



Plaza & Deck System

DS-290.0-0608



1. PRODUCT NAME

LATICRETE® Plaza and Deck System

2. MANUFACTURER

LATICRETE International, Inc.
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Bethany, CT 06524-3423 USA

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3. PRODUCT DESCRIPTION

LATICRETE Plaza and Deck 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 (50 lbs/ft² /250 kg/m²) and high haulage/placement costs associated with conventional gravel drain beds.

Uses

Recommended for new construction and renovations, such as:

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

Advantages

- 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

Suitable Substrates

Use over structurally sound and properly pitched:

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

Packaging/Components

- **LATICRETE TILE DRAIN MAT**—Lightweight, efficient drainage mat; 300 % better flow rate than crushed gravel drain bed. Mat Thickness: 1/4" (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—Patent # 5,383,314
- **LATICRETE 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 LATICRETE 226 Thick Bed Mortar with LATICRETE 3701 Mortar Admix. Reinforced with 2" x 2" (5 x 5 cm) 16 gauge galvanized wire.

- **LATICRETE® 9235 WATERPROOFING MEMBRANE**—A thin, liquid-applied, fabric reinforced waterproofing membrane applied over LATICRETE® Latex Mortar Bed. Non-flammable and non-hazardous. Provides secondary waterproofing and crack suppression protection.
- **LATICRETE LATEX THIN-SET MORTAR AND LATEX MODIFIED GROUT**—Ceramic tile, pavers, brick or natural stone are installed directly over the LATICRETE Mortar Bed and Membrane with LATICRETE Latex Thin-Set Mortar and Latex Modified Grout for permanent, weather resistant and maintenance-free installations. Use LATICRETE 254 Platinum or LATICRETE 211 Powder with LATICRETE 4237 Latex Additive. Grout is prepared by mixing LATICRETE 1500 Sanded Grout with LATICRETE 1776 Grout Enhancer.

Coverage

Application	Product	Mix Ratio	Coverage
Leveling Bed Pitch Layer (Plastic Consistency)	LATICRETE 226 Thick Bed Mortar w/ LATICRETE® 3701 Latex Additive	60 lbs to 1 gal (27 kg to 3.8 l)	32ft' @ 1/4" (2.8 m' @ 6 mm) thickness
Mortar Bed (Semi-Dry Pack)	LATICRETE 226 Thick Bed Mortar w/ LATICRETE 3701 Latex Additive	420 lbs to 5 gal (189 kg to 19 l)	22.5 ft' @ 2" (2m' @ 50 mm) thickness
Thin Bed (Trowelable)	LATICRETE 211 Powder w/ LATICRETE 4237 Latex Additive or	35 lbs to 1 gal (18 kg to 3.8 l)	40 ft' (3.6 m')
	LATICRETE 254 Platinum	50 lbs to 5.5 qts (22.7 kg to 5.21 l)	60 ft' (5.4 m')
Grout (Plastic)	LATICRETE 1500 Sanded Grout w/ LATICRETE 1776 Grout Admix	50 lbs to 1 gal (22.7 kg to 3.8 l)	Refer to Grout Coverage Chart

Shelf Life: Factory sealed containers of the LATICRETE Latex liquids are guaranteed to be of first quality for two (2) years if stored at temperatures >32°F (0°C) and <110°F (43°C). Factory sealed containers of this product are guaranteed to be of first quality for one (1) year if stored off the ground in a dry area.

*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 9235 Waterproofing Membrane (see Section 10 **FILING SYSTEM**)
- A primary roof membrane must be installed first; the LATICRETE System is then loose-laid over the membrane
- The elevated deck assembly must be structurally designed for maximum deflection not to exceed L/360 of the span of the structure under combined live and dead loads for ceramic tile and L/480 for stone applications.
- Consult local building codes and regulations for structural requirements.

Cautions

- 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.

4. TECHNICAL DATA

Physical Properties

Weight of System @ 2" (50 mm) Thickness (excluding veneer)	27 lbs 1 per ft' (132 kg/m')
Compressive Strength of System with 1/2" (12 mm) Paver Tile	432,000 lbs/ft' (20.7 MPa)
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.

5. INSTALLATION

Preparation

Wood framed & plywood systems must be exterior grade. Slope of concrete or wood structures to drain, to an edge, or scuppers must be provided, pitch 1/4" per foot (18 mm per 1 m).

