



**CONCRETE
FLOOR
SOLUTIONS**

EPOXY FLAKE FLOOR INSTALLATION INSTRUCTIONS

****Please read and understand all installation instructions prior to beginning your flooring project.**

Preparation:

We always recommend diamond grinding the concrete surface prior to installation. Grinding the concrete will help to remove any contaminants from the surface and will provide a good scratch profile guaranteeing the required bond to the substrate.

(Please be aware that contaminants such as oil, which have penetrated into the concrete, in most cases cannot be fully removed and may cause materials to not bond to the surface.)

After the grinding is completed, the surface must be vacuumed to remove all loose dust and debris.

(It is also advised to not wash or rinse the floor with water unless there is additional time allowed for the concrete, joints and cracks to fully dry.)

Repairs:

Repair cracks and spalls using our CFS-Fast Set Epoxy Crack Filler / Spall Repair. After the repairs are completed, grind over the repaired areas to apply a scratch to the surface. This scratch will allow the materials to properly bond to the repaired surface areas.



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Mixing The Epoxies:

It is advised to always mix epoxies in the complete batches as received. Epoxies must always be mixed to the correct ratio as stated on the label. You will risk having the epoxies not fully cure if this step is not followed.

To properly mix the epoxies it is advised that you use a slow speed drill with a minimum 3" mixing paddle. During the mixing process, and with the drill on slow speed, move the mixing paddle around the edges of the bucket to ensure that all of the material gets mixed properly. Mixing time is +/- 2 minutes with a mixing paddle to insure proper mix.

It is critical to review and understand the **POT LIFE / CURE SCHEDULE** prior to mixing and working with any of these materials. Most epoxies cannot be mixed and left in the bucket for any length of time.

(READ EACH MATERIALS TECHNICAL DATA AND SAFETY DATA SHEETS PRIOR TO INSTALLATION)

Installation:

A critical step when applying epoxies is to ensure the proper coverage rates are followed. This is especially important when utilizing multiple flooring kits on larger flooring projects. It is advised that a mark/note is made, prior to installation, to show how much floor each mix should cover. This will ensure the epoxy is being put down at the correct rate.

(1) Epoxy Primer Application (CFS-Low Viscosity Primer):

Primers are designed to penetrate into the surface of the concrete. This step will create a bonded surface which will allow for the proper application of the intermediate coat.



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It is recommended to wear spiked shoes during the application steps. Spike shoes will allow the installer(s) to work the entire area of the floor where the epoxy has been poured, squeegeed or back rolled. Always take caution when wearing and walking in spike shoes. Do not drag spikes while walking as this may leave marks in the finished floor.

Begin by pouring the properly mixed epoxy primer across the floor in 4"-6" wide ribbons. The ribbons should be poured paralleled to each other leaving approximately three feet between each ribbon pour. You have approximately 20 minutes before the epoxy will begin to set in the bucket. The working time is extended once the mixed material is poured onto the floor.

Next, using a squeegee, push the epoxy primer puddle while moving parallel with the ribbon pour to uniformly cover the floor. A 6" roller and 2" brush can be used to address edges and corners.

Finally, back roll the epoxy primer perpendicular to the direction it was squeegeed. It is recommended to use a ¼" nap 18" "Epoxy Glide" roller cover.

Allow material to harden +/- 16 hours but not more than 30 hours before applying the next coat.

(2) Epoxy Intermediate Coat Application (CFS-Intermediate Coat):

It is recommended to wear spiked shoes during the application steps. Spike shoes will allow the installer(s) to work the entire area of the floor where the epoxy has been poured, squeegeed or back rolled. Always take caution when wearing and walking in spike shoes. Do not drag spikes while walking as this may leave marks in the finished floor.



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Begin by pouring the properly mixed epoxy intermediate coat across the floor in 4"-6" wide ribbons. The ribbons should be poured paralleled to each other leaving approximately three feet between each ribbon pour. You have approximately 20 minutes before the epoxy will begin to set in the bucket. The working time is extended once the mixed material is poured onto the floor.

Next, using a squeegee, push the epoxy intermediate coat puddle while moving parallel with the ribbon pour to uniformly covering the floor. A 6" roller and 2" brush can be used to address edges and corners.

Finally, back roll the epoxy intermediate coat perpendicular to the direction it was squeegeed. It is recommended to use a ¼" nap 18" "Epoxy Glide" roller cover.

