



Colored Epoxies

Application Instructions

Colored Epoxies Manufactures high performance architectural coatings in clear and colored epoxies that are a cost-effective solution for substrate protection. Designed for commercial, Industrial, and residential Industries.

Our Epoxies have zero VOC's and VOHAP free. Developed to be used with decorative flake and metallic finishes.

Typical Uses:

- * Garage Floors
- * Basements
- * Plywood
- * Concrete Floors and Walls
- * Schools
- * Office Buildings
- * Retail Floors
- * Showrooms
- * Food & Beverage processing facilities
- * High traffic applications
- * Industrial and commercial warehouses
- * Mechanic Shops.

Overview:

Colored Epoxies can create an excited new look for most interior floors. This guide will outline many of the steps needed to achieve dramatic floors. It is essential that an Installer have experience with these systems before taking on any projects for hire. Contact Technical department with any Installation questions

866-608-7625

PREPPING THE SURFACE: CONCRETE, PLYWOOD and PRIMING

Our Epoxy is the primer and the finish, all in one.

Step 1. Whenever possible grind concrete with diamond grinder 16-18 grit. Most tool rental companies will have a rental machine lavina.com or similar if not it can easily be done by hand with a hand held 5" or 7" angle grinder with cup wheel or for faster production diamabrush.com this tool will grind up to 500sf per hour. Be sure to use a dust shroud with a high-powered vacuum HEPA, Vacuum preferred but a wet dry vacuum will work just not as efficient. Use wet dry vacuum for residential use only. Properly prepared concrete will turn white opening its pores.

Sweep and vacuum well, leave no dust behind. The porous the concrete the better. Grinding will remove most prior sealers, epoxies, paints and excessive oil stains. Tool rental and delivery available through [colored epoxies website](http://coloredepoxies.com) pickup and delivery available to all lower 48 US states.

Note: Our epoxies can be applied over existing epoxies, sealers and coatings when recommended grinding is not feasible. If this the only option, our epoxies are industrial enough to bond to any surface. Preparatory steps must be taken, scrape up with 12" flat metal with pole available at home depot and Lowes and remove all loose flakey epoxies. If not, our epoxies will lock down debris in place leaving it difficult to remove after the fact. Vacuum well, spray down, wipe or mop with denatured alcohol (cleaning agent).



In process of setting up grinder, vac & prep tools



5" angle grinder for perimeter edges with attached dust shroud. Shown 60-80 grit cup wheel on 5/8" threaded arbor



14-16 grit double bar trapezoid diamonds removing paint



14-16 grit easily removing failed epoxy for big box store brands

Step 2. Patch holes and small Spaulding areas with self-leveling epoxy, skim coat with trowel or flat squeegee small to medium size fill-in patch work. Small individual fill-in holes can be done with bondo it quick, fast drying & can sanded & install same day.

TIP: For larger patch work such as excessive Spaulding, filling in depressions or leveling off low lying area, mix epoxy clear or colored with white thin set mortar. Use flat squeegee or flat 16" steel trowel to pour & fill. Let cure overnight patch work will be ready to be grinded to a smooth finish the following day.



Grinding bondo and pre-flake patch over exceptional wide expansion joints, 1/4" back rod was pre-installed in joint, followed up by polyurea joint filler.

TIP: Material is self-leveling with only adding 10% of thin set to mix. For viscous material add more thin set mortar to epoxy. This permanent patch repair will lock and bind exposed aggregate in concrete mix. Guaranteeing against cracking, peeling, lifting or shrinkage like most skim coated concrete or other cementitious patch materials. You can use machine or hand-held grinder or orbital palm sander over patch if needed to sand out high spots once fully cured.



Expansion joints can be stuffed with 1/4" backer rod then filled with dual component polyurea flexible caulking.



1/4" back rod shown Installed in crack, then filled with polyurea super flexible joint filler.



Joints can be pre-filled, then excess grinded off with machine along with rest of floor.

Step 3. Applying primer coat / moisture vapor barrier MVB.

