@laticrete.me

# Technical and safety literature

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

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.