

COUNTERTOP EPOXY INSTRUCTIONS

TOOLS & SUPPLIES

Diamond Epoxy
Diamond Prime Coat & Metallic Powder
Clean Paint/Mixing Sticks
Graduated Mixing Buckets
Standard Mixing Cups
Nylon Paint Brush
Propane Torch
3M Masking Gun
Masking Film & Painter's Tape
Disposable Nitrile Gloves
DAP spackling & sandpaper

COVERAGE

2 quarts = 8-10 sq feet @ 1/8"
1 gallon = 16-20 sq ft @ 1/8"
2 gallons = 32-40 sq ft @ 1/8"
3 gallons = 48-60 sq ft @ 1/8"
4 gallons = 64-80 sq ft @ 1/8"
5 gallons = 80-100 sq ft @ 1/8"
6 gallons = 96-120 sq ft @ 1/8"
7 gallons = 112-140 sq ft @ 1/8"
8 gallons = 128-160 sq ft @ 1/8"
9 gallons = 144-180 sq ft @ 1/8"
10 gallons = 160-200 sq ft @ 1/8"

STEP 1: PREPARATION & CLEANING

Before you start, make sure that both the epoxy, substrate and ambient air temperature are between 70 - 75 degrees Fahrenheit (21 - 24 Celcius). Clean countertop surface with 409 or a comparable cleaner. Make sure the entire work area is clean and free of dust and clutter, which may contaminate the finished product. Use DAP spackling to fill small holes, cracks and seams.

SKIM COAT

If applying epoxy over a porous surface such as concrete or wood, a skim coat is necessary before flood coating with epoxy to prevent air bubbles in the finished product. If you're careful you can do this now; otherwise wait until after masking. Mix a small amount of epoxy according to the instructions in Step 3 and use a squeegee to spread a very thin coat over the entire surface. This will seal the surface to prevent air bubbles during the flood coat stage. Wait a minimum of 6 hours after skim coating before applying the flood coat.

STEP 2: MASK & PAINT EDGES

After cleaning, let the countertop dry, then begin masking. Roll plastic onto the floor and under your work area. Place the masking material tightly up to the toe kicks under the cabinets and use masking tape to hold in place. Then run plastic along the front edge of your cabinets at the very top, just under the countertop, allowing it to drape onto the floor which you just masked. This is to allow epoxy to drip off the countertop without touching your cabinets or floors. Once everything is properly masked, paint all vertical countertop edges with Diamond Prime Coat™. Make sure that you have enough Diamond Prime Coat™ left over to mix with the epoxy flood coat later on. Let this prime coat dry for at least 4 hours before moving on to the next step.

STEP 3: MIXING EPOXY

NOTE: In this step, it is extremely important to measure epoxy accurately and mix thoroughly, with clean buckets and clean mixing sticks. Hardener (Part B) should always be poured into the mixing bucket first, followed by the resin (Part A) in an exact one-to-one ratio. Mix well with the stirring stick for 3 minutes. Be sure to scrape the sides and bottom of the bucket often to pull any unmixed part A or B off of the container walls. Most problems encountered are because of failure to follow these instructions or failure to have your ambient air temperature, countertop and epoxy at the required temperature before starting.

STEP 4: ADDING BASE COLORS

This step is equally important, and still necessary even if you are only completing a clear coat. Take the already mixed Epoxy and pour all of the contents into a second clean container. Then add your Diamond Prime Coat™ color to the mixture (not necessary for clear coats), and stir for an additional 3 minutes using a second clean mixing stick. One jar of Diamond Prime Coat Color™ is enough for up to 2 gallons of Diamond Epoxy™. As soon as you are finished mixing, immediately pour all of your product out onto the countertop surface.

WARNING: If left in the bucket, it will harden much more quickly than when poured out on the countertop, reducing your working time.

NOTE: All of our products have been specially engineered for compatibility. Use of other epoxy resins and colorants may affect UV resistance and curing. Do not try to cut corners by mixing a cheaper epoxy or using other colorants with our epoxy. If you choose to ignore this advice, do so at your own risk! For more information, read the specifications on our Diamond Epoxy™.

