



LATICRETE MASTER GUIDE SPECIFICATION.

Ceramic tile and stone installation materials.

Installation System:-

Installation System including leveling mortar, adhesive, grout, waterproofing and crack suppression should be provided as a single source system manufactured by Laticrete India Private Limited.

1. Leveling Mortar Bed:-

It shall be weather, shock and impact resistant and shall meet the following physical requirements.

| | |
|----------------------|---------------------|
| Compressive Strength | 3500 psi (24.1 MPa) |
| Flexural Strength | 1500 pi (10.3 MPa) |
| Tensile Strength | 400 psi (2.7 Mpa) |

The product shall be Laticrete 226 mixed with Laticrete 3642 as manufactured by Laticrete India Pvt Ltd or Equivalent.
Applicable standard – ANSI 118.4

2. Thin Set Adhesive for Floor & Wall:-

It shall be high strength and long lasting adhesive, suitable for installation of ceramic tile on cement plaster/screed and shall meet the following physical requirements.

| | |
|----------------------|---------------------|
| Compressive Strength | 2550 psi (17.5 MPa) |
| Shear Bond Strength | 256 psi (1.7 MPa) |

The product shall be Laticrete 290 mixed with water as manufactured by Laticrete India Pvt Ltd or Equivalent.
Applicable standard – ANSI 118.1

3. Latex fortified Thin Set Adhesive for Floor & Wall:-

It shall be water, weather, shock and impact resistant, suitable installation of various kind of tile/stone on several substrate and shall meet the following physical requirements.

| | |
|----------------------|---------------------|
| Compressive Strength | 3000 psi (20.6 MPa) |
| Shear bond Strength | 275 psi (1.8 MPa) |

The product shall be Laticrete 111 mixed with Laticrete 73 as manufactured by Laticrete India Pvt Ltd or Equivalent
Applicable standard – ANSI 118.4

Polymer modified adhesive for Floor & Wall:-

It shall be high strength single component adhesive, suitable for installation of Glass mosaic tile on cement plaster/screed and shall meet the following physical requirements.

| | |
|----------------------|---------------------|
| Compressive Strength | 2750 psi (18.9 Mpa) |
| Shear bond Strength | 300 psi (2.0 Mpa) |

The product shall be Laticrete 252 Ag Silver as manufactured by Laticrete India Pvt Ltd or Equivalent

Applicable standard – ANSI 118.4

Epoxy adhesive for Floor & Wall:-

It shall be high strength, chemical resistant epoxy adhesive, suitable for installation of Industrial tiles in Corrosive environment

| | |
|--------------------------|---------------------|
| Shear Bond | >1250 psi (8.6 MPa) |
| Tensile strength | 1700 psi (11.7 MPa) |
| Compressive strength | 7500 psi (51.7 MPa) |
| Thermal shock resistance | >1200 psi (8.3 MPa) |
| Shrinkage | 0.03% |
| Sag resistance | Pass |

The product shall be Latapoxy 300 as manufactured by Laticrete India Pvt Ltd or Equivalent

Applicable standard – ANSI 118.3

4. Latex Fortified Cement Based Grout:-

It shall be weather, shock, impact resistant, colour fast and shall meet the following physical requirements.

| | |
|----------------------|---------------------|
| Compressive Strength | 3050 psi (21.0 MPa) |
| Linear Shrinkage | < 0.1% |
| Tensile Strength | 400 psi (2.7 MPa) |
| Flexural Strength | 800 psi (5.5 MPa) |

The product shall be Laticrete 500/600 series grout mixed with Laticrete 1776 as manufactured by Laticrete India Pvt Ltd or Equivalent

Applicable standard – ANSI 118.6

5. Stain free epoxy Grout:-

It shall be chemical and stain resistant, non-toxic, non-flammable, water cleanable Epoxy Grout and shall meet the following Physical properties.

The cured epoxy grout shall be chemical and stain resistant to ketchup, mustard, tea, coffee, milk, soda, beer, wine, bleach (5% solution), ammonia, juices, vegetable oil, brine, sugar, cosmetics and blood. It shall also be chemical resistant to dilute acids and alkalies, gasoline, turpentine and mineral spirits.

Performance Properties

| Test Test / Method | Results |
|------------------------------|---------------------|
| Water Cleanability | (>80 min) |
| Water Absorption | 0.4% |
| Initial Setting Time | 3 hours 30 min |
| Service Setting Time | (<7 days) |
| Linear Shrinkage | > 0.10% |
| Sag | no change |
| Bond strength to quarry tile | 1200 psi (8.2MPa) |
| Compressive Strength | 7500 psi (51.7MPa) |
| Tensile Strength | 1500 psi (10.3 MPa) |
| Thermal Shock | 1100 psi (7.5MPa) |

CHEMICAL RESISTANCE CHART at 75°F (23°C)

| CHEMICAL NAME | Continuous Exposure | Intermittent Exposure | Splash Exposure |
|----------------------------------|---------------------|-----------------------|-----------------|
| Milk | R | R | R |
| **Wine | R | R | R |
| Ethanol | NR (soft) | R | R |
| **Potassium Permanganate 10% | NR | R | R |
| **Potassium Permanganate 1% | R | R | R |
| Tannic Acid to 50% | R | R | R |
| Tartaric Acid to 50% | R | R | R |
| Phosphoric Acid to 80% | R | R | R |
| *Sulfuric Acid to 20% | R | R | R |
| Oxalic Acid to 10% | R | R | R |
| Lactic Acid to 5% | R | R | R |
| Acetic Acid to 5% | R | R | R |
| SodiumHydroxide to 50% Saturated | R | R | R |
| Benzoic Acid 5% | R | R | R |
| Sea Water | R | R | R |
| Fruit Juice | R | R | R |
| Methanol | NR | NR | R |
| Mek | NR | NR | R |
| Chloroform | NR | NR | NR |
| Methylene Chloride | NR | NR | NR |
| Toluene | NR | NR | R |
| Xylene | NR | NR | R |

