

Aquaflex Modified Wet-Set Installation Process - Tile



The following is a quick overview of the Aquaflex Modified Wet-Set Installation Process. This process is very efficient and suits retail construction perfectly.

The process starts with 3 simple words **SMOOTH, POROUS & CLEAN.**

SMOOTH

When the concrete surface is **SMOOTH** then lippage will not occur (unless the tile itself is defective). A 30,000sf store space can be perfectly level but still remain bumpy. Just like the ocean is relatively level, you can always guarantee there will be some waves. There are 2 accepted ways to fix bumpy concrete and we need to do both: fill in the low spots and grind off the high spots. We don't want to broadcast skim-coat. Broadcasting skim-coat is not how the material was designed to be used. Skim-coat is designed to lift slight depressions in the concrete. Use the string technique to quickly identify these invisible depressions. Grinding becomes necessary to shave the highs so that less (not more) skim-coat can be applied. Skim-coat is a polymer modified mortar, sets-up (crystalizes) completely different than cement and will never be as hard as concrete. So limit its use!

*If you miss a low spot or crown and a slight lift occurs, lay a few tile over the lifted area while the glue is still wet. The glue will set up after a few hours and lock it down. Make sure you lay the tile within the 2hr active window.

POROUS

Porosity creates "surface energy" powering higher bond strengths. It has its limitations. Too much (shot blast) and the adhesive can be completely absorbed. Enough, and besides high bond strength, you will insure proper adhesive cure times, proper tile placement, flexibility to adjust placement and eliminate glue squeeze at seams. A tight, nonporous concrete surface leaves 100% of the adhesive on the surface. When the adhesive does not have sufficient porosity for absorption, the cure time will increase, chances that tile will displace will increase and you will fight with the floor throughout the project.

CLEAN

A clean surface means the removal of dust and dirt that, to an adhesive, looks just like substrate. Too much dust, and no matter the above steps, you will destroy bond. Using a fan to blow dust away only serves to aerosolize the dust, which now can find its way into your lungs and on merchandise. Concrete dust is crystalline, hazardous and can lead to COPD, kidney failure and Cancer. Use a vacuum and then MOP! Mopping is as important as trowel technique. It insures a pristinely clean surface, impregnates the concrete with moisture necessary for cure and increases adhesive absorption.

The Aquaflex Modified Wet-Set Installation Process

The above sequence of pictures speaks for itself. As fast as you can trowel, is as fast as you can set floor. **DO NOT spread adhesive through wet or uncured Patch & Skim.** Notice in the first pic how even the trowel lines are. The adhesive is translucent, allowing you to clearly see the chalk lines below. This is by design. The trowel is angled correctly at about 35 degrees to the concrete surface. The section pictured was almost 350ft long and 12ft wide. This was set in about 3 hours totaling 4200 sq ft! The guys started at 10:00p, stopped for 30mins to eat, cleaned up and out the door by 4:00a. The pic on the far right is at 8:00a after store opening. Another crew was doing the prep work.