Application

PITCH LAYER—To provide pitch over a concrete deck, prepare a LATICRETE Latex Leveling Bed mix. Apply mortar over dampened substrate. Build from featheredge up to 3/4" (18 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 LATICRETE Plaza and Deck System.

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

LATICRETE TILE DRAIN MAT—LATICRETE Tile 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 Drain Tile Mat will be exposed for a period of time. Cover with a protection board. Also, place temporary weight on LATICRETE Tile Drain Mat to prevent uplifting by wind. **Note:** LATICRETE Tile Drain Mat interlocks in only one direction.

LATICRETE 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 2" (50 mm) is required. **Note:** Additional pitch can be built into mortar bed if primary membrane has not been sufficiently pitched (minimum required 1/4" per foot/ 18 mm per meter.)

LATICRETE 9235 WATERPROOFING MEMBRANE—(For detailed installation guidelines please refer to data sheet 236.0, WPAF.5) LATICRETE 9235 Waterproofing Membrane can be applied immediately after LATICRETE Mortar Bed has hardened (12–24 hours @ 70°F (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 @ 70°F (21°C) after installation. Flash membrane over edge of LATICRETE Mortar Bed at expansion joints (see detail drawing ES–EJ01). **Note:** Do not bridge expansion joints with LATICRETE membrane. Flash membrane down into joint and seal joint with foam backer rod and sealant.

LATICRETE LATEX THIN-SET MORTAR—Install ceramic tile, pavers and stone directly over LATICRETE 9235 Waterproofing Membrane using LATICRETE 254 Platinum or LATICRETE 4237 Latex mixed with LATICRETE 211 Powder.

LATICRETE Latex Modified Grout—Select grout color from LATICRETE® Grout Color Card Data Sheet 254.3 US. Prepare grout using LATICRETE 1500 Sanded Grout mixed with LATICRETE 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 LATICRETE Latasil™.

6. AVAILABILITY AND COST

Availability

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

Toll Free: 1.800.243.4788
 Telephone: +1.203.393.0010
 Internet: www.laticrete.com

Cost

Contact a LATICRETE Distributor in your area.

7. WARRANTY

See 10. FILING SYSTEM

DS 230.13: LATICRETE Product Warranty

A component of:

DS 230.12: LATICRETE 10 Year System Warranty Guarantee

8. MAINTENANCE

LATICRETE and LATAPOXY grouts require routine cleaning with a neutral pH soap 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.

9. TECHNICAL SERVICES

Technical assistance

Information is available by calling:

Toll Free: 1.800.243.4788, ext. 235
 Telephone: +1.203.393.0010, ext. 235
 Fax: +1.203.393.1948

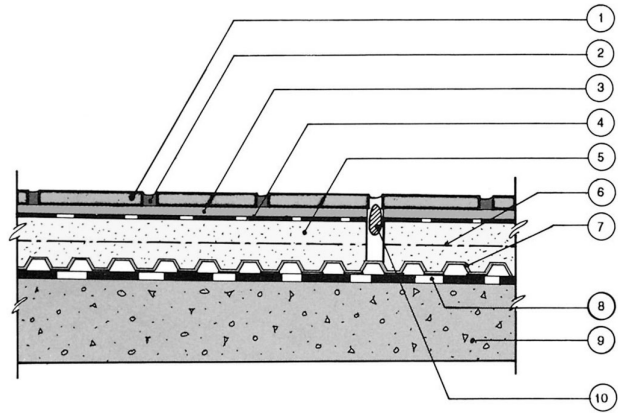
Technical and safety literature

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

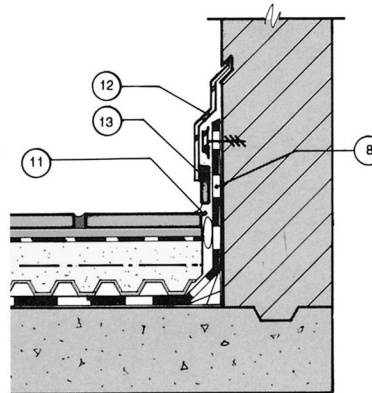
10. FILING SYSTEM

Additional product information is available on our website at www.laticrete.com. The following is a list of related documents:

