

Tile & Stone Installation Systems | Floor Covering Installation Systems |
Concrete Restoration Systems

Installing *Primer T*[™] over *Planiseal*[®] VS

Planiseal VS is a two-part, epoxy moisture-reduction barrier that is typically covered with a primer and a self-leveling underlayment (SLU) to prepare high-moisture concrete to receive a moisture-sensitive floor covering. Among the many MAPEI primers that can be used over *Planiseal VS*, *Primer T* is a single-component acrylic primer designed for ease of application.

While an SLU system that includes *Planiseal VS* and *Primer T* enjoys a long history of successful installations, several variables on the jobsite must be understood and controlled for a satisfactory outcome. This document outlines some important considerations for each layer of the system and should be used in conjunction with the products' Technical Data Sheets (TDSs) during installation.

When *Primer T* can be used over *Planiseal VS*

(all requirements must be met):

- When the project is indoors and will be under an HVAC system after the leveler is installed and cured per the TDS requirements
- When the project will not have vehicular traffic for 7 days after installation of the leveler
- When the leveler will be covered by the finished flooring and not used as a topping
- When enough curing time can be allotted for *Planiseal VS* (at least 8 hours before *Primer T* application) and *Primer T* (at least 5 hours before SLU application)
- When no exposed fibers, fillers or reinforcements from the prepared concrete substrate will extend through the *Planiseal VS* layer
- When the SLU is mixed per specifications outlined in the TDS and not overwatered
- When the SLU is placed in a layer not exceeding the maximum thickness stated in the TDS

Considerations for installing *Planiseal VS*:

- Review the TDS for application requirements and necessary jobsite conditions.
- Shotblast or grind the substrate to an International Concrete Repair Institute (ICRI) concrete surface profile (CSP) of #2 to #3. Allow the substrate to outgas for 16 to 24 hours before applying *Planiseal VS*. Not allowing time for outgassing can lead to bubbles in *Planiseal VS*.

- Any fibers or other concrete additives that may extend into or through the *Planiseal VS* layer must be completely removed down to the level of the concrete surface. If the fibers cannot be removed (for example, metal fibers), contact MAPEI's Technical Services Department.
- Once a CSP of #2 to #3 has been achieved, the substrate must be absorptive to accept *Planiseal VS*. Confirm absorptivity by placing water droplets on the floor and observing that they absorb into the concrete (see ASTM F3191 for details of conducting a water-drop test).
- Treat all cracks and joints per the TDS directions.
- Temperature of room and slab must be between 50°F and 85°F (10°C and 29°C).
- Thoroughly mix full units of Part A and Part B.
- Apply *Planiseal VS* for a resulting wet film thickness (WFT) of 12 to 14 mils. This should be checked periodically with a film thickness gauge, which is available from your MAPEI sales representative.
- Allow a minimum curing time of 8 hours. Longer curing times may be needed for temperatures below 73°F (23°F).
- *Planiseal VS* should cure to a shiny, clear and continuous appearance, with no holes or voids in the membrane. If voids are present, consult the TDS for recommended next steps.
- If more than 24 hours passes before *Planiseal VS* is covered with a primer, reapply *Planiseal VS*.

Before applying *Primer T*:

- Ensure that the *Planiseal VS* layer has no evidence of contamination (dust, paint, oil, footprints, etc.). Contaminants should be removed before *Primer T* is applied.
- Ensure that the *Planiseal VS* layer has no evidence of fibers extending into or through the product. No fibers should extend into or through the *Planiseal VS* layer.
- Check the *Planiseal VS* layer for tackiness. If tackiness is observed, allow *Planiseal VS* to cure until it is no longer tacky.
- Check the *Planiseal VS* layer to make sure it does not have a chalky or greasy appearance or feel. If it does, contact MAPEI's Technical Services Department.

Considerations for installing *Primer T*:

- Review the TDS for application requirements and necessary jobsite conditions.
- Do not apply if the temperature of the slab is less than 5 degrees Fahrenheit (2.8 degrees Celsius) above the dew point. This can cause a thin water layer to be deposited on the *Planiseal VS* layer. A dew point calculator can be found at <http://www.dpcalc.org/>.
- Apply *Primer T* only if the substrate and ambient temperatures are between 50°F and 85°F (10°C and 29°C).
- Apply a thin layer of undiluted *Primer T* with a 3/8" (10 mm) roller. Typical coverage for 2 U.S. gallons (7.57 L) of *Primer T* over *Planiseal VS* is 800 square feet (74.3 m²).
- Allow *Primer T* to completely cure. This takes a minimum of 5 hours. Curing will take longer in low temperatures or high humidity conditions.
- Limit air movement over the surface of *Primer T*. No fans or breeze should blow directly on the primer. Direct air movement toward the ceiling.

- Allow sufficient curing time before allowing foot traffic (typically at least 24 hours) and vehicular traffic (typically at least 7 days). Consult the product TDS for details.

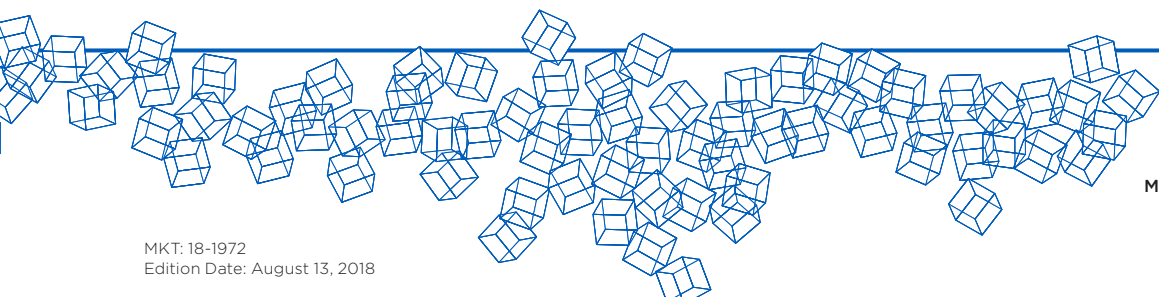
Failure to follow the above recommendations could result in nullification of the MAPEI warranty. Not every jobsite is ideal for the SLU system that includes *Planiseal VS* and *Primer T*. MAPEI produces other primers that may be more appropriate for an installation. It may also be beneficial to use a self-leveling underlayment with specific properties for certain conditions. For the best product choices for an installation, consult your MAPEI Sales or Technical Services Representative.

Before applying an SLU:

- *Primer T* should be continuous with no voids.
- Ensure that *Primer T* has no evidence of contamination (dust, paint, oil, footprints, etc). Remove any contaminants and clean, if necessary.
- Confirm that *Primer T* is cured. When *Primer T* is fully cured, it is clear in appearance (even when wetted with a water droplet) and cannot be scraped from the surface by a fingernail.
- Honor expansion and dynamic joints; do not cover them with a self-leveler or flooring.
- Saw cuts and static joints may be covered but can result in cracking later. Cracks can typically be repaired before flooring is applied.

Considerations for installing an SLU:

- Read and follow all directions on the TDS for the SLU.
- Do not use outside of the temperature ranges indicated on the TDS.
- Do not use more water than is allowed on the TDS. Too much water could lead to inconsistent shrinkage, cracking and de-bonding.
- Do not exceed the maximum thickness for single-lift application as stated in the self-leveler's TDS.



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