



Necessary Items			
Epoxy			
<input type="checkbox"/> Ultra Z Poxy			
Color			
<input type="checkbox"/> Solid Base Pigment		<input type="checkbox"/> Metallic Powder Color	
Mixing			
<input type="checkbox"/> Graduated Measuring Cup	<input type="checkbox"/> Mixing Container	<input type="checkbox"/> Paint Mixing Stick	<input type="checkbox"/> Mixing Paddle & Drill
Masking			
<input type="checkbox"/> Masking Tape		<input type="checkbox"/> Painter's Plastic	
Application & Effects			
<input type="checkbox"/> 91% Isopropyl Alcohol	<input type="checkbox"/> Foam Roller	<input type="checkbox"/> Nylon Paint Brush	<input type="checkbox"/> Plastic Putty Knife
<input type="checkbox"/> Heat Gun/ Propane Torch	<input type="checkbox"/> Squeegee	<input type="checkbox"/> Spray Bottle	
Miscellaneous			
<input type="checkbox"/> Disposable Gloves		<input type="checkbox"/> Sand Paper	

\*\* All items may not be mandatory depending on the look you are trying to create but all items will appear in instructions below which will give you a better understanding of what you may need for a particular project.

Coverages	@ 8 MILS (primer coat)	@ 40 MILS (top coat)	@ 80 MILS (max per coat)
1 qt. (22 oz. A : 11 oz. B)	~50 sq. ft.	~10 sq. ft.	~5 sq. ft.
1 gal. (86 oz. A : 43 oz. B)	~200 sq. ft.	~40 sq. ft.	~20 sq. ft.
1.5 gal. (128 oz. A : 64 oz. B)	~300 sq. ft.	~60 sq. ft.	~30 sq. ft.
3 gal. (256 oz. A : 128 oz. B)	~600 sq. ft.	~120 sq. ft.	~60 sq. ft.

\*\* MILS is thousandths of an inch (.001" = 1 MIL). It is a standard measure for coating thicknesses. For your reference, a standard credit card is normally around 30 MILS thick.

### Step 1 - Prep

Ultra Z Poxy can be applied to nearly any substrate however proper steps should be taken to promote adhesion. In most cases, this will mean either sanding, grinding, sand blasting or acid etching to produce a clean and rough surface. **CONCRETE:** Should be allowed to cure for a minimum of 14 days. If previously sealed or coated, all coatings should be fully removed either through mechanical or chemical methods. Concrete must be sanded no finer than 60 grit to remove all surface laitance (a layer of weak and nondurable cement and fine aggregates, brought by excess bleeding or by premature/ improper finishing). **WOOD:** Should be sanded no smoother than 60 grit. All previous coatings, wax or oils should be removed either through mechanical or chemical methods. **LAMINATE:** Should be lightly scuffed with 60 grit sand paper to help promote adhesion. **STONE:** A honed or rough surface stone should be fine as is but all previously applied oils or waxes should be removed.

If the stone is polished, it should be diamond ground with a 50 grit polishing pad to remove the polished finish.

After the prep is complete, make sure substrate is dry and clean of all dust and debris or anything that may contaminate the epoxy. The temperature of the substrate should be between 65°F - 75°F.

## **Step 2 - Masking**

Use painters plastic and masking tape to protect all cabinet fronts, appliances, sinks, etc. Also, cover at least 2' of the floor from the base of the cabinets as the epoxy will drip. Do not use paper or another porous masking material as epoxy may soak through.

## **Step 3 - Primer Coat (optional) & Edges**

If applying Ultra Z Poxy over concrete, wood or any other porous substrate, you will want to apply a primer coat. This will seal the substrate and help prevent off gassing which will leave bubbles in your finish coat. To do so, mix enough epoxy according to the coverage rates for primer coat on the first page of this document and the mixing directions in Step 4. If only using Ultra Z Poxy as a clear coat, there is no need to add any color to the primer. If you will be using color later, now is a good time to add a solid base pigment to start and cover the color of your substrate. More on adding colors in the next section.

To apply, pour epoxy onto substrate surface immediately after mixing. Push epoxy around with a foam roller and continue to roll out until a thin uniform film is covering the substrate. If you are applying a lighter base color over a darker substrate, you may want to apply the primer coat slightly thicker than the recommended coverage. Once a uniform coating is achieved use a heat gun or propane torch to release any bubbles forming in the epoxy. If using a pigment, this is a good time to paint your edges with the base color. Use a nylon paint brush to thoroughly coat the edge so none of the substrate color shows through. If drips form, let them be for now. If ridges form along the edge, you can use the brush or roller to smooth them out until the epoxy sets enough that it no longer runs. Let the primer coat dry for a minimum of 6 hours and a maximum of 24 hours (@ 70°F) before applying top coat. If applying after 24 hours, lightly scuff surface with 100 grit sand paper before moving on to top coat.

## **Step 4 - Mixing Epoxy & Adding Color**

To determine the amount of epoxy to mix, use the coverage chart on the first page. Mix only enough epoxy for one coat at a time. If your countertop is broken into sections, you may want to work on one section at a time, until you get a feel for the pot life. Materials should be pre-conditioned to a minimum of 50°F (ideally 70°F) prior to use. Thoroughly mix each component separately. Pour component B into component A using the proper mixing ratio of 2 A:1 B by volume. Mix both components for at least 2 minutes using a drill with paint or epoxy mixing paddle at low revolution (300 to 450 rpm) to reduce trapping of air. If an epoxy mixing paddle is not available to you, use paint mixing sticks to thoroughly blend part A and B. Be careful not to be too aggressive and create air bubbles in the mixture.

