

229/230 Polymer Fortified Mortar

Globally Proven
Construction Solutions

229 / 230 Polymer Fortified Mortar are polymer fortified blend of carefully selected polymers, Portland cement and graded aggregates. 229 / 230 Polymer Fortified Mortar do not require the use of latex admix, only needs to add water to produce thick bed mortar with exceptional strength.



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 projects (Pumpable instructions behind)



USES

- Polymer Fortified Mortar 229 for Floor application
- Polymer Fortified Mortar 230 for Wall application
- Interior and exterior applications
- Wet and dry applications
- Bonded and non-bonded thick bed mortar applications
- Conventional thick bed mortar applications
- Concrete repairs

MANUFACTURER/ DISTRIBUTED BY

LATICRETE South East Asia Pte Ltd

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STANDARDS/CERTIFICATIONS

- ASTM C109
- BS 4551
- ASTM C348
- EN 13892
- ASTM C413
- BS EN 1015
- ASTM C413ASTM C157
- BS EN 13412
- ASTM C627
- ASTM C1437

Suitable Substrates

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

Packaging

25kg bag, 80 bags per pallet.

Approximate Coverage

25kg of Polymer Fortified Mortar will yield a coverage of about $0.7m^2$ - $0.8m^2$ per 20mm thick.

Shelf Life

Factory sealed bags of this product are guaranteed to be of first quality for one (1) year* if stored in a dry place at temperatures $>0^{\circ}$ C and $<40^{\circ}$ C

Limitations

- Use LATAPOXY[®] 300 Adhesive for installing green marble or moisture sensitive stone, agglomerates, and resin backed tile or 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.

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.
- Allow a minimum 14 day cure after the final grouting period prior to filing 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. Silica sand may cause cancer or serious lung problems. Avoid breathing dust. Wear a respirator in dusty areas
- Keep out of reach of children.

TECHNICAL DATA

Performance Properties

Test	Test Method	Results
Compressive Strength	ASTM C109	\geq 25N/mm ²
Flexural Strength	ASTM C348	≥5N/mm²
Tensile Adhesion Strength	EN 13892	$\geq 1 \text{N/mm}^2$
Water Absorption	ASTM C413	≤5%
Water Retentivity	BS 4551	≥90%
Shrinkage	ASTM C157	0.1%
Flow	ASTM C1437	≥80%
Modulus of Elasticity in Compression	BS EN 13412	≥20,000 N/mm²
TCNA Service Rating	ASTM C627	Extra Heavy
Stiffening Time		
- 1.0N/mm²	BS EN 1015	≥150 mins
- 2.0N/mm²		≥210 mins

Working Properties

Pot Life (25°C)	1 hour
Time to Light Traffic	>12 hours

Specifications are subjected 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 8°C and 35°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

Mixing Floor Mortar Bed - 229

Mix to Dry Pack Consistency with 25 kg of 229 Polymer Fortified Mortar to 2.81 - 3.21 of water, yielding approximately 0.7 m² - 0.8 m² @ 20mm thick. Mix to a stiff, semi-dry consistency. Mix ratio may vary dependent upon workability required. Please do not mix other aggregates such as cement or sand etc to 229 Polymer Fortified Mortar.

Bonded Mortar Bed—Installation

Before placing mortar, apply a slurry bond coat made from 4237 Thin Set Mortar Additive mixed with 211 Crete Filler 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 4237 Thin Set Mortar 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.

^{**}Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use

^{*} High humidity will reduce the shelf life of bagged product.

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 gauges 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 4237 Thin Set Mortar 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.

Mixing Wall Renders - 230

Mix 25kg of **230** Polymer Fortified Mortar to 3.8 ℓ - 4.2 ℓ of water. Mix to a desire plastic consistency. Please do not mix other aggregates such as cement or sand etc to 230 Polymer Fortified Mortar.

Wall Renders — Installation

Pre-damp surface and 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 prior to the installation of tile.

As a Pumped Mortar for Renders and Plaster

25kg bag of 229 / 230 Polymer Fortified Mortar utilizing liquid plasticizer/pump aid. Confirm with manufacturer of pump aid for compatibility with polymer fortified mortar mixes. Approximate coverage for 25kg bag of mortar will be $0.7 \text{m}^2 - 0.8 \text{m}^2$ at 20mm 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.

Concrete Repair and Resurfacing — Installation

Before placing mortar, apply a slurry bond coat made from 4237 Thin set Mortar Additive mixed with 211 Crete Filler 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 35°C.

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

Cleanina

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

AVAILABILITY AND COST

Availability

LATICRETE and LATAPOXY materials are available worldwide. For distributor information, call:

Telephone: (65) 6515-3028 Fax: (65) 6515-3037

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

Cost

Contact a LATICRETE Distributor in your area.

WARRANTY

LATICRETE South East Asia Pte Ltd warrants that 229 / 230 Polymer Fortified Mortar is free from manufacturing defect sand will not break down, deteriorate or disintegrate under normal usage for a period of one (1) year from date of purchase subject to the terms and conditions.

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.

TECHNICAL SERVICES/ CONTACT

Technical Assistance

Information is available by calling:

LATICRETE South East Asia Pte Ltd No. 38 Sungei Kadut, Street 2 (Level 2, A3) Singapore 729245

Telephone: (65) 6515-3028 Fax: (65) 6515-3037 Email: enquiry@laticrete.com.sg **Technical and safety literature**To acquire technical and safety literature, please visit our website at se.laticrete.com