

Globally Proven
Construction Solutions

Tile and Drain Mat

LATICRETE Plaza and Deck System provides a thin, lightweight, weather and frost resistant installation for ceramic tile, pavers, brick or stone. This system is designed for use over roof waterproofing membranes. An integral subsurface drainage component provides for elimination of infiltrated water. LATICRETE Plaza and Deck System eliminates the dead load problems (245 kg/m2) and high haulage/placement costs associated with conventional gravel drain beds.



FEATURES/BENEFITS

- Thin and lightweight, reduces dead load by 50%
- Frost and Weather Resistant
- Protects the tile installation from water damage and frost heaving
- Provides integral subsurface drainage for extra heavy traffic conditions
- Single source responsibility
- "Extra Heavy Service" rating per TCNA performance levels (RE: ASTM C627 Robinson Floor Test).
- For new projects and renovations
- Reduces potential for efflorescence



USES

- Plazas
- Balconies
- Walkways
- Exposed Decks
- Terraces
- Courtyards

MANUFACTURER/DISTRIBUTED BY

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

Telephone: +65 6515 3028 Fax: +65 6515 3037

Internet: se.laticrete.com

STANDARDS/CERTIFICATIONS

ASTM C627

Suitable Substrates

- Decks
- Concrete
- Precast
- Exterior Glue Plywood decks that have been waterproofed with a primary roof waterproofing membrane.
- Packaging/Components

Packaging

 $18.5~\text{m}^2$, lightweight, efficient drainage mat; 300~% better flow rate than crushed gravel drain bed. Mat Depth: 6 mm supplied in rolls. Mat is engineered to permit maximum load transfer to structural deck while allowing lateral flow of infiltrated water to flow easily to drains

Components

LATEX MORTAR BED

A high strength, frost and shock resistant mortar that provides an extra heavy duty, loadbearing base for the bonded tile finish. Prepared by mixing with 226 Thick Bed Mortar with 3701 Mortar Admix. Reinforced with 50 x 50 mm 16 gauge galvanized wire.

HYDRO BAN®

A thin, liquid-applied, waterproofing membrane applied over Latex Mortar Bed. Non-flammable and non-hazardous. Provides secondary waterproofing and crack suppression protection.

LATEX THIN-SET MORTAR AND LATEX MODIFIED GROUT

Ceramic tile, pavers, brick or natural stone are installed directly over the Mortar Bed and Membrane with Latex Thin-Set Mortar and Latex Modified Grout for permanent, weather resistant and maintenance-free installations. Use 211 Powder with 4237 Latex Additive. Grout is prepared by mixing 1500 / 1600 Tri-poly Fortified Color Grout with 1776 Grout Enhancer.

Coverage

Test	Products	Mixing Ratio	Coverage
Leveling Bed Pitch Layer (Plastic Consistency)	226 Power w/ 3701 Mortar Admix	7 kg to 1 Itr	0.7 m ² @ 6mm thickness
Mortar Bed (Semi-Dry Pack)	226 Powder w/ 3701 Admix	200 kg to 20 ltr	2m² @ 50mm Thickness
Thin Bed (Trowelable)	211 Powder w/ 4237 Admix	4kg to 1 Itr	lm²
Grout (Plastic)	1500 Sanded Grout w/ 1776 Admix	6kg to 1 Itr	Refer to Grout Coverage Chart

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 Waterproofing Membrane

- A primary roof membrane must be installed first; the System is then loose-laid over the membrane
- 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.
- Consult local building codes and regulations for structural requirements.

Cautions

Consult MSDS for more safety information.

- During cold weather, protect finished work 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

Physical Properties

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	Weight of System @ 50 mm Thickness (excluding veneer)	132 kg/m²
	Compressive Strength of System with 12 mm Paver Tile	20.7 N/mm²
	Service Rating per ASTM C627	Extra Heavy

^{*}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

Wood framed & plywood systems must use exterior glue plywood. Slope of concrete or wood structures to drain, to an edge, or scuppers must be provided, pitch 19 mm per

1 m.

Application PITCH LAYER

To provide pitch over a concrete deck, prepare a Latex Leveling Bed mix. Apply mortar over dampened substrate. Build from featheredge up to 19 mm. Primary roof waterproofing membrane (provided by others) must be properly installed according to manufacturer's instructions over the hardened pitch layer. Flood testing of primary waterproofing membrane is required prior to the installation of Plaza and Deck System.

Note: Contact roofing membrane manufacturer for installation and protection requirements.

TILE AND DRAIN MAT

Tile and Drain Mat is loose laid over primary roof waterproofing membrane. Mat is placed so that open cups face up. Roll out mat and cut to desired length with utility knife (protect waterproofing membrane from damage). Interlock by placing one row of disks over top of adjacent sheet and lay in. Sheets can be cut easily for precise fit at restraining wall surfaces. If tile drain mat will be exposed for a period of time, cover with a protection board. Also, place temporary weight on Tile Drain Mat to prevent uplifting by wind.

