



Designer Tops 1 & 2

"Authentic Designs at a Whole New Level"

What's in your portfolio?

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About Granicrete International:

Formed in 2006, Granicrete International has become a premier leader in the decorative concrete industry thanks to the fine installations done by our customers. Because of exceptional finishes, Granicrete has been sought out and shown on numerous home improvement television shows over several broadcasting networks.

The basis of success has been our focus on developing user friendly systems and products that require a little to no learning curve in order to achieve stunning and successful installations. We enjoy serving both novices and seasoned professionals to successfully bring the “Wow Factor” to their clients.

What Will Be Your Portfolio of Wow Factor Projects?

Granicrete has remained steadfast to provide the best training in the industry. We have been told many times over by recognized industry leaders that our system of training is the best they have ever experienced.

With such success from our Original Countertop Surfacing System, our installation systems have expanded over the years to include the following:

- **RESIDENTIAL INTERIOR AND EXTERIOR FLOOR OVERLAYS**
- **COMMERCIAL INTERIOR AND EXTERIOR FLOOR OVERLAYS**
- **REAL METALLIX EPOXY FLOORS AND TOPS**
- **COMMERCIAL EPOXY FLOORS**
- **RESIDENTIAL EPOXY FLOORS**
- **ORIGINAL COUNTERTOPS**
- **DESIGNER COUNTERTOPS**
- **SHOWERS AND WALLS**



Equally important for our user-friendly products and excellent training, is your need to be financially rewarded for your fine work. We developed our systems to be both cost effective for both you and for your clients while providing you with excellent profit opportunities.

Today's story is about you...

Congratulations for taking this step forward in training! Today you get to start your journey in learning how to successfully use Granicrete products.

It is our hope that you will broaden your abilities for using our installation systems to serve a wide variety of clients in diverse markets.

THE MARKETS FOR OUR SURFACING SYSTEMS

RESIDENTIAL:

Homes / Apartments / Condominiums / Townhouses

HOSPITALITY:

Hotels / Resorts

COMMERCIAL:

Offices / Retail / Malls / Plazas / Restaurants /
Amusement Parks / Parking Garages / Hospitals

GOVERNMENT:

Buildings / Parks / Schools / Universities / Stadiums / Arenas



The “U” is provided to support your success and is your place to go for ongoing support. It is a great resource to learn more about the products and systems of Granicrete.

You are encouraged to take time reading our Product Specification and Use Sheets and reviewing installation guides as you will find answers to questions you may have before you start using those products. We also have short concise videos for many of our systems and application techniques in the U as well.

Here is the list of the U’s offerings:

1. Product Specification Sheets & Safety Data Sheets (viewable and downloadable)
2. Agreement Templates (downloadable and customized)
3. Color Charts for Glass, Micas, Stains, Epoxies, Colors (downloadable)
4. Training Videos
5. Pictures as provided by our installers for download.
6. Coloring recipes
7. Marketing aids and online store for custom made brochures, job site signs, door hangers.
8. Installer tips and Help Desk to forward questions.

Commendations and Concerns:

The U provides you with the opportunity to express commendations and concerns. We like to hear good things about distributors and our corporate team. Likewise, should you have a concern let us know for that gives us the opportunity to become better.

Your contributions to the “U”:

We value your contributions of pictures, coloring formulas, and installation tips. Your contributions can become a part of your on-line gallery for your marketing efforts and may end up on the public side of the web where you can tell the world about your works. With any pictures you upload, we recommend staging your shots with lighting and using a high-quality digital camera with interchangeable lenses.

The “U” is a Privilege:

This is a rarity but suspension or removal may occur due to improper use of products or systems, consumer complaint related to inability or unwillingness to resolve a confirmed problem, or a determined inactivity for purchasing of Granicrete’s products for our system(s) or providing unauthorized access to the U for individuals not under your direct employment.

Training

Training is vitally important so that you obtain a very good understanding of any system prior to installation. Successful installation is vital to the Granicrete name and image as well as yours. It is your lifeline to gaining clients and their referrals for the long term.

A note about “Training”:

You are encouraged to put to further practice the knowledge and skills you learn in training before you begin installing for your clients. Look at practice as your opportunity to “play” with our products and create unique finishes that will amaze your prospects. A professional in their field always puts time into developing and honing skills. Such practice will set you above and apart in your market. Training is not a warranty by Granicrete of your independent work in the field. All warranties and guaranty you make in your installs are strictly between you and your clients.

How to Get Training for our Systems:

Original Countertop Surfacing

For those needing more hands-on instruction, such may be offered through small classroom instruction or comprehensive online video practice system. Both include materials to practice with and samples you make are yours to keep and show to your prospects.

Interior & Exterior Floor Overlays

For those needing more hands-on instruction, such may be offered through small classroom instruction or comprehensive online video practice system. Both training programs include materials to practice with and samples you make are yours to keep and show to your prospects.

Real MetalliX Floors and Tops

Training manual and how-to videos are on Granicrete University.

Designer Tops

Training guide is offered on demand by request having already completed Original Tops Training.

Shower & Wall Finishes

The training manual is in Granicrete U. Training in Floor Overlays is very helpful prior to doing this system.

Commercial-Industrial Epoxy Coatings

Training guide and how-to video are in Granicrete University.

Sales & Marketing Training

This online presentation, manual, and sales brochures are available for purchase from Granicrete International. We want you to not only have successful project outcomes but highly profitable projects.

About This Designer Tops Training...

The instruction you will gain from this class is predicated upon your understanding that has been obtained for texturing, color interactions, and the correct protocol for applying Granicrete Crystal Top Epoxy as well as all the detailing options for Crystal Top Epoxy.

In this advanced class you will learn the following:

- The unique difference of the Countertop Blend in comparison to the Granicrete Countertop Blend for achieving different artistic finishes.
- How reactive agents integrated into the colorants used will cause these colors to yield exceptionally different looks than achieved with just water dilutions.
- How the use of natural stones and manufactured add-ins can be integrated to achieve high-end looks far beyond any stone top.
- A detailed understanding of the system, use of common tools and artistic accessories that will take your coloring to a higher level.

The looks achieved in this class are intended for you to achieve \$50-\$100 per square foot...even more! Your typical cost of materials in relation to the Designer Tops Countertop System will be approximately \$10-\$15 per square foot.





This class is designed to extend your creativity, ask questions, and have fun playing with your newly acquired higher end finishes. Having gone through the short learning curve of the prior class, you will be able to advance promptly. But keep in mind, mastery of techniques learned comes with practice and continued conditioning of your acquired skills.

Our goal is not to teach you to replicate finishes but to expand your mind for how you can create one-of-a-kind finishes that you can replicate for yourself that are sought after by consumers appreciating your artistic skills combined with your professional application for functional and artistic expressions.



So, take notes, take pictures, and get ready to learn and earn!









General Tool Lists

Power Equipment (Starter = S ... Pro = P)

		APPLICATION	S	P
	SHOP VAC	Clean Up and Fabrication	X	
	DE-HUMIDIFIER	During Epoxy in humid conditions	X	
	SPACE HEATER	Drying Texture Maintain Room Temp for Epoxy	X	
	TABLE SAW	Fabrication		X
	PORTABLE AIR COMPRESSOR	Fabrication		X
	PEDESTAL FANS	Drying Texture		X
	CHOP/MITER SAW	Fabrication		X

Power Tools

		APPLICATION	S	P
	4" GRINDER	Counter repair	X	
	PALM SANDER	Counter repair / Post Epoxy Finish	X	

	SKILL SAW	Fabrication		X
	JIG SAW	Sink Cut		X
	BISCUIT SAW	Fabrication		X
	PLUNGE ROUTER	Sink Cut / Machined Wood Edges		X
	BRAD NAILER	Fabrication		X
	ROTOZIP	Removing Backsplashes		X
	SAWSALL	Removing Backsplashes		X
	½" DRILL	Mixing Texture		X

Tool Fittings

	APPLICATION	S	P
Diamond Blade	For 4" Grinder		X
Saw Blades	For Jig Saw (Cut wood and Formica)	X	
½" Inverted Bit	For Router		X
½" Straight Bit	For Router		X
#20 Biscuits	For Biscuit Saw Cut		X
1 ¼" Brad Nails	For Brad Nail Gun		X
400/1200/2000 Grit	Dry Sandpaper for Palm Sander	X	
Drill Bits	For Drill	X	
Screw Bits (Magnetic)	For Drill	X	
Roto Saw Blade	For horizontal cut of backsplashes		X

General Hand Tools - See Additional Tools Lists for Designers

	APPLICATION	S	P
Hammer		X	
Pipe Wrench		X	
Crescent Wrench		X	
Socket Wrench Set		X	
Screwdrivers		X	
Mixing Paddle		X	
Tape Measure		X	
4' Level		X	
T-Square			X
Right Angle		X	
Extension Cords		X	
Razor Knife		X	
Scissors		X	
Caulking Gun		X	
Margin Trowel		X	
Pool Trowel		X	
Decagonal Trowel		X	
Rubbing Stone		X	
Wood Clamps			X
Propane Torch		X	
Moving Blankets		X	
Sawhorses			X
Protective Goggles		X	
Particles Mask		X	
Bench Brush		X	
Dustpan		X	
Broom		X	
Flashlight		X	
Headlight		X	
Deck Brush		X	

Supplies – Disposables

	APPLICATION	S	P
Wood Glue			X
Loctite			X
Mirror Glue			X
Clear Silicone Caulk			X
Small Propane		X	
Disposable Gloves		X	
Formula 409		X	

Windex		X	
Scouring Pad		X	
Cleaning Alcohol		X	
5 gallon mixing pail		X	
Quart Measurers		X	
5 Qt. Measurers		X	
2 Gallon Pails		X	
Paint Stir Sticks		X	
10-20 Spray Bottles		X	
3" Chip Brushes		X	
3" Foam Brushes		X	
Tile Sponges		X	
Sea Foam Sponges		X	
0000 Steel Wool		X	
Marking Pencil		X	
2" Painters Tape		X	
1/2" Grout Tape		X	
3/4" Grout Tape		X	
36" Craft Resin Paper		X	
Roll 2 mil Plastic		X	
13" Masking Paper		X	
18" Masking Paper		X	
Paper Towels		X	
Rags		X	
Contractors Hand Soap		X	
GRANICRETE DETAILING KIT	Sanding discs to detail your epoxy countertop finishes (<i>see countertop detailing in index</i>)	x	

Designer Tops Supply Lists

Finishing Products:

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Granicrete Countertop Blend 2. Mica Flakes 3. Advanced Suspension Additive 4. Acryli-Shades 5. Dispersions | <ol style="list-style-type: none"> 6. Water 7. Mica Essence Powders 8. Crystal Top Epoxy 9. Hydro Barrier Membrane |
|---|--|

Finishing Tools:

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. 6 Mil Painters Plastic 2. Thin Painters Plastic 3. 3/4" Groutline Tough Tape 4. Magic Trowel 12" or 24" | <ol style="list-style-type: none"> 5. Contractors Heavy Brown Paper or Rosin Paper 6. 2" Blue Painter's Tape 7. Pool Trowel 8. Margin Trowel |
|---|--|

- | | |
|---|--|
| 9. 60-100 grit sanding discs | 18. Electric Drill |
| 10. Mixing Buckets – 5 Qt., 1 Qt., 5 Gallon – for water | 19. Mixing Paddle |
| 11. Mixing Cups | 20. Stir Sticks |
| 12. Paint Rollers, Trays | 21. 2" Chip Brushes |
| 13. 2" or 3" Sponge Brushes | 22. Veining Brushes – Script Liner Sizes
20/0, 1, 4 |
| 14. Propane Torch with adjustable knob & lock | 23. Head Lamp |
| 15. Granicrete Professional Spray Bottles | 24. 8" Bamboo Skewers |
| 16. Wallpaper Sponge | 25. Sea Sponges |
| 17. Paper Towels, Rags, Cheese Cloth | |

Tote Boxes

A convenient way to operate is to store your tools and supplies in convenient tote boxes that may roll and stack. Some installers begin with a few five-gallon buckets and some cardboard boxes and then progress to totes as they grow their business. Consider having checklists on your totes so that you can easily identify what goes in each tote and that you have those items on hand before getting to the job site. Extra runs to the hardware store amount to lost time and money.

Organizing and labeling these boxes will prove handy. (I.e. Fabrication / Coatings / Coloring / Epoxy / Finishes)

Quality Camera: Consider purchasing a high mega-pixel quality camera with a zoom lens and adjustable lighting to capture your before and after images to show others and further your business.

Designer Tops Tips for Success

General Tips:

1. Always store Colorants & Crystal Top in a temperature-controlled area out of direct sunlight – not in the back of your car/truck.
2. Always use clean dry containers when mixing your products, ESPECIALLY Crystal Top Epoxy.
3. Always clean your tools immediately after use.
4. Always store your tools in a safe, dry place.
5. When in doubt, always refer to your installation manual or recipe.

Granicrete Countertop Texture Blend:

1. Shake and mix the product as after shipping/storage, the Blend settles. Shaking it aids in removing the product from the bucket without making a mess.
2. For efficiency, use an electric drill with a heavy-duty paddle for mixing Countertop Blend.
3. Countertop Blend can be “tempered”, meaning if you have left over mixed Finish Blend, say from your roll coat, more water &/or Countertop Blend can be added to continue the application process within a reasonable period of time.

Advanced Suspension:

1. We strongly recommend using Granicrete professional spray bottles. Yes, they are more expensive, but well worth it.
2. For the finishes in this curriculum, except where noted, color is generally mixed at ratio 30% to 70% water. This means 3 oz. color to 7 oz. water. This is the baseline - water to color. You can add more/less water depending on the effect you want to achieve. Make sure to check your notes for variations.
3. Shake your spray bottle with color often. The colors tend to separate from the water after sitting.
4. Test the spray in a bucket or trashcan. The color may stream instead of mist.
5. When misting, the harder you squeeze the trigger, the finer the mist.
6. When finished coloring, transfer your color/water mix to a clean, dry container that has a secure lid. This prevents the color that settles to the bottom from clogging the sprayer.

Crystal Top Epoxy:

1. Always make sure to transfer Crystal Top during the mixing process; this ensures 100% success every time.
2. Always mix Crystal Top 1:1-Hardener to Resin.
3. In cold & humid climates ALWAYS use a dehumidifier or the Crystal Top will not cure properly.
4. In cold climates, place the Crystal Top Resin & Hardener containers in a bucket of warm water.
5. Never use an electric drill w/paddle attachment to mix Crystal Top.
6. Do not whip air bubbles into the Crystal Top.
7. Pour Crystal Top in a zigzag pattern over the surface & then spread from the center out to the edges.
8. When spreading the Crystal Top, remember you are aiding in the leveling process – NOT painting on the Crystal Top. Always use a light to medium touch.
9. Always use a headlight or some type of high watt portable light to point out skips.
10. Always use a Propane torch, NEVER MAPP gas, a blow dryer, or heat gun.
11. Remember that Crystal Top is a chemical cure process. It is not the air or heat from the torch that “cures” the epoxy. CO2 from the flame of the propane torch removes air bubbles – NOT THE HEAT! Set the flame to medium or low and move your torch quickly over the surface. DO NOT “cook” the Crystal Top.

PREP AND FABRICATION

Pre-Installation Knowledge

There are many variables when you walk into a potential project that you need to be aware of. Granicrete's countertop system is designed to resurface over many different substrates, but each substrate has its own special requirements. It is important to know what the procedure is for each of the different substrates to ensure proper installation as well as making sure you bid the project at the right price.

Inspecting the structural integrity of the countertops is crucial in the estimation of a countertop installation. The problems that typically occur for laminate and tile countertops are listed below, but these also apply to other types of countertops. If the existing countertops are not made from laminate or tile it is important to still inspect the integrity of the countertops. Some of the basic problem areas to look at include, but are not limited to proper support, water damage and made out of a solid and sound material.

If it is determined that the countertops do not have any structural integrity problems, then the option to refinish the existing countertops is available. If the existing countertops have integrity problems, then the estimate needs to include the added cost of fabricating new countertops. Fabricating countertops can add approximately \$5 per square foot plus labor.

If the project is for new construction, which demands fabricated countertops the visual inspection of the integrity of the existing countertops is unachievable, but it is a good idea to inspect the cabinets as well as the jobsite. While inspecting the cabinets check to make sure they are level and they will provide proper support for the new countertops.

Also check for clearance of top drawer in relation to any faux edge you may plan to construct. (Be sure you design the edge to assure clearance when pulling the drawers.)

If the customer requests an under-mount sink for existing countertops or new construction that section of the countertops will need to be fabricated. Whenever an under-mount sink is installed that particular section of the countertops should be fabricated out of MedEx or Extera (referred to as MDX throughout the manual).

Never use particle board, engineered wood, or plywood as substrate to build countertops. MDX is normally found at quality lumber yards or wood specialty stores. This added protection will help prevent any water damage that might occur in years to come. If MDF or these other woods are used for an under mount sink it is almost guaranteed water will swell up the wood possibly causing the Granicrete material to pop off or crack.

Remember that Granicrete resurfacing products are only as good as the substrate they are applied to.

Things to consider when looking at a project.

Working within the framework of proven success

Granicrete has spent significant time developing the system it has. Through all this, we have identified what should not be done. We encourage you to follow our system fully and stretching application outside of our testing and experience is not recommended.

Projects you want to be doing / work to avoid.

As with anything that is new, there is a learning curve. We recommend that you start small and progress in your scope with each successful project. Begin your first project by “playing” in your garage, making a table top, or doing the installation at your own home or friend’s. This experience will help you gain confidence to engage in more challenging projects.

The customer and work you wish to avoid is that which infers or demands of you to replicate the look of manufactured tile stone. Although you may incorporate colors of such into your work, it is virtually impossible to replicate by hand. Some consumers want uniformity in their look. Such customers should be avoided as your work is custom and will have variations throughout the project which would be expected of stone-like finishes.

Identifying dry-rot and other defects

Be sure to crawl underneath the sink with a flashlight and pocketknife. Scratch away at the wood by the sink edge. If it is swollen, has water stains, or chips away while scratching it, that wood substrate must be replaced. This means additional time and materials for countertop removal, fabrication, and replacement before you even begin doing your coats. It is not unreasonable for the installer to charge a flat \$300 for such work.

When to work over the existing surface or build new

If the existing surface has bubbling, delamination, or other defects, you may have to replace it. Also, if the countertop edge has a “non-drip” lip, that surface will need to be planed-grinded before the coats and squared before the edging step.

How under mount sinks factor into your scope of work

MDX should be used when fabricating for an undermount sink. We have devoted an entire section to sinks. Most of your customers will replace their sink and faucet to go along with their new countertop. In their sink selection they will need your professional recommendations as to it being drop-in or under-mounted. In either case, modification to the existing sink cut out may need to be made if not replaced entirely.

Will the project also be done off-site or strictly on-site?

Depending on the size of the counters involved and their shape, fabrication and coating can be done off-site thus allowing for delivery, removal, and placement on-site. Such opportunity can be more time efficient for you as the installer and much more convenient for your customer.

The example below shows a kitchen top that likely needs to be done onsite due to its size and shape. To fabricate and coat offsite and deliver onsite could likely result in flexing of seams and cracking of texture.



Another consideration for offsite fabrication and coating is related to the consumer's ability to be without the use of their kitchen for a few days if installed on-site. This can be more difficult for larger families and diminish their interest in a Granicrete installation.

MEASUREMENTS

Once the countertops have been inspected and it is determined if the existing countertops can be refinished in place or new countertops need to be fabricated, it is time to measure. Measuring the countertops is easy, but important.

