

# Laticrete 3701 Fortified Mortar

DS-239.2.0913

#### Globally Proven Construction Solutions



## 1. PRODUCT NAME LATICRETE® 3701 Fortified Mortar

## 2. MANUFACTURER

LATICRETE UK

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## **3. PRODUCT DESCRIPTION**

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 a thick bed mortar with exceptional strength. 3701 Fortified Mortar is an approved substitute for 226 Thick Bed Mortar mixed with 3701 Mortar Admix.

## Uses

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

## Advantages

- 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
- For use as a scratch or finish coat in place of Type S or Type N mortar

## Suitable Substrates

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

For interior only, over cleavage membrane with wire reinforcing min. 2" (50 mm) thick \*\* Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use.

#### Packaging

Supplied in 20kg sacks 54 per pallet.

## Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for up to 12 months if stored in sealed dry conditions at temperatures  $>(5^{\circ}C)$  and  $<(35^{\circ}C)$ .

## Approximate Coverage

- 1.1 m2 at 12 mm depth
- 0.56 m2 at 25 mm
- 0.3 m2 at 50 mm

## 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 and 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)

## Cautions2

- Consult MSDS for more safety information.
- During cold weather, protect finished work from traffic until fully cured.
- Allow a minimum 14-day cure at 70°F (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.
- Keep out of reach of children

## **4. TECHNICAL DATA**

#### Performance Properties

LATICRETE 3701 Fortified Mortar.

Test/Test Method	Results
Water Absorption ANSI A118.6–4.4	<5%
Compressive Strength ANSI A118.4–6.1	27.6–34.5 N/mm2
Flexural Strength ANSI A118.7.3.5	7.5–8.3 N/mm2
TCNA Service Rating ASTM C627	Extra Heavy
Shrinkage 7 Day Cure ASTM C-157	< 0.05%

## Working Properties at 21°C

LATICRETE 3701 Fortified Mortar

Pot Life	2 hour
Time to Foot Traffic	16 hours
Time to Heavy Traffic	72 hours
Wet Density	2166 kg/m3

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.

#### **VOC/LEED** Product Information



This product has been GREENGUARD Indoor Air Quality Certified⊚ by the GREENGUARD Environmental Institute under the GREENGUARD Standard for Low Emitting DC Content pounds/gallon (grams/liter) of product

Products in finished form. Total VOC Content pounds/gallon (grams/liter) of product in unused form is 0.00 lb/gal (0.00 g/ $\ell$ ).

## **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, 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 20kg of 3701 Fortified Mortar to 2.0–2.5  $\ell$  of water. 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 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.

#### **Unbonded Mortar Bed—Installation**

Before placing mortar, place a cleavage membrane e.g. 4mm thick polyethylene sheeting 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) of 3701 Fortified Mortar to 2.1 - 2.3 litre 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 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.

#### 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 2.8 m2 at 25 mm thick. Coverage will vary according to mixing, pumping, placement, job site conditions and rebound. Do not exceed 5/8" (15 mm) thickness per lift/application of pumped render. Scratch up previous lift prior to placing subsequent lifts. Application

# Concrete Repair and Resurfacing –

## Levelling Mortar Consistency

Mixing Leveling Mortars Mix a 20kg bag of Fortified Mortar to 2.1 - 2.3 litre 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 90°F (32°C).

#### Cleaning

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

## 6. AVAILABILITY AND COST

#### Availability

LATICRETE and LATAPOXY<sup>®</sup> materials are available worldwide. For on-line Distributor Information, call 0151 486 6101 or visit LATICRETE UK at www.laticrete.co.uk

## 7. MAINTENANCE

Non-finish LATICRETE and LATAPOXY installation 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 the LATICRETE UK Technical Service Hotline: Tel: 0151 486 6101 Fax: 0151 448 1982 e-mail: sales@laticrete.co.uk

#### **Technical and Safety Literature**

To acquire technical and safety literature, please visit our website at www.laticrete.co.uk

### 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 liability is assumed by the user when used incorrectly and not in accordance with LATICRETE guidelines.

The manufacturer is not responsible for any loss or damage arising from incorrect usage of this product.

The specifier or other party responsible for the project must ensure that the details in this data sheet are appropriate for the intended application and that additional detailing is performed for specific design or any areas that fall outside the scope of this specification.

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