

Flooring Installations using STAUF R-series Adhesives (R701, R731, R741) or Moisture Mitigation Products (ERP-270, ERP-275, ULC-500)

1. A. On new construction, slabs should be free of all construction contaminants such as mud, dirt, curing compounds, paint overspray, drywall mud, oil, grease, etc. Ensure only water-based sweeping compounds are used since oil-based or chemically treated sweeping compounds will contaminate the concrete. Use a Diamabrush (Concrete Prep Tool) or similar device to remove all contaminants and create a concrete surface profile 2 (CSP). Unlike a sander or grinder, the Diamabrush does not push the dust back into the pores of the concrete. Using a dust deputy or similar device between the machine and the vacuum will help prevent the vacuum filter from clogging. Deep vacuum with a HEPA filter vacuum and damp tack the entire floor until completely clean. Do not flood the slab with water, as this will create a slurry that will penetrate the pores. Use removal equipment to assist with scraping the floor.

B. On existing flooring jobs where old flooring is removed, remove all the old adhesive residue and then go on Step 2 because there could be even more adhesive and contaminants deep down in the concrete from previous flooring installs. Elevated inorganic or organic contaminant levels in concrete can prevent proper adhesion of primers, sealers, and adhesives to the slab's surface. Core samples must be extracted from the concrete slab following the ASTM-C42M-13 procedures to measure the contaminants. Three core samples should be taken for the first 10,000 SF subfloor and one for every additional 10,000 SF. Extraction should be done dry if possible. Core sizes should be 1-4" in diameter and 1-4" in length. There is a testing company listed in Technical Information #16.
2. Depending on how deep the contaminants are found in the test cores, grind or shot blast to determine which method must be used to get the concrete to a clean, porous substrate. Remove all old adhesives and other bond breakers from the surface and what is in the concrete. STAUF does not require a certain CSP level, only a clean and porous surface. Once this is done, a simple moisture test (ASTM-F3191) to show that the concrete is now porous proves that the concrete is ready for the adhesive or other product.
3. Apply EHS-265 Hydro-Seal primer to the cleaned concrete using a 3/8" paint nap roller at 800-900 SF per mixed 2.5-gallon. It will increase the bond strength of the adhesives or the moisture mitigation products.
4. Once EHS-265 has dried, apply the STAUF adhesive or moisture mitigation product.
5. Moisture Mitigation:
 - A. Apply ERP-270 Perma-Seal® over EHS-265. Once it has dried, use ACS-210 True-Seal primer on any areas that need patching using QFF-560 Quick Feather Float cement patching materials.
 - B. Apply ULC-500 LevelSeal over EHS-265. Once dried, use a 120-grit sanding screen to smooth trowel ridges on the ULC-500. This will also help fill any minor voids in the product. If patching is required in those areas, use ACS-210 and patch using QFF-560.

6. R-Series Adhesives: Apply the adhesive (R701, R731, R741) directly over the dried EHS-265 and install modular flooring products directly into the wet adhesive, working off the flooring. Within 30 minutes of installation, roll both directions with a 100-lb. roller and then again in an hour to ensure the flooring is down and in contact with the adhesive.
7. Sheet flooring products should be installed using the moisture mitigation products in 5A.

Follow the directions on each product's Technical Data Sheet. If you have any questions about using STAUF products, contact our Technical Director. Create a simple video of this test being performed and of the bond test of the flooring and adhesive to be used and send it to our Technical Director. STAUF will write a job warranty to cover materials and labor.

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