The measurements obtained from the countertops will be used to determine the square footage and if fabricated off site they will be used to assemble the countertops. In order to measure the countertops properly you will need to measure the length and width of each individual piece including the backsplashes. Calculate for overhangs for when doing island measurements as well as backsplashes. Be sure to measure inside edges of the sink cabinet to determine for limitations needed for any sink replacement. Do not allow the customer to go too big with their new sink selection where it impedes your ability to mount it within the sink cabinet.

Standard kitchen countertop depth is 25"

Recording the measurements of the countertops on grid paper will help eliminate errors when it is time to build the countertops or calculate the square footage.

Depending on the size of the grid paper designate each box a particular size (1' or 6"). This will give scale to your drawing and make determining square footage a breeze.

Square Footage is equal to the depth x width of a countertop. Normally every linear foot equals two square feet. Nine square feet is approximately 1 square meter.

Another easy measurement for square footage:

Total Inches of Width x Total Inches of Length
Divide this Total by 144 to get square feet

Measurements for Fabricated Countertops

The depth of a countertop is the length from the wall to the front of the countertop not from the backsplash to the front of the countertop. If the countertops are being fabricated off site and the measurements for depth are taken from the backsplash and not the wall the countertops will end up 1"-2" short. Also, remember there will be a false edge underneath the front edge of the countertop. The countertop overhang needs to be at least the width of the false edge strip plus an inch to allow room for adjustment or out of square cabinets.

When measuring the width of the countertops make sure you allow 1/16"-1/8" on each side for Granicrete material. Again, make sure the overhang on each side is adequate enough to allow for a false edge as well as room for adjustment. Always

remember to measure the backsplashes and calculate the square footage to add to the estimation.

Another way to measure is to cut door skins in 3" strips. Lay them around the perimeter of your counters. Slide and cut them to be exact and then hot glue the pieces together. Write notes on these pieces for identification. Roll them up. Unroll on MDF and trace the outline template you had created on site.

A good note is that the back of the countertop does not need to be flush to the wall. Your backsplash will hide gaps up to the thickness of the splash itself.

Measuring Countertops for Refinishing

Measuring countertops in order to refinish requires the same steps as listed above. Measure the length of the countertops followed by the width and multiply together to get square footage. While measuring the countertops check to see how the appliances fit between the countertops. If there is a tight fit make a note to not apply a lot of material to the edges, so the appliances will still be able to slide back in. Always remember to measure the backsplashes and calculate the square footage to add to the estimation.

TEMPLATING COUNTERTOPS

Are you square? (side to side) - (front to back) - (corners)

1. Check your corners with a right angle to verify they are actually 90° and square. Every couple of degrees off can cause the back of the countertop to miss being flush at the counter's outside ends by ¼ - 1/2".
2. Use a level (4'-6' long) to run along the wall to verify they are actually flat and without any gaps or bowing.
3. Check the back measurements of your counter and compare the front measurements of the counter. If the walls or cabinets on each end are not square, your counter may get pinched before reaching the back wall.

Pull the drawers...

Determine the clearance you have for the drawer as related to the how the countertop edge will be fabricated. If the drawer frame is flush to the top of the cabinet, you cannot create a countertop with a faux edge but will need to do a flush mount.

Measuring and checking it twice (three times)

You have a couple options in measuring. One is to create a template of the outside using 2"-3" wide strips of melamine that you can cut with a knife and glue together.

The other is just old-fashioned tape measurements, recording them and drawing out on graph paper. In either case, not only do you need to measure two (or three) times to be sure you are accurate, but you also need to account for the depth measurement of the countertop where the existing backsplash rests. Forgetting this important measurement will leave you $\frac{1}{2}$ - $\frac{3}{4}$ " off. If there is not going to be a backsplash, accurate measurements are essential.

The other important measurement is under the front edge of your counter. Look up under and determine how far over the countertop edge extends beyond the cabinet. This is necessary because the cabinets below may not recess equally throughout. If you build a faux edge and the cabinet does not recess enough, the edge will not have enough room to allow the counter to sit flush.

Considerations when doing backsplashes (outlets) (flush under top cabinets)

Granicrete recommends that existing back splashes be removed and new splashes fabricated. The reason for this is that our entire process is much easier and consistent when done horizontally. The coloring of vertical surfaces will have some variation from the horizontal surface and the epoxy process will be challenged on the vertical surface because of the self-leveling properties of the epoxy.

When removing back splashes, consider fabricating splashes that are slightly taller than the ones which were cut out. Doing so can hide any of the marks or minor damage done during the removal process. To accentuate the back splash even further, consider taking the splash to the bottom of the top cabinets.

When measuring splashes, you must account for wall outlets and switches. Exact routing out of these is required and you will need outlet extensions to pull the outlet to the new surface and install the face plates flush to the new back splash.

You will also need to consider the "rise" of the new countertop and splash when going up under the upper cabinets. Anticipate the new counter will add $\frac{1}{8}$ " for texture and epoxy and so will the top edge of the splash. Therefore, you will want to give room for around $\frac{3}{8}$ " for the extra material. Also be sure that the upper cabinets are hung equally throughout by taking multiple measurements from the countertop to their bottom edges to avoid pinching of the splash when mounting.

WORKING WITH DIFFERENT COUNTERTOP SUBSTRATES

Coating Over Laminate or Formica

Laminate is the #1 countertop resurfaced over. It is also the easiest and cheapest option for the customer. The two biggest concerns about resurfacing over laminate are Water Damage and Delamination of the existing laminate.

Water Damage – This occurs when the particle board underneath the laminate is exposed to water causing the particle board to swell. If the Granicrete countertop system was applied on top of this surface the increased swelling of the particle board would cause delamination between the Granicrete and existing countertop. If there are signs of water damage it is recommended that you fabricate that section of the countertop.

Delamination – The existing laminate is beginning to lift or pull away from the surface. If this problem is occurring on the existing countertops it must be determined whether the countertops should be fabricated off-site or if the countertops integrity has not been comprised and can still be refinished. If the countertops are only delaminating in a few small areas then those areas can be removed, covered with Hydro Barrier Membrane, and refinished with Granicrete Countertop Blend. If the delamination is substantial, then the countertops will need to be fabricated off-site.

If there are major problems with the laminate countertop it is best to fabricate new countertops (*refer to the fabrication section in your manual for the procedure*).

Removing and Fabricating Backsplashes

What tools are needed?

Sawzall/ Shop Vacuum / Knife / Hammer / Small crowbar-chisel / Screw driver

Most Formica splashes are fabricated as part of the countertop. This means the splashes need to be cut away flush at the countertop and then be separated from the drywall.

A flush cut can be done using a Sawzall or Roto zip circular saw blade. NOTE: Before cutting and creating sawdust and dust, have a good shop vacuum that can suck up the debris while cutting is done. Cut across the base of the splash as flush horizontal as possible.

Next, to remove the back splashes from the drywall, cut down behind the top edges. Avoid cutting into the drywall. Then using the hammer and small crow bar chisel, tap the chisel down behind the splash slowly and gently popping it away from the drywall.

45 vs. 90 degree cuts

Whenever possible, backsplashes should be cut at 90° to replicate the natural cut of stone. Likewise, doing 90° cuts for counters makes sense as well.

Backsplashes that are already in place

When texturing a backsplash that is already in place, after painting the first two coats with the chip brush, you will need to use a different technique to begin the texture coats. Texture coats will require you to “push” the material up the face of the backsplash. This is accomplished by holding the trowel at a 45° angle at the base of the backsplash and run the trowel up the splash while closing the trowel to nearly a 90° angle at the top of the splash. Extra material will pile at the top edge and this can be trimmed down by moving along the top of the splash until a flat square edge is achieved. Achieving such an edge can be accomplished using a margin trowel for trimming.

Texturing can be more easily accomplished when the backsplash is on a raised horizontal surface. If using sawhorses, be sure that ample support to the backsplash is provided to avoid sagging using bricks or blocks. If the brick or block is slightly thinner than the backsplash, all steps of texturing an epoxy are easier. Texturing of the bottom edge (the edge that will be lying on top of the countertop) is not needed and this edge should be kept clean at all times. Consider using Granicrete’s Groutline Tough Tape (1/2” – 3/4”) along the bottom edge and interior edges during the trowel process and removing this tape before coloring and epoxy.

When coloring backsplashes that are already mounted, be cautious of over spraying which can cause the colors to run. Allow some extra dry time between colors. If coloring backsplashes that are yet to be mounted, set them on a horizontal surface and be sure to color them in the same sequence and spray directions at the same time you are doing the counters.

Coating Over Tile

Sound Construction – The tile on the countertops should be free of defects (i.e., cracked tiles, bad grout,). Defects in tile countertops usually result from improper construction of the sub-frame. A visual check of the tiles will suffice for cracks and grout. Lightly tapping on the tile with the handle of a screwdriver can be used to determine if the tile has a solid backing. If the tapping generates a hollow sound the tiles were not laid properly and should not be refinished with Granicrete. The countertop system is only as good as its substrate therefore, if defects are found in the tile countertops it is recommended that the countertops be removed and the new countertops be installed on MDF or MDX.

Sufficient Support – Tile countertops are heavier than laminate which can cause them to sag if they are not properly supported by the cabinets. While visually inspecting the underside of the countertops check out all the points of contact between the cabinets and countertops making sure that there is sufficient support

to prevent sagging. The biggest problem areas are corner cabinets where spans tend to be the longest. Adding a cross bar on corner cabinets will help with the long span.

Water Damage – This occurs when the particle board or plywood used to build the sub-frame is exposed to water causing the wood to swell. If the Granicrete countertop system was applied on top of this surface the increased swelling of the wood will cause the tiles to raise and crack the texture of the countertop blend. If there are signs of water damage it is recommended that you fabricate that section of the countertop.

Granicrete is often requested to go over existing tile countertops. In doing so, it is important to inspect the substrate the tile rests on, the type of grout used, and the overall depth of the grout lines.

When reviewing the substrate, look underneath with a flashlight by pulling the drawer out of the lower cabinets. If you see signs of wet spots, staining, dry rot, or bowing, this means that water has seeped through the tile and the substrate is damaged. If the wood is damaged, the tile may have a chance to move or break from the grout. Any such occurrence may mirror through the Granicrete at a point in the future.

If the depths of the grout lines are more than 1/8", you will have to float extra material through them to reach a level surface. As our goal is to keep our material very thin, such added thickness can affect the finished look of Granicrete in a couple ways:

- (1) After coloring and sealing, you may see shadows of the grout lines appear over time. This is particularly so if the coloring process provides for the colorant to have extended drying times. The thicker material absorbs more of the colorant and may hold the color differently thus showing the grout lines.
- (2) When applying the epoxy, as extra moisture may be trapped in deeper parts where the grout lines were filled, this can cause the epoxy to cure unevenly having trapped the extra moisture and oxygen beneath. A ripple effect rather than a glass-like effect may be the final look after complete curing has taken place.
- (3) Many of the tiled surfaces have a no-drip edge. This edge piece must be chiseled or cut off. Floating extra texture to get to level will produce even more problems as mentioned in point (2) including latent delamination of the epoxy and its cracking.

Success has been achieved in overcoming these challenges by doing a couple extra steps when going over tiled surfaces. Consider the following:

1. Do the two brush coats over the tile. Allowing each coat to dry thoroughly.
2. Do one thing trowel coat to fill the grout lines and create flat surface drying thoroughly.

3. Do two coats of 2 parts water to 1 part Granicrete Superstrength Polymer resin or Poly Low Odor. Dry thoroughly between coats and after the last coat. Granicrete's Versa Primer is excellent for priming interior floors and MDF.
4. Do another thin brush coat and allow to thoroughly dry.
5. Finish with two thin trowel coats with the first trowel coat still wet when applying the last trowel coat.

Because of these variables and precautions, additional time, and material costs for going over tile surfaces and determine if removal of tile countertops including the substrate and then fabricate new tops for replacement is the better option.

Coating Over Solid Surfaces

In addition to Formica®, requests are received for going over granite and Corian®. Both are within our scope. Deep cleaning of granite will be required in order to remove oils that may have seeped into the pores. As for Corian®, we recommend a 400-grit sanding and cleaning of this surface before the first brush coat. As for Formica®, cleaning the substrate is required.

Coating Over Granite

A couple considerations must be made going over existing granite. Being porous, granite can be very dirty and oily. If the granite has been sealed, granite may still have developed dirt and oils that the sealer did not cover.

We recommend that all granite be ground using a 220-400 grit sanding pad. Your goal is to scuff up the sealer and then begin cleaning. Use a degreaser cleaner and sponge thoroughly and then water wipe and rinse.

Repeat the water washing and rinsing until foam and film is removed. As a last step using a solution of 10 parts water to 1-part bleach, bleach the surface and again water wipe and rinse. This last step is to diminish the chances of mold build up under the texture.

Allow surface to thoroughly dry using towels and fans. Do not begin the texturing steps until the granite is dry.

Coating for Exterior Countertops

Granicrete countertop blend can be used for exterior applications, but **Crystal Top Epoxy or any other epoxy should NEVER be used for exterior applications.** Epoxies will amber when applied in direct UV applications. Even under a covered

patio the epoxy will amber from high temperatures. Granicrete has several sealers that are excellent for outdoor application. Contact Granicrete with recommendations for your outdoor application.

*Reference the exterior fabrication section in this manual for the recommended fabrication procedure.
Sealing exterior countertops is covered later in this manual in the sealing section.*

Removing Appliances

Safe removing and disconnection of appliances

Since most jobs will be done in a customer's home that has finished flooring and cabinets, kitchen prep is an important step in the Granicrete process. Removing the appliances is relatively simple and makes your job much easier.

Stove: Disconnect the electricity and/or gas to the stove. Remove the stove and store away from the job to avoid getting materials on the stove. CAUTION: Do not drag the stove across the floor. Use mover's pads and place those under the stove. Then pulling on the pad, the stove should slide across the floor. Remove the Formica® edge banding where the stove was as the heat from the stove has likely softened the glue.

Refrigerator: The refrigerator will need to be moved aside or completely out of the kitchen area. It may have water hooked to it for an icemaker. Turn the water off, disconnect plumbing, unplug, and relocate refrigerator. Remember to plug the refrigerator in wherever you relocate it to avoid food spoilage. NOTE: Be sure the plumbing valve behind the refrigerator does close completely and the water in the line drains fully and does not fill again. If it does, the valve is not closed or is broken.

ALL ABOUT SINKS

Drop in Sinks

Plumbing precautions

1. You need to know your local code. Some jurisdictions require plumbing to be done by a plumbing contractor.
2. Second, know your liability coverage for your business. If you do not have coverage, we recommend you defer this to one who does. Be sure to consider the costs for outside services to your projects so you can cover them in your professional proposals.
3. For most of us, using a plumber is the best route as they can get the work done in a fraction of time while absorbing the liability. You may want to limit yourself to sink removal only charging \$50-\$100 and help the customer make the plumbing arrangements. (Your being networked with a good plumber can be a source of great leads as well.) Note: Even if all you intend to do is to remove and/or reset the sink, there may be faulty valves. Have replacement valves already in hand. In fact, consider replacing valves with every installation.

To do or not to do

Should you provide this service in installation, be prepared in advance with the right tools, hardware, and having tested and shut off the main water line in advance. Consider some type of charge for parts.

Test the main water valve by closing it off, turning on the faucet, and making sure that the water in the line depletes with no subsequent dripping. Any dripping means the valve cannot close flush. A certified plumber is needed for that repair before any work can begin.

Hardware you will want includes various compression valves and high pressure flex hoses of length and diameter fitting. If pipe cutting, soldering, and hard copper plumbing are required, we recommend deferring this work to a licensed plumber as well.

In all cases, work within the scope you are permitted, capable of, and comfortable with.

Typical process to remove the sink

1. Turn the main water line off.
2. Turn on faucet and remove all pressure in the faucet lines.
3. Leave faucet on and watch for dripping after pressure drops.
4. Close in-line valves under the sink.
5. Unthread valves and replace with correct compression valves.
6. Unthread drainpipes. (Place pieces back together and set aside.)
7. Unthread disposal and connection to dishwasher if applicable.
8. Cover drainpipe with duct tape or stuffed rag
9. Unscrew all mounting brackets under counter that clip the sink.
10. Cut into silicone beading all around the sink ring on top of the counter.
11. Push up the sink from underneath.
12. Follow packaging directions for mounting new in-line valves. Switch to off position.
13. Line area with plastic and place buckets under each valve.
14. Turn the main water valve partially on.
15. Quickly check to make sure in-line valves are working with no leaks.
 - a. If leaking address immediately by tightening. Assess whether main line needs to be shut off while doing so.
 - b. Continue installation process once valves are tight with no leaks.

Will the new sink fit?

NOTE: *These steps should be considered in advance of beginning the stages of the Granicrete coats. This allows you to do the cut outs and waterproofing in advance of the coats. Doing these cut outs after completing the Granicrete coats and epoxy make for a more difficult task. Saw blades going through the concrete and epoxy are more likely to break leading to scratches and cracking of the epoxy. If your faucet system requires drilling holes for the plumbing, now is also the time to do so.*

Once you have removed the sink, you should be able to place the template for the new sink and determine what cuts are needed. Mark those accordingly and be sure you have ample room under the new sink edge and the vertical walls of the cabinet to place the new brackets.

Not only do you need to consider the width from side-to-side of the sink, but you need to consider its position from front to back. Consideration for the front and back cabinet frames must be made especially if separate holes for faucet plumbing must be made.



Undermount sinks will require even more room to work with underneath as not only do you have a sink lip to account for, but the brackets must extend out from that lip as well.

By advising the customer of the sink size they may purchase you will help them make a good buying decision. **YOU WILL NEED THE NEW SINK TEMPLATE IN ORDER TO MAKE SURE YOUR NEW CUT OUT IS CORRECT.**

Again, being networked with a good plumber can be beneficial as not only can he make money from the work you refer to him but he may have advantageous pricing for sinks as well benefiting your customer and their overall project cost.

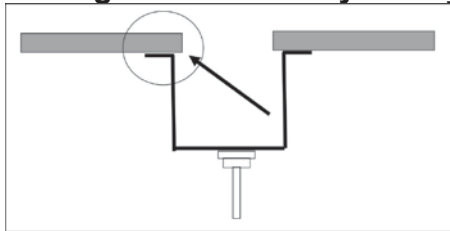
Cutting a new sink template

Use either a high-quality jig saw or router to complete your cuts to the shape of your template. Take your time and do not force the tool around the template marking. Allow it to work through at its pace and your guidance.

Cutting the hole is straightforward. Use a 3/8" bit to drill a starter hole in one corner and then use a saber saw to cut around the outline. If you don't have a saber saw, a keyhole saw for the corners and a handsaw will work just as well, only slower. Cut from the top to minimize any tear out from the saw.

Undermount Sinks

Mounting the easiest way: Always follow directions per your sink's template.



The best practice for under mount sink is when the sink cut out is slightly smaller than the sink itself. This "True" undermount has the inner edges overhanging the sink bowl edges by 1/8" to 1/2". This allows for slight misalignment and gives your extra room to place the sink while providing that professional look.

Complications can arise because templates may call for flush or step mount cuts. Flush mounts require the cut out to be flush with the inside edge of the sink bowl. Step mounts require a finished countertop opening that is larger than the sink's bowl opening so the sink's flange is exposed. Be sure to "double-stack" the MDX so that it has plenty of material and depth to anchor bracket mounts to. Double stack strength is enhanced by brad-nailing underneath every few inches after having wood-glued the surfaces together.