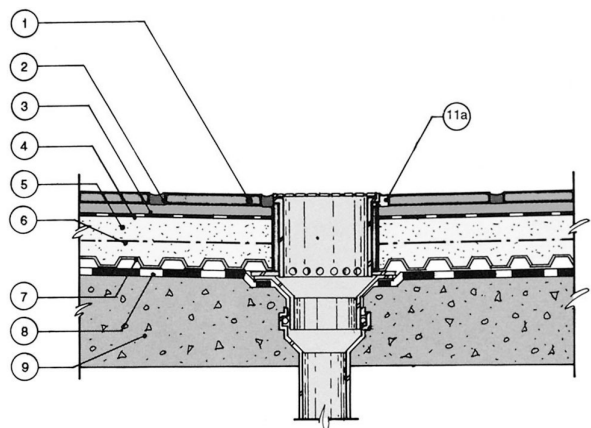
- DS 236.0: LATICRETE 9235 Waterproofing Membrane
- DS 231.0: LATICRETE 3701 Mortar Admix
- DS 239.1: LATICRETE 226 Thick Bed Mortar
- DS 230.1: LATICRETE 4237 Latex Additive
- DS 265.0: LATICRETE 1776 Grout Enhancer
- DS 230.12: LATICRETE 10 Year System Warranty
- DS 256.0: LATICRETE 1500 Sanded Grout
- DS 254.3US: LATICRETE Grout Color Card Data Sheet
- DS WPAF.5: LATICRETE 9235 Waterproofing Membrane, LATICRETE Watertight™, LATICRETE Blue 92 Anti-Fracture Membrane How To Booklet
- DS 6200.1: LATICRETE Latasil™
- DS 677.0: LATICRETE 254 Platinum



**DECK SYSTEM
 DWG. 130.0**

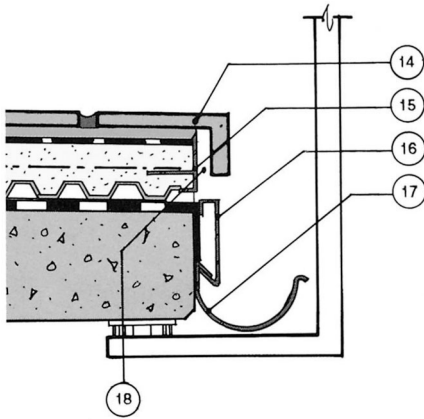


**WALL/FLOOR CONNECTION
 DWG. 130.2**



**DRAIN DETAIL
 DWG. 130.1**

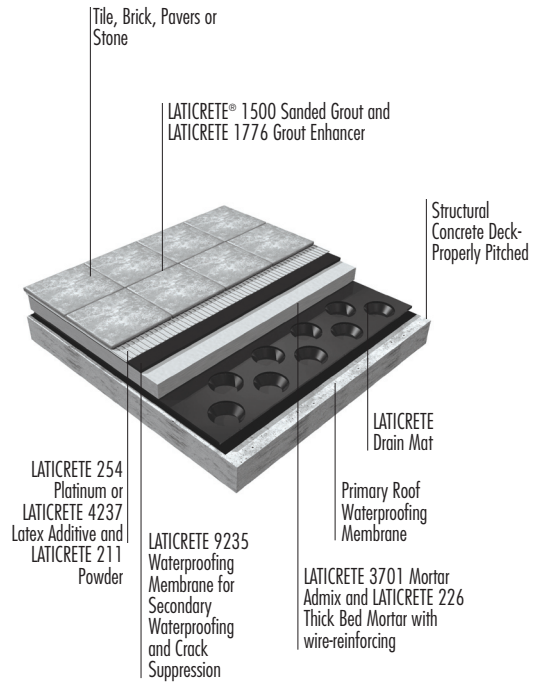
LATICRETE PLAZA & DECK SYSTEM



**EDGE DETAIL
DWG. 130.3**

Key Notes

1. Tile, Brick, Pavers and Stone
2. LATICRETE® 1500 Sanded Grout mixed with LATICRETE 1776 Grout Enhancer
3. LATICRETE 254 Platinum
4. LATICRETE 9235 Waterproofing Membrane for secondary waterproofing and crack suppression
5. LATICRETE 3701 Mortar Admix mixed with LATICRETE 226 Thick Bed Mortar (Minimum 2" / 48 mm)
6. Wire Reinforcing (16 Gauge, 2" x 2" (5 cm x 5 cm) welded galvanized wire mesh)
7. LATICRETE Tile Drain Mat
8. Primary Waterproofing Membrane (Roofing Type)
9. Concrete slab, properly pitched: 1/4" per foot/ 18 mm per meter
10. Expansion joint
11. Foam backer rod topped with suitable sealant
- 11a. LATICRETE 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



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