FORMULA TO FOUNDATION

ARCHITECTURAL COATING PROJECTS

A few DO'S and DON'TS. TRICKS and TIPS for better outcome.

Epoxy is one of the most accessible floor coatings to install. When applied correctly, it's within reach for anyone to do!! The downside is one misstep can produce a barely tolerable epoxy floor. Leaving you to reassess what went wrong, and what your new budget is!

THIS DOWNLOAD IS FOR:

Accomplished DIY'ers who are looking for any extra input before installing their resin floor(s). These individuals comprehend the pitfalls but are competent and confident in their abilities.

Some of this advice is applicable to polyaspartic and other polymers. However, it should not be assumed these coatings are one in the same; different characteristics and procedures.

From a friend in the business.

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5 DO'S AND 5 DON'TS

DON'T use a 9-inch roller! Only use when edging (if at all)
DO use an 18-inch roller! *Fewer lap lines, less time for application*.

DON'T etch the floor! It's a myth that etch removes most floor contaminants while properly preparing floors to accept coatings! *It's messy, caustic requires gallons and gallons of water to remove and is an environmental disaster! Only select flooring applications require muriatic acid.*
DO use a trackless/planetary stand-up or kneeling floor grinder, *e.g., Hilti DG-150* with efficient dust extraction. *DIY'ers can use a decent shop vac with HEPA bag and separator if prepping a garage or outside. Contractors are required to use OSHA, EPA or equivalent dust extraction systems*!

DON'T walk on fresh ground concrete with dirty boots or shoes! *Concrete is porous. Once prepped, you'll expose clean floors to dirt, oils and liquids that can create floor failure.*
DO wear booties over boots. If allowable, you can double up on socks or wear 'slip-ons' when walking on prepared substrates. *Clean feet. Keep it neat!*

DON'T scrape out the bucket AFTER mixing. Do not leave the bucket dumped upside down on the floor! *Uncured resin is lining the inside of the bucket and will ensure floor failure.*
DO thoroughly remove uncured epoxy resin or activator from the floor immediately if drips are present.

DO NOT expose the floor to sunlight. Avoid applying with rising temperatures. *UV light and drastically rising temperatures can create erratic curing of the epoxy.*
DO apply epoxy when the temperature is steady or falling.

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5 EASY TRICKS

1. With the lights off, use a floor lamp to expose contaminants and debris AFTER vacuuming. Remove debris.

2. Spread 'flake' evenly onto the floor with the handle removed from a 2-gallon bucket, toss flake into the air like a professional card dealer. Think of the 'flake' like confetti; be careful to avoid hitting the ceiling. Always allow “set up” time when using quartz to prevent sinking material into the epoxy.

3. Use a kitchen (egg) timer to mix and gauge when your epoxy is setting up at certain stages. Don't count steamboats or pretend time is linear. Improper mix times are dead simple yet often, a significant cause of floor failures.

4. Prepping between multiple coat applications.
   A. Using a solvent between coats when you’ve missed the recoat window will both soften and clean the epoxy coating. This time-saver avoids screening then vacuuming. *CAUTION: Hazard warning!*
   B. It is recommended AT MINIMUM to install a 2 coat system (primer and topcoat) to ensure durability and overall aesthetics.

5. Wearing spiked shoes: spikes should be sharp, tight and clean. Vertically raise and lower your foot onto the floor to eliminate spike slides (and avoid falling) in your wet epoxy. *Act like your walking on ice.*

6 TIPS

1. Fill cracks level or slightly (<1 mm) above the concrete surface, Then grind, cut or scrape the crack filler flush to the substrate. DO NOT treat your epoxy coating as a leveller.

2. 1st: Vacuum edges and corners with the hose nozzle. 2nd: Vacuum in square sections with a purposeful manner. Aim to stress the vacuum motor by pulling the wand head, creating a seal on the floor. This maximizes suction.

3. When Applying Metallic Epoxy.
    A) 24 hours before application: premix the powdered metallics into the resin for 10 minutes.
    B) Day of application: premix resin another 5 minutes BEFORE mixing in the activator. *This process diminishes "starbursts" or "comets," i.e. unmixed pigment.*

4. Applying epoxy under five milliliters (paint) only requires a roller. If the roller isn't turning, push out the epoxy until the roller turns to avoid pooling.

5. Start with a chip brush; do all edge work and square areas around posts, corners etc. Using a 3/16 notched squeege push material into place. Once material has been spread out and is even. Using your 18 inch roller, pull away from the edge of the wall -until the roller can no longer provide full coverage. Then, diagonally roll the opposite way to ensure complete coverage and uniformity. On final roll, pull the roller towards you, walking backwards to avoid spike slides.

6. If you *need* to use tape, remove it as you finish sections. Careful, not to drag it onto the wet epoxy floor! Removing tape after epoxy cures is a major pain and should be avoided. i.e.: very time consuming and you'll be left with jagged edging.

Relaxxx! You've got time! Standard floor epoxies have ample time windows for applying (unlike other fast cure coatings). Always have (at minimum) one or two people assisting you! Be WORK WISE: Know your slab moisture content and RH% the day of application. If its going to be a hot day, wait until the temperature is steady or dropping before applying. Read the TDS! Know the pot life, open time, and apply epoxy in the goldilocks zone. **All the best, to a better outcome!**