We recommend steering your customer to a TRUE MOUNT as it allows some room for cutting imperfections. Cutting can be done with a jig saw but better controlled using a router to maintain cleaner edges.

Most customers that select an undermount do so because of the ease of cleaning. Crumbs and liquids can be sponged from the countertop and into the sink. Attempt to move your customer into the True mount as it is also the easiest to keep clean. You may have to modify the template by reducing the sink cut from what is shown.

You should ask your client the mounting method they want and specify it in your agreement. Help your customer make the best choice while keeping it easiest for yourself.

The specific method of fastening the sink to the countertop varies by manufacturer. If you can fasten the sink to the underside of the countertop, then flip it over and place it you will find less time on your back.

It is common for independent Granicrete installers to charge \$250 for installing a new undermount sink.

Solid surface one-piece sinks

1. Such sinks often found with Corian or cultured marble should be examined for their cosmetic look. If the sinks are in great shape, you may consider keeping them but creating an under mount look by fabricating a $\frac{3}{4}$ " countertop that lay over all the existing surfaces and having a sink cut out that then gives the illusion of the sink being an under mount.
2. Should you wish to avoid fabricating a new countertop you have two other options. A) Using grout tape, tape a line $\frac{3}{4}$ " down from the top edge of the sink. Do your texture steps while keeping the edges smooth. Perhaps consider using a frosting spatula to smooth the surfaces. Pull the tape and re-tape before coloring and then epoxy. Make sure the sink bowl below the tape line is well lined during the entire process. B) Trowel the entire bowl using a frosting spatula to smooth out. Be sure to remove the drain rim, cover the drain whole, and replace the drain rim after completion. Monitor your colors and epoxy to prevent them from running.
3. If the sink is not in good cosmetic shape, consider removing the entire countertops and fabricating new.

Positioning and securing top mount sinks.

1. Double-check your positioning of the sink in relation to the interior and exterior edges of the countertop and be sure it is right. A mistake here would be expensive.

2. Run a hefty bead of silicone caulking around the top of the counter along the sink cut out.
3. Place the sink accordingly and tighten sink clamps from underneath.
4. This may cause some of the silicone to ooze out around the edges so wipe it up with a clean cloth and some Windex® type of glass cleaner.
5. As an added step of water protection, use GE Silicone Clear II and do a bead around the exterior edge. If you lightly mist the edges with glass cleaner first and then bead with the silicone, wiping the excess off is easily done.

Positioning and securing undermountsinks

1. If possible, flip the countertop over and position the sink.
2. Crawl under the countertop and continue positioning until desired.
3. Trace the edge of the sink on the MDX.
4. Mark and drill the holes on the underside of the MDX for the mounting screws.
CAUTION: Run masking tape on your drill bit so as to make sure your drill hole does not puncture through the counter's top. Likewise, make sure the screws used will not do the same.
5. Using denatured alcohol on a rag, clean the underside surface of the countertop around the hole you have just cut as well as the top edge of the sink.
6. Run a hefty bead of silicone caulking around the underside of the hole and position the sink on top using your markings. Follow the sink manufacturer's directions for tightening down the sink to the MDX.

If the faucet holes are separate, run hefty bead of silicone around the holes.

Final steps for both...

Attach flexible compression fitted water supply lines to the faucet stems and then to the water supply lines.

Once the sink is in place, install the sink drain. Put plumber's putty on the bottom of the drain assembly and push it down into the drain opening in the bottom of the sink. There is a lock nut that tightens and holds the drain in place, so tighten it as well.

Allow the plumber's putty or caulk to set up overnight.

Assemble and attach the "S"-trap and drainpipe to the sink bottom and the household drainpipe.

Finally, turn on the water and check for leaks. Hopefully, there won't be any, but if there are, tightening the pressure couplings (gently) will usually stop them.

You've just installed a beautiful and functional under mount or drop-in sink and countertop.

Countertop Preparation

When coating a countertop in place it is important to mask off the kitchen properly to keep countertop blend, colors and epoxy off the cabinets and floors. Treat the kitchen like you are doing surgery on the countertops. All the countertops will be exposed and everything is protected.

Methods to back-fill countertop surface after splashes removed.

If you cut the backsplash and are using the existing countertop, you may find gaps between the drywall and the back of the countertop. Inspect the gaps to verify if the gaps left lead to being inside the cabinets or between the back wall of the cabinets and the drywall. You must avoid any debris that can fall into the cabinets. Seal these exposed area by placing duct tape up and under the inside of the cabinets and caulk from the topside.

You will need to fill these gaps to be level to the counter. This can be done by cutting strips of MDF and using wood glue to put them in place. The remainder of the spaces can be filled using Hydro Barrier Membrane to bring to level. Allow to dry.

Identifying and removing loose edge bands

Any edge bands, especially those by the oven and dishwasher need to be pulled off. Clean with alcohol and then paint over the bare wood with the Hydro Barrier.

Identifying and repairing warps and drip edges

If you have slight warping on the counter, used a sander or grinder to remove and then paint the exposed with Hydro Barrier Membrane.

Formica non-drip edges needs to be plane to level. Tile drip edges need to be chiseled off. All exposed wood needs to have the Hydro Barrier brushed on.



Rule #1 is clean and sound. If you're remodeling an existing countertop, it is necessary to clean it thoroughly. Soak the whole counter with 409 or Fantastic and allow it to sit for 10-15 minutes. With a wet sponge or green 3m scrubber, rinse with warm water until it is clean and the soap is removed. Clean the counter with Windex to remove all residues. Allow to dry. Protect the Kitchen Surround Area

Now that the counters are clean and structurally sound, it will be necessary to protect the surrounding areas before getting started. Granicrete recommends the following procedures to avoid difficulty with your job:

Cover the entire floor with 2 mil plastic sheets secured by painter's tape. The plastic will protect any liquids from soaking through the paper on the customer's floor.

Over the floor plastic roll out 36" Brown craft or Brown resin paper; secure the paper using painter's tape and at all joints.

Use a high quality 1" or 1½" painter's tape directly underneath the counters to cover the top of the cabinets. Also, tape at the base of the cabinets on the floor around the entire kitchen and on any surrounding walls.

Using 4' long thin painter's plastic, cover the cabinets to protect colors from soaking through.

Over the plastic on the cabinets tape 18" painter's paper and tape a row of it touching the floor and coming about half way up the cabinet. (Work floor up.)

Then run another row of painter's paper just underneath from the top of the floor cabinets draping over the bottom row of paper. It is important to work from the floor up to make sure that no Granicrete materials drip behind the paper and onto the face of the cabinet.

Protect the walls above the counters and the upper cabinets with 18" paper and painter's tape as well. Do not use plastic masking as it will repel colorants causing them to dribble onto your countertop.

Consider using ¾" filament tape and run a line of it on the wall flush to the countertop. You will pull this tape after all texturing is done before you epoxy.



Managing and setting up your work area

Do set up a staging area for your totes and mixing of material. Be sure the area has ample plastic sheeting and resin paper over it for spills and splattering.

Should you feel you need to, you may use caution tape so that others don't walk through your work area. Dropping plastic sheeting in viewing areas can be considered so that you don't feel as if someone is looking over your shoulder as you work.

You should also make sure your customer understands that pets are not free to roam while your work. If they need to be leashed or put behind closed doors, it is for their well-being. Pet hair, nose prints, and paw prints all detract from the finished look of your countertop.

After-hour management of your work area

Be sure that you finish each day with your work area cleaned up and ready for the next day. This will create good will with your customer. It is a common response of customers to dislike the work of the installer if the installer was messy and disorganized through the installation. Again, pets should not be able to roam the work area.

Hydro Barrier Membrane

Using a chip brush, cover the inside rim of the sink hole with Granicrete Hydro Barrier Membrane. You should paint the material on top of the counter and underneath the counter a few inches. This will protect the wood from swelling if the caulk around the sink ever fails.

You may also paint the Hydro Barrier Membrane along seams and where you have exposed wood from sanding or grinding.

A last area for sink seal would be on the underside of the countertop along the dishwasher where steam and moisture is more prevalent.

INTERIOR FABRICATION

Granicarete Countertop Blend is designed and engineered to resurface over existing tile, Formica, and even cultured marble or other solid surface countertops. However, many times when a remodel is started it may require fabrication of one or all of the countertops. Granicarete Countertop Blend is for interior countertop and wall applications.

The most important rule is that *the substrate must be clean and sound*. If the existing countertop is damaged or rotten then it is not a good idea to resurface it with Granicarete. A new top must be fabricated using MDF (medium density fiberboard). For the area around an under-mount sink or where exposure to water is more prevalent MedEx, Extera or MDO is PREFERRED. These types of wood are denser and water resistant which provides a more suitable substrate.

(MedEx, Extera and MDO are NOT suitable for exterior fabrication of Granicarete Countertops; refer to the section in your manual regarding exterior countertop fabrication)



Often the customer's counters will be in small enough pieces where they are easily transported and can be installed at the jobsite. It may be easier and give you more control of the environment if you were to fabricate new tops and install them after they are completely finished and cured. This will also have far less impact on the homeowner as the kitchen will only be unavailable to them for one day.

One of the allures and selling points of Granicarete countertops is the seamless look, which is not possible with other counter choices. If a kitchen requiring new construction has larger counters with multiple angles that would prevent transport of the counters in one piece, the tops must be installed, then coated in place.

BACKSPLASHES

When fabricating a countertop, you will want to discuss with your customer the different options for their backsplash. The right backsplash will really finish your countertop installation. As seen in the picture above glass, metal, stone or any other form of tile is an option for backsplashes. If the customer decides to go with tile for the backsplash you will want to finish the countertop and then tile the backsplash.

Granicarete offers many options for backsplashes when fabricating a countertop as well as coating over the existing surface.

Countertop to Cabinet Backsplashes (Full Splash):

To create a full splash the same color and finish as the countertop you will need to fabricate the backsplash using $\frac{1}{2}$ " or $\frac{3}{4}$ " MDF. $\frac{1}{2}$ " MDF is acceptable for backsplashes as long as they do not have to be biscuit and miter bolted together. Since most countertop finish can only be achieved horizontally you will have to color, seal and finish the backsplashes by lying flat and then glue them in place.



When building full splashes do not forget to measure the outlets and switches on the wall and make your proper cutouts before starting the coating process. Make sure you measure twice and cut once.

Full splashes do not have to be the same color as the countertop. You can use the same fabricated MDF backsplashes and create a stone tile pattern that will blend nicely with the countertops.

To create a fully seamless backsplash be sure to follow the biscuit and miter-bolt instructions below.

4-6" Backsplashes (Half Splash):

Half Splashes are a great alternative to full splashes yet still providing the same functionality and a great finish. Half splashes are much easier to fabricate and install. There are no cutouts that need to be made. Simply measure the countertops and cut your lengths.



The height of half splashes is up to the installer and consumer. 4-6" is standard, yet still taller than most fabricated countertops. Measure the bottom of your lowest outlet or switch and build the back splashes $\frac{1}{2}$ " shorter. The $\frac{1}{2}$ " allowance is for the products that you will be coating over the MDF.

To create a fully seamless backsplash be sure to follow the biscuit and miter-bolt instructions below.

Wall Troweled Backsplash:

Granicrete's alternative flooring texture is capable of being troweled directly over painted drywall to create a stone tile finish. You will want to complete the countertop first and then work on the wall backsplash. Refer to Granicrete's Flooring manual for vertical application instructions.



CUTTING YOUR MDF

MDF is the recommend wood for building interior countertops. MedEx, Extera or MDO must be used for under-mount sinks and areas that will be exposed to high levels of moisture.

It is not necessary to be a finish carpenter to make a living installing Granicrete counters, but a basic understanding of a few tools and techniques is required

Always use the straight edges of your fiberboard (typically each sheet is 97"x49"x3/4"). Using a T-square and tape measure be sure to draw your outline accurately for making your cuts. Check twice so you only cut once.

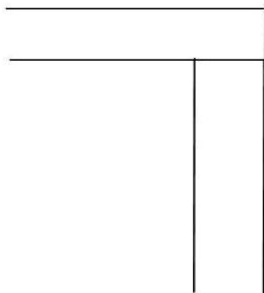
Cutting fiberboard can be done by table saw or circular saw. In either case, it is critical to use a guide so that your cuts are straight. If you do not have the equipment to do this, make arrangements with a carpenter or your home improvement store for assistance. Most lumber yards and large home improvement stores will cut MDF into smaller pieces for a small charge. This can save time if you do not personally have the equipment to make the proper cuts.

Always wear eye, ear, and mask protection. Follow saw guidelines.

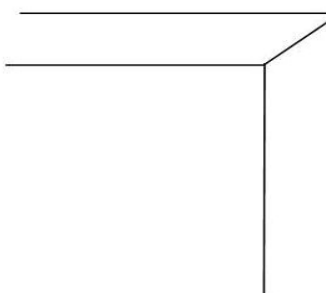
Do not do your joint cuts near the sink nor above the dishwasher. If you can, try to make the cut over a cabinet cross member for additional support.

When cutting pieces that will be joined together it is best to use biscuits and miter bolts. This applies to countertops and backsplashes that cannot be cut from one sheet. Butt joints are acceptable and recommended for joining long pieces, L shapes and U-shaped kitchens. The entire surface will be coated for a seamless look, which hides the joint. The following picture shows edges abutting to each other with the 90° edge cut on the left being preferred.

**90 Degree Cut
Preferred**



**45 Degree Cut
Not Preferred**

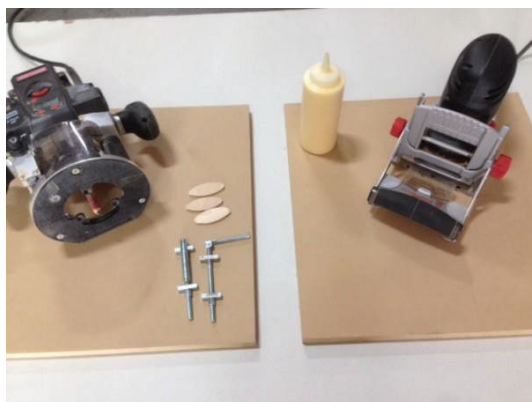


When cutting your MDF also make sure to allow for the Granicrete products that you will be adding to the surface. Surfaces that are getting coated with Granicrete Countertop Blend and Crystal Top Epoxy will create about 1/8" – 1/4" of lift on the surface.

BISCUITS & MITER BOLTS

Tools Required:

- #20 Biscuits
- 1/2 Plunge Router and bit
- Wrench to tighten miter bolts
- Miter Bolts
- wood glue
- Biscuit Joiner
- PPE



*All these tools can be picked up at any local home improvement store.
Miter bolts are typically found in the laminate countertop section.*

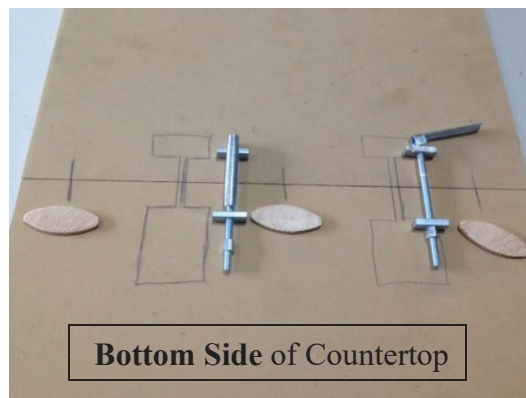
Joining pieces together requires the proven method of biscuits and miter bolts. This proven method should not be deviated from. The biscuits provide reinforcement so the two countertop sections don't shift up and down. The miter bolts pull the two separate sections together for a tight fit.

A standard depth kitchen countertop is 25" and will require 3-miter bolts and 4-biscuits. Half backsplashes will require 1-2 of each depending on how many will fit with the desired height.

Failure to do this properly can result in unsightly cracking along the joint.

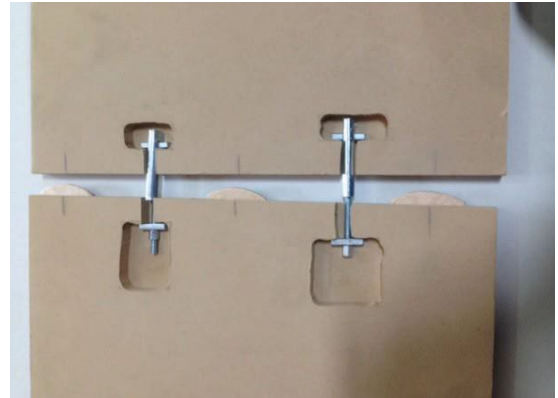
Using a flat surface, flip the pieces being joined upside down so that you are working on the bottom surface. Align the pieces together and make markings for the biscuits and miter bolts.

Trace the "dog bone" shape snugly around the draw bolts making sure the bolt head end has a big enough box to get a wrench around the miter bolt head. The other end of the



miter bolt needs to have a long enough box to accommodate the bolt stem. Now make your cuts using the biscuit joiner making sure the saw cut is the same size as the biscuit (size 20 biscuits are recommended). Likewise, use your plunge router make a 1/2" plunge following your markings.

Clean the area and run a bead of wood glue along the joining edges and into the biscuit cuts. Place the biscuits in the cuts and slide the pieces together. Drop in your miter bolts and screw them tight. Enough glue should be placed into the joint that it squeezes out when the miter bolts are tightened. If the joint is not sealed with glue when the countertops are flipped over use Hydro Barrier Membrane to seal the seam.



Make sure that in tightening, the two sections sit flush and flat. Setting heavy 5-gallon buckets of sand on the pieces will keep them flat while the glue dries. Be sure to have plastic under the seam so glue will not dry to surface below.

Allow glue to dry before flipping over and starting the coating process

NOTE: Some installers at this point would do a dry fit to make sure the pieces cut will fit as measured. Others will do a measurement and check again to their drawing. Either makes good sense prior to taking the time and effort in doing your Granicrete coats.

FAUX EDGES

1. Since the counter is made from 3/4" MDF, the exposed edges must have a strip of MDF attached below the top to create a false edge that is 1 1/2" thick. Rip 3/4" pieces from the 3/4" MDF. These strips should be glued to the undersides of the countertop that are visible and attached with a 1 1/4" brad nail approximately every six (6) inches. Apply enough glue to squeeze out the edge slightly. This ensures a good seal and doesn't allow moisture to soak into the seam.
2. If the edge needs to be flush to the cabinets, rip 2"-3" strips of MDF and run along the edges using the glue and brad nails in the same way. This technique creates an easy installation, but does make the countertops heavier to transport.

When building your countertops, make sure you check the top drawers in the cabinets. Drawers that are mounted flush to the top of the cabinets will need to have countertops built according to option #2 above.

SINK CUTOUT

If the customer has purchased a new sink there will be a template within the box or on the box. Using the template, trace out the sink in the desired area. Make sure you double check your measurements after tracing the sink, check to make sure after you cut out the sink it will fit into the cabinet bay (Front and back and sides). A plunge router or jigsaw can be used to cut out the sink area. Typically, a ¼" diameter router bit is adequate for plunge cuts.

SINK CUTOUT FOR UNDERMOUNT SINKS:

Consider cutting a second piece of MDF that will fit just within the interior edges of the sink's cabinet. Route it the same as the top countertop.

Glue this up to the top and align the cut out while still being sure to fit within the inside edges of the cabinet. Use ample brad nails from the underside to enhance strength and adhesion. Such is needed to compensate for undermount sink weight (when filled with water) and to provide ample screw-in of mounting clamps to the underside.