This should be applied in a dip and roll method using an 18" x 3/8" nap roller preferably with a roller bucket not roller pan to dip 18" roller into. Roll out in a North and South. Use 6" hot dog roller same nap and pile high as 18" for corners, along walls, around poles and hard to reach areas.



Shown epoxy is rolled 4" up wall always use 6" & 18" rollers.

Once floor is 1/3 complete after using up first mixed batch of epoxy (note: don't mix too much at one time) Coverage rate is 350 sf per gallon on a dip & roll.

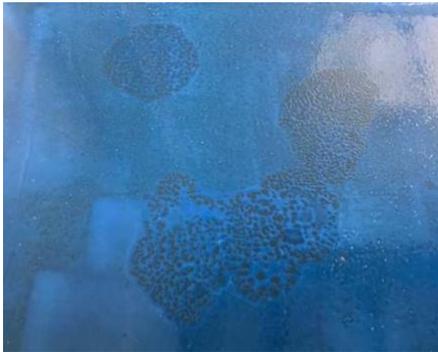
Walk back on top of wet floor with spiked shoes. Using wet 18" roller start from top roll roller east to west move roller down 18" roll west to east. Repeat process, this will smooth out any roller marks left behind. Mix another fresh batch repeat process. Let floor dry overnight.

NOTE: Always use epoxies clear or colored for the primer. Colored Epoxies are designed to fuse and bond to one another on succession coats without the need of purchasing additional primer coats materials.



Clear epoxy used as primer / mvb over patch work. Both jobs ready for flake to hide all imperfections in floor.

STEP 4. Any fish eyes, or orange peel (refer to colored epoxies website for explanation & prevention in troubleshoot guide) left behind from imbedded grease or oil that could not be removed from grinding. Fish eyes can be lightly sanded off if necessary, this would only be the case if primer was applied too thick, from pouring directly onto floor over grease and oil rather than dip & roll. Otherwise leave it for the next application which will cover defects 100% by rolling a second dip roll coat over floor.



NOTE: Colored Epoxies is the only residential, commercial, industrial brand that can guarantee adhesion over these conditions. Applying the Primer/MVB coat will also stop any out gassing from hydrostatic pressure up to 15 pounds from passing through providing superior waterproofing benefits. Be careful what you read, or YouTube online, Do-not acid wash the concrete, power wash, or hose down concrete with water when using our 100% solids epoxy, this method shown on the internet is for lower end epoxies only. Concrete absorbs water leaving high a moisture content. Our epoxies will encapsulate the moisture which may create adhesion issues or blemishing whitening effect from H₂O. Especially if using acids to attempt to open clogged pours concrete must be flushed well (power washed or hosed) with water to remove all acid.

APPLYING CLEAR OR SOLID COLOR EPOXIES

Step 1. Repeat steps 1 and 3 preparing the concrete surface, roll out epoxies dip & roll method as noted above.

Step 2. Following day apply second application be sure to apply in same dip & roll manor as noted above.

NOTE:

If your goal is a solid color finish be sure to use the same epoxy for the primer and finish application when ordering.

If your goal is to seal the floor only using clear epoxy resin only then typically 2nd coat is not needed unless excessive fish eyes appears.

Do-not pour epoxies directly on the floor for this particular application always use dip & roll bucket for best distribution & coverage rates. Using a Bucket will insure 350sf per gallon coverage rates. Coverage rates will vary based-on concrete or plywood profile. Once floor is fully covered you can then pour out excess epoxy directly to floor to fill low spots, re-cover up fish eye etc. then use roller to smooth out. Be sure to have spike shoes ready. Rollers can-not be re-used once fully cured.

Flip bucket upside down over any plastic in a warm environment to self-drain overnight. Left over epoxy will cure to bucket if not. You can re-use bucket the following day. New mixed epoxy can be poured right over cured epoxy in bucket. After several applications epoxy can be peeled right out from the bucket bringing it back to its original new condition.

