

PI.745 – Installation Procedures: HERMETIC™ Paramount Heavy Duty Floor

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GETTING STARTED

Understanding the products for this finish and having experience prior to beginning a project is critical. It is recommended to consult with an Elite Crete Systems Technical Representative before beginning a project to discuss many facts that may impact the outcome. Note: heavy duty trowel flooring is not for outdoor exposures subject to thermal temperature changes.

SURFACE PREPARATION

Although the HERMETIC™ Paramount Heavy Duty Floor can be applied to substrates other than concrete as well, these installation procedures pertain only to a concrete substrate. The concrete must be structurally sound and any repairs in the surface must be made in advance of the floor coating. The surface must be clean, dry and free of any previous sealers or petrochemicals. In general a CSP (concrete surface profile of 3 is recommended and this is achieved by means of mechanical abrasion (grind, shotblast, etc.).

SPALL REPAIR

If the spall is to be overcoated with an additional epoxy treatment, there is no need to saw cut the edges. All spall repairs that will not have additional covering over it shall be saw cut 1/4" deep around the edge of the spalls.

APPLICATION PREPARATION

Carefully inspect the substrate to ensure it is ready to be coated. Mask off required areas and where the application will be terminated.

Choose a work area for mixing that will not result in contamination of the open containers of materials and protect that area from possible splash or spills from the primer. Perform a final inventory of required materials, tools, etc. Once the part A, part B and aggregate components are mixed they must be applied immediately without delay.

APPLICATION STEPS

Depending upon the applicators preference the heavy duty mortar can be mixed to be self priming or a little dry to have a easy sealed finished surface in one application. Most inexperienced applicators prefer the dryer mix for ease of application. If a wet self priming mix is selected, first prime with E100-VB5™ and allow to become tack free before beginning the troweling stage. For dry mix applications first prime with E100-VB5™ to seal out vapor transmission. After cure, apply a thin coat of the selected binder resin and roll out over the cured E100-VB5™ primer. Note: Before the second prime coat has become tack free apply and finish the dry mix mortar. If the epoxy primer has become tack free stop and reapply a fresh coat of epoxy primer. If the second coat of epoxy primer has been cured more than 12 hours lightly sand and reapply a fresh coat of primer and immediately continue with the mortar application. However, understand this is an optional application and the installer needs to determine if it is required. Contact an Elite Crete Systems Technical Representative for assistance in making this determination.

The recommended amount to mix at a time depends on the size of the project, number of applicators and experience with the products.

1. (Optional) pour one part E100-VB5™ part A with one part E100-VB5™ part B into a clean, dry mixing container and add one pint of clean potable water per combined gallon of E100-VB5™. Example: one gallon of part A and one gallon of part B would require 2 pints of water.

2. Mix the combined products with a jiffy type of similar mixing blade for two full minutes. It is critical to scrape the entire side, bottom and where the side meets the bottom to ensure the materials are adequately and thoroughly mixed. Failure to mix properly may result in areas of the finish that will not cure properly or perform as well as intended.
3. Pour the mixed E100-VB5™ on the floor in ribbons based on the required square foot of the area to be coated. Do not pour in a puddle or in one isolated area as it will be difficult to move the material over the entire intended area. Use a 3/8" new, clean, delinted, shed free roller to evenly apply the material. Ensure that all areas are coated and free of voids. The target coverage is a rate of 250 to 300 square foot per combined mixed gallon. Failure to remain within that range may result in product failure. This coat will take 5 to 7 hours before it can be recoated or proceeded to the next step. This coat must be dry before proceeding and the cure time can be effected based on factors such as air temperature, substrate temperature, humidity, etc. An optional but often recommended. If a second coat is applied, repeat this step before proceeding to the next step.
4. Inspect the coat of E100-VB5™ for surface debris or defects such as air bubbles. If an air bubble or void is found another full coat or a patch using E100-VB5™ is required to ensure the concrete substrate is completely sealed off.
5. If an optional binder coat primer is required, mix part A and part B
6. Of any of the following binder resins are suitable as a second coat primer or as a binder for aggregate (E100-PT1™, E100-UV1™, E100-PT4™, E100-UL7™, E100-NV4™, E100-NV5™ or E100-VR1™). NOTE: All clear resins have optional pigment that can be added in the field if required.
7. Mortar mixing: Select from any of the resin systems above. To make an wet self priming mortar add 3 to 3.5 gallons of #12 Flint silica sand (rounded 40 to 50 sieve) to 1 gallon of the selected resin binder above.

To make a dryer, easy to seal mortar (requires a wet primer under it) add 4 to 5 gallons of #12 Flint silica sand (rounded 40 to 50 sieve) to 1 gallon of the selected binder resin above.
8. Spread the material with a screed box or hand screed to desired thickness and finish by hand trowel or power trowel to seal it. Note: do not over trowel as it could build up heat and cause blisters. Cure is about 8 hours for Standard Set and 4 hours for Fast Set.
9. After the dry mortar has cured, one or more top coats may be required to seal the surface, coatings are listed in item #6.

In all cases, Elite Crete Systems resinous flooring systems must be applied per the instructions of each individual product in the system. Concrete surfaces must be structurally sound, clean and with proper surface preparation methods.

Elite Crete Systems shall not be responsible or liable for adhesion failures that are the result of poor workmanship, deficient substrates, the presence of alkalinity or salts or expanding aggregates and reinforcements such as rebar, wire mesh, drains or expansion joint materials.