(3) Decorative Flake Application:

Immediately after the intermediate coat has been back rolled, begin broadcasting flakes evenly across the floor by tossing them in the air and letting them shower down on the wet epoxy. It is recommended to first lightly broadcast the entire floor and then to repeat the process until all of the available flake has been distributed or the desired look has been achieved.

Allow the epoxy to cure +/- 24hrs before sweeping or vacuuming any excess flakes off the floor. A wide floor scraper may be necessary to knock down sharp edges or vertical chips if heavy or full flake was applied.



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(4) Epoxy Top Coat Application (CFS-UV Clear Epoxy Topcoat):

It is recommended to wear spiked shoes during the application steps. Spike shoes will allow the installer(s) to work the entire area of the floor where the epoxy has been poured, squeegeed or back rolled. Always take caution when wearing and walking in spike shoes. Do not drag spikes while walking as this may leave marks in the finished floor.

Begin by pouring the properly mixed epoxy topcoat across the floor in 4"-6" wide ribbons. The ribbons should be poured paralleled to each other leaving approximately three feet between each ribbon pour. You have approximately 20 minutes before the epoxy will begin to set in the bucket. The working time is extended once the mixed material is poured onto the floor.

Next, using a squeegee, push the epoxy topcoat puddle while moving parallel with the ribbon pour to uniformly cover the floor. A 6" roller and 2" brush can be used to address edges and corners.

(If a more textured surface profile is desired, the included Aluminum Oxide additive can be broadcast into the already squeegeed topcoat epoxy. To broadcast the aluminum oxide, take small pinches between your fingers and toss them in the air letting them shower down on the wet epoxy. The broadcast of the aluminum oxide MUST be done prior to the back roll step. The back roll step will encapsulate the aluminum oxide into the topcoat.)

Finally, back roll the epoxy topcoat perpendicular to the direction it was squeegeed. It is recommended to use a 1/4" nap 18" "Epoxy Glide" roller cover.



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(5) (Optional Upgrade) CFS-High Performance Urethane Application:

It is recommended to wear spiked shoes during the application steps. Spike shoes will allow the installer(s) to work the entire area of the floor where the epoxy has been poured, squeegeed or back rolled. Always take caution when wearing and walking in spike shoes. Do not drag spikes while walking as this may leave marks in the finished floor.

(If a more textured surface profile is desired the included Aluminum Oxide additive MUST be broadcast onto the cured intermediate coat prior to pouring the urethane topcoat onto the floor. To broadcast the aluminum oxide, take small pinches between your fingers and toss them in the air letting them shower down on the cured intermediate coat with flake. The back roll step will encapsulate the aluminum oxide into the urethane topcoat and allow for even distribution across the floor.)

Pour the properly mixed urethane into a watering can. Next, pour approximately 3" wide parallel stripes across the floor approximately 16" apart. Back roll the urethane topcoat perpendicular to the direction it was poured on the floor. It is recommended to use a ¼" nap 18" "Epoxy Glide" roller cover.

These materials are designed to go down thin, at approximately 166 sq.ft. per gallon. A second coat can be applied if a heavy topcoat is desired. Allow 72-hour cure time before opening up to traffic.

(6) (Optional Upgrade) CFS-Polyaspartic Application:

It is recommended to wear spiked shoes during the application steps. Spike shoes will allow the installer(s) to work the entire area of the floor where the epoxy has been poured, squeegeed or back rolled. Always take caution



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when wearing and walking in spike shoes. Do not drag spikes while walking as this may leave marks in the finished floor.

This is an extremely fast set material. Based on the technical data sheet the actual usable working time is 10-20 minutes, depending on environmental conditions and volumes.

Begin by pouring the properly mixed polyaspartic topcoat across the floor in 4"-6" wide ribbons. The ribbons should be poured paralleled to each other leaving approximately three feet between each ribbon pour.

Next, using a squeegee, push the polyaspartic topcoat puddle while moving parallel with the ribbon pour to uniformly cover the floor. A 6" roller and 2" brush can be used to address edges and corners.

(If a more textured surface profile is desired, the included Aluminum Oxide additive can be broadcast into the already squeegeed polyaspartic topcoat. To broadcast the aluminum oxide, take small pinches between your fingers and toss them in the air letting them shower down on the wet epoxy. The broadcast of the aluminum oxide MUST be done prior to the back roll step. The back roll step will encapsulate the aluminum oxide into the topcoat and allow for even distribution across the floor.)

Finally, back roll the polyaspartic topcoat perpendicular to the direction it was squeegeed. It is recommended to use a ¼" nap 18" "Epoxy Glide" roller cover.