With two pieces aligned, then sand the inside sink edges to desire uniformity.

TRANSPORTING FABRICATED COUNTERTOPS

Avoid allowing the joints to flex when you lift and move. Adding bracing underneath using strips of 3" wide strips of MDF screwed into the underside can be helpful. Another weak point is around the sink cutout. Use 2"x4" or 3" wide strips of MDF and a c-clamp to stabilize. Like a sheet of glass, carry and transport counters on their edges (preferably the back edge that will be hidden with the back splash. Use moving blankets to wrap around the tops and splashes so they will not rub or nick each other.

During transport, avoid vibration and allow the pieces to move by strapping them to supports. Do not over tighten.

Be sure you have the necessary help to lift, off-load, carry in, and place the counters.

REMOVAL OF OLD COUNTERTOPS

Open the cabinet doors and pull out the drawers. Look for any mounting brackets and screws that are connected to the underside of the countertop. Unscrew all brackets. Try lifting up the countertop. If there was no glue or its old, you are likely able to break loose the bonding and lift the counter from the cabinets. Use the hammer and small pry-bar if the counter does not release.

Check all the cabinet supports and make sure they are the same height. Removal of the old countertops can leave large clumps of adhesive on the supports that will cause your new counters to be out of level when installed.

PLACEMENT OF NEW TOPS

Although you took careful measurements and precise cuts, when placing the countertops over the cabinets you may find walls are not square. An “L” shape countertop will not rest flush against both walls. When this occurs you must “scribe” the countertop.

This is done by looking at the widest gap between the back edge of the top and the wall. Use a small piece of wood that is the width of your deepest gap and is about 1” long. With the top pushed against both walls use a marker and place it up against the wood scribe and trace your line along the entire back splash. With proper skill saw and guide, cut the back of your countertop and then place it again. You should be flush on that wall if not both walls.

Professional tip: Consider fabricating your countertop with 2-3” band of MDF (MDX) on the underside all around the perimeter of the top to give the added thickness desired rather than create a faux edge with just a 1” strip. The reason for this is that the 1” strip can become a snag to the front corners of the cabinets for walls that poorly squared.

When using the perimeter technique, be sure to have with you an extra 2” pieces to place over the adjoining top edges of the cabinets to give added support under your countertop. These pieces can be 16-18” length and can be glued to the top of the cabinet and to the bottom of the countertop.

COATING

The Granicrete Countertop Surfacing Process

1. Granicrete is a multiple-step process.
2. Each step is crucial to the success of the finished product.
3. To avoid unwanted problems, **never shortcut these procedures**.
4. The secret to a fantastic countertop is building the perfect canvas to color. This is achieved by paying attention to detail while coating your countertop. A quality texturing job will result in better quality color, very similar to painting a canvas. The greatest painter cannot fix a poorly constructed canvas with paint alone.

Follow these simple steps and instructions below to create the perfect countertop.

- | | |
|-----------------|----------------|
| 1 st | – Brush Coat |
| 2 nd | – Brush Coat |
| 3 rd | – Edge Profile |
| 4 th | – Trowel Coat |
| 5 th | – Trowel Coat |

Following these steps will not only assure proper bond and thickness but they also provide the easiest path to creating the perfect texture for a natural stone finish.

Mixing ratios within this section referring to “Texture” are referencing Granicrete’s COUNTERTOP BLEND.



Tools Needed for Brush Coats:
Gloves and a Chip Brush



Tools Needed for Edges:
Gloves, Chip Brush and Margin Trowel



Tools Needed for Trowel Coats:
Gloves, Chip Brush, Margin & Pool Trowel

Brush Coats

MIXING RATIO

2 Parts Countertop Blend: 1 Part Water

Slight adjustments for temperature, humidity or personal preference may be made to these formulas. Be sure to mix thoroughly to help eliminate clumps in the mix. Mixing can be done with a kitchen whisk or a power drill and mixing paddle.

1st Brush Coat – “Bond Coat”

The first texture coat is the bond coat. It is what bonds the cement products to the substrate. The mix is 2 parts texture (Countertop Blend) to 1-part water. It does not matter what size container you use as long as the mix ratio is correct (e.g., two 32 oz cups texture to one 32 oz cup water).

Mix only what you will use within half an hour or so. This mix will be very wet and will settle if not stirred regularly. Stir it with the brush as you are applying.

The bond coat is best applied with a 3-4” chip brush. Since it is applied so thin, the material will seem to be translucent. That is perfectly normal and to be expected. You are only concerned about getting a consistent and even coat over the entire surface.



It is critically important to run the brush strokes the length of the counter, never the width. Brush strokes should be an arm's length and blended together where individual sections overlap. Do not leave any cold joints (build up) as this will create an undesirable hump in the countertop. Make sure that you cover the edges completely with no drips as they will be unsightly.

Be sure to paint on the texture along the countertop edges and backsplash as well. Clean the underside of edge and allow material to DRY COMPLETELY before progressing further. Touch the dried texture to determine if is cold or if any texture rubs off on your finger. If the texture is cool it is still wet. When dry it is white and will no longer feel damp.

Under Mount Sink Planning Tip: Be sure to apply on inside edge of the sink cut out and brush back from the underside approximately two-three inches as well. With your brush, remove any drips on the bottom edge.

2nd Brush Coat – “Profile Coat”

Once the first coat has dried completely the second coat is applied exactly the same as the first. The mix is also 2:1 and is applied in the same manner. Since it is going over concrete, as opposed to MDF, laminate, or tile substrates, it will automatically go on thicker and dry faster. It is important to make sure the entire board including the sides is covered and that no cold joints are left to form ridges or humps. Long brush strokes are easier to work with than short ones.

Make sure to remove all drips on the sides and underneath the countertops.

The second coat of Granicrete Countertop Blend is applied exactly as the first; however, the result is much different. The 1st coat is essentially a primer coat to which the 2nd will adhere. You will be building a much thicker brush profile and will not see any sign of substrate (i.e., laminate, MDF, tile...) exposed through the brush coat material.

Apply an even coat over the entire countertop, edge and backsplash areas. It is wise to remove any materials that may be on the bottom side of the counter edge with a margin trowel.

Under Mount Sink Planning Tip: Be sure to apply on inside edge of the sink cut out and brush back from the underside approximately two-three inches as well just as you did before. With your brush remove, any drips on the bottom edge.

ALLOW BRUSH COATS TO FULLY DRY BEFORE PROCEEDING TO EGES

Edges

MIXING RATIO

**4-4.5 Parts Countertop Blend: 1 Part
Water Plus up to 25% medium...**

Slight adjustments for temperature, humidity or personal preference may be made to these formulas. Be sure to mix thoroughly to help eliminate clumps in the mix. Mixing can be done with a kitchen whisk or a power drill and mixing paddle.

Squaring Front Edge and Backsplash

Once the 2nd Brush Coat is completely dry it is necessary to do the edges. For granite countertops in many regions of the country, bull nosed, or rounded,

edges are cheapest, while chiseled or square edges can be cost prohibitive. It is easier to replicate high end looks with Granicrete so we discourage making or leaving the edges rounded.

This means that when resurfacing over Formica that has a round edge on the front and backsplash it is necessary to square that edge prior to applying the final edge look. This is easily accomplished by applying some material with a margin trowel on the rounded area of the edge. It is easiest to place some Granicrete material mixed at 4:1 on a piece of cardboard and use the back of a margin trowel to place the material on rounded countertop surface to begin to overbuild the edge.

This mix is much thicker and easier to form without worry of it dripping or falling off the vertical surface. When the material has dried some then a trowel can be laid flat horizontal and another placed vertical on the counter edge to effectively cutting the edge to square.

Edging (chiseled / flat / modified chiseled / rope)

While any edge can be replicated by shaping your MDF using a router or wood trim, the best and easiest options are as follows:

Chiseled Edge - On real granite the chiseled edge effect is very expensive because the slabs are laid in a sand bed and the edges are chipped by a skilled artisan or by machine that runs into the hundreds of thousands of dollars. This edge option can add several hundred dollars to the average granite counter job. The increased chance of cracking entire slabs of granite is another reason for the expense. **With Granicrete this high-end look is one of the easiest to replicate as it's simple as "frosting a cake."** The edging material is mixed 4:1 and is thick enough to hold in your hand but has a somewhat buttery consistency.



With Granicrete's Countertop Blend it is recommended to **add up to 25% silica sand or 30 grit sand to your edge mix.** This will help prevent cracking and provide a stronger edge when creating thick looks.
(For flat edges this is not necessary.)



If the material starts to dry too much during your application you can re- temper it with water. Put the mixed material on a hawk or piece of cardboard. Use the back of a margin trowel to pick up some material and wipe the texture onto the edge as if frosting a cake. This material is applied to completely cover the face of the outer edge. Also, make sure that the edge material overlaps slightly onto the top of the

counter. This additional material will be removed later, but assures that the top corner is well protected on your finished counters. **Keep this build up to less than ¼" thick.**

Allow the material to stiffen and use the clean edge of the margin trowel to "shave" the material from the top by laying the trowel flat on top of the counter and slice through the peaks.

Be sure the corner of the top and side edge are meshed together. Use your hand or slightly damp tile sponge to blend the corner together so that no crack or line is visible along the edge.

Also use the trowel to lightly "knock down" any peaks in the texture. Since two trowel coats are yet to be installed this is not the finished edge but just the rough shape to be taken on. You will want to overemphasize the texture if you desire a heavy chipped or rock effect. When coating the surface with trowel coats you will want to stipple the edge with a chip brush. This creates a very realistic replication of chipped granite.

The edges need to dry completely before moving on. As the material dries, you may notice small shrinkage cracks on some of the thicker areas. This is not a problem as the troweled coats will fill in any hairline cracking that may occur.

Allow your edges to completely dry before proceeding to Trowel Coats

Flat Edge Option: This edging material is also mixed at 4:1. This edge is left completely square but requires the buildup of at least a ⅛" of material that will be troweled flat. If some texture is left it will resemble knife marks where the slab was cut and not polished. This is an excellent choice for many looks but is the best choice when replicating marbles or concrete counters.



The application is similar to the chiseled edge in that it is necessary to wipe some material on with a margin trowel remembering to squeeze some over the lip of the edge. Instead of frosting like the chiseled edge, it is just important to get material on thick enough, preferably about ⅛". Once the material starts to dry you will pull your margin trowel across the edge face to knock down any remaining texture. You should expect to shave off a fair amount of material from both the underside and the top of the counter.

Professional Tip: *If you over work your flat edges by making them perfectly smooth, your colors will not take well making it difficult to color your countertop. Instead, leave a slight texture and colors will absorb into your edges making them easier to color and they will look more like your top. Using a slightly damp tile sponge to blot the edge will help remove trowel lines will keep the edge flat.*

Modified Flat Edge Option: This edge follows the steps for the flat edge but as the material dries, use the tips of a chip brush bristles and tap into the edge. A slight stipple

will occur similar to what is found for poured concrete counters.

Rope Edge Option: Using 1" wooden rope trim (found in trim and hardwood section at home improvement centers) both glue and brad nail it every few inches into the MDF edge of fabricated countertop. Recess the wooden rope trim 1/4" from the top which should leave you a 1/4" recession from the bottom.

Sand the wooden rope trim at the corners and joints to help maintain the pattern and detail of the trim piece.

With the wooden rope trim now secure, use the 2:1 brush mixture and paint two coats of texture over the exposed wood. Be sure to dab clean the "twine" lines not allowing for buildup. When doing the 3:1 for the trowel coats, avoid pulling the texture from the countertop over the edge as much as possible. Do allow for some to be pulled over on the fourth coat and with a damp brush, pull the 3:1 through the rope and down to the bottom edge. Continue to dab clean the twine. If buildup of texture does occur in twine, use the edge of a rubbing stone to re-create the twine.



SANDING OF EDGES AND TOP BEFORE TROWEL COATS:

Once dry you will take a tile rubbing stone and lightly rub all surfaces. You are not looking to sand any areas smooth; the top should be flat and all loose pieces should be knocked off including on the sides. Avoid taking the rubbing stone along the point where the top and sides meet. Keep your rubbing stone flat along the surfaces. Never hold it at an angle. Be sure to use on bottom edge where undesired build up has occurred.

Take a bench brush, blower, vacuum, or compressed air and remove all dust from surfaces to assure a good bond.

ALLOW EDGES TO FULLY DRY BEFORE PROCEEDING

Trowel Coats

MIXING RATIO

3 Parts Countertop Blend: 1 Part Water

Slight adjustments for temperature, humidity or personal preference may be made to these formulas. Be sure to mix thoroughly to help eliminate clumps in the mix. Mixing can be done with a kitchen whisk or a power drill and mixing paddle.

1st Trowel Coat: “Fill Coat”

Trowel coats are mixed using a 3:1 Countertop Blend to Water ratio. There are many types of trowels to choose from but a 14” pool trowel is the preferred choice. Magic Trowels also work great for the 1st Trowel Coat.

Note: Keep this coat thin by scraping excess off using your trowel. The first trowel coat will fill in the profile you have created with your brush coats.



It is intended to be very thin with the pool trowel or Magic Trowel at about a 30° angle. You will see chatter marks on the surface. This is perfectly normal and is to be expected. Make sure to cover the entire surface completely. If you are doing a remodel with existing backsplashes, use the trowel to push some material on the top of the splashes and trowel down the face. Start troweling at the base of the splashes towards the front of the counter to assure flatness.

Once the top is finished it is time to move on to the edges. Use the 3” chip brush to remove any drips and cover the edges uniformly with a thin coat of texture.

Professional Tip: Use a finishing trowel or margin trowel to flatten corners that your pool trowel does not reach for each trowel coat.

2nd Trowel Coat: “Finish Coat”

The second coat should be applied when the first coat is firm but still damp. It will be applied in a thin, yet slightly thicker, coat than the first. Use the pool trowel or a Magic Trowel to cover the entire surface then lay the trowel flat on the surface and drag it across the surface; this will reveal some texture.

Take your chip brush and cover the edges again with another thin layer of material.

The deck of the counters will need to be knocked down using a pool trowel a few more times as the material dries to flatten the slightly textured areas and create a

flat surface. The optimal counter will be flat, smooth, and have a few random pockets of texture reveals to accent the surface when colored. Do not use the rubbing stone to smooth this final surface as doing so will cause scratching that will be highlighted when coloring.

Much artistic license is available in this last trowel coat. You can achieve an aged stone look by simply digging some of the damp texture out and using a deck brush to give a salted finish. Troweling back over both will give an aged stone, even travertine look that will be further enhanced with the Granicrete colorants. Still "keep it thin" with your texture coat.

Under Mount Sink Planning Tip: Be sure to pull material back from the bottom edge along the bottom. Do not allow for drips. The bottom side will need to be sanded using the rubbing stone to smooth the texture before coloring.

ALLOW TROWEL COATS TO FULLY DRY BEFORE PROCEEDING

Pre-color Preparation

A few final steps before coloring will assure a beautifully detailed finished product. If you have refinished an existing counter with a pre-mounted backsplash take a margin trowel or razor knife and cut a line between the back edge of the counter and the backsplash. This will give the illusion of two separate pieces of stone.



Also cut at the top back edge of the backsplash to separate it from any masking materials. The front edge of the counter must be rubbed with a tile stone to remove any burrs or rough spots. Carefully observe the edge to create the most realistic looking surface.

The countertop surface may be sanded lightly by using 400-grit sandpaper to remove any burs or sand particles. Be sure that the top edges are flush with the surface level. If these top edges are higher than the surface, a "pooling effect" will occur with the epoxy causing the epoxy to settle below these high points and requiring a second coat of epoxy to be applied.

Rub your clean hands across the surface to check for smoothness. Any kernels of texture will challenge the self-leveling properties of the epoxy.

Use a brush or stream of air to remove any dust or debris prior to coloring. Do not use furniture tack clothes because they leave a residue on the surface that may cause your epoxy to fish eye.

Installation Steps & Options for Real Metallix Countertops

Granicrete's Real Metallix is a fun option for Designer Countertops. We are seeing a greater frequency for these tops for commercial applications where one-of-a-kind theme and designer finishes are sought. This section about Real Metallix offers some simple approaches for application and color integrations. We encourage you to consider Real Metallix as a fun option for your clients.



Step 1: PREP & Fabrication

Granicrete's Real Metallix countertop system can be directly applied to Laminate Countertops as well as MDF without using Granicrete Countertop Blend. Using Granicrete's Countertop Blend or Countertop Blend may be required to strengthen the countertop substrate and bridge seams or imperfections in the substrate. If the substrate is sound, flat and has no imperfections then you can proceed with Option 2 below using only epoxy. A sound substrate is a must when applying the Real Metallix system. If a new countertop is required, then follow the countertop fabrication section in your countertop manual.

When coating over laminate it is necessary that all seams and joints are flat and properly sealed. You will need to sand laminate with 80 grit sandpaper if you are not going to be applying Granicrete Countertop Blend under your Metallix countertop.

Step 2: PRIMER (Only needed if coating directly over laminate without the use of Countertop Blend) Apply primer to ensure good adhesion over exiting laminate and solid surface countertops. Granicrete's Vera Primer has excellent cross-linking properties. This can be followed using Granicrete CA-FD or Metallix Epoxy grams with one full jar (226 grams – 8 oz.) of Mica Essence.

The benefit of adding Mica Essence to your primer is simple. When Denatured Alcohol, Isopropyl, or Acetone is sprayed on the final Metallix Coat it can cause a separation where the Metallix move away and reveal the primer. If your primer is a solid color of a complimentary Mica Essence color, then you will see that color under your metallic finish. When you use a metallic primer you always see Real Metallix.

Step 3: REAL METALLIX COAT

This is the fun step!! This can be done with CA-FD, Metallix Epoxy, or Crystal Top Epoxy can be used to create unlimited designs and colors.

Crystal Top Epoxy - 100% solids countertop epoxy designed for interior applications only. Granicrete's Countertop Epoxy will provide a high build beautiful

finish that is easy to work with. It has exceptional self-leveling properties and some artistic elements will soften after coloring is completed and while leveling takes place. Both CA-FD Clear and Metallix Epoxies will hold designer finishes more accurately.

Movement can be created in the Metallix coat using the following techniques:

1. Apply Coating with an irregular pattern and allow curing. This will provide you with the least movement because as the epoxy settles and cures your movement will flow out. *Note: Real Metallix should never be used when a solid color is desired you will always have some movement with shading and light and dark areas.*
2. Spray mist solvent/alcohol onto your selected epoxy after 10-30 minutes of application using a Granicrete Professional spray bottle. This will force movement in the coating and create hammered effects or just help blend the Metallix colors together. Do not over saturate the surface as this can cause solvent bubbles or delamination. Isopropyl and denatured alcohol are the most user-friendly.
3. Move the Metallix that is in epoxy with an air-compressor or leaf blower to create desired looks. Be careful not to blow off masking or debris from surrounding areas onto the coating.
4. Multiple batches of your selected epoxy can be blended up with different Real Metallix powders to create a multicolored colors and veining. Spraying a light mist of solvent will help soften the edges of each color. For more distinct lines or veins wait 20-30 minutes after the application of your base color, then mix up a new batch and apply veins or new colors.
5. Light spraying of aerosol colorants onto the surface or onto sticks and brushes and applying to the wet epoxy has tremendous looks.
6. You can also mix Mica Essence powders with acetone and spray on the countertop with a Granicrete Professional spray bottle. This creates spotting of a new color or with an even light mist it can create light veining.