STEP 5: FLOOD COAT WITH EPOXY

Spread the epoxy mixture that you just poured onto the countertop with a foam roller, and coat the entire surface evenly and thoroughly, right up to the edges. NOTE: At this point product will start dripping over the edge. Don't try to prevent this by stopping short of the edge. You will waste a little epoxy here, but it's not worth saving material by coating too thinly near the edges. And don't worry about the drips that form; you will take care of them later on.

STEP 6: TORCHING THE SURFACE

Once you are satisfied with your creation, it's time to heat the surface to help level the epoxy and release air bubbles. For this you may use a heat gun or propane torch. A heat gun is not as effective as the torch, and will tend to push material rather than level it. A propane torch will also allow you to create a marbling effect if so desired. We recommend using a torch head that works well when inverted. Torch evenly, making sure to not torch too close to the edges. Never let the torch stay in one place, but keep it moving in even, overlapping strokes. If you torch too long in one place the surface will burn. This step not only levels the epoxy and releases small air bubbles, it can also be used to give the finished product a marbled effect. Finally, examine the surface carefully using reflected light on the surface to help identify any non-covered or uneven areas. WARNING: Do not use torch in presence of solvents or other flammable materials, and give isopropyl time to evaporate before torching.

STEP 7: CREATING VEINS, MARBLING AND GRANULAR EFFECTS

After you finish leveling the base coat, you can start mixing accent colors by adding metallic mica powders to 91% isopropyl alcohol in spray bottles. One package of Diamond Metallic Powder is adequate for 1-2 quarts of isopropyl. The ratio of isopropyl to powder is not critical since it will evaporate and leave the metallic powder behind. Shake often before and during application to keep the colors suspended. Use this mixture to create veins, marbling, granularity and contrast. Layer colors on top of each other or apply them alongside each other in random patterns. For veins, use a paint stick to drag accent colors through the surface, or create swirls by mixing two colors layered on top of each other. To create granular effects, stand back from your work and spray from a distance, adjusting the spray nozzle from fine to coarse. Experiment off of your countertop, spraying on the masking film or a piece of cardboard. Try spraying more heavily in certain areas and lighter in others.

Always start and finish strokes by spraying off of the countertop and moving across your piece, so you don't end up with a large puddle of color where you don't want it. This is your chance to be creative and experiment. Remember that if you're not happy with the results, you can always go over it with contrasting isopropyl/metallic powder accent color mixture. Allow time for colors to blend after spraying to get a better idea of the finished look. For ideas, you can use high-quality photos of natural stone and try to duplicate on your countertop "canvas." When finished, you can spray clear isopropyl over the entire surface. This will help to further blend and subdue colors and create an even more natural, stone like finish. This also helps to release any remaining air bubbles that rise to the surface from mixing.

DIAMOND COAT

WARNING: Isopropyl alcohol, while not as volatile as other solvents, is still highly flammable. NEVER have open flames while spraying isopropyl, and be careful when torching to wait until alcohol has fully evaporated.

STEP 8: CLEANUP

Approximately 2-3 hours later, go around all countertop edges with a paint stick or putty knife in order to remove drips from the bottom edge. Once the epoxy is completely cured, if you have any remaining drips, you can remove them with sandpaper. Once epoxy has hardened to the point that drips are no longer forming (about 2 - 4 hours), you can start to remove the masking and clean up the area. Color over-spray is easy to wipe off as the isopropyl evaporates, leaving behind only the colored powder.

THAT'S IT, YOU'RE DONE!

Wait at least 36 hours before using your countertop, and longer before placing heavy objects on top. Like concrete, your countertop will take 30 days to completely cure and reach full hardness.

STILL HAVE QUESTIONS? PLEASE CALL US!

Do you still have questions? Please don't hesitate to call. We have the friendliest, most experienced staff in the industry, and for no additional cost, we will be happy to walk you through the entire process. Call Now at 970.628.1846 to speak one-on-one with one of our professional installers.