

## Quick Tip:

# Subfloor Prep Cementitious/Epoxy Products in High Moisture Vapor Situations

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**E**ach year, over one billion dollars are lost on claims related to flooring damaged by moisture in the United States alone. All types of wood and resilient flooring can be adversely affected by moisture when installed over concrete subfloors. These effects could surface immediately or take weeks, months, or years after the installation to manifest. Warping, buckling, cupping, and discoloration are some of the common traits you might expect to find as a result of moisture damage. Moreover, harmful moisture vapors may transmit from concrete subfloors and present health hazards in the form of mold, mildew, or bacteria. Fortunately, there are particularly innovative product systems available today which comprise the ultimate first line of defense against all such damages.

Subfloor preparation is vital to ensuring your installation is protected in the long term. As concrete dries, water vapor naturally exits the slab by creating small capillary networks that remain open as future pathways for moisture. Moisture vapor emission, therefore, is a natural byproduct of water sources below the slab. It's crucial to not only reduce the emission rate of these vapors, but to also create a flat, level, and smooth surface upon which other flooring materials can be properly installed.

One of the most popular technologies utilized to defend against moisture are single component and two-part epoxy moisture barriers engineered to protect and prepare the concrete substrate. Particularly strong and versatile are two-part epoxies, which can aid with substrate consolidation and adhesion promotion, while typically boasting the lowest perm ratings of any moisture vapor

barrier technology in the flooring industry. The fast-curing nature of some epoxies on the market could allow you to progress with the installation in as little as 3 hours with a peace of mind afforded by moisture protection of up to 100% R.H. (relative humidity).

When it comes to implementing proper subfloor preparation, installers should consider a self-leveling underlayment specially engineered for use in high moisture situations. These moisture tolerant, rapid setting and durable self-levelers can address the need for a flat, level, and smooth surface. A cementitious underlayment can produce self-smoothing substrates for all types of residential and commercial flooring finishes. There are options available which feature high flow, high strength engineering and cure times as low as 90 minutes. There's no longer a need to choose between working thoroughly and working quickly. All told, you can install a secure system that contributes the highest possible moisture resistance in just a few hours.

Now more than ever, there's a wide range of products available to help contend with high moisture installations. The ultimate choice for installers is a fully integrated combination of products that are capable of rapidly resolving moisture concerns while supplying an optimal surface profile. Some companies provide every element of a fully warranted system, allowing installers to rely on just one trusted supplier. Harmful moisture vapor emissions can pose a threat on any given installation, but these latest technology groupings afford a greater efficiency and security than ever before.

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Photos courtesy of Sika Corporation