Step 4: FINAL CLEAR COAT

After completing coloring and surface has dried, then you can apply the Clear Coat of your choice Crystal Top Epoxy, Crystal Top AHD, SL-P60, and WB-P53).

Before application of your clear coat it is recommended that you take 220 or 400 grit sandpaper and sand the surface to knock down any textured areas or high spots in the countertop. Sanding will give you a much better finish after rolling out your clear coat. Read the product information sheet for your desired clear coat. Follow the coverage rates detailed on the product information sheet.

OPTIONAL Metallix Installation Options & Procedures

Option 1:

Do Countertop Blend steps though trowel coats if the edges need to be modified.

Step 1: CA-FD or Metallix Epoxy (With desired amount of Mica Essence... *Can add up to 226 Grams = 8oz of Mica Essence per 1.5 gallons of Mixed CA-FD or Metallix Epoxy*)

Step 2: Clear coat with Crystal Top Epoxy or Crystal Top Epoxy AHD

Step 3: Top-Coat with WB-P53 or sand and polish the Crystal Top.

KEY POINTS FOR OPTION 1 – REAL METALLIX

- Residential-Light Commercial
- High Build
- Low Odor
- Installation Time After Prep is 1-2 days
- Inexpensive Metallix System

Option 2:

Do not use Countertop Blend if you do not need to modify the substrate edges. Instead ...

Step 1: Granicrete Versa Primer over the substate.

Step 2: CA-FD or Metallix Epoxy with desired amount of Mica Essence... *Can add up to 226 Grams = 8oz of Mica Essence per 1.5 gallons of Mixed CA-FD*)

Step 3: Crystal Top Epoxy or Crystal Top Epoxy AHD

Step 3: Top-Coat with WB-P53 or sand and polish the Crystal Top.

KEY POINTS FOR OPTION 2 – REAL METALLIX

- Residential- Commercial
- Thick Build
- Low Odor (WB-P53 as Top Coat)
- Installation Time After Prep 1-2 days
- Easy Install Metallix System

Finishing the Installation

Installing splashes and silicone 24-hours after epoxy or P53 application

Twenty-four hours after the epoxy or WB-P53 has been put down, use GE Silicone II Clear Silicone or similar to bead along the backsplash and around the sink after its replacement. This long-last silicone resists mold and yellowing. Lightly misting Windex over the silicone after you run your small bead makes wiping excess silicone easier and minimizes clean up.

Some installers are having success with colored silicones that can be found at either home improvement or countertop stores. Colored silicone can do a better job hiding wider gaps that will cause clear silicone to turn cloudy.

After replacing the sink, we recommend covering the countertops for 5–7 days with a soft linen sheet or cloth to assist in keeping the surface from being scratched during its curing and hardening period. The customer should avoid cans, platters, and small appliances with small legs during the curing process.

Installing Sink 24-hours after epoxy or P53 application

Twenty-four hours after the epoxy or WB-P53 have been put down, the sink can be installed. Use Silicone to seal in the sink. Make sure the sink is gently placed on the countertop a full cure for epoxy is 24hrs. If the plumber is installing a cast iron sink you don't want him sliding it across the countertop to put in place as it will scratch.

Importance of providing continuing service agreements

Included in the index section of this manual is a copy of the Granicrete Countertop Care sheet. You must have the customer sign two copies, one for them to keep and one for you to have. These care instructions are much similar to that of granite and Corian® surfaces. Your customer's understanding of ongoing care is very important to assure long-term satisfaction.

In addition to the Customer Care sheet, you should consider offering a service agreement stipulating the initial warranty of your installation and then the ongoing warranty based upon your periodically (semi-annually, yearly or every other year) coming out to service the top.

Depending on the level of service designated, your ongoing work may be as simple buffing and shining or as much as a complete re-epoxy. The benefit to you of having service agreements is that they are a tangible asset of your business that has re-sale value as well as yielding you an opportunity to propose other installation opportunities in the future with your customer.

***BE SURE TO GIVE YOUR CUSTOMER THE
GRANICRETE COUNTERTOP CARE INSTRUCTIONS!***

Maintaining and Repairing

Epoxy left untouched has the highest gloss but will also show the greatest imperfections from scratching and scuffing. This is more noticeable with darker surface colors. Help the customer to understand that a sanded and detailed countertop will provide a much friendlier surface as well as a surface that is easier to maintain.

Epoxy with WB-P53 helps to reduce the friction of the surface and aids in reducing scratches and scuffing.

Epoxy that has been detailed may be your best route for customer satisfaction. Future scratches and scuffs can be buffed and polished relatively easily.

Cleaning

Periodic wiping using a damp soft cloth or glass cleaner will maintain the appearance of Granicrete. **Do not use sponges, brushes or cleaners that are or contain abrasives.**

Polishing

An excellent quality Beeswax. Gel Wax, automotive wax, as applied using the wax manufacturer's instructions, is advised. A high-speed orbital buffer will create a wonderful additional protective shine to your counters.

Scratches or Cuts

Minor scratches and surface marring can be easier sanded out using Abralon pads and spray-on beeswax. Start with 800 or 1000 to remove the scratches and then work up in grit to your desired sheen. (See Granicrete's polish kits.) Heavier gauges and cuts may require more industrial products used in the automotive industry. Using the directions of an automotive paint rubbing compound followed by the manufacturer directions for automotive car wax with carnauba can fill, reduce, and/or remove the scratch.

Burns

This epoxy has been tested for indirect heat up to 500°F using MDF as a substrate, however as with all countertop surfaces we recommend that hot pads and cooling racks be used for your kitchen pots and pans.

*Read **Epoxy Cure Sheet** in the index to remove heat rings and why they are caused.*

Cracking or Peeling

Correctly applied product that is cared for and maintained properly should not crack or peel. However, as neither the manufacturer nor the distributor has control over the actual installation of this product, the manufacturer and/or distributor cannot take responsibility for or make guarantees regarding the product's performance after the product containers have been opened and/or

applied. The installer should double check that they have followed installation instructions correctly as incorrectly applied product may cause problems.

Most important: Remember to let the customer enjoy their countertop so they will refer business to you. Granicrete Countertops are a fantastic addition to any house and they become a conversation piece that will sell business as long as you take care of your customers.



COLORING

Granicrete Countertop Coloring

One of the advantages associated with Granicrete Countertop Blend is its water-resistant element that is not inherent in other grout mixes. The water resistance quality is not only a necessity in the harsh kitchen environment but also aids in the coloring process.

Granicrete colors will take about 30 – 40 minutes to set up on the surface; this is called “color lock”. Until the color dries it can be removed with a wet sponge. This means that even demanding customers can be appeased; if they are not satisfied with the color the first time, wipe it away and re-color.

Colors

Granicrete offers several distinct types of coloring products. The following are primarily used in this designer’s class.

With these coloring products you can literally recreate almost any look of granite, stone, or marble. Here is a brief explanation of the types of colors and how they are used.

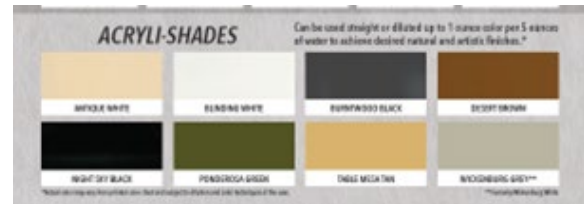
The key of most of the Designer Tops finishes is that coloring is done topically on the Countertop Blend as desired AND coloring is also done topically on the “slip coat” of Crystal Top Epoxy through the use of our Suspension Additive and manipulated by brushes and light torching of the color infused slip coat to also move about colors.

Fine misting of spray colorants can be achieved by spraying colorant through a mesh screen (frying pan splatter screen). Adjust nozzle setting to achieve desired speckling size. Avoid standing directly over countertop with screen to avoid dripping or have sponge - rag to catch dripping from the splatter screen.

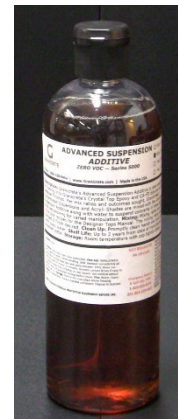
Concentrated Dispersion colors - These colors are also liquefied pigments but they do contain dispersion agents to keep them mixed uniformly in the water. There are thirty standard Dispersion Colors available. Concentrated Dispersions must be diluted with water. They can NEVER be used straight out of the bottle.



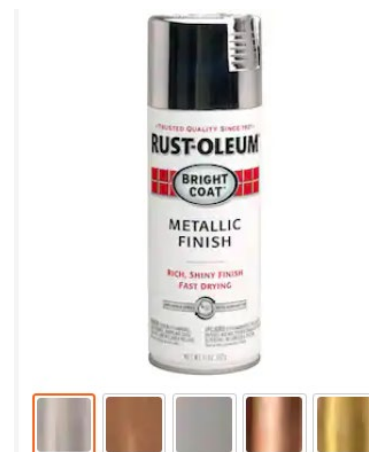
Acryli-Shades - Although paints are not used on Granicrete, Acryli-Shades colors are very paint-like in appearance. They are actually pigmented acrylic stains that are diluted and used in a variety of techniques to create some very interesting colors.



Suspension Colorations – Our Suspension Additive is mixed with our colorants to yield a uniform mix in the water and suspend below and in the epoxy to be used in many ways for designer results.



Webbing Sprays – Is an accent that can be used to create natural thin veins without the use of an artist brush. Webbing sprays can be sprayed onto a dry or wet surface. These sprays may leave bubbles on the surface that need to be pounced down with towel or sponge before you apply your clear coat. They may be purchase via local and online retailers. We have found Rust-Oleum to be preferred over Krylon.



Coloring Techniques

For the most part spray bottles will be used to color the counters during the seminar as well as on future installs. During the coloring process several coloring techniques and settings for your spray bottles will be referenced. The coloring segment of the seminar proceeds quickly so it is important to understand some terminology and techniques ahead of time. Always remember to write down your color formulas so you can replicate them later. Here are the terms and methods used:

Spot Flood: A spot flood is when certain areas of the counter are flooded with color until it is pooled on the surface. This technique uses the spray bottle set to a heavy mist, almost a stream. Generally, instructions will spell out whether the counter is to be covered uniformly and to what percentage of coverage. This technique gives you your background color for most granite and is also used to create colored veining running through the counter.

Flood: A flood is when the entire surface of the counter is flooded with color. This technique is used frequently for marbles and stone looks. It is also used to blend colors together by creating a uniform translucent layer over already colored counters. Usually the spray bottle will be set on a heavy mist, almost stream.

Streak: This technique uses the spray bottle set to a stream and is used to create directional streaks or stripes in a countertop. Sometimes it is used to create veined looks and many times color is sprayed in streaks onto an already flooded counter. When your spray bottle is set to a stream this does not mean the veins you create need to be straight lines across your countertop. Always keep your veins organic.

Speckle: Speckling is one of the most used techniques and is sprayed with the bottle set to a mist. The trigger of the spray bottle is only partially pulled to create droplets. It is easiest to control the speckles by standing further away from the counter and pointing the spray pattern slightly upward to allow the speckles to settle onto the countertop. All the types of colors will be speckled at one time or another. Acryli-Shades work well to speckle but they require a dry surface to create good looking speckles. ***Professional Tip: Use a frying pan splatter screen at 90°angle to spray colorant through to get finer speckles. Monitor bottom of the screen for dripping.***

Ghosting: The ghosting technique is always accomplished by spraying an Acryli-Shade onto the surface. Due to the surface tension created by the liquid a bubble is formed on the surface. The thinnest part of the speckle is the outer ring which we allow to dry, a sponge is then used to dab away the middle, revealing the underlying color but leaving the “ghost ring”. This is a very cool effect and looks good on almost any counter.

Cracking: If you desire very thin veins or cracks in your counter such as some marbles have, it is necessary to seal the colors using the Granicrete Poly Low Odor. After Poly Low Odor has dried, use a razor knife, pin, or any other sharp object to cut through some of the Poly Low Odor and into the texture, making the desired pattern of cracks and color with a sponge and desired pigment. The color will absorb into the exposed texture and will wipe off the Poly Low Odor easily.

How to use each colorant - How colorants interact with each other

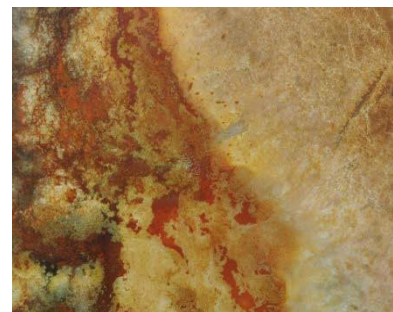
The most important step in becoming successful at Granicrete Coloring is learning how the colors react with each other. Practice, Practice, Practice... Once you learn how each color reacts with each other you will be able to replicate any natural stone or create your own custom finishes.

Dispersion colors are designed for use in creating base colors and layers of depth. They tend to diffuse as they absorb into the texture. When misted over Acryli-Shades these colors will provide some speckling along with micro veining leaning toward marbleizing.

Acryli-Shades are more “paint like” and are excellent for creating larger veins and speckling as they tend to sit more on the surface of the texture. When “thinned” by misting dispersion over it, these colors will separate some creating some beautiful marble finishes. Acryli-Shades can be used straight out of the bottle to create a solid vein if needed.

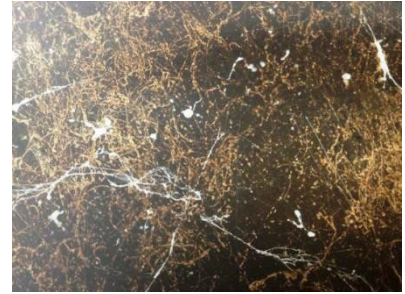


Acrylic Concrete Stains are designed to absorb into the texture and while doing so provide varying shading and intensity of the color used. Misting these stains over a wet Acryli-Shade will cause the Acryli-Shade to separate and leave a natural quartz vein.



Webbing Sprays are used to create natural veins without the use of an artist brush. Spraying the webbing on the sample board first and then coloring on top will help set the veining into the stone making it look more natural.

Practice spraying the webbing on dry and wet surfaces to create different effects. Spraying on a wet surface will help eliminate bubbling that is formed when spraying the webbing spray. Lots of bubbles on the surface could result in a second pour of epoxy. These are available through local retailers.



Suspension Additive and Mix Ratios: The Designer Tops System utilizes our Suspension Additive mixed with our colorants to create unique coloring effects below and in the epoxy. The “Suspension” characteristic permits colorant to be manipulated by torching where water evaporation occurs leaving the colorant behind in very enhance ways.

The following are typical mix ratios used in our coloring recipes:

30% Suspension Colorant - 70% Water mixing formula:

- 3oz Suspension Additive
- 3oz Concentrated Dispersion
- 14oz Water

40% Suspension Colorant - 60% Water mixing formula:

- 4oz Suspension Additive
- 4oz Concentrated Dispersion
- 12oz Water

50% Suspension Colorant - 50% Water mixing formula:

- 5oz Suspension Additive
- 5oz Concentrated Dispersion
- 10oz Water

Follow the instructions supplied with your Granicrete Color Selector (included at the back of this manual). Remember, the Granicrete surface is water resistant and absorbs color slowly so if you don't like your results remove the color before it dries with a soft, wet sponge, pat dry, and try again.

Encouraging play = Greater profits

Although Granicrete provides many coloring formulas to achieve a variety of looks, we do not want to put you in a box of personal creativity. We encourage you to play with the colors and create some incredible looks that people will ask from you. By playing you will become confident in understanding how colors and color types interact. This understanding will help you “replicate” various stone looks that prospects will present to you and ask you to do. With your greater abilities you should be confident in charging more for your custom works.

The beauty of Granicrete's coloring system is that it yields an absolutely custom look by you as a Certified Installer. By developing your own styles and finishes you are increasing your "sellable" factor as well as increasing the likely hood that you can satisfy picky customers.

When to stop coloring and why

This is often the challenge for most beginners. Here is a good piece of advice. The moment you are not certain to add more, that is the best time to stop. Keep in mind that no stone finish is supposed to look perfect. Once it does, it now looks faux instead of authentic.

SEALING

SEALING COUNTERTOPS

Granicrete offers many different options for sealing and detailing your countertop surfaces to create a natural stone finish that will last for years. This section of your manual will cover the most common used techniques and Granicrete recommended options for sealing a countertop.

Granicrete's Crystal Top Epoxy has been the "go to" sealing option for interior countertops for years. It provides a glass like finish that can be honed to a more natural sheen or coated with high performance polyurethane (WB-P53) to provide added scratch resistance for gloss finishes. Crystal Top Epoxy is available in the original formula as well as AHD (Advanced Heat Diffusion). Both epoxies are great choices for any interior countertop. The AHD version provides added heat resistance against heat rings formed from concentrated heat (reference epoxy cure in the index). Both versions are one coat applications, but the AHD is slightly thinner than the original formula.

As fewer interior designers are specifying granite in their designs because granite has become so inexpensive and cheap in quality, we have seen more designers specifying concrete countertops to their clients. More consumers are inquiring directly in the marketplace for concrete countertops.

WB-P53 is the "go to" option for professional installers that are looking for a concrete countertop finish. This technique is also used when the client wants a true white surface. WB-P53 will not amber like epoxies do over time. This technique will provide a much thinner build than epoxy creating a more natural look and feel while providing the highest level of scratch resistance for a countertop.

Being water-based polyurethane, P53, is easy to apply and has great flow ability to reduce any application marks. Application can be done with a roller. Both techniques provide exceptional results even for the unskilled user. See the U for details and latest application tips.

Crystal Top, Crystal Top AHD and WB- P53 (Gloss and Satin) are Low VOC and Low Odor



Beginning Steps to a Successful Finish

Although Crystal Top Epoxy and WB-P53 are mixed at different ratios they have similar characteristics when it comes to favorable application temperature and humidity. The trick to a successful finish is making sure you have favorable temperature and humidity.

Storing Epoxy & Polyurethane:

1. The best storage and application temperature is around 75° F (23.3°C). Having the surface temperature of the countertop also at this temperature is ideal.
2. It is best to bring the sealer in with you from the onset of your work. If temperatures are above the ideals, placing the epoxy in a cooler or refrigerator is appropriate. If the ideals are too low, place the sealer containers in a warm bath (keeping the caps above the water level).
3. Do not set epoxy in direct sun to change its temperature. A resulting photo synthetic reaction will reduce the pot life significantly upon mixing.
4. Do not let your epoxy be exposed to repetitive large temperature variations as this can cause it to coagulate in their bottles which can be resolved by placing the epoxy bottles in a warm water bath of about 120°F for about 20 minutes.

Best Temperatures and Conditions for Mixing and Applying:

Think of your room like an operating room. Dirt and dust should be minimal, the countertops should be dust free, and any fans or moving air should be shut off. Ideal temperature for applying epoxy & WB-P53 is 75° F

Brush and/or blow the entire surface to remove all remaining debris. Cleaning the countertop should be with a bench brush or air blown. Do not use your hands because the oil of your hand can leave prints and smears for your coloring. If you use a vacuum, be sure the attachment has some type of felt or foam liner so that the plastic does not come in direct contact with the dried colorant and leave marks. It is critical that no sand particles remain on the surface as they will appear through the epoxy.

HVAC and all fans should be turned off. House pets should be behind closed doors. De-humidifier should be operating during mixing and through first 24-hours of curing if humidity is **higher than 30%**.

Your floor covering should also be cleaned or re-lined so that dust is not kicked up.

Doors and windows should also be closed.

Air movement, along with doors and windows being opened, should be kept to a minimum for 24 hours after application. Allow 24 hours for the counters to cure before cleaning up or installing the sinks and backsplashes. It is best to advise the homeowners to be careful with the counters for a week to allow a full cure.

