



## PREP AND INSTALLATION INSTRUCTIONS FOR

### Commercial & Industrial IV: Special Chemical Resistant 2-Layer Coating Kit

**PLEASE READ INSTRUCTIONS FULLY BEFORE STARTING YOUR PROJECT.**

#### **PREP:**

Prep is the most important part of the project. Poorly prepared floors will cause failures and void the Epoxy Central warranty.

Epoxy Central carries a complete line of floor repair items to repair corroded, cracked and damaged areas, and also carries crack fillers for filling of hairline and larger sized cracks. Contact us for our easy-to-read Surface Prep Bulletin which reviews the various methods and products needed (if any) for proper floor repairs prior to coating. Many 'home center' types of floor repair items contain silicones or are low grade and not compatible with epoxy coatings and are subject to failure or peeling.

#### **NEW OR UNPAINTED/UNSEALED CONCRETE:**

Note: Newly poured concrete must 'cure' first. Moisture in the floor may cause coating failure. New concrete normally has to cure generally at least 30 days. Test any concrete to be coated by taping a 4' x 4' sheet of clear plastic on the floor with duct tape. If moisture under the plastic sheet or floor dampness/darkening appears the next day, then do not coat yet. Older concrete with moisture issues can also create problems. If you have a continuing moisture problem then we recommend doing an inexpensive moisture test (we sell these test kits) and using either a standard primer or a moisture barrier primer. Call or email for details and technical advice.

**The floor must be properly prepared to accept the coating by one of several methods:**

1. **Sweep and/or power wash**: the floor to remove any dirt, dust and debris.
2. **Sanding**: Sand the floor with a rotary type sander (similar to a buffer). This roughens up the floor. Vacuum well to remove any dust.
3. **Acid Etching**: (make sure to wear proper protective gloves, goggles and clothing as acid can be irritating to skin and eyes) Use the included Epoxy Central etching solution by diluting the acid 4 parts water to 1 part muriatic in a large empty 5 gal pail. Power wash area first to remove any dirt and

dust. While still wet, apply to floor with a stiff bristle broom or mop. Let stand 45 minutes or until it stops foaming (normal). Rinse well to neutralize the acid/water mixture. Let Dry for at least 24 hours or when visually dry, whichever is longer.

4. **Surface Grinding:** You can rent a diamond head floor grinder or 'shot blaster' at local tool rental stores. These methods work well for removal of old paint and sealers and 'open up' the surface very well for adhesion. Make sure to vacuum very well to remove any remaining dust. Please note that mechanical type surface prep can make your floors more porous, and necessitate the need for an additional primer coat. Test after prep assure a satisfactory result.

## **SEALED CONCRETE**

Often when concrete is poured the contractors either add in or apply a clear sealer. This can create adhesion problems with a floor that is going to be painted or coated. To test to see if your floor has been sealed, dribble a few drops of water on it. If it does not 'bead up' and 'soaks in', then most likely it's not sealed. If it does bead up then you need to re-etch at a higher acid concentration or grind the floor per above, and then test with water droplets. If it still beads up then repeat as necessary. Failure to do this could result in significant floor failures.

## **PAINTED CONCRETE**

Painted concrete ideally should be stripped prior to painting, and then etched per above once stripped. EPOXY CENTRAL CAN ONLY ADHERE TO WHAT IS UNDER IT, SO IF YOU EXISTING COATING IS COMING UP, THEN SO CAN THE EPOXY! Epoxy Central carries an excellent cement floor stripper that dissolves the paint and allows for easy, safe removal. See our website under the 'Strip and Clean' link of the 'Buy Now' portion of our website store.

If you are unable or unwilling to strip your floor, at the minimum it must be power washed, lightly sanded or etched with Epoxy Central Etch per above. Let dry once etched and neutralized and then apply the coating.

Please note that floors that have some, but not all, of the paint removed, and have some paint remaining now have different 'porosity' areas since the painted areas will absorb less epoxy than the areas where the existing paint has worn off or been removed. This can lead to 'blotchiness' in surface appearance unless you apply 2 coats of epoxy or prime first with one of epoxy primers.

## **DRAINS/OPEN AREAS**

Any areas that are not going to be coated completely or where there are 'edges' such as linear floor drains or circular drains a 1/8" wide by 1/8" deep 'slot' must be cut into the floor with a hand grinder with a masonry blade or circular saw with a diamond blade for the coating to drop into and create a 'clean edge into the

slot. On the opposing side of the slot duct tape off while applying so the epoxy does not run past the slot. The purpose of this is to create a clean edge for the epoxy to prevent water migration under the epoxy which can cause the concrete to swell and de-bond the epoxy. Failure of coating due to improper preparation is not covered under warranty.

## APPLICATION

**Commercial & Industrial IV: Special Chemical Resistant 2-Layer Coating Kit** is a 2-layer system utilizing a self priming epoxy and a second layer of protective topcoat. The labels for both layers are color-coded. The first layer of epoxy will have **Gray** labels and topcoat has **Red** labels. Never mix different colored labels with each other!! Keep each layer to the side or in a separate area to avoid mistakenly mixing epoxy and topcoat, as if this occurs, it will never harden and have to be removed by stripping.

Both epoxy and topcoat layers are mixed at 2:1 ratios. It is self priming on cement and metal surfaces. On bare wood prime first with our standard one part Wood Primer or a good quality oil-based wood primer (call to order). Do not leave in sunlight or allow containers to get warm or hot as this can shorten the working time when mixed. Use included mechanical mixer or mixing stick to assure proper and thorough mixing. **MAKE SURE TO MIX COMPLETELY MOVING THE MIXER ALONG THE SIDES AND BOTTOM, AS ANY UNMIXED MATERIAL MAY NOT HARDEN. MIX FOR 2-3 MINUTES AT SLOW/MEDIUM SPEED. DO NOT ENTRAIN AIR BUBBLES.** Once mixed it applies like a standard thick paint and no special skills are required for application.

Do not mix more than you can apply in a 45-60 minute time frame as once mixed, Epoxy Central hardens and cannot be stored under any circumstances. Better to mix it up in smaller batches and apply. **NOTE: you can mix as much or as little epoxy as you want, just make sure to hold the 2:1 mix ratio. Please apply with a 1/4" nap, no lint solvent-safe roller. It can also be brushed. Unmixed epoxy can be stored in its original containers.**

Use spiked shoes (supplied on larger orders) to facilitate even application appearance.

If you are using one of our Aluminum Oxide non skid additives they also get broadcast onto the wet epoxy while wet.. Apply by hand by gently throwing small amounts onto the epoxy. Repeat as needed to achieve desired surface texture.

Allow to dry overnight before top coating.

Topcoat should be applied 24-48 hours after application of the epoxy. If longer than 48 hours has passed the floor should be VERY lightly sanded and wiped

down with denatured alcohol prior top coating. The second topcoat protective layer is mixed also 2:1. Once again you can mix as much or as little topcoat as you need, just hold the 2:1 mix ratio. Topcoat goes on a bit thinner than the epoxy and hence you will get more coverage per gallon.

Allow to dry overnight for light foot traffic. Heavy vehicle traffic and usage should be avoided for 5-7 days or until fully cured. Temperature and humidity also affect curing.

Cleanup with xylene (xylol).