What is the fastest – and best – way to build the mortar bed and waterproof a shower? New technology has the answer to this common question.

Plastic Shower Pan Liner Method

The traditional method (TCNA method B415) calls for installing a pre-slope on the subfloor of the shower. Then, a plastic shower pan liner is added to the pre-slope and clamped to the drain, with the liner extended up the walls 3” above the top of the curb. The watertight floor should be flood tested for a minimum of 24 hours. The water is drained and a traditional cement mortar bed meeting ANSI A108.1 is installed on the plastic liner to create the base for tiling.

While you could wet set tiles on the still-wet mortar bed, many prefer to allow the mortar to cure 24 – 72 hours before installing the tile with the thin-set method.

This mortar bed method has been used for decades, but does have drawbacks. Primarily, it is a time consuming process. In this day and age, installation speed to save labor costs is more important than ever. Buildings and homes go up much faster and the cost per hour for labor is much higher. It has become essential to find new ways to finish a ceramic tiled shower quickly.

Secondly, the thick mortar bed just beneath the tile will fill with water when the shower is used. If done right, water will slowly drain through the weep holes into the drain. Many times the pre-slope is not done right or the weep holes are partially blocked. The water remains in the mortar bed, contaminated with all the organic materials from showering.

This has led many installers to surface waterproofing (TCNA method B421 or B422) of the shower floor mortar bed instead of using a shower pan liner beneath the mortar bed. This keeps the water out of the mortar bed and directs it down the drain. This method eliminates the installation of the pre-slope, but you may still have to wait for slow drying mortars and membrane materials to cure before installing tile.

CUSTOM’s Rapid-curing System for Creating Showers

Custom Building Products has solved these inherent problems with two rapid-curing products for preparing a shower for the installation of ceramic, glass and natural stone tile. The first product in this system is CUSTOM’s SpeedSlope™, a rapid-setting mortar bed that meets ANSI A108.1.

SpeedSlope Rapid Curing Sloping Mortar

Following TCNA method B421 or B422, SpeedSlope is installed onto the subfloor of the shower stall in the same way a traditional cement mortar bed is placed. It is shaped to fit the floor and sloped ¼” per foot to the drain. Because of its unique cement chemistry, it cures hard in less than 2 hours and is ready to receive waterproofing. SpeedSlope is pre-blended and polymer-modified, so there is no need for jobsite mixing of sand and cement or the addition of liquid latex additive; just add water and mix to a dry pack consistency.

RedGard SpeedCoat Rapid Curing Waterproofing Membrane

The second product in the shower system is RedGard® SpeedCoat ™, an extremely fast curing, liquid-applied waterproofing membrane.

With the cured SpeedSlope mortar bed ready in 2 hours, RedGard SpeedCoat is used to waterproof the shower floor and walls with a simple roll-on application. RedGard SpeedCoat uses a cross-linking, moisture cure, polymer base to meet the demanding requirements of ANSI A118.10 and the IAPMO standards for shower pan liners.

RedGard SpeedCoat can be trowel or roller applied like traditional latex-based waterproofing membranes using the manufacturer’s directions for proper installation. Following TCNA method B421 or B422, the membrane is tied into the drain and carried up the walls, as with any typical waterproofing membrane available today.
Moisture Cure Technology

Unlike traditional waterproofing membranes, RedGard SpeedCoat’s moisture cure technology will typically cure the membrane in less than one hour. The reactive curing process is not affected by temperature and humidity variation and the final cure is much more predictable. Because of its unique composition, RedGard SpeedCoat does not change color as it cures. Once it is dry to the touch, it is fully cured and ready for flood testing and the installation of ceramic tile.

Because of its thin application rate, RedGard SpeedCoat coverage per gallon is much higher than traditional latex-based waterproofing membranes. When used in conjunction with CUSTOM’s SpeedSlope, the coverage of one gallon of RedGard SpeedCoat is equal to 3-½ gallons of a traditional latex-based waterproofing membrane. Typically, one gallon of SpeedCoat is all that is needed to fully waterproof a standard size shower stall.

When used together, SpeedSlope and RedGard SpeedCoat can prepare a shower in hours rather than days. After tile is set with a qualifying CUSTOM mortar and grout, this shower installation system is eligible for up to a lifetime warranty.

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