NOTE: Use Duct tape to end epoxies at doorways (straight lines) or baseboards anywhere you don't want epoxy to touch. Be sure to pull tape right after install before epoxy dries. Use denatured alcohol and rag to wipe up, clean up any bleed threw that may run under tape.

For best results use ZEP spray bottle filled with denatured alcohol.



Lastly always finish coat east to west, west to east to ensure flawless finish

MIXING INSTRUCTIONS

Mix epoxy at a 2:1 ratio always. 2 parts A resin to 1-part B hardener with squirrel mixer or similar slow speed mix. Be sure to pre-mix all of part A first colored pigments only as pigments will settle to the bottom of the can. Mix all of part "A" into one 5-gallon pail, use a rubber spatula to remove excess contents from part A. We use only high-quality heavy weight SOLID pigments with our epoxies reason for settlement, once stirred they mix easily right back into suspension.

Use pre-measured container to achieve a 2:1 ratio. Pre-marking pail will help. Epoxies can be applied the next day after a 10-12 cure time. Minimum temperature to apply is 50 degree or above ideal temperature is 65 – 70 degrees. Never try to install epoxy below 50 otherwise it will never cure properly.



TIPS: To check if epoxy is cured enough the following day, first touch with your fingers if its tacky and leaves an imprint then it needs more time to dry. Try using a fan to move the air around air circulation is key stagnant air will prolong cure time. If dry to the touch, use your finger nail to check for harness, if it moves just a little but not tacky, epoxy needs more cure time it's close to being fully cured. Improper 2:1 rations can slow down the cure time or even not cure at all. Be sure to always mix at a 2:1 ratio.

WINTER SHIPPING WEATHER WARNING: For Part "A" colored epoxies only.

Pigmented epoxies tend to cling together when exposed to cold weather temperatures during shipping and transportation through UPS and FEDEX causing pigments to become a "thick like" paste from the cold.

REMEDY, put metal cans direct under heat, get can as hot as possible to liquify, rotate cans ensuring even heat. Shake can to ensure liquified, open and pre-mix let cool to room temperatures before mixing part 'B'

Every delivered order will come with its own set of mixing instructions and can also be found directly on colored epoxies website.

If mixing epoxy to coverage rates and you have left over unmixed material, you can always apply as may subsequent applications to use it up.

INSTALLING FLAKES VERTICALLY AND HORIZONTALLY

Step 1 Follow Steps 1 & 2 in concrete preparation.

Step 2 Always apply Step 3 in concrete preparation the only exception would be if it is new concrete above grade. Primer / MVB should always be our clear epoxy or colored epoxy resins.

Step 3 Deciding size of flakes to use.

1. 1/16" FLAKE: Is used best for applying in a vertical application such as a foundation walls, Stair risers, or making a floor look like one-piece linoleum or sheet vinyl. 1/16" seeds well, has exceptional interlocking finish. All vertical applications must be double broadcasted. For best practice roll on epoxies over walls, use hopper gun with air compressor to spray on 1/6" flake, let fully dry no scraping needed.
Roll on second coat of clear epoxy over 1/16" flake use hopper gun to re-spray flake.



Finish options: Mat finish or Glossy.

Mat finish will look like a granite if a speckled flake color is chosen. Glossy finish if you are looking for a sheen. Gloss applications will require two rolled on clear coat epoxy finishes. Either application will deliver a decorative water proof finish. The decision usually depends if you want to match the finished flake floor with the walls.

2. 1/8" FLAKE: The professional installers #1 choice.
1/8" Seeds uniformly & has a nice tight interlocking finish that can be either hand broadcasted or sprayed with hopper gun. 1/8" Scrapes up easily, with little to no effort.
3. 1/4" FLAKE: Does not seed as well, shows open gaps between flake exposing more of the accent back ground colored epoxy. Always choose a colored epoxy that closely resembles the color flake chosen. This is a great size flake if you are looking for that finish look. Needs some effort to scrape up, if not done properly it will leave the floor bit rough and textured.
NOTE: There are 100's of color selection options that can all be seen at colored epoxies website, in addition to glow in the dark flakes, holographic flakes, crystal flakes, quartz, micas, glitters and much more.

