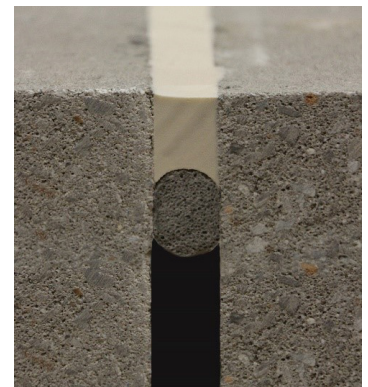


Subfloor Repair

Improper treatment of cracks and incorrect subfloor preparation are often sources of moisture penetration, causing floor failure. STAUF has developed systems to resolve these issues. After the slab has been adequately prepared by grinding or shot blasting, vacuumed, and tacked, the substrate is prepared for all flooring installations; including moisture mitigation or resinous coatings using the following products:

A. TREATMENT OF CRACKS AND GAPS

1. **Hairline or spider web cracks** are typically less than 1/32" wide and only topical. They do not need to be treated prior to the application of sealers.
2. **Stress cracks or relief cuts** are over 1/32" up to 1/8" wide. Widen cracks to at least 1/8" and make 3/8" deep cross cuts about every foot. Insert brackets into cross cuts and fill with crack filler such as STAUF CCF-40. Spread dried sand over the crack filler and remove excess sand after it has dried.
3. **Relief cuts or non-moving voids** are over 1/8" wide and may go all the way through to the bottom of the slab. A backer rod must be inserted into the hole to retain the crack filler. Make cross cuts about every foot and insert brackets. Fill all voids with a crack filler such as CCF-40. Spread dried sand over the crack filler and remove excess sand after it has dried.
4. **Dynamic or moving joints** have intentional separations between two sections of concrete that allow for expansion and contraction. They need to be honored throughout the entire installation. Insert a backer rod into the dynamic joint. The compound should be filled to a depth of 2x the width of the joint. Fill this void with a permanently flexible and moisture-resistant joint filler such as STAUF DJF-60. After the joint filler is dry, it can be covered with the same primer, sealer, leveler, or adhesive as is used on the rest of the floor.



B. TREATMENT OF HOLES AND DEPRESSIONS

1. Large Cracks, Holes, and Low Areas

Patching over high moisture subfloors requires a unique system that will not deteriorate. STAUF EHS-265 is a two-part water-based epoxy. When mixed with STAUF QFF-560 cement patch instead of water, the material becomes a moisture resistant patch, or skim coat capable of withstanding moisture. EHS-265 2.5 QT unit can be mixed with a minimum of 5 lbs. QFF-560 to address excessive cracks and minor variations. Mixtures with up to 10 lbs. of QFF-560 can be used to build ramps, fill depressions, or large holes.



2. Covering Ceramic Tile and Grout Joints

Patching over ceramic tiles cannot be performed with water-based products since the subfloor is non-absorbent. STAUF ERP-270 and fine dried sand is a system designed to fill and smooth out ceramic tile and grout joints when resinous coatings or any flooring types are applied over them. Mix 1 gallon of ERP-270 with 10 lbs. of 70 mesh silica sand to create a patch that will act as a bonding agent over ceramic tile and fill in grout joints.

3. Filling Depressions Over Large Areas or Deep Holes

A more economical patch can be applied for very deep holes or large depressions. ERP-270 can be used to create an inexpensive yet water-resistant patch for filling large or deep voids. Mix one gallon of ERP-270 with 50 lbs. of dry play sand. This will result in a mortar-like consistency that can be manually spread over the area to be leveled. This patch cannot be feathered and needs to be installed at a thickness of at least 1/8" or greater. After a 4-8 hour cure time, the edges can be feathered using the fore mentioned EHS-265/QFF-560 mixture. Finally, the entire area should be covered with STAUF ULC-500 or other suitable materials that cover the different structures of the materials used.

C. MOISTURE RESISTANT SELF LEVELING COMPOUND

1. Moisture Resistant Leveling Compound To Be Installed Under Any Surface

Many subfloors require both a moisture barrier and a self-leveling compound. This can be achieved with EHS-265, which is applied with a 3/8 nap roller (yields up to 320 SF/gal). This two-part water-based epoxy primer creates a strong bonding agent for subsequent products. The primer is white during installation and turns clear within 2-4 hours as it cures.

After the primer has dried, the leveler can be installed. ULC-500 is a two-component urethane leveling compound capable of creating a moisture barrier up to 18# CC or 97% RH. Work can commence within four hours, enabling flooring installation to begin the same day. The membrane must be applied at a minimum of 1/32" (yield up to 50 SF/G) with a #11 disposable rake trowel blade but can be leveled up to any thickness, e.g., filling utility trenches. Due to its pliable/flexible characteristics, ULC-500 provides crack isolation. The unique qualities of this compound have generated third-party testing, which shows resiliency that gives relief from joint discomfort as a result of standing or walking on floors that typically are unforgiving such as concrete. ULC-500 is exceptionally durable and may be used in conjunction with other STAUF products.



Visit www.staufusa.com for more information, or call Technical Services at (901) 820-0007.