Crystal Top Epoxy Process

You will need: Bottles of "A" and "B" Epoxy
 Several clean wooden stir sticks
 Four 2-3" foam brushes (clean) (Do not use brushes for oil base paints)
 Two 2-qt. plastic measuring bucket (marked with 1 qt. marking)
 Four 5-quart plastic buckets (clean)
 OR Two 2-gallon buckets (clean) *Preferred
 One – two tubes Clear GE Silicone II Caulk
 Windex
 Paper Towels (Better yet soft throw away rags)

The Granicrete Crystal Top Epoxy has been blended specifically for indoor countertop application. It is both heat and scratch resistant, crystal clear and easy to apply. For an epoxy, Crystal Top is UV stable but will amber slightly over time so it is advisable to avoid highly white countertops. Multiple coats of WB-P53 or Polyurea 80 are ideal sealers for white countertops. The process for using this product is detailed later in this section.

All epoxies will amber in time. This is natural due to amines used in epoxy formulation. Even as Crystal Top is fortified with additional UV inhibitors, ambering is still a possibility. Ambering is rarely noticeable in earthtone colors. But if your design has prominent or dominant white in it, we recommend that your final coat should NOT be Crystal Top. That after desigining with colorants in your slip coat, and when that coat has dried, it would be sealed with WB-P53 and better yet, Polyurea 80.

Mixing Crystal Top Epoxy:

We know that success in mixing Crystal Top Epoxy can be accomplished in many ways. The procedure identified in this manual may be seen as "overdoing it." But, we believe that following these procedures will support the greatest and most consistent success in your endeavors. Further, such extra precautions far exceed the drawbacks of having to be doing multiple coats of epoxy due to lay- down failures.

The 2-gallon set of epoxy is designed to cover 50-60 square feet (although covering 70-80 square feet is not uncommon in warmer climates). This means that 15-20 square feet will be covered with every ½ gallon mixed (1 quart "A" and 1 quart "B"). We recommend mixing at this ½ gallon increment so as to assure a thorough

blending while being able to monitor application.

Mixing the epoxy is easy, but mistakes can happen if ANY of the epoxy components are not blended completely. This is the reason we recommend small batches in a large and clean mixing container. Please use a completely clean bucket to mix in as even the tiniest grain of sand will affect the finished product.

1. Be sure that all buckets, containers, stir sticks, and brushes are clean and as dust free as possible. You may want to place an additional plastic liner under your “mixing station” as this can be a messy process.
2. First be sure you have a 1-gallon jug of “A” and a 1-gallon jug of “B”. Mark your 2 qt. containers as “A” and “B”.
3. Pour 1 quart of Crystal Top Epoxy “A” into the “A” container and pour 1 quart of Crystal Top Epoxy “B” into the “B” container. Make sure each container is equally filled as a 1:1 mix is a must. Never use the heights of the gallon jugs as markers of measurement as the tackiness of viscosity will only be true after several minutes of settling after pouring.
4. Pour the “A” container into at least a 5 quart mixing bucket. (A wide mouth bucket is better than a deep container as the pot life is extended.) Using a stir stick, scrape the bottom and sides to get as much out of the container into the bucket as possible. Using a separate stir stick repeat this same process with the “B” container.
5. With the “A” and “B” in the 5-quart container, begin stirring using yet another stir stick. The stirring motion should be like stirring soup and also scrape the bottom and sides of the 5-quart bucket in order to make sure your mixing is thorough. Continue wiping your stir stick during mixing so as to get the epoxy mixed off it as well. Do this for approximately 4 minutes.
6. Pour the mixed contents of this 5-quart container into another 5-quart container. Be sure to scrape the bottom and sides with that stir stick while doing so. The purpose of this transfer is to assure the most thorough mix. Continue to stir and scrape for another minute or two.

In this mixing process you will notice things like the epoxy turning cloudy and then clears. You will see tiny bubbles form in the epoxy and some will escape and float in the air. This is to be expected.

KEY POINTS FOR MIXING EPOXY

Make sure you have equal parts of part A & Part B in a clear container

Mix Thoroughly for 4-5 minutes

Transfer to a new container and mix for another 1-2 minutes

Make sure to scrap the sides and bottom of the bucket while mixing

Hand mixing only – NO DRILLS

Pour epoxy out of bucket onto countertop as soon as mixing is complete.

Applying the mixed Crystal Top Epoxy:

1. If you have backsplashes already in place, pour epoxy along the bottom of the splash and draw the material up the splash with a brush or squeegee. As the epoxy adheres to the backsplash, then draw the material away from bottom of the backsplash toward the front of the countertop to avoid pooling.

2. If your backsplash is separate, do your countertop and then do your backsplash separately.

3. Pour epoxy directly from the mixing bucket over the countertop in an “S” shape

Remember, epoxy cures faster in a larger mass so it is best to pour out the entire bucket and then spread.

4. Using your foam brush or ¼” neoprene notched squeegee, lightly spread the epoxy. Using too much brush pressure will challenge the self-leveling properties of the epoxy. A soft hand will assure a more even flow that will support the self-leveling process.

5. Do not worry about your edges at this time. Get your surface properly coated to the edge.

6. Mix additional batches of epoxy per our directions and continue with the backsplash and additional countertop sections accordingly.

7. As you do each section of countertop be sure to use a flashlight or wear a head lamp to look for missed spots or thin spot of epoxy. Where you find these spots, immediately drizzle epoxy from the end of your brush to fill those spots as additional brushing is not normally needed or advised. Watch for debris that needs immediate removing. Also closely check the top edges to be sure that there are no thin or missed spots. If the reflection of the ceiling or lighting is undistorted, then the epoxy is good. If the reflection is distorted or wavy, then it must be applied thicker in that area.

After 24 hours, any additional coats require sanding

8. Dab or lightly brush your edges to make sure that the colorants are sealed in.

Epoxy drips developing from under the edges can be wiped away while wet using a sponge, rag, or

*brush. Doing so will reduce the need for mechanical sanding underneath the following day.
Wipe drips 1.5 hours after application to eliminate the most amount of drips.*

Undermount Sink Tip: Be sure to pull epoxy a few inches back on the inside bottom edge of the sink. Monitor for drips and continue to pull epoxy back along the bottom side.

KEY POINTS FOR APPLYING EPOXY

Pour epoxy out of mixing container on to surface in "S" shape
Spread epoxy over backsplash first
Cover the entire surface of the countertop
Brush all your edges
Torch bubbles in epoxy
Scrape drips 1-2hrs after application

IMPORTANT NOTE: *Watch your pot! Epoxy will heat up in the container. If the bottom of the container is very warm, in moments it will become hot. When it reaches this very warm temperature, STOP USING IT. Set the container with the epoxy outside on rock or dirt and allow it to harden. CAUTION: Hot epoxy will smoke and can melt the container and/or catch on fire. If epoxy does smoke, stand clear of it and douse with water or sand. Start mixing a fresh batch per instructions above.*

Propane Torch to Remove Bubbles: (Never use MAPP gas)

1. The purpose of the torch is not to heat the epoxy but to allow the carbon dioxide at the end of the flame to draw out the bubbles in the epoxy and to help set the epoxy from a peach fuzz look to a glass finish.
2. The time to use the torch is approximately 15 minutes after applying. The torch can be a full flame and should be aimed at the epoxy at a 45° angle. Never point the flame directly downward as the epoxy can be burned resulting in a knot-like finish.
3. Moderately cast the end of the flame 1-2" across the surface being sure that only the end of the flame is rarely touching the surface. Cast across the entire epoxied surface. You should see the bubbles instantly go away and the surface become instantly very clear and glass-like. Do not let the flame set to long on one area as the epoxy can flash as mentioned in the prior point.
4. Watch over the epoxy for 30-45 minutes after using the torch and monitor for latent bubbles or dust particles. Latent bubbles can be removed with additional torching. Dust particles (hair, sand, fuzz, flies) can be removed with tweezers and then lightly torch the area again. Consider hanging fly paper off to the side if your work area is subject to many flies.

5. There is a time limit to how long you can pick particles out. If the epoxy is starting to set up (approximately 45 minutes after application), you need to use more caution as self-leveling is more difficult.

Questions and Answers:

How do I get epoxy off tools and hands?

Acetone or Denatured alcohol works very well as does Soy Gel for uncured epoxy. When cured you will need to use a grinder.

Why do I have soft spots left in my epoxy?

Bad mixing or bad mix ratio. If soft spots are tacky, but still firm, you can lay down another coat of epoxy. If the spots are soft and gel consistency then you will need to remove the uncured spots, wipe clean with acetone and fill with new epoxy. Then re-pour the entire top.

Why does my epoxy get white rings from hot cups?

The 4 coats of texture were too thick. Moisture from coloring was retained as epoxy cured. When hot item placed on epoxy, moisture ring developed under it. Option to resolve is blowing the area with a heat gun, keep temperature of epoxy less than 200 degrees. Allow a couple more months for continued curing. (See epoxy cure sheet in Index)

Why does my epoxy have dimples?

Dimpling can be caused by having too much moisture in the texture and/or too much humidity in the air. The moisture can come from the texture being too thick and/or still damp when epoxy coat was applied. Some of this can be reduced through dry sanding per the technique provided in this manual. Using a de-humidifier to bring humidity down to 35-40% is very important during the epoxy application **and for the following 12-24 hours of initial cure**. Over torching or late torching (after 45 minutes) will cause dimpling as well.

Will bleach damage the epoxy?

Crystal Top Epoxy can be sanitized and disinfected with a bleach solution without losing strength or performance. Although straight bleach will discolor the epoxy it will not lose any strength or performance. If bleach solution is diluted four parts of water to one part of bleach yellowing of the epoxy should not occur.

Where do I go to get any other answers to my questions?

First, contact your supply distributor. For further assistance, look for the Crystal Top Epoxy Troubleshooting Guide in the “U” or contact our headquarters directly.

Detailing Epoxy Countertops

We recommend detailing your sample boards and countertops. You have a couple choices for detailing. You can either apply a protective coating (like WB-P53) or perform a process of sanding and buffing.

Detailing both reduces the scratching of the surfaces and moves the gloss appearance to be closer to polished stone. If your countertops are of dark finish (especially black) this detailing is an absolute must as surface scratches are more readily apparent over a dark finish.

Detailing your sample boards makes for smart marketing. Have your prospects select from a truly finished product instead of boards that you have not detailed. This will absolutely help you in the future as customer calls about surface scratches on your newly finished projects are minimized.

Detail your boards so the consumer chooses the option you have for them at the time of sale. Show them sample boards that are polished and boards that are sealed with WB-P53. Let them choose which of the two they prefer.

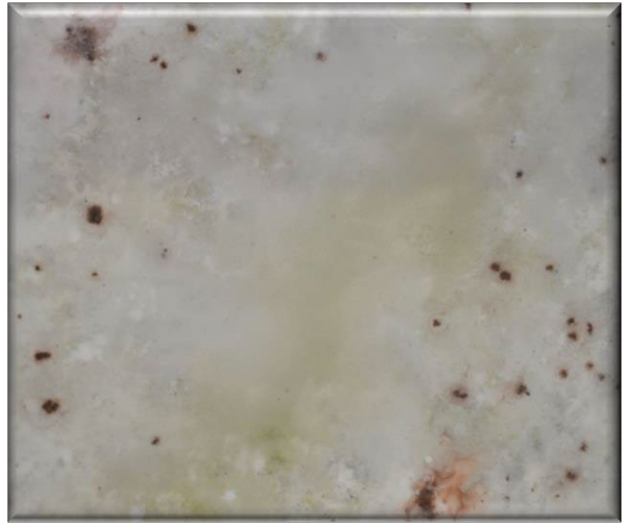
WB-P53 can be HVLP sprayed. If rolling, we recommend using a closed cell rounded edge roller. Sherwin William "Black Foam Roller" is very good.

For best application methods of WB-P53 and for Sand-Polish Detailing of your tops, go to the U as these are listed in the Designer Top Installation System.

COLOR RECIPES



Bianco Romano



For this Tops 1 finish you will need:

1. Blinding White
2. Ponderosa Green
3. Groutline Grey
4. Desert Rose
5. Mica Flakes 3mm Natural (Option)

Mixing Procedure:

1. Mix 30% Blinding White + 70% water.
2. Mix 30% Ponderosa Green + 70% water.
3. Mix 15% Groutline Grey + 15% Suspension Additive + 70% water.
4. Mix 25 % Desert Rose + 25% Suspension Additive + 50% water. Then add approximately 2 drops per tablespoon of Mica Flakes Natural 3mm into a small container to tint the Mica Flakes.

Step-by-Step Procedure:

1. Flood surface with Blinding White mix, starting with the edges and then moving to the top surface.
2. While wet, Spritz Groutline mix sparingly into surface. To achieve this, stand approximately 4-5 ft. away from target and hold spray bottle up above your shoulder height and give a quick, firm spritz.
3. Spritz more Blinding White mix and use water on surface to blend and move color.
4. Spritz Ponderosa Green mix in same manner the Groutline mix was applied, less Ponderosa than Groutline though.
5. Carefully stream Ponderosa Green mix into an isolated area of the surface. This will create a toned rift running through the stone. Immediately chase this area with water spritz to disperse color.
6. Torch flooded surface to manipulate color and absorb moisture. You may also use a chip brush to pounce and soften the transition from Blinding White to Ponderosa Green.
7. Sparingly place tinted Mica Flakes into surface.
8. Mist with Blinding White again to disperse Desert Rose from Mica flakes. **Let dry.**
9. Mix Crystal Top Epoxy and pour topcoat according to installation manual. Better yet, topcoat with Polyurea 80 instead as this white finish may amber over time.

Emphasized Training Techniques: Flooding, Tinting Mica Flakes, Manipulating color on stone with torch

Bianco Romano Notes:



Black Galaxy

For this Tops 1 finish, you will need:

1. Midnight Black
2. 3mm Natural, Antique Gold and Amber Mica Flakes

Mixing Procedure:

1. Mix Midnight Black at 50% color with 50% Suspension Additive.

Step-by-Step Procedure:

1. Sponge Midnight Black mix onto surface, being sure to cover all areas.
2. Carefully blow Mica Flakes onto wet surface, achieving a 60-70% coverage area. Distribute flakes evenly.
3. Mix Crystal Top Epoxy and apply over entire surface according to installation manual instructions. Be sure to push mica flakes down into the epoxy using either a wooden skewer or chip brush. Let dry.
4. Repeat Crystal Top Epoxy procedure as necessary.



Emphasized Training Techniques: Solid Color Application, Introducing Mica Flakes

Black Galaxy Notes:

Calacatta Gold

For this Tops 1 finish, you will need:

1. Groutline Grey
2. Blinding White
3. Taupe

Mixing Procedure:

1. Mix Groutline Grey at 50% color with 50% Suspension Additive.
2. Mix Blinding White at 30% color with 70% water in a Granicrete Professional Spray Bottle.
3. Mix Taupe at 50% color with 50% Suspension Additive.



Step by Step Procedure:

1. Flood entire surface with Blinding White mixture.
2. Thin Groutline Grey mix with water on a script liner brush. Use a script liner and brush veins as desired through flooded surface. Try to lay the color onto the wet Blinding White as opposed to applying the color through it and onto the surface. Another option is to streak the Groutline mix through the wet surface with a spray bottle.
3. Thin the Taupe mix with water on a script liner. Drop a very small amount of thinned mixture just here and there through surface. On a sample board this would only be a drop or two in one or two places. The color will disperse and become a larger area of color than you may expect.
4. Torch surface, rapidly moving torch to manipulate color a create vein structure. **Let dry.**
5. Apply final coat of Crystal Top Epoxy per installation manual instructions. Mix Crystal Top Epoxy and pour topcoat according to installation manual. Better yet, topcoat with Polyurea 80 instead as this white finish may amber over time.

Emphasized Training Techniques: Flooding ... Streaking ... Manipulating Color with torch

Calacatta Gold Notes: *Caution ambering epoxx may occur over time. Avoid dark rooms as well.*

Carrera Marble

For this Tops 1 finish you will need:

1. Saltillo
2. Midnight Black
3. Stonehenge
4. Blinding White
5. Spray Webbing Black, Silver & White

Mixing Procedure into Spray Bottles:

1. 20% Saltillo + 20% Advance Suspension + 60% water
2. 50% Midnight Black + 50% Advance Suspension
3. 20% Stonehenge + 20% Suspension + 60% water
4. Blinding White (Straight)



Step by Step Technical Procedure:

1. Lightly spray a mist of water over the entire surface.
2. Spray on the Saltillo Mix and the Stonehenge Mix evenly at a 50/50 ratio, covering 100% of the surface.
3. With sea sponge or cheesecloth pounce and blot the Saltillo and Stonehenge to soften the color drawing back through some of the natural basecoat. This is to create "COMPOSITION and GOOD NATURAL COLORING."
4. Squirt Blinding White randomly on board (just a little at a time and straight out of the bottle) pounce and blot with a damp sea-sponge, and then immediately soften with a badger brush. Allow for warm tones and white tones throughout out and with some general areas stronger one way or the other.
5. Use badger brush to soften transitions throughout.
6. Now spray on Krylon Black spray webbing. Shake can 2 minutes and then lightly spray with hand moving side to side at about 20" away. Be sure to get edges as well. Coverage of this black is less than 5% and very uneven. Repeat this process using the Silver webbing adding an additional 5%
7. Vein with Midnight Black straight using script liner brush to connect the dots between some areas of the black webbing. REFER TO SECTION ON PROPER VEINING TECHNIQUES for this step.
8. Now spray on Krylon White spray webbing. Shake can 2 minutes and then heavier spray about 6" away about 40-60% of board and edges. You will use a fair amount of the White webbing, do not be afraid to use more this process is key in setting the final finish back and helps the look to become extremely authentic. Best toopcoat with Polyurea 80 instead as this white finish may amber over time.

Emphasized Training Techniques: Web Veining ... Blend & toning straight color ... Veining ... Fissures.

Carerra Marble Notes: *Caution Ambering Epoxy ... Predominant white -light colors can amber. Keep epoxy thin and be sure to final seal with a UV stable sealer like WB-P53.*

Emperador

For this Tops 1 finish you will need:

1. Antique White
2. Stonehenge
3. Cherokee
4. Night Sky Black
5. Spray Webbing - White, Gold
6. Mica Essence Gold
7. Mica Essence Mocha
8. Paper Towels

Mixing Procedure:

1. Antique White mixed as Acrylic Shade.
2. 20% Stonehenge + 20% Suspension + 60% water.
3. 20% Cherokee + 20% Suspension + 60% water
4. 50% Night Sky Black + 50% water.