Coverage Rates:

- Full coverage 8-10 square feet per pound, Professional installers #1 choice. Medium coverage 15 square feet per pound
- Light coverage 20-25 square feet per pound

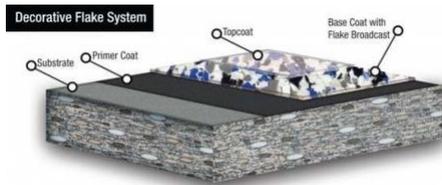
4. INSTALLING THE FLAKES:

- A. Follow all steps 1-3 in preparing the concrete surface.
- B. Have mixing station set up outside of work area prior to starting.
- C. Use duct tape as needed to tape off baseboards, stair risers, poles, use as a straight line over a snapped chalk line to delineate accent colors. Use in doorways to properly end epoxy or garage aprons. Duct tape should also be used with 3 mil plastic to protect installation from leaves blowing in garage, (close door less 4") to retaining heat & protection from wind and debris blowing in.
- D. Apply epoxy over concrete or plywood using the dip and roll method in a north and south direction.
- E. Walk on wet floor with spiked shoes while floor is wet, broadcast flakes, have helper pre-fill 3-4 one-gallon plastic pails to pass & assist. Uniformly broadcast flakes over floor.
- F. Mix up another small fresh batch of epoxy repeating process again.
- G. Once broadcast is complete wait 15 minutes, look for bleed through or wet spots to appear or any area you may wish to add more flake to, walk back on floor with spikes (be sure spikes are cleaned first do not drag feet) re-broadcast as needed.
TIP: Spaulding areas, thin hairline cracks can be pre-broadcast over these areas prior to starting full broadcast day of or day before as additional pre-prep to ensure imperfections in floor disappear.

H. Following day, approximately 8-12 hours use a leaf blower to push back extra flakes. (re-claimed flakes can be used as touch up as needed by mixing clear epoxy over flake and re-broad casted over specific spots.)

I. Using Floor scraper, scrape flakes in a north and south direction removing any angled high points. Use leaf blower and stiff bristle broom to remove all flakes prior to applying epoxy finish.

J. Our Super UV MCU urethane top coat is an optional application that can be used over clear epoxy for additional UV protection, harsh chemical protection and resistance to epoxy scratching by increasing hardness.



TIP: Flake over Flake pre-flake over primer/patch work prior to applying full flake to best hide any possible imperfections.



TIP: Pre-flaking over flake or patch work ensures perfection.

5 APPLYING CLEAR EPOXY OVER FLAKES: This is by far the most important application step in the flake installation process. Applying clear epoxy will achieve a rich durable high build resin finish. Applying clear epoxy will encapsulate the flake protecting it from staining and discoloration providing a lifelong finish, guaranteed from lifting from hot rubber car tires, forklift traffic and many more benefits...

Coverage rate for this application is 125sf per gallon.

- A. Mix generous amount of clear coat epoxy not more than 3 gallons or less at one time into 5-gallon pail.
- B. Pour out slowly 4-5" width ribbon east to west along back wall approximately 3-4" off wall. Using a soft flexible rubber squeegee 12-18" in width (magic trowel or similar) squeegee epoxy east to west in 40-degree angle leaving NO puddling behind. Always pour out wet over wet on consecutive mixed batches.

- C. Once floor approximately 1/3 or 1/2 covered before mixing another batch use 18" roller to pre-wet with clear epoxy by rolling dry roller into mix. Do not over saturate.
- D. Using spike shoes walk on wet floor, follow bottom note on step 3 in preparing the concrete by rolling roller east to west moving 18" roller down 18" then rolling west to east. See attached videos.

Tip: In event roller becomes over saturated from extra epoxy left behind by squeegee, either rollout excess on dry flake if this is not possible because room is complete, ring out excess epoxy with rubber gloves sliding hand over roller top to bottom back into 5-gallon pail. Resume final finish roll. When finished let floor dry completely before driving or applying heavy equipment. 24 max with proper heat and air movement.



