



## 220 Marble & Granite Thick Bed Adhesive

A specially designed thick bed adhesive for floor installations with a wide range of tiles, natural stones, and manufactured paving units, 220 Marble & Granite Thick Bed Adhesive does not require the use of latex admix.



### ADVANTAGES



- Specially formulated for large format tiles/stones
- Builds up to 40mm without shrinkage or setting problems.
- Premixed – no job site blending of powders required.
- Safe-Non-flammable; safe to store and mix.
- Economical – saves time and money.
- Versatile-wet and dry areas
- Good segregation resistance
- Excellent substrate adhesion and durability

### MANUFACTURER

**LATICRETE Middle East LLC.**  
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### USES

- Interior and exterior floor applications
- Wet and dry applications
- Pourable or trowel on options
- To pre-level substrates prior to install tiles or pavers.
- Ideal for use on concrete & screeds

### STANDARDS / CERTIFICATIONS

EN 12004, C2E

Exceeds ANSI A118.4



**DCLD CERTIFIED**

Please see the technical data

## Packaging

Per Bag: 20 kg / 72 bags per pallet

Colors: Grey & White

## Recommended Surfaces<sup>^</sup>

- Concrete
- Mortar Bed
- Cement Terrazzo
- Cement Backer Board<sup>\*\*</sup>

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

<sup>^</sup>Consult LATICRETE Technical Service for specific installation recommendations

## Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for one (1) year<sup>\*\*\*</sup> if stored off the ground on pallet in warehouse condition at 0 - 40°C , below 65% relative humidity. High humidity will reduce the shelf life of bagged products.

## Coverage<sup>\*</sup>:

**For 20 kg bag @40mm thickness approx. 0.40m<sup>2</sup>**

Coverage provided is approximate and is for estimation. Actual coverage depends on the job-site conditions, application methods, wastages, etc.

## Limitations

- DO NOT USE 220 Marble & Granite Thick Bed Adhesive for vertical (wall) applications.
- 220 Marble & Granite Thick Bed Adhesive
- Should be buttered on to the back of the tiles to ensure solid-bed full contact with the surface adhesive bed.
- Use LATAPOXY<sup>®</sup> 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.
- 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

**DCLD:** This product has been certified for Low Emitting Materials by Dubai Central Laboratory Department (DCLD) of Dubai Municipality. No.CL20020733: 2017 Al Sa'fat Dubai Green Building Evaluation System.

VOC/LEED Product Information: Total VOC Content grams/liter (pounds/gallon) of product in unused form is 0.38 g/L

## Performance Properties

220 Marble & Granite Thick Bed Adhesive when mixed with water exhibits the results shown in the tables.

**Table 1: Test as per ANSI A 118.4**

| Test (Method)                  | Specification (at 28 days) | Result        |
|--------------------------------|----------------------------|---------------|
| Porcelain Tile -Shear Strength | >200psi (1.38 MPa)         | 1.4 - 1.6 MPa |
| Stone – Shear Strength         |                            | 1.4 - 1.8 MPa |
| Marble- Shear Strength         |                            | 1.4 - 1.8 MPa |

**Table 2: Tensile adhesion strength as per EN 12004 -1 C2**

| Test                    | Requirement            | Results                     |
|-------------------------|------------------------|-----------------------------|
| <b>Normal condition</b> | ≥1 N/mm <sup>2</sup>   | 1.5 - 2.2 N/mm <sup>2</sup> |
| Water immersion         | ≥1 N/mm <sup>2</sup>   | 1.1 - 1.8 N/mm <sup>2</sup> |
| Heat aging              | ≥1 N/mm <sup>2</sup>   | 1.4 - 2.2 N/mm <sup>2</sup> |
| Open time, 30 mins      | ≥0.5 N/mm <sup>2</sup> | 0.6 - 0.8 N/mm <sup>2</sup> |

## Working Properties @ 23°C

| Test                         | Result                       |
|------------------------------|------------------------------|
| Open Time                    | 30 minutes                   |
| Pot Life                     | 2 hours                      |
| Time to Traffic (foot-Light) | 24 hours                     |
| Time to Grout (Floor)        | 24 hours                     |
| Time to Grout (Wall)         | 24 hours                     |
| Ready for full service       | 2 weeks                      |
| Wet Density                  | 1.80 ± 0.1 g/cm <sup>3</sup> |

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.

### Mixing

Recommended Water addition is 3.5 to 4.0 liter of Water for 20kg of material. Mix 20 kg of 220 Marble & Granite Thick Bed Adhesive to approximately 4 liters of clean water. Mix mechanically with a slow speed mixer to a plastic consistency and allow to slake for 5 minutes. Remix and apply. Mix ratio may vary dependent upon weight of finish.

### Application

Apply 220 Marble & Granite Thick Bed Adhesive to a uniform thickness of 4mm to 40mm or sufficient to cover the tiles with raised or studded back profiles. Tiles/Pavers should be dry and fixed by pressing into the adhesive by twisting them into place, which will seat the Tiles/Pavers firmly to the adhesive. Apply pressure to the Tiles/Stones so that it makes contact across the whole of the adhesive that was applied, it is recommended that tiles with raised or studded back profiles, should be back-buttered immediately prior to fixing, to ensure solid - bed full contact with the surface adhesive bed. Adjustment to any tiles that are uneven should be done within the adhesive Open time to ensure that all gaps are of equal height and width. Excess adhesive should be removed using a damp sponge or cloth before material has set.

### Grouting

Grout installation after a minimum of 24 hours curing time at 21°C. see the recommended LATICRETE Grout chart below:

| Grout  | Type         | Mixing                                      |
|--|--------------|---|
| SPECTRALOCK® Pro Premium Grout†                      | Epoxy Based  | Part A+B+C                                  |
| PERMACOLOR® Grout <sup>^</sup> / PERMACOLOR® Select* | Cementitious | Mix with water                              |
| 1500 Sanded Grout / 1600 Unsanded Grout              | Cementitious | Mix with 1776 Grout Enhancer or with water. |

To discover more about our recommended LATICRETE grout products tailored to your specific needs, please contact our technical service team by phone or email at [technicalservice@laticrete.me](mailto:technicalservice@laticrete.me).

\*PERMACOLOR Select selling with Color Packs and 11.3 kg of Grout Base

†United States Invention Patent No.: 6881768 (and other Patents).

<sup>^</sup>United States Invention Patent No.: 6784229 (and other Patents).

**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.

### Cleaning

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

## AVAILABILITY AND COST

### Availability

LATICRETE® materials are available worldwide.

### For distributor information,

please contact us by email at: [enquiry@laticrete.me](mailto:enquiry@laticrete.me) or, visit [www.laticrete.me](http://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 subject to the terms and conditions stated in the LATICRETE® Product Warranty. Please consult our technical support for further information.

## TECHNICAL SERVICES

### Technical assistance

For information contact us by email at:

[enquiry@laticrete.me](mailto:enquiry@laticrete.me)

### Technical and safety literature

To obtain technical and safety literature, please visit our website at: [www.laticrete.me](http://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.