Step-by-Step Procedure:

1. Spray Webbing White on entire surface starting to lay in vein structure.
2. Spray Webbing Gold on random areas of surface (about 25%)
3. Spray Stonehenge mix on entire workable are, heavier in some areas than others.
4. Spray Cherokee mix in areas you wish to be lighter.
5. Stream Night Sky mix in one or two areas to create a darker value.
6. Spray Krylon Webbing White on to wet mixture.
7. Repeat Step 3 through Step 5, noting that the color in these steps is applied rather heavy, this is not a light misting.
8. Use paper towel to blot and create open areas. These will be the lightest areas. You may use torch at this point to absorb more moisture and manipulate color pattern. Let dry.
 - a. Option: Additional veining may be done with Antique White.
 - b. At this point you can vein with a script liner brush highlighting stones and crevices that developed naturally during the coloring process. Do not *try* to create veins or cracks, just outline what is already there, and then soften with a damp cheesecloth. Remember **LESS** is more, no creative S's, Y's or X's. When in doubt, keep you veins straighter. **Let Dry.**
 - c. You may also add a small amount of Rich Gold veining or stones. Mix 50% Gold Mica Essence and 50% Mocha Mica Essence in a small container. To this mixture add 50% water to create a Rich Gold "paint" like material. Use script liner and add veins and fill stones as desired.
9. Mix Crystal Top Epoxy and pour according to instructions provided in this manual

Emphasized Training Techniques:

Toning Color ... Web Veining ... Flooding ... Blotting ... Mica Essence ... Script Liner Veining

Emperador Notes:

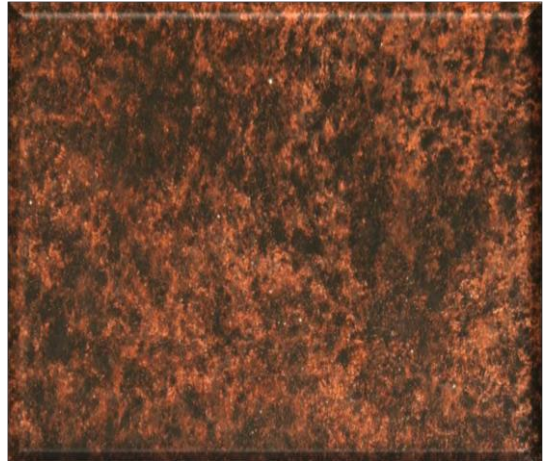
Nero Copper

For this Tops 1 finish, you will need:

1. Rustic Red
2. Desert Rose
3. Night Sky Black
4. Mica Shimmer Copper, Fine Gold or Copper Glitter Glue (option)

Mixing Procedure for Spray Bottles:

1. 15% Rustic Red + 15% Suspension + 70% water
2. 15% Desert Rose + 15% Suspension + 70% water
3. 50% Night Sky Black + 50% water
4. Mix Copper or Gold Glitter Glue 25% into 75% water



Step-by-Step Procedure:

1. Begin by spraying your edges with Desert Rose mix followed by Rustic Red mix. This allows overspray to begin coloring the top surface.
2. Once all edges are complete, begin covering your prepared surface with Desert Rose mix and Rustic Red mix, covering approximately 50% of each color, or to your liking.
3. At this point, you can let these colors dry or nearly dry.
4. Spritz Night Sky mix beginning with the edges, allowing the overspray to start the coloring process on the top surface. Proceed to spritzing the top surface.
5. While surface is wet, add a *small* amount of glitter over entire area. Use a light touch, since more can always be added, but too much is just too much!
6. Mix Crystal Top Epoxy and apply topcoat according to installation manual.

Emphasized Training Techniques:

Speckles ... Introducing Glitter ... Spritzing

Nero Copper Notes:

Travertine

For this Tops 1 finish, you will need:

1. Saltillo
2. Stonehenge
3. Table Mesa Tan
4. Antique White
5. Desert Brown

Mixing Procedure in Spray Bottles:

1. 15% Saltillo + 15% Suspension + 70% water.
2. 15 % Stonehenge + 15% Suspension + 70% water.
3. 30% Table Mesa Tan + 70% water.
4. 30% Antique White + 70% water.
5. 30% Desert Brown + 70% water.



Step-by-Step Procedure:

1. Begin by flooding the sides and tops with Antique White mix.
2. Spritz random areas of the surface with Saltillo mix, Desert Brown mix, and Stonehenge mix.
3. Stream Table Mesa Tan mix organically through surface, allowing the colors to blend together and run over the edges.
4. Heavily stream Antique White mix following the natural lines and curves the Browns and Yellow you have created.
5. Ghost with Antique White mix to blur and soften color transition.
6. Torch to move manipulate color pattern and absorb moisture. When color stops moving do not torch that area any further, avoiding “cooking” the Acryli-Shade.
7. Mix Crystal Top Epoxy and apply topcoat according to installation manual instructions.

Emphasized Training Techniques: Manipulating Color with torch ... Flooding

Travertine Notes:



BLACK ICE

For this Tops 2 finish you will need:

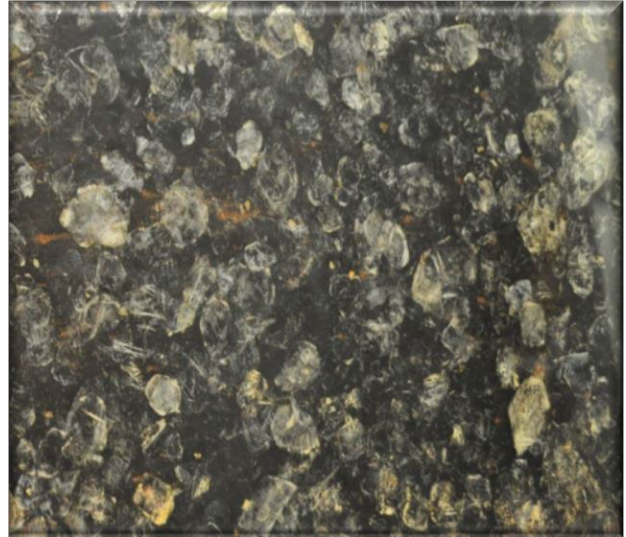
1. Midnight Black
2. Night Sky Black
3. Mica Flakes 25mm Natural
4. Mica Flakes 3mm Natural

Mixing Procedure:

1. 15% Midnight Black + 15% Advanced Suspension + 70% Water.
2. Night Sky Black 1:1 with water or undiluted.

Step-by-Step Procedure:

1. Apply Night Sky Black 100% over all surfaces and allow to dry.
2. Mix Crystal Top according to workshop instruction at the 1:1 ratio Part A to Part B.
3. In a zigzag motion apply a thin-medium "slip coat" of the Crystal Top and brush out evenly with a 3-4" foam brush. Make sure that 100% of the black substrate is covered by the Crystal Top.
4. While the Crystal Top is wet randomly place 25mm Natural Mica Flakes until 70-80% of surface is covered. Press down all high parts of the Mica Flakes with a bamboo skewer, trying to get the flakes to lay as flat as possible.
5. Blow in the 3mm natural Mica Flakes for the edges, and then let sit for at least 3-5 hours, depending on ambient temperature.
6. When epoxy is dry, sand the finish lightly with 400 grit sandpaper to knock down any high pieces of the flakes and flake edges.
7. Thoroughly dust and clean the surface.
8. Mix Crystal Top Epoxy and apply topcoat according to installation manual. May require 2 coats to seal.



Techniques Used: Flake integration into epoxy.

Notes:

Green Onyx

For this Tops 2 finish you will need:

1. Blinding White
2. Ponderosa Green
3. Brick Red
4. Saltillo

Pricing: Pakistan Green or “Green Onyx” costs between \$120-\$200 per sq. ft. Installers are charging between \$90-\$140 for this finish.



Preparation of Colors:

1. Have 5 small mixing containers at hand.
2. Have Blinding White straight to be added to a container of mixed epoxy.
3. Have Ponderosa straight be ready to add straight in separate containers with mixed epoxy.
4. Prepare a mix of 25% Saltillo + 25% Advanced Suspension + 50% water.
5. Prepare a mix of 25% Brick Red + 25% Advanced Suspension + 50% water.

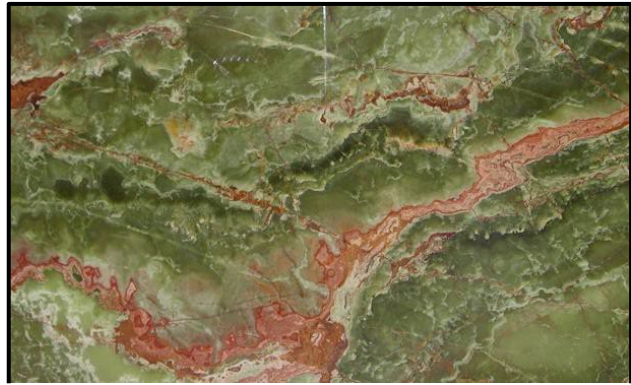
Step-by-Step Coloring Procedure:

1. Fully mix a quart of Crystal Top Epoxy at its 1:1 ratio. Then add 3 oz. of Blinding White straight and STIR ONLY ONCE to remain stringy. DO NOT OVERSTIR. (For samples mix less)
2. First dip a chip brush into the Ponderosa Green epoxy mix and blend into board in a wavy skip spot camouflage covering 70%. It works best to have a picture to reference for composition, (Google images)
3. Follow that with the Blinding White epoxy mix. Dip a different clean brush and mirror the Ponderosa Green sections by rounds and swirls with brush strokes covering the outer inch (piggy-backing) of the Ponderosa Green epoxy and carrying over the texture canvas. Walk the brush over the Ponderosa Green and push or pull the epoxy film and covering about 15% of the board (leaving about untouched).
4. Follow the Blinding White by dipping another clean brush into Brick Red epoxy mix. This contrast color is a “complementary” color, which needs to be kept to a minimum... perhaps 15-20% of your board filling where neither the Ponderosa Green nor the Blinding White is on the board. Remember with this contrast color so “less is more.”
5. At this point your entire board should have complete color. Now, will come the finishing touches.
6. Take Your Blinding White epoxy mixture and dip your brush into it and walk the color over the Brick Red creating areas of what appears to be a sheer veil just peeking through the white.
7. Now apply a small amount of Brick Red - Water solution, by dipping a chip brush into the solution, shake out excess solution. Turn the handle and brush hairs sideways above the countertop surface and draw your glove upwards against the end of the hairs causing the hairs to flick droplets down toward the board. Do this throughout the board with 10-20% sporadic spotting.
8. Torch while casting across the board very quickly.

9. Using the Saltillo mix and water, use a script liner to run and swirl random drops of color mainly into the Brick Red areas, watching how the existing color moves out from the liner.
10. Torch again quickly. Let dry 4-6 hours, until tacky and epoxy is not moving.
11. With a clean liner brush use Blinding White straight out of the bottle and create fissures according to what pleases the eye. Do not overdo.
12. Mix Crystal Top Epoxy and apply topcoat according to installation manual instructions. Best to topcoat with Polyurea 80 instead as this white finish may amber over time.

Techniques: Brush epoxy and color integration ... script brush

Green Onyx NOTES:



This is a finish should be approached with much practice before offering to clients. Creating space and flow for larger surfaces (bigger than a sample) is achieved by practice. Further, with the time and technique developed you should only perform this work for clients who understand the value of such stone combined with the appreciation of your hand-crafted artistry.



Natural Granite

For this Tops 2 finish, you will need:

1. Stonehenge
2. Cherokee
3. Tasha
4. Desert Brown
5. Blinding White straight to be added
6. Mica Flakes 25mm Amber, 3mm Natural, Antique Gold and Amber
7. Gold Spray Webbing (Optional)

Mixing Procedure:

1. 20% Stonehenge + 20% Advance Suspension + 60% water.
2. 20% Cherokee + 20% Advance Suspension + 60% water.
3. 50% Tasha + 50% Advanced Suspension.
4. Combined mix of 30% Desert Brown + 10% Stonehenge + 60% water in a spray bottle.



Step-by-Step Procedure:

1. For the final trowel coat of Countertop Blend, add Mica Flakes 25mm Amber and 3mm Natural, Antique Gold, to the Countertop Blend & apply to top, flat surface & edges. Allow material to set up properly. With a slightly damp sponge, begin exposing mica flakes as demonstrated in workshop. Let dry. (Mix may be as much as 25% of these Mica Flakes.)
2. With a clean damp sponge wipe surface to remove any remaining powder from Mica Flakes.
3. Using a rouging technique with well rung damp sponge, apply a small amount of Stonehenge-AS and Cherokee-AS to a damp surface. These colorants will be applied to sponge SOB (straight out of the bottle you mixed). Mottle and soften the color keeping translucent. There will be areas of calm that have very little to no color.
4. **Option:** Spray Gold Webbing directionally with established color pattern.
5. Use script liner and apply vein on the edge of area where darker hues fade into lighter hues of the trowel coat. Refer to picture above. Use Stonehenge SOB (straight out of the bottle you had mixed) slightly thinned with water. Use a sea sponge to blot and soften vein.
6. Mix enough Crystal Top epoxy for a slip coat over entire surface plus add additional ½ cup per square ft. (8 oz per sample board).
7. Pour a slip coat of mixed epoxy over surface and spread to edges with sponge brush.
8. Add 4-5 drops Stonehenge mix to left over epoxy in container and stir (“fold”) 3-4 times. **DO NOT OVER MIX.** We are creating ribbons of color. Lay in the tinted epoxy into the freshly poured untinted epoxy to tint in areas. With the length of the stir stick (on its edge) lightly drag through the ribbon of tinted epoxy. You may also stipple the tinted epoxy into the clear epoxy with a chipbrush.

9. Spritz Desert Brown mix over the epoxy.
10. Using Tasha, SOB (straight out of the bottle you had mixed), pour into a cup with a small amount of water. Using a chip brush or liner brush, lay in some vein work into the wet epoxy.
- 11. NOTE: Remember to leave some areas of silence or calmer areas.**
12. Once you are happy with composition, torch to manipulate colorant applications in epoxy for veining, fissures, and more. Once you have torched the epoxy it is not advised to add more color. Let dry.
13. Dipping a script liner brush, use Blinding White straight and apply some wet and heavy veins. Let this dry a few minutes, even torch very quickly to absorb moisture. Use damp paper towel wad and rub at veins, removing much of the Acryli-Shade, leaving very thin vein structure.
14. Mix Crystal Top Epoxy and apply final topcoat per installation manual instructions.

Techniques: Mixed medium in texture, epoxy brushing, script liner use, torching.

Natural Granite Notes:

Persian Tiger Onyx

For this Tops 2 finish you will need:

1. Groutline Grey
2. Cherokee
3. Saltillo
4. Blinding White

Mixing Procedure:

1. 50% Groutline Grey + 50% Suspension Additive
2. 50% Cherokee + 50% Suspension Additive
3. 50% Saltillo + 50% Suspension Additive
4. Blinding White straight
5. Blinding White mixed per Acryli-Shade
6. Spray bottle combining 25% Groutline Grey mix + 25% Cherokee mix + 50% water.



Step by Step Procedure:

1. Spray a light mist of water to dampen surface.
2. With a damp grout sponge, lay in some soft tones of the Groutline Grey mix and of the Cherokee mix to rough out the composition. Use a damp sea sponge to mottle and break up the color. Soften with Badger Brush.
3. Mix Crystal Top Epoxy, 1:1 ratio & pour a thin-medium slip coat. Brush out with a foam brush, 100% coverage. Pour excess epoxy into a different container.
4. Mist on a small amount of the combined Groutline/Cherokee/water mix and lightly torch to break up or melt the color into the epoxy.
5. In the separate mixing container with the remaining epoxy, add 3-5% of Blinding White Acryli-Shade straight and stir fairly well.
6. With a chip brush work the white epoxy over the "slip coat" using a hit skip technique, rocking the brush back and forth to create pockets of color underneath.
7. Do a final torch & **let dry**, at least 4-6 hours, or until slightly sticky, but doesn't move.
8. Once dried dip a dry chip brush in the Cherokee straight out of the bottle you had mixed using only the top half of the brush. Dip the bottom half dip of the brush into Groutline Grey straight out of the bottle you had mixed doing a "double loaded" brush.
9. Run the brush in an onyx (semi-circular and wave) pattern across the surface of the dry epoxy.
10. Cross flog over with Blinding White Acryli-Shade loaded on a 3' chip brush and soften with Badger Brush.
11. Repeat step 8 and 9 but use Blinding White as mixed per Acryli-Shade and also with the Saltillo mix. (SOB) You may also choose to tone this color to a more caramel color by picking up some Cherokee mix.
12. Cross flog with "white" bristles as above.
13. Place a white fissure/vein here or there opposite of the onyx "flow".
14. Mix Crystal Top Epoxy and apply final topcoat per installation manual instructions. Better yet, topcoat with Polyurea 80 instead as this white finish may amber over time.

Suggestion: Onyx is more of a soft semi-gloss sheen, hone down with 2000 grit Abralon for a nice result.

Techniques: Color into epoxy integration. Torch manipulation.

Tiger Onyx Notes:



This is a finish should be approached with much practice before offering to clients. Creating space and flow for larger surfaces (bigger than a sample) is achieved by practice. Further, with the time and technique developed you should only perform this work for clients who understand the value of such stone combined with the appreciation of your hand-crafted artistry.



Serpentine Marble

For this Tops 2 finish, you will need:

1. Saguaro Green
2. Cherokee
3. Blinding White
4. Antique White
5. Ponderosa Green
6. Groutline Grey

Mixing Procedure:

1. 20% Saguaro Green + 20% Advance Suspension + 60% water.
2. 20% Cherokee + 20% Advance Suspension + 60% water.
3. 40% Blinding White + 60% water.
4. 40% Antique White + 60% water.
5. 40% Ponderosa Green + 60% water.
6. 50% Groutline Grey + 50% Advanced Suspension.



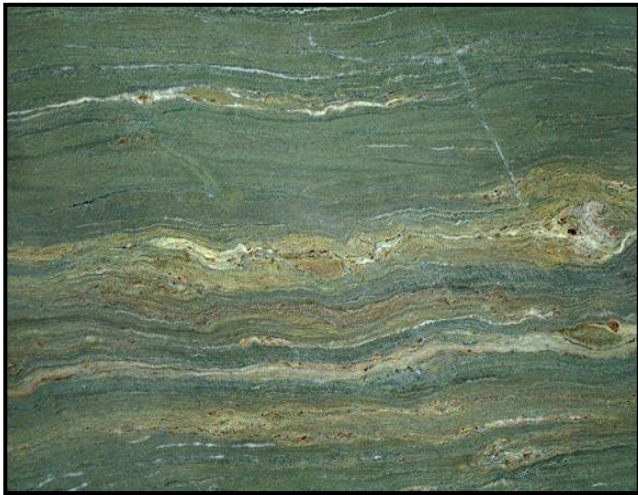
Step-by-Step Procedure:

1. Begin with a light misting on entire surface with Blinding White mix for a light but full coverage.
2. Stream Antique White mix in a linear fashion about 50% of surface.
3. Stream Saguaro Green mix in a linear fashion about 70% of surface.
4. Stream again with Antique White mix following your original pattern, followed by a light linear spritzing of Ponderosa Green mix over the Saguaro Green.
5. Add a small amount of Cherokee mix in a linear fashion, by laying the spray bottles on its side, slowly depressing the spray bottle trigger as to dribble and spit out. **Let dry.**
6. Mix Crystal Top Epoxy & pour a small amount into a separate clean container.
7. In the small container, add 2-3 drops of Groutline Grey mix and fold gently. Remember you want ribbons of color and translucency.
8. Apply a slip coat to surface with the clear epoxy.
9. Using a chip brush, apply the colored Groutline epoxy in a linear fashion on about 20-25% of the surface. Remember the Groutline Grey color is strong and will move and color will expand as it is torched. As an option you may also add a small amount of Saguaro to the Groutline mix and ribbon in in some areas.
10. With your chip brush or mixing stick, begin to pull epoxy in a linear fashion until satisfied with composition. This should have a slight wave to it and not just be pulled straight. Refer to darkest areas in photo above. **Let dry.** Must dry a minimum of 4-6 hours depending on climate and conditions.

11. Apply final coat of Crystal Top Epoxy per installation manual instructions.

Technique: Color integrated into epoxy, movement by torching.