The product shall be Latapoxy SP-100 stain free grout as manufactured by Laticrete India Pvt Ltd or Equivalent
Applicable standard – ANSI 118.3

Industrial epoxy grout:-

It shall be highly chemical resistant industrial grade Epoxy Grout and shall meet the following Physical properties.

The cured epoxy grout shall be chemical resistant to food acids, mineral acids and solvents

Performance Properties

| TEST | RESULT |
|----------------------|---------------------|
| Water Cleanability | >80 min |
| Initial Setting Time | >2 hours |
| Service Setting Time | < 7 days |
| Shrinkage | 0.07% |
| Sag | No change |
| Quarry Shear Bonds | 1000psi (6.9MPa)* |
| Compressive Strength | 10000 psi (68.9MPa) |
| Tensile Strength | 2000psi (13.7Mpa) |
| Thermal Shock | 500 psi (3.4MPa) |

| Chemical Resistance* Chart | | | |
|-----------------------------------|----------------------------|-------------------------------|------------------------|
| Chemical Name | Continuous Exposure | Inter-mittent Exposure | Splash Exposure |
| Food Acids | | | |
| Lactic to 10 % | R | R | R |
| Acetic to 10% | R | R | R |
| Formic to 5 % | R | R | R |
| Citric to 50% | R | R | R |
| Tartaric to 50% | R | R | R |
| Tannic to 50% | R | R | R |
| Oleic to 100% | R | R | R |
| Phosphoric to 80% | R | R | R |
| Mineral Acids | R | R | R |
| Hydroflouric Acid** 10% | R | R | R |
| Sulfuric to 50%** | R | R | R |
| Nitric to 30%** | R | R | R |
| Hydrochloric to** 36.5% | R | R | R |
| Corrosive Cleaners | R | R | R |
| Sodium Hypochlorite** (Bleach) 3% | R | R | R |
| Sodium Hydroxide (Saturated) | R | R | R |
| Solvents | R | R | R |
| Xylene | R | R | R |
| Ethyl Alcohol | R | R | R |
| Mineral Spirits | R | R | R |
| Toluene | R | R | R |
| Methylene Chloride | NR | NR | NR |
| Gasoline | R | R | R |

The product shall be Latapoxy 2000 Industrial grout as manufactured by Laticrete India Pvt Ltd or Equivalent
 Applicable standard – ANSI 118.3 & ANSI 118.5

6. Water Proofing membrane:-

LATICRETE 9237 - WATER PROOFING MEMBRANE FOR TILE INSTALLATION:

Waterproofing membrane shall be liquid, thin and cold applied. Standard packing shall be Proprietary Latex liquid and corner reinforcing fabric. Fabric shall be used for installation on coves and corners. The product shall be used as a crack suppression membrane when reinforced with fabric to treat hairline shrinkage cracks up to 3mm. Water proofing membrane shall meet the following physical requirements:

Performance Properties

| | |
|--|---|
| Physical Properties | LATICRETE® 9237 Waterproof |
| Tensile Strength | 450 psi (3.1 Mpa) |
| Elongation | < 400% |
| Hydrostatic Pressure | 40hrs |
| Bond Strength of quarry tile to Membrane* | 350 psi (2.4 Mpa) |
| Bond strength of wall tile to membrane* | 375 psi (2.5 Mpa) |
| Dry Time @ 70oF (21oC) Cure Time @ 70oF (21oC) Full Cure @ 70oF (21oC) | Approx. 2-3 hrs 1 st coat Approx. 3-4 hrs 2 nd coat Approx. 5-7 days |
| Chemical Resistance | Brine Solution NA Sugar Solution NA Milk NA 10% Citric Acid NA 5% Acetic Acid NA 10% Sodium hydroxide NA Toluol NR Urine NA Calcium Chloride NA |

*Retains hydrostatic pressure resistance after 3 days immersion in 5% sodium hydroxide / potassium hydroxide solution at 66 deg cel.

**Ceramic tile installed with Laticrete 4237 Latex additive and Laticrete 111 Crete filler powder over Laticrete 9237 on Concrete.

Specifications are subject to change without notification. Results shown are typical but reflect test procedures used.
 Actual field performance will depend on the type of tile/stone used, installation methods and site conditions.

The product shall be Laticrete 9237 as manufactured by Laticrete India Pvt Ltd or Equivalent
 Applicable standard – ANSI 118.10

Technical Services:

As a professional courtesy, LATICRETE offers technical service free of charge. LATICRETE does not have any expressed or implied contractual obligation of duty to provide those technical services.

The user maintains all responsibility for verifying the applicability and suitability of the technical service or information provided.

The right to copy, distribute and utilize for commercial purposes is granted exclusively to architects, engineers and specification writers.

For additional technical support, contact Laticrete Technical Services Division.