Note: Tile and Drain Mat interlocks in only one direction.

LATEX MORTAR BED

Screed the mortar in a normal manner, remembering to maintain the proper pitch in the deck. Place galvanized wire reinforcing in the middle of the bed. Compact or tamp the mortar bed to ensure proper strength and durability. A minimum bed thickness of 50 mm is required. Note: Additional pitch can be built into mortar bed if primary membrane has not been sufficiently pitched (minimum required 18 mm per meter.)

HYDRO BAN®

(For detailed installation guidelines please refer to HYDRO BAN data sheet) HYDRO BAN can be applied after Mortar Bed has hardened (12-24 hours @ 21°C). Do not install membrane over areas with standing water. If membrane is to be left temporarily exposed, cover with protection board. Protect from rain with polyethylene sheet for 7 days @ 21°C after installation. Flash membrane over edge of Mortar Bed at expansion joints (see detail drawing ES—EJO1).

Note: Do not bridge expansion joints with membrane. Flash membrane down into joint and seal joint with foam backer rod and sealant.

LATEX THIN-SET MORTAR

Install ceramic tile, pavers and stone directly over HYDRO BAN using 4237 Thin Set Additive mixed with 211 Crete Filler Powder.

LATICRETE COLOR GROUT

Select grout color from Grout Color Card. Prepare grout using SectraLOCK® Pro Grout or 1500 / 1600 Tri-poly Fortified Color Grout mixed with 1776 Grout Enhancer.

Expansion and Control Joints

Ensure that all wall/floor and field expansion joints are properly designed and spaced, and are free to move using a traffic-bearing, exterior grade sealant or pre-formed jointing material. Use LATASILTM.

Cleaning

Clean tools with water.

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 International, Inc. warrants that Tile & Drain Mat is free from manufacturing defects and will not break down, deteriorate or disintegrate under normal usage for a period of ten (10) years from date of purchase subject to the terms and conditions.

MAINTENANCE

LATICRETE® and LATAPOXY® grouts require routine cleaning with a neutral pH cleaner (e.g STONETECH® Stone & Tile Cleaner) and water. All other LATICRETE and LATAPOXY materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

TECHNICAL SERVICES / CONTACT

Technical Assistance

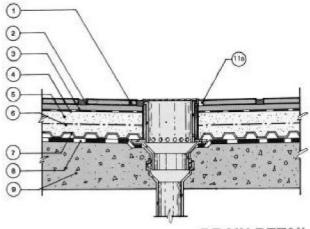
Information is available by calling:

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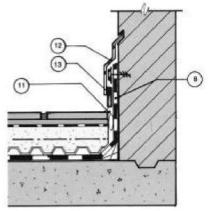
Email: enquiry@laticrete.com.sq

Technical and safety literature

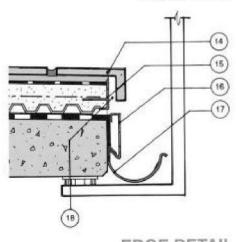
To acquire technical and safety literature, please visit our website at **se.laticrete.com**



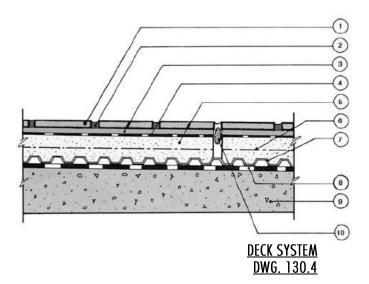
DRAIN DETAIL DWG. 130.1



WALL/FLOOR CONNECTION DWG, 130.2



DWG. 130.3



Key Notes

- 1. Tile, Brick, Pavers and Stone
- 2. 1500 Sanded Grout mixed with 1776 Grout
- 3. 4237 Thin Set Additive mixed with 211 Crete Filler Powder
- 4. $\operatorname{HYDROBAN}^{\otimes}$ for secondary waterproofing and crack suppression
- 5. 3701 Mortar Admix mixed with 226 Thick Bed Mortar (Minimum 48 mm)
- 6. Wire Reinforcing (16 Gauge, 5 cm x 5 cm welded galvanized wire mesh)
- 7. Tile and Drain Mat
- 8. Primary Waterproofing Membrane (Roofing Type)
- 9. Concrete slab, properly pitched: 18 mm perimeter
- 10. Expansion joint
- 11. Foam backer rod topped with suitable sealant
- 11a. Latasil™
- 12. Flashing
- 13. Tile base
- 14. Balcony edging tile
- 15. Edge profile
- 16. Drip edge
- 17. Gutter
- 18. Gap between edging profile and balcony edging tile