



## 305 PLUS Improved Adhesive

305 Plus (Formerly known as 315 Tile Adhesive) is a High Performance bagged cementitious powder to be mixed with either water or latex admixture to install ceramic tile and natural stone using the thin-set method of installation.



### ADVANTAGES



- High tack – Will hang tile without slippage.
- Dual purpose, for walls and floors
- Ready to use, just mix with water except for exterior facades.
- Long open time.
- Water & heat resistant.
- Strong bond and durable.
- Elevated standard compliance with Laticrete Latex.

### USES

- Designed for interior or exterior installation of ceramic tile and natural stone for walls & floors.
- For exterior façade, mix with latex 3701 Mortar Admix. Must fortify with latex for impervious tiles, porcelain, mosaic, glass, and stone tiles, use with cement backer board and heavy traffic areas.

### MANUFACTURER

**LATICRETE Middle East LLC.**  
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### STANDARDS / CERTIFICATIONS

- Complies ANSI 118.1 and EN 12004 C1T, when mixed with water.
- Meets ANSI A 118.4, EN12004 C2T, ISO 13007 when mixed with latex (3701 Mortar Admix)
- DCLD CERTIFIED



**Packaging** - 20kg bag; 72 bags per pallet

**Color:** Grey and White

#### Suitable Tiles:

Ceramic/ Glazed tiles, when mixed with water.

Porcelain/vitrified, ceramic, glass mosaics, quarry and stone tiles, when mixed with 3701 Mortar Admix.

#### Suitable Substrates

- Concrete
- Cement plaster
- Concrete masonry
- Cement mortar bed
- Cement terrazzo
- Brick Masonry
- Cement backer board\*\*\*
- Ceramic Tiles & Stones

\*\*\* Consult cement backer board manufacturer for specific installation recommendations and to verify acceptability for exterior use.

#### Approximate Coverage for 20Kg bag.

Trowel notch size	Sqm.
6 mm x 6 mm	5.5 – 6.5
6 mm x 9 mm	5.0 – 6.0

NOTE: Above coverage is intended as a guide, it may vary depending upon application technique, substrate profile/flatness, trowel angle, trowel wear and wastage factor. Actual coverage shall be determined by mockup area based on site conditions.

#### Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for one (1) 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 product.

#### Limitations

- Adhesives/mastics, mortars and grouts for ceramic tile, pavers, brick and stone are not replacements for waterproof membranes. When a waterproof membrane is required, use a LATICRETE® Waterproof Membrane.
- Suitable for submerged conditions when mixed with latex 3701 Mortar admix.
- For large format tiles, pls check our technical department for suitable adhesive.

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

- 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 respirators in dusty areas.
- Keep out of reach of children.
- Consult SDS for detailed safety information.

#### TECHNICAL DATA

##### Physical Properties

###### ANSI 118.1-mixed with water

Shear strength, Ceramic tile	Specifications	Results
7-day, CI 7.1.2	≥1.38 MPa (200 psi)	1.4 - 1.6 MPa
Water immersion-7 days, CI 7.1.2	≥1.03 MPa (150 psi)	1.1 - 1.8 MPa

###### ANSI 118.4-mixed with latex: 3701 Mortar admix

Shear strength, Porcelain tile		
1 day, CI 7.2.2	0.5 Mpa (72.5 psi)	0.8 - 1.6 MPa
7-day, CI 7.2.3	1.38 Mpa (200 psi)	1.5 - 2.0 MPa
Water immersion-7 days, CI 7.2.4	1.03 Mpa (149 psi)	1.1 - 1.8 MPa
28-day, CI 7.2.5	1.38 Mpa (200 psi)	1.6 - 2.4 MPa
Freeze thaw cycling- 28 days, CI 7.2.6	1.21 Mpa (175.5 psi)	1.3 - 2.2 MPa

###### EN 12004-2/ ISO 13007-2: Mixed with 3701 Mortar Admix

Initial tensile adhesion strength	≥ 1.0 N/mm <sup>2</sup>	1.2 - 1.6 N/mm <sup>2</sup>
Tensile adhesion strength after water immersion	≥ 1.0 N/mm <sup>2</sup>	1.1 - 1.4 N/mm <sup>2</sup>
Tensile adhesion strength after heat ageing	≥ 1.0 N/mm <sup>2</sup>	1.4 - 1.8 N/mm <sup>2</sup>
Tensile adhesion strength after freeze- thaw cycles	≥ 1.0 N/mm <sup>2</sup>	1.1 - 1.2 N/mm <sup>2</sup>
Open time: tensile adhesion strength, 20 mins	≥ 0.5 N/mm <sup>2</sup>	0.5 - 0.7 N/mm <sup>2</sup>

#### Working Properties @ 23°C

Pot Life	2 hrs.
Time to grout	24 hrs.
Time to traffic (foot- Light)	24 hrs.
Ready for full service	2 weeks
Wet Density	1.70 ± 0.1 g/cm <sup>3</sup>

The technical data shown are typical but reflect laboratory test procedures conducted in laboratory conditions at 23±2°C and 55±5 % relative humidity. 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 to 35° C and structurally sound, clean, and free of all dirt, oil, grease, loose peeling paint,

laitance, concrete sealers or curing compounds. Rough or uneven concrete surfaces should be made smooth with LATICRETE® Latex Portland Cement underlayment to provide a wood float (or better) finish. Dry, dusty concrete slabs or masonry should be dampened, and excess water swept off.

Installation may be made on a damp surface. All slabs must be plumb and true to within 6mm in 3m. Expansion joints shall be provided through the tile work from all construction or expansion joints in the substrate. Follow ANSI Specification AN- 3.8" Requirements for Expansion Joints" or TCA Details EJ171 "Expansion Joints". Do not cover expansion joints with mortars. Cement Backer Board; follow TCA installation detail W244.

### Mixing



Place clean potable water into a clean pail, Add 305 Plus powder. Use approximately 4.2 - 4.6 liters of water or 3701 Mortar Admix (dilute 2 parts 3701 Mortar admix with 1 part water by volume), based on performance requirements.

Mix by hand or with a slow speed mixer to a smooth, trowelable consistency. Allow mortar to slake for 5 – 10 minutes. Adjust consistency if necessary. Remix and apply with the proper sized notched trowel.

### Application



Apply mortar to the substrate with the flat side of the trowel, pressing firmly to work into surface. Comb on additional mortar with the notched side.

*Note: Use the proper sized notched trowel to insure full bedding of the tile. Spread as much mortar as can be covered with tile in 15-20 minutes.*

*Back butter large tiles (>20x20cm) to provide full bedding and firm support. Place tiles into wet, sticky mortar and beat in using a beating block and rubber mallet to imbed tile and adjust level. Check mortar for complete coverage by periodically removing a tile and inspecting bedding mortar transfer onto back of tile. If mortar is skinned over (not sticky), remove and replace with fresh mortar.*

### Cleaning

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

### Grouting

Grout installation after a minimum of 24 hours curing time at 21°C.

### Recommended LATICRETE Grouts:

Grout	Type	Mixing
SPECTRALOCK® Pro Premium Grout	Epoxy Based	Part A+B+C
PERMACOLOR® Grout	Cementitious	Mix with water
1500 Sanded Grout / 1600 Unsanded Grout	Cementitious	Mix with 1776 Grout Enhancer or with water.

### AVAILABILITY AND COST

#### Availability

LATICRETE® materials are available worldwide. For distributor information, please contact LATICRETE Telephone: For on-line distributor information, visit [www.laticrete.com](http://www.laticrete.com).

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

#### Technical and safety literature

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

**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 methods and site conditions.