# MAPEI's primary waterproofing system featuring *Planiseal* ° CR1



Primary waterproofing is essential to the success of exterior installations, especially if the installation is over occupied space, such as balconies or roof decks. By installing a complete system – primary waterproofing, bond coat and tile installation products – from a single-source supplier, you know that the system components will work together.





The Miami-Dade Notice of Acceptance (NOA) designates that the approved product meets Florida Building Code (FBC) High Velocity Hurricane Zone (HVHZ) requirements. Many coastal municipalities accept or require this NOA in their local building code. Always confirm the most current requirements per the local code.







# DIRECT-BOND APPLICATIONS

The fully warranted direct-bonded tile application system includes:

- *Mapeflex® PI FT*: One-component, non-sag, elastomeric polyurethane sealant
- *Planiseal CR1*: Single-component, 100%-solids, cold-fluid-applied, structural waterproofing membrane. It contains no tar or asphalt and is resistant to rain after 2 hours. *Planiseal CR1* is moisture-curing, will not shrink and is VOC-compliant in virtually all municipalities. Very low in odor, it is well suited for use in and around occupied spaces. Thanks to advanced proprietary technology, this single-grade membrane can be used in horizontal as well as vertical applications, maximizing versatility. *Planiseal CR1* can be applied by roller, brush, trowel or squeegee.
- **MAPEI LMR Fabric:** Spunbond, nonwoven polyester reinforcing fabric for liquid waterproofing membranes
- **Mapesand<sup>™</sup> Coarse:** Calibrated, washed and oven-dried, 16/30 mesh silica sand that is broadcast to refusal (any 16/30 coarse drywashed sand can be used)
- ANSI A118.15 large-and-heavy-tile mortar from MAPEI, such as *Keraflex™ Super*
- **Ultracolor® Plus FA:** Rapid-setting, "all-inone" grout with DropEffect<sup>™</sup> technology to help repel water, dirt and grime from penetrating grout joints. It is an ultra premium, fine-aggregate, fast-setting, polymer-modified, color-consistent, nonshrinking, efflorescence-free grout for joint widths from 1/16" to 3/4" (1.5 to 19 mm).
- *Mapesil® T Plus:* Professional-grade, 100%-silicone sealant that exceeds ASTM and ANSI standards. It features enhanced adhesion for use on multiple substrates, and is specifically formulated for heavy traffic and expansion/movement joints.

## DEBONDED APPLICATIONS

*Planiseal CR1* can be applied over concrete, wood, metal and plastic. For a complete listing of suitable substrates and surface preparation requirements, refer to the Technical Data Sheet for *Planiseal CR1*. However, whether installing a single-coat or a reinforced system, with MAPEI's primary waterproofing as the base for a system installation, you are off to a secure – and dry – start.



#### Single-coat system installations:

- a. *Planiseal CR1* can be applied with a short-nap roller (3/8" or 10 mm), brush, trowel or squeegee.
- b. Verify 60-mil thickness using a wet-mil gauge.
- c. Planiseal CRI should also be applied 4" (10 cm) up the wall.



Reinforced system installations:

- a. Immediately after applying the first 60-mil-thick coat, apply *MAPEI LMR Fabric* into the wet material. *MAPEI LMR Fabric* can be embedded by lightly rolling with a dry roller.
- b. The second 60-mil-thick coat of *Planiseal CRI* can be applied immediately but must be applied within 24 hours.

Whether single-coat or reinforced, allow the system to cure for 24 hours.

For installations where positive drainage is desired, apply a reinforced system over the drain assembly per industry standards.



## TILE INSTALLATION OVER PRIMARY WATERPROOFING

Whether you have installed a single-coat or a reinforced system, preparing MAPEI's *Planiseal CR1* primary waterproofing system for tile installation is a straightforward process. *Planiseal CR1* will waterproof the substrate, providing long-term protection and a suitable surface for tile installation.

- a. Apply a 20-mil skimcoat of *Planiseal CRI* over the entire primary waterproofing system where tile will be installed; verify the thickness with a wet-mil gauge.
- b. While the skimcoat is still wet, broadcast *Mapesand Coarse* or 16/30 coarse dry washed sand to the point of refusal.
- c. Allow to cure for 24 hours and then remove all loose sand.
- d. Install tile using a mortar meeting a minimum standard of ANSI A118.15, for a long-term warrantable installation.

For installations where positive drainage is desired, apply a reinforced system over the drain assembly per industry standards.

#### PRIMARY WATERPROOFING UNDER PEDESTAL SYSTEM

Planiseal CRI is suitable for use under pedestal installation systems that require a primary waterproofing membrane. Planiseal CRI should be covered with a suitable drainage layer, such as **Mapedrain™ 35**. Pedestals should not be set directly on *Planiseal CRI*. Be certain to follow all the instructions for the selected pedestal system. Contact MAPEI's Technical Services for more information.

