

STAUF Outdoor Floor Coating System

STEP 1: CREATE A UNIFORM SUBFLOOR

Preparation

Before leveling, use a commercial cleaner to remove any loose debris and pre-existing grease, wax, oil, and other organic contaminants. Make sure any paint, adhesive, flooring, sealer, or other residues are well bonded; if not, sand or diamond grind the entire floor to remove these anti-adherents. Prepare cracks and dynamic joints as described in Technical Information #19. You may also need to use ERP-270 epoxy and QFF-560 to create a concrete/epoxy mix to smooth rougher areas. Tape off all areas before proceeding. Any open entries must be bridged with foil tape, aluminum profile, or fast-setting silicone.



Apply VPU-155 "S" over the entire area to achieve an extra bond to the surface. This will take approximately two hours to dry. The next step is to apply the ULC-500, 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 before mixing. First, pour the entire bottle of hardener into the bucket 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) 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 push under your tape.



Always work the wall first; after about 15 minutes, pull away from the wall with a rake or trowel, removing any excess material. After about 15-30 min. roll the entire floor with a spiked roller (STAUF XSR18 spike roller on XRF18 roller frame) to prevent air bubbles. You will need to wear spiked shoes when rolling with a spike roller. Always use a clean roller. It is always best to clean the 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: COLOR, FLAKE, & SLIP-RESISTANCE

Preparation

Before proceeding, make sure to fix any problem areas. You may want to use a grinder to sand out any rough spots. It is best to sand with 180 grit sandpaper (Start with a high grit and work your way down to 120 grit until smooth) to smooth the entire surface. You will periodically need to replace sandpaper or brush the dust buildup off the paper. Do not sand in one spot for very long; keep the buffer moving. Sanding can be done with a buffer, pad driver attachment, and hook and loop sandpaper.

Once completed, sweep, vacuum, and tack the floor with water to ensure there is no dust left on surface. Always tack until completely clean. The next step is to put the worn surface on your floor. Before mixing the product, ensure all openings are prepared to prevent the coating 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 CCO-640 Outdoor 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 mix along the sides and bottom of the pail. Always mix on top of cardboard or drop cloth. Once mixing, have an empty bucket to put your mixing paddle into before using it again.

Installation

Pour the mixture into a roller pan (STAUF XRT18) and start rolling onto the floor immediately to avoid heating up and drying in the pail. This product can be rolled onto the wall portion previously covered with ULC-500 with a small foam roller. Spread coating evenly using a 1/8" short nap or 3/8" medium nap roller, depending on the roughness of the floor. If desired, flakes and/or sand need to be spread within the open time of the coating (approx. 20 min). Broadcast the desired amount of colored flakes. Then immediately broadcast white play sand over the entire surface until no epoxy shows. After a few minutes, check the area, looking for shiny spots that may need more sand.

For complete coverage, it generally takes from half a pound to one pound of sand per square foot. Once the epoxy has dried, you will sweep and clean off the excess sand, which is about half of your spread. You will need to wear spiked shoes when spreading flakes and sand. One gallon of coating covers between 200 - 500 SF depending on the roughness of the subfloor and the nap roller is used. The color will look patchy if applied too thin. Let the coating cure completely (1 hour) before proceeding.



STEP 3: APPLY TOPCOAT

Preparation

Start by removing tape or silicone in openings and along walls. You may want to reapply the tape in openings to make sure the final coat is as straight as possible. Before proceeding, make sure to fix any problem areas. Next, scrape the entire floor using a wide scraper to knock off any large particles of sand or loose sand. Next, clean the floor by sweeping and vacuuming. The last step is to put a thin layer of clear coat 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. Next, drain the hardener from the smaller pail into a larger pail of the STAUF CCO-650 Outdoor Top Coat. Add the pre-measured texturing compound (STAUF XTCx) and mix all components described above. Only use colorant in the top coat if no flakes were used in the previous coat.



Installation

Pour the mixture into a roller pan (STAUF XRT18), quickly spreading the coating evenly using a foam roller (STAUF XFR18 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 skipped areas while being careful not to leave any puddles. This layer works best when applied in a thin coat; otherwise, the skid-resistant effect of the sand is greatly reduced. Work quickly to prevent coating from hardening in pail. A pail should cover at least 1000 SF or 400 SF per gallon. The required slip resistance might not be achieved if spread too thick. Ensure proper spread rate by marking off a 1000 SF area per 2.5 gallon pail. Let the coating cure completely (about 1-2 hours) before allowing foot traffic on the floor. Wait at least 12 hours before allowing rolling loads on the floor and at least 24 hours 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.