Serpentine Marble Notes:





Sodalite Royal Blue

For this Tops 2 finish, you will need:

1. Midnight Black
2. Cobalt Blue
3. Night Sky Black
4. Blinding White
5. Charred Pearl or White Embossing Powder (Option)
6. Charred Silver Mica Essence (Option)
7. Webbing, Black and White



Mixing Procedure:

1. 20% Midnight Black + 20% Advanced Suspension + 60% water.
2. 20% Cobalt Blue + 20% Advanced Suspension + 60% water.
3. 50% Blinding White + 50% water.
4. 50% Night Sky Black + 50% water. Also add 2 tablespoons of Charred Silver Mica Essence per 16 fluid oz of this mixture.

Step-by-Step Procedure:

1. Spray Black Webbing then White Webbing to begin to form the vein structure on your surface.
2. Mist entire surface with your choice of either Blinding White mix or Midnight Black mix depending on whether you want a lighter or darker blue overall appearance.
3. Beginning with edges first, (over spray will hit the top surface) mist entire surface with Cobalt Blue mix.
4. Mist on Midnight mix over the wet Cobalt Blue in areas you want darker.
5. Mist on Blinding White mix in areas you want lighter.
6. Repeat with the Cobalt Blue mix by flooding the surface.
7. While this is wet, apply more White Webbing to create veins that flow directionally with color pattern.
8. Immediately spritz small amount of the Night Sky Black+Mica Mix to add depth and push back veining here and there. Now torch to absorb water and manipulate color pattern as desired. When color stops moving in an area stop torching there and move on to wet areas.

Let dry.

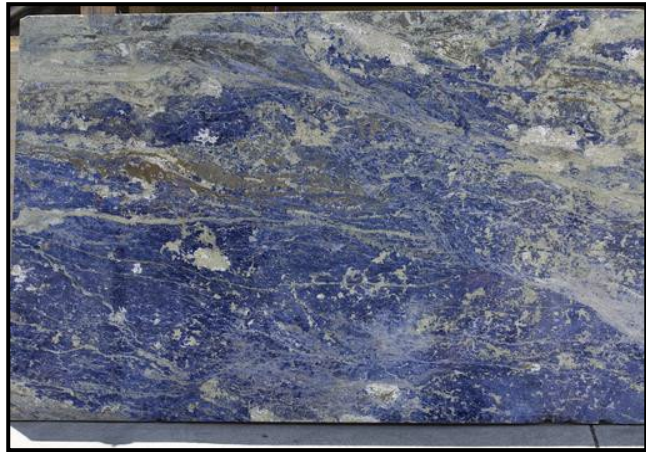
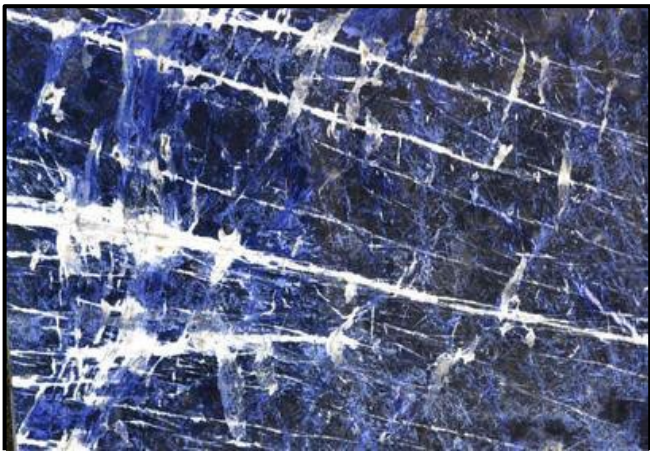
9. **Option:** Spritz mix of 50%/50% Denatured Alcohol and Lavender Mica Powder. This will

give the surface a blue-purple hue when viewed from certain angles. **Let dry.**

10. Mix epoxy & pour/brush enough onto surface for a thin slip coat covering 100% of the surface. Remember to pay attention to the edges so you don't get any drips.
11. Stand back from surface & let the "stone" tell you where the white veining should be.
12. Keep a small container of Isopropyl Alcohol or Denatured Alcohol nearby to clean liner brush. Keep a small container of water nearby to wet your brush before loading with veining color. Rinse your brush with water after removing any epoxy with the alcohol.
13. Add veining by first wetting an artist's liner brush with water then loading with Blinding White to thin the Acryli-Shade. Twist the brush as you remove from color to remove any excess color/water. With a light touch, lay the color on the epoxy. The water in the veining paint will react with the epoxy & begin to break up. Also, you can heat the veining with the propane torch to get it to break apart.
14. Add a light dusting of white embossing powder onto surface in desired areas.
15. Heat embossing powder with torch until melted & starting to create "stones". This will create a fogging effect in areas. All desired embossing powder should be sprinkled in at this point-once the embossing powder is melted, more usually cannot be added.
16. **Option:** Additional glitter can be added at this point by sprinkling it in desired areas.
17. Let this epoxy coat set up at least 4- 6 hours & apply final coat of Epoxy per installation manual instructions.

Techniques: Torching colors. Torching colors in epoxy. Scripting through wet epoxy.

Sodalite Royal Blue Notes:



Walnut Travertine

For this finish, you will need:

1. Mica Flakes Amber 3mm
2. Mica Flakes Gold 3mm
3. Blinding White
4. Antique White
5. Stonehenge
6. Cherokee
7. Groutline Grey



Mixing Procedure:

1. Apply Countertop Blend coats as per class instructions, except add 5-10% Mica Flakes into last trowel coat. Allow to dry about 90% (normally about 45-60 minutes).
2. With a slightly damp sponge clean surface to expose mica. Let dry completely.
3. Mix 50% Blinding White with 50% water.
4. Mix 50% Antique White with 50% water.
5. Mix 20% Stonehenge + 20% Advanced Suspension + 60% water.
6. Mix 20% Cherokee + 20% Advance Suspension + 60% water.
7. Mix 20% Groutline Grey + 20% Advanced Suspension + 60% water.

Step by Step Procedure:

1. With a damp sponge, clean surface to remove any remaining Countertop Blend from Mica Flakes. Spritz surface lightly with water.
2. Pour some of the Stonehenge mix into a cup. With a slightly damp chip brush (2", 3", and 4" chip brush, brush across the counter creating different flowing veins with unequal spacing between. Do not allow for any recognizable pattern. Use a damp sponge and pull off some of the color creating soft shading tones in spaces. The entire board should have a degree of veining and softening.
3. Use a script liner and add create a few "ekg" veins.
4. Mix Crystal Top Epoxy. Apply a light skim coat over surface. (6-8 oz is sufficient for average sample board.) Torch quickly only to help level epoxy.
5. Use Blinding White mix and the Antique White mix and stream color from your spray bottle in harmony with the prior veins. This should cover about 60% of the surface. Use a clean

chip brush and wave or curtain vein the mix with the grain of pattern. Keep the flow consistent and not too wavy.

6. Spray a light mist of Stonehenge mix and the Cherokee mix over surface covering 10%-20%.
7. Adjust spray setting on Stonehenge bottle and stream on surface where Blinding White mix and the Antique White mix have not been streamed already running parallel.
8. Use clean chip brush and lightly pull color to elongate and create eyes of open spaces within the pattern.
9. Quickly torch and let dry.
10. Use Blinding White Acryli-Shade straight out of the bottle (SOB) and a script liner to create a couple of thin veins in line with the current vein. Flog or tap the freshly painted veins.
11. Mix Crystal Top Epoxy and apply topcoat according to installation manual.

Techniques: Color integration into epoxy, script lining

Walnut Travertine Notes:





Agate

For this Ultra Tops finish you will need:

1. Acrylic paint of choice
2. Various Sizes Cut Agate available through retailers or online.
3. "0" & "00" Blue, Lapis, Azure crushed glass also available online or with local retailers.

Mixing Procedure:

Frame:

1. Create a routed frame with rim for plexiglass to lay at the bottom. Paint the frame.
2. Remove plastic film from plexiglass and lightly sand with 220 grit sand paper using random orbital sander.
3. Lay plexiglass sanded side up into the frame. Silicone seal the edges of the plexiglass joining the interior frame edge. Let completely dry.



Placing Agate:

1. Position Agates as desired on plexi surface. A consistently inconsistent arrangement looks best, varying between sizes and shapes. You may break a few agates into smaller pieces to fill in between the larger stone. Fill the plexi inset as much as possible.
2. Mix the glass colors together. Sprinkle glass mixture carefully into all open areas. Use a small artist brush or chip brush to dust any excess glass off the stones and into the crevices between the stones.
3. Mix Crystal Top Epoxy and apply topcoat per installation manual instructions. Be extra gentle when spreading the epoxy as to not brush it over the frame edge unless desired. Let dry.
4. This will most likely require a second pour of the epoxy. Sand any protruding areas and apply additional coats of epoxy as needed.

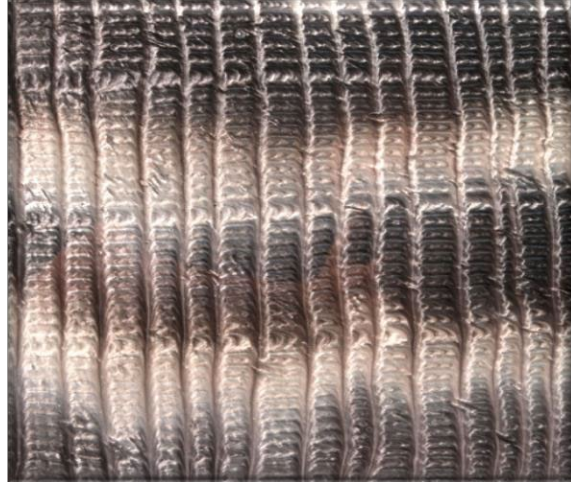
Notes:



Mica Swirl

For this finish you will need:

1. Granicrete Mica Essence Charred Pearl
2. Granicrete Mica Essence Charred Graphite
3. Night Sky Black



Step by Step Procedure:

1. Apply brush coats, edges, and trowel coats as normal.
2. Apply Night Sky Black in 1:1 ratio with water or undiluted and cover entire surface. Allow to dry.
3. Mix enough Crystal Top Epoxy to cover surface a second time then divide this into two containers. Add Charred Pearl Mica Essence to one container of epoxy and Charred Graphite Mica Essence to the other. Approximately 2 tbsp per cup of epoxy.
4. Carefully stream first color of epoxy across the surface in one direction. Continue "striping" the surface about every 2" with these streams of tinted epoxy. Now take the alternate color of epoxy and stream in the same manner between each of the first color streams. Let sit another 30 minutes then lightly torch.
5. Use a plastic hair comb and softly pull the comb through the setting epoxy in one direction.
6. Now repeat in the opposite direction.
7. Repeat this process (steps 6 and 7) 2 additional times.
8. As a final pull through the epoxy, turn the comb on its side and using only the single edge lightly drag through single lines spaced approximately 1" apart. A slight curve in these final lines is desired.
9. Lightly torch a final time and let dry.
10. Apply final coat of Crystal Top Epoxy.

Notes: Consider this finish with other colors and tools to play with as well as use of misting or spritzing Acetone or denatured alcohol in the coat where Mica Essence is in play.



My Finish: _____

For this finish I needed:

1. Color: _____
2. Color: _____
3. Color: _____
4. Color: _____
5. Color: _____
6. Color: _____

Mixing Procedures:

1. Dispersions (3 caps to 24oz of water) (Yes / No _____)
2. Acyrli-Shades (4oz of colorant to 20oz of water) (Yes / No _____)
3. Acrylic Concrete Stains (50% Stain to 50% water) (Yes / No _____)
4. _____

Step-by-Step Procedure: (Flood – Spot Flood – Mist Speckle -- % --- Still Wet. Etc.)

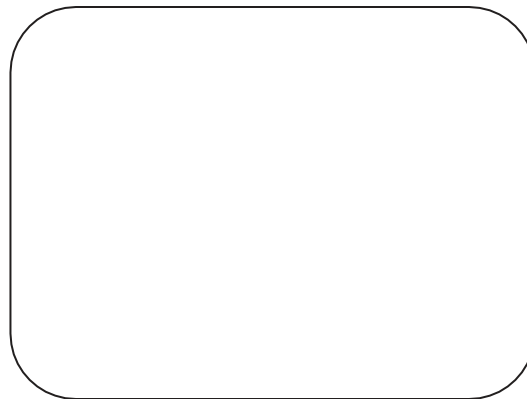
- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.



My Finish: _____

For this finish I needed:

1. Color: _____
2. Color: _____
3. Color: _____
4. Color: _____
5. Color: _____
6. Color: _____



Mixing Procedures:

1. Dispersions (3 caps to 24oz of water) (Yes / No _____)
2. Acyrli-Shades (4oz of colorant to 20oz of water) (Yes / No _____)
3. Acrylic Concrete Stains (50% Stain to 50% water) (Yes / No _____)
4. _____

Step-by-Step Procedure: (Flood – Spot Flood – Mist Speckle -- % --- Still Wet. Etc.)

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

My Finish: _____

For this finish I needed:

- 7. Color: _____
- 8. Color: _____
- 9. Color: _____
- 10. Color: _____
- 11. Color: _____
- 12. Color: _____

Mixing Procedures:

- 5. Dispersions (3 caps to 24oz of water) (Yes / No _____)
- 6. Acyrli-Shades (4oz of colorant to 20oz of water) (Yes / No _____)
- 7. Acrylic Concrete Stains (50% Stain to 50% water) (Yes / No _____)
- 8. _____

Step-by-Step Procedure: (Flood – Spot Flood – Mist Speckle -- % --- Still Wet, Etc.)

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

ADDITIONAL AIDS

Additional Aids & Conversion Chart

Making sample boards

Sample boards can be made very easily. We recommend using ¾" MDF and then adding faux edges using strips of ¾" MDF. MDF can be found in most quality lumber yards and home improvement stores. Inquire with each as to their assistance to pre-cut pieces for you to make assembly much easier and faster. Follow the directions provided in the countertop fabrication section of this manual regarding gluing and brad nailing these boards.

Making color boards to help customers select

Creating sample boards is a must for any serious installer. Having a selection of looks, colors, and edging to show the prospect is essential to helping you close sales. By having samples to look from, they can be used to help guide your customer through the process of selection.

Plastic Spray Bottle Cleaning and Maintenance

Granicrete's plastic spray bottles are a wise investment and will last for many months if you take care of the spray heads. After a day's use, remove the spray head and tube from the bottle. Spray the remaining colorant out until tube clears.

Dip tube into warm water and spray water through the tube and sprayer squeezing the trigger several times. Remove tube from warm water and continue spraying until only air remains. Close the nozzle and screw the sprayer back into the bottle until next use. Re-use of colorants already mixed are at your discretion. Adding 1-2 glass marbles into the spray bottle enhances mixing for next use.

Installation Agreement

Granicrete International has provided a downloadable template for an installment agreement at Granicrete U. You are welcome to use it and modify it as you need for your personal and legal needs.

What you must never say

Obviously complete professionalism during installation is expected. Where we see installers falling into trouble is by telling the customer that the countertops are scratch "proof" and heat "proof". There is a difference between stating "resistance" and being full "proof". Be sure you are clear in this regard. Again, provide a copy of the Countertop Maintenance and Care Instructions with the customer saving a signed copy for you.

What you must always cover and have the customer acknowledge

Your look is custom. Even other counters you have done will not look exactly like the next one you do no matter how hard you try. Do not commit to making anything that is "exact" to a sample board by you or provided to you by your prospect.

Help the customer fully understand you will have shading and variations throughout the project which enhances the authentic look you will be achieving.

Things you do to avoid a dispute

By making sure your customer signs your agreement and the countertop care and maintenance instructions, you avoid most disputes. By having the customer sign off on the coloring you have done before applying the epoxy, you are further assured of the customer's approval.

Another area we find installers struggling is providing a dark countertop with little to no depth or variation. The problem of such a look is that the dark base shows every imperfection in troweling, epoxying, surface swirls and scratching.

Consideration beyond your control but within your control

- * Know your temperatures (ambient –surface – and epoxy)

The best temperature for epoxy, the room, and the countertop surface is around 75-80°. Using a temperature gun to measure the three will help in your epoxy process. It is not uncommon to consider using an electric blanket to warm the texture surface to help raise the temperature. (Be sure to brush the surface to remove lint prior to epoxy being applied.)

- * Know Granicrete's application limitations (working indoor vs. working outdoor)

Crystal Top Epoxy is for indoor use. In direct sun (unfiltered by windows) it will yellow over time. Do not apply or expose material to direct sunlight as it will reduce your pot-life significantly.

- * Know your humidity and how to reduce it

Epoxy will cure best when humidity in the room is reduced below 35%. Monitor your weather forecast to determine if moisture needs to be removed from the room. Using a de-humidifier will assist in the initial 24-hour period of curing to help the epoxy's finish be glass-like smooth. Humidity can also cause dimpling of your epoxy because the weight of the air is putting pressure on the epoxy. Using a de-humidifier during the entire installation will enhance dry times for texture coats as well.

The difference between tech support and crisis management

Tech support comes through questions being asked in advance of the installation. Crisis management occurs when the unasked question comes during the installation when a problem has arisen. When in doubt it is better to ask before...not after.

We will do our best to support you in the crisis, but often the concept of demolition and re-doing the process correctly is not music to one's ears.

Granicrete's support system

Your distributor is both your point of supply and for initial contact with questions you may have. Our distributors are knowledgeable but are not expected to know everything. They will tell you if they don't have an answer and they will expedite contacting Granicrete on your behalf to get the answers to your questions.

There may be occasions when your distributor is not readily available to service your questions. You are welcome to call Granicrete's Tech Team at its headquarters through extension 200 or by emailing the TheTeam@Granicrete.com.

Continuing your education at Granicrete "U" and your local distributor

- * Resources in the "U" ... <http://granicreteu.com>

The "U" has been designed to support your success. With galleries of ideas, technical articles, trade tips, marketing materials, agreement templates, and product information, the U is your place to go for ongoing support.

The U also has a forum where you can bring questions to experts and monitor the advice and guidance given for many topics.

The U also has a lead board that displays consumer inquiries desiring free design consultations. If you see a lead of interest where you are located, contact Granicrete International for the lead. These leads are a free service.

- * Your contributions to the "U"

We value your contributions of pictures, coloring formulas, and installation tips. Your contributions will become a part of your on-line gallery for your marketing efforts and may end up on the public side of the web where you can tell the world about your works.

With any pictures you upload, we recommend staging your shots with lighting and using a high-quality digital camera with interchangeable lenses.

Uses and permissions

Granicarete does not authorize the use of our name for your use in your corporate or trade name or in your URLs.

Granicarete does authorize the use of our logo as long as the entire installation system was composed of Granicarete products. The Granicarete name can never be used if you are using foreign products.

Granicarete does authorize the use of Granicarete pictures for the purpose of installing Granicarete products and as long the installer is in good standing with Granicarete International.

Granicarete reserves the right to withdraw the installers use and reference to Granicarete, its logo, its pictures, and its products should the installer lose good standing status with Granicarete International and/or its distributor(s).

Visit Granicarete University for SDS before using these products.

Granicarete International

Phone: 866.438.9464

Web: www.granicrete.com

Manufacturer/Distributor Warranty: As neither the manufacturer nor the distributor has control over the actual installation of this product, the manufacturer and distributor disclaim any and all warranties expressed or implied regarding color shade, appearance, and product performance at and after opening product containers. Manufacturer and distributor recommendations and suggestions are made without guarantee. Conditions of installer's and consumer's use