Rich resin epoxy over flakes. See video on squeegee applying



INSTALLING EPOXY METALLIC FLOORING AND COUNTERTOPS LIKE A PRO

Step 1. Apply steps 1-3 in preparing the concrete.

Step 2. After applying primer/moisture vapor barrier coat, a second application will be needed to insure the definitive bold back-drop 3d imagery color for the metallic epoxy installation.

NOTE: Always choose a solid color epoxy for the primer coat/mvb coat. Refer to first goal Notes under "Installing clear or colored epoxies" when choosing your color selection.

Contract is always best.

Step 3. SETTING UP MIX STATION: All metallic epoxy pigments must be pre-blended ahead of time.

Ratio:

4oz of powdered metallic pigment to 1 gallon of epoxy. Pigment should be blended to resin side "PART A" only.

Example: 1.5-gallon kit (2:1 ratio) = 6oz of powdered pigment.

3-gallon kit = 12oz of powdered pigment.

Be sure to always add 2oz extra of pigment to every gallon of resin to compensate for the ½ gallon of hardener to be added after.

Coverage rates are approximately 60 Sq. Ft. Per gallon.

Example: 350 Sq. Ft. divided by 60 Sf coverage Rate = 5.8 gallons. For ordering purposes order two 3 gallon kits of clear resin 6 gallon total, along with 24oz of powdered pigment.

Station set up for 350 square feet should be three 5-gallon pails filled with 2 gallons of part A resin in each pail. Slowly mix 12 oz of dry pigment in each pail.

Step 4. APPLYING ONE COLOR METALLICS: Mix one gallon of part B hardener into pre-mixed metallic part A resin. Mix slowly for 2-3 minutes. Pour out wet ribbon east to west 6-7" wide along back wall. Using your magic trowel, pull, twist and turn metallics over back drop color allowing approximately 20% of back drop to show thru. There is no real secrete or standard to this process, the goal is to simply get the floor covered. Once floor is covered you will notice over the next 4 hours the metallics will start to take on its own shape, design & look while dispersing throughout our resins. Be sure to have a helper mix up another batch just prior to using up material, always pour wet over wet maintaining fresh and continuous pours. Note: Be sure break up room in equal 1/3 parts to fulfill 1/3 for each mixed pail of material.

Step 2. ADDING ADDITIONAL COLORS: There is no right or wrong way to applying colors. Here are a few simple tips.

First Tip adding 2nd Color: Once floor has been completed with primary metallic color, immediately walk on wet floor with spiked shoes, pour out in a ribbon style 2nd pre-mixed metallic color. Introduced metallic will disperse evenly into one another, creating cloudy effects over the next 4-5 hours.

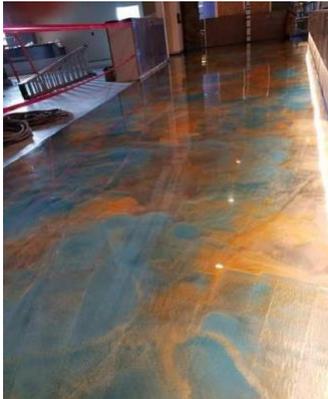
Pouring in a heavy bead of metallic in a zig zag /straight line pattern will leave a more definitive marble vein finish.

By Using a pre-wet 18" roller floor can be lightly rolled over for effect, or most commonly done by using a leaf blower to push colors around.

Another trick is upon pouring out initial bead of metallic first color, drizzle accent colors over pour then squeegee & leaf blow.

Third Tip Applying 2 or More Colors: Process is the same. Once primary metallic and first color metallic has been applied immediately apply third, fourth and even fifth.

Be sure all accent colors have been pre-blended to save time. Remember you have an estimated pot life of 40 minutes before epoxys begin to react to one another starting the initial curing process. If this your first time installing you may want to start off with one or two colors only.



Med brown back drop with 3 colors



white back drop with 2 colors



Magic Trowel



Vanity counter with 3 separate pours, see video.
Master vanity duel sinks



white back drop with one color