



Description: Endurosil Epoxy Mortar System is a 100% solids epoxy combined with graded sand and aggregates and power troweled. The floor is a high build system that is highly impact, abrasion and chemical resistant.

Uses: Epoxy Mortar is a seamless flooring option in manufacturing plants, mechanical rooms, warehouses, commercial kitchens, restaurants, garages and service areas where resistance to heavy impact is necessary.

Advantages: Impact Resistant, 100% Solids, Chemical Resistant, Low Odor, High Build

Required Materials: EP-300 Epoxy Patch, EP-1000 100% Solids Epoxy, Silica Sand

Required Tools: Roller and Roller Frames, Mortar Mixer, Gauge Rake or Mortar Screed, Swimming Pool Trowel or Power Trowel.

Optional Materials: EP-500 Waterbased Epoxy Primer (for uncured concrete), EP-2000 Polyurethane Topcoat

Substrate Inspection: The surface must be structurally sound. The surface must be dry and free of oil, grease, curing agents, dirt, dust or other foreign material that may prevent proper adhesion. The surface must be porous or rough enough to allow the product to adhere to surface. A minimum of 28 days cure is required on all concrete surfaces unless the installer utilizes EP- 500 Waterbased Epoxy Primer.

Substrate Preparation: Clean all cracks and joints using a concrete saw. Prepare the concrete surface to a profile equal to about a 50 grit sandpaper. The recommended method of profiling the concrete is by grinding, shot blasting or scarifying the surface.

Moisture: All concrete should be tested for moisture before applying a seamless coating. Water vapor transmission through on-grade concrete slabs may result in the failure of the epoxy floor (either the lifting of the dried film or the improper curing of the material). If moisture emission exceeds 4 pounds per 1000 square feet contact Endurosil prior to application.

Product Application

Joint and Crack Fill & Covebase: Utilize EP-300 Epoxy Patch Paste to fill all joints and cracks prior to the application of the flooring system. Mix 2 parts of A to 1 part of B. Ensure that the paste is sufficiently mixed prior to use. Install the mixed paste in the joints or cracks using a putty knife or trowel. The installer may also use alcohol to help smooth the material. The EP-300 Epoxy Patch Paste may also be used to install a covebase.



Primer: Mix 2 parts of A and 1 part of B of EP-1000, ensuring that the product is properly mixed. Apply the product at a rate of approximately 300 square feet per gallon using a roller and brush. The mortar mix will be installed into the wet primer.

Mortar Mix: Set your gauge rake or mortar screed to the desired thickness. Mix 1 gallon of A and ½ gallon of B of EP-1000 (clear) for 3 to 5 minutes. In the mortar mixer put approximately 100 lbs (approximately 12 gallons) of 30 to 60 grit silica sand. For optimal strength mix a combination of aggregate sizes. Once the silica sand is mixing properly, insert your mixed epoxy into the dry silica sand.

1/8 inch will give the installer approximately 90 square feet per mix ¼ inch will give the installer approximately 45 square feet per mix ½ inch will give the installer approximately 22.5 square feet per mix.

Pour the mix directly onto the wet epoxy primer and extend using a gauge raker or mortar screed. Allow product to begin to set, then smooth and compact material using either a rounded swimming pool trowel or a power trowel. You can use alcohol to lubricate and clean your trowel.

Grout Coat: Grind floor and repair imperfections in the surface. Mix 2 parts of A and 1 part of B of EP-1000 100% solids epoxy pigmented, mix in fumed silica and apply at a rate of 75 to 100 square feet per gallon using a flat or v notched squeegee and back rolling to smooth the epoxy.

Top Coat: Install EP-1000 using ¼ nap roller at a coverage rate of 300 to 400 square feet per gallon. Optional Topcoats are EP-2000 Polyaspartic.