

STAUF PERMA-FLEX Indoor Epoxy Floor Coating System

To create an indoor floor coating using the STAUF Perma-Flex system, you will need to follow these three detailed steps:

STEP 1: CREATE A UNIFORM SUBFLOOR

Preparation

Before leveling, use a commercial cleaner to remove any loose debris and any pre-existing grease, wax, oil, and other organic contaminants, paint, adhesive, flooring, sealer, or other residues must be removed by sanding or grinding the entire floor to remove these anti-adherents. Prepare cracks and dynamic joints as described in Technical Information #19. Tape off all areas before proceeding. Any open doorways need to be bridged with foil tape, aluminum profile, or fast-setting silicone. Prime wet subfloors with EHS-265. ULC-500 is a two-component urethane leveling compound that will form an even surface by itself and can be raked or troweled to achieve the desired product thickness. To achieve a subfloor that is flat and uniform in color, spread ULC-500 over the entire area.

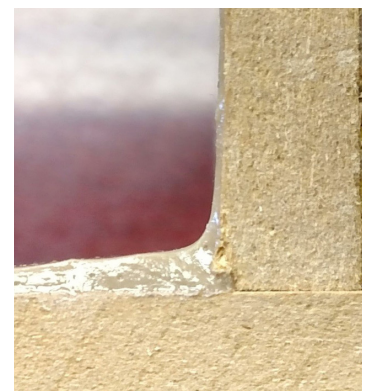


Mixing

Make sure pails were stored between 50°-80°F for at least 12 hours prior to mixing. Pour the entire bottle of hardener into the pail with the leveling compound. Mix the two components for at least two minutes using an electric drill and mixing paddle (STAUF XMP17) with no more than 300 rpm to avoid air entrapment. Next, add one bottle of Color-Fast Tint (STAUF XCFn) to the pail and mix until a uniform color is achieved. Make sure to blend along the sides and bottom of the bucket.

Application

One gallon of mixed product will cover up to 50 SF @ 1/32" thickness using STAUF XBL11 notches blades with STAUF XTH22 blade holder. It can be applied at any thickness to the bottom portion of walls to create an easy-to-clean corner by pulling the product up the wall with a flat trowel and letting it flow down by itself. Be careful not to pull too much up the wall and have it push under your tape. Always work the wall first; after about 15 min. pull away from the wall with a rake or trowel, being careful not to leave excess material.



After about 15-30 minutes roll the entire floor with a blue textured roller (STAUF XLR18 textured roller on XRF18 roller frame) to prevent air bubbles. You will need to wear spiked shoes when rolling with the textured roller. Always use a clean roller. It is always best to clean roller with acetone immediately when finished. Then brush with a stiff brush to completely clean roller. Let the leveling compound cure completely (about 4-8 hours) before proceeding to the next step.

STEP 2: TINT YOUR SUBFLOOR

Preparation

Before proceeding, make sure to fix any problem areas. You may want to use a hand sander to sand out any rough spots. It is best to sand the floor with 120 grit sandpaper (Start with a high grit and work your way until smooth) to smooth the entire surface. You will need to replace sandpaper or brush the dust buildup off the paper. This can be done with a buffer, pad driver attachment, hook and loop sandpaper.

Once completed, sweep, vacuum, and tack the floor with acetone to ensure no dust is left on surface. Always tack until completely clean. The next step is to put the wear surface on your floor. Before mixing the product, ensure all doorways and other openings are prepared to prevent the epoxy from going too far.



Mixing

Make sure pails were stored between 50°-70°F for at least 12 hours before mixing. Start by draining the hardener of the STAUF CCI-600 Epoxy Indoor Base Coat into the resin by piercing through the plastic disc in the center of the lid and the bottom of the upper container using a long screwdriver or similar tool. Let the hardener flow into the lower part of the bucket until empty. Next, open the ring and remove the upper container. Mix the two components for at least two minutes using an electric drill and mixing paddle (STAUF XMP17) with no more than 300 rpm to avoid air entrapment. This paddle will not create a vortex to pull in the air when mixing.

Add one bottle of Color-Fast Tint (STAUF XCFn) to the pail and mix until a uniform color is achieved. Make sure to blend along the sides and bottom of the pail. Always mix on top of cardboard or drop cloth. Once mixed, have an empty bucket available to put your mixing paddle into before using it again.

Installation

Empty the entire pail onto the floor immediately to avoid heating up and drying in the bucket. This product can be rolled onto the wall portion previously covered with ULC-500 with a small foam roller. Spread epoxy coating evenly using a notched trowel (STAUF XBL11 notched blade with STAUF XTH22 blade holder). After about 30-60 minutes, roll with a spiked roller (STAUF XSR18 roller on XRF18 roller frame) to prevent air bubbles. You will need to wear spiked shoes when rolling with a spike roller.

One gallon should cover no more than 70 SF. It can be applied at any thickness, but the color will look patchy if spread too thin. In doorways, do not flood these areas with epoxy. Instead, gently work the epoxy up to the doorway. Flakes of various colors can be used at this point of installation to provide more color to the floor. They can be broadcast lightly or as heavy as you prefer. Be sure to wear your spiked shoes while doing this. Let the epoxy coating cure completely (12-18 hours) before proceeding to the next step.

STEP 3: MAKE FLOOR SLIP-RESISTANT

Preparation

Start by removing tape or silicone in open doorways and along walls. Then grind off the edge of epoxy to prevent sharp areas. You may want to tape off openings to ensure the final coat is as straight as possible. Before proceeding, make sure to fix any problem areas. You may want to use a grinder to sand out any rough spots. Before proceeding, use a buffer, pad driver, and 120-grit sandpaper or screen to go over the hardened epoxy. You will need to replace sandpaper or brush the dust buildup off the paper.

Next, clean the floor by sweeping, vacuuming, and tacking with acetone to ensure no dust is left on the surface. The last step is to put a thin layer of epoxy with texturing compound (STAUF XTCx) over the tinted layer.



Mixing

Make sure pails were stored between 50°-70°F for at least 12 hours before mixing. Drain the hardener of the STAUF CCI-610 Epoxy Indoor Top Coat as described above. Add the pre-measured texturing compound (STAUF XTCx) and mix all components similar to the previous step. Only use colorant in the top coat if flakes were not used in the previous coat.

Installation

Pour mixture into a roller pan (STAUF XRT18) and work quickly to spread the epoxy evenly using a 3/8" nap roller (STAUF XLR18 foam roller on XRF18 roller frame). Do not pour directly on the floor with this application. Roll in one direction, then immediately roll opposite direction to prevent skipping areas while being careful not to leave any puddles. This layer works best when applied in a thin coat. The texturing compound will sink into epoxy if the coating is spread too thick. Work quickly to prevent the epoxy from hardening in bucket.

A 2.5-gallon pail should cover approx. 750 SF, or 300 SF per gallon. The required slip resistance might not be achieved if spread out further. Ensure proper spread rate by marking a 750 SF area per 2.5 gallon pail. Back roll the entire area after about 15-30 minutes with a 3/8" nap roller. Let the epoxy coating cure completely (about 12-18 hours) before allowing foot traffic on the floor. Wait at least three days before allowing rolling loads on the floor, and at least ten days for vehicles or heavy machinery.

Note: Installations, where air and/or slab temperature is below 50°F, will result in prolonged drying times (up to twice as long as standard). Never install products when slab and/or air temperature is below 32°F or in condensation environments. None of the products should come in contact with water during the drying process. They will react by creating bubbles and/or discoloration.

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