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
- Exceeds ASTM C270 requirements
- Excellent for ramping and pitching

USES

- Interior and exterior applications
- Wet and dry applications
- Bonded and non-bonded thick bed mortar applications
- Conventional thick bed mortar applications
- Concrete repairs
- Suitable screed for floor coating system.

MANUFACTURER

LATICRETE Middle East LLC.
P.O. Box. 86028, Ras Al Khaimah
United Arab Emirates
Toll Free (with in UAE) 800 5632
Telephone: + 971 7 244 6396
Fax: + 971 7 244 5915
www.laticrete.me

STANDARDS

Applicable Standards
BS EN 13892-2 | BS EN 13813 C35/F7 |
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 UL Environment

Packaging
20kg per bag & **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 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.

Approximate Coverage

0.8 M^2 at 12mm
0.41 M^2 at 25mm
0.22 M^2 at 50mm

Shelf Life
Factory sealed containers of this product are guaranteed to be of first quality for one (1) year if stored off the ground on pallet in warehouse condition at 0 - 40°C, below 65% relative humidity, below 65% relative humidity.

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 tiles, 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).
- For bonded screed application over old concrete or concrete with integral waterproofing admixtures, use epoxy bonding agent, recommended Guard Prime EPM.

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 it 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, 28 days: ANSI 118.7 Cl 3.4	< 5.0%
Compressive Strength, BS EN 13892-2	1 day: 15- 20 N/mm² 7 days: 25 - 30 N/mm² 28 days: 40 - 45 N/mm²
Flexural Strength, 28 days: BS EN 13892-2/4	8 - 10 N/mm²
Linear Shrinkage, 28 days: ASTM C157	< 0.1 %
Tensile adhesion Strength, 28 days: ASTM D4541	0.5 - 1.0 N/mm² (With slurry bond coat) 1.5 - 2.5 N/mm2 (With Guard Primer EPM)

Working Properties, at 25 °C

Pot Life	2 hours
Wet Density	2.30 ± 0.1 g/cm³
Time to Foot Traffic	12 - 16 hrs.
Regular Traffic	7 days
Full service load	28 days

Specifications subject to change without notification. The 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.

3701 Fortified Bed Mortar is suitable for extra heavy service rating in accordance with the performance level

requirement guide of the 2024 TCNA Handbook for Ceramic, Glass, and Stone Tile Installation.

Application

Mortar Bed

- **Mixing Mortar Bed—Dry Pack Consistency for Floors**
  Mix 20 kg of 3701 Fortified Mortar to approx. 2–2.5L of water. Mix to a stiff, semi-dry consistency. It is recommended to use a pan mixer to achieve semi dry mix consistency at a recommended water dosage. Do not use a free -falling concrete mixer as it may form lumps.
- **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 well Refer to TDS 143 "Slurry Bond Coats – When & What to Use" for more information on slurry bond coats.
  For dense concrete with low water absorption it is recommended to use Guard Prime EPM as bonding primer over concrete. The concrete could be damp but not wet or with standing water while applying primer. Place 3701 Mortar while the primer is wet & tacky. If the primer is dried due to delay, re-apply and place the mortar wet on wet" 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 15lb, builder felt) on the substrate. Place mortar over the cleavage membrane (approximately 1/2 the depth of the mortar bed). Next, place 50mm x 50mm, 16 gauge galvanized welded wire mesh over the mortar. Then, place the balance of the mortar bed. The wire mesh should be 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. While the slurry bond coat is wet and sticky, place the tile and beat 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 12mm 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 24hours 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 20kg bags of mortar will be 3m^2 at 25mm thick. Coverage will vary according to mixing, pumping, placement, job site conditions and rebound. Do not exceed 15mm thickness per lift/application of pumped render. Scratch up the 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 – 2.5L 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 installed 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. For applications over dense concrete having low water absorption shall be bonded with Guard Prime EPM as bonding primer with wet-on-wet application. A site mock-up is recommended to confirm the desired performance.*

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: enquiry@laticrete.me or, visit www.laticrete.me

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 is 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 application, 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. The results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.