If adding a solid color pigment, first mix the pigment into part A and blend until uniform color is achieved before adding in part B. One 500ml jar is enough to treat a full 1.5 gallons of epoxy so scale accordingly. If adding a metallic powder, first mix parts A and B according to instructions above. Remember, once epoxy is mixed, the pot life will begin. Next, slowly add in desired amount of powder and thoroughly mix with paint stick until well blended. Scrape bottom and walls of container several times to ensure a homogeneous mix. On average, 10 grams of metallic powder per quart of epoxy should be used for good coverage. Less may be used if a more translucent look is desired. Never exceed 25 grams of powder per quart of epoxy. Only prepare quantity that may be applied during 40 - 50 minute pot life (at 70°F). Surface and environment temperature will affect cure time.

## **Step 5 - Applying Top Coat**

Once epoxy is mixed and colors have been well blended, immediately pour out the epoxy. If left in the mixing container, it will begin to generate heat and begin to set rapidly. You can now spread the epoxy with a squeegee, foam roller, putty knife, etc. You want to spread the epoxy evenly over the entire surface right up to the edge. When you get near the edge, some epoxy will run over and drip but this is not a cause for concern. If you attempt to keep the epoxy back from the edge, it may get too thin on the corner. We will address the drips later. If using color, this first flood coat should be your base color with either solid pigment or metallic powder added.

Once the epoxy is evenly spread, you can now torch it. This will help level the epoxy and remove any unwanted air bubbles that may have developed. Waft the top with a propane torch or heat gun. A torch is recommended as it does not blow air which can move the epoxy around more than desired. Hold the torch inverted so that the flame just grazes the epoxy coating. Do not leave the torch in one place, always keep it moving. Avoid torching too close to the edges as this will cause the epoxy to run over. The torch may also be used to move the epoxy and create a marbling effect. This will be more evident once additional colors are added to your top coat. **Be sure to never use a torch around the isopropyl alcohol that we will discuss in the next step.**

## **Step 6 - Adding Colors to Create Effects**

Now comes the fun part! An unlimited number of supplemental colors can be added to create nearly any design imaginable. There are a few popular techniques discussed below but this is only the tip of the iceberg. With this product, you are only limited by your imagination. For veins and marbling, start by mixing more epoxy and adding a complementary or contrasting color. Typically, metallic powders are used for veining and highlights but solid pigments may be used as well. These colors can be poured, drizzled, splattered or transferred into the wet top coat in any fashion necessary to create the desired look. For veining, you can drizzle the accent color using a paint stick into the wet top coat (and down the front edge). It can then be pushed around or manipulated with a squeegee, brush or putty knife in any manner necessary.

Another popular method to create a fisheye effect or transfer metallic powder into the top coat is through the use of 91% isopropyl alcohol. Clear alcohol can be spritzed with a spray bottle or drizzled off the end of a paint stick. When the alcohol hits the epoxy, it will push the metallic

powder in the top coat and create a “fish eye” effect. The larger the drop of alcohol, the larger the affected area will be. In addition to using the 91% isopropyl alcohol on its own, the metallic powder can be added to the alcohol (10 - 25 grams of metallic powder per quart of alcohol) and sprayed onto the wet top coat to add an additional color in a speckled pattern. Shake the spray bottle periodically to keep the metallic powder in suspension. Experiment with the distance from which you spray the color as well as the nozzle size on the spray bottle to create different effects. The amount of time that the top coat has been curing may also play a role in the size and intensity of the fish eye effect. Do not spray alcohol after about 45 minutes of set time.

Experiment with laying colors next to each other, on top of each other or swirled in a random pattern to create some truly unique looks. If you add too much accent color and no longer like the look, you can normally “erase it” by covering with an additional layer of top coat color. It is important to realize that the epoxy will continue to move as it cures so even after the pot life has expired, the look will continue to change for several hours. Remember, there is no right or wrong way to apply the epoxy so get creative and have fun with it!

## **Step 7 - Additional Coats and Effects (optional)**

Once you have achieved the desired look, let the epoxy set for 16 to 24 hours. If you are satisfied with the look at this point, skip to step 8. If you would still like to add more color, you should recoat within the 16 - 24 hours recoat window. To enhance the appearance and give the epoxy a look of greater depth, you may want to add a clear flood coat at this time. Within this clear top coat, you can add more color from spraying the isopropyl alcohol with metallic powder or drizzling on solid veins that will appear to sit on top of the previous coat giving a more 3D look.

Another look that may be desired is a more matte finish. Since Ultra Z Poxly has a natural high gloss appearance, it is great for a polished stone look but not too realistic for a honed stone look like marble. One effective technique is wet sanding the epoxy with 400-1000 grit wet sand paper (depending on level of sheen desired). This will remove the high gloss and leave you with a super smooth but dulled look.

## **Step 8 - Removing Drips and Cleaning Up**

After roughly 2 to 4 hours, once epoxy has firmed up enough that it has stopped dripping, you can use a putty knife or plastic scrapper to clean up all drips that have formed on the bottom of the countertop edge. Likewise, after the epoxy has hardened for 24 to 36 hours, you can sand these drips away but scraping while they are still soft is more effective.

If epoxy has dripped or tracked somewhere that it does not belong, clean up immediately with rag and 91% isopropyl alcohol. Once epoxy cures, it may be nearly impossible to remove from certain surfaces. Dispose of all mixing containers .

## **IMPORTANT NOTICE!**

•• If applying over an existing colored surface, proper adhesion and compatibility tests are essential. When using this product, the substrate preparation, application, performance and all other liabilities are strictly the end users responsibility. CCS and it's affiliates offers no guaranty, warranty or other claims to the success or results from the use of this product. CCS warrants the product to be free of defects and will replace or refund the purchase price of the product in the case that said products are proven defective. Any consequential damages including any labor costs are not covered by this warranty and are therefore not recoverable from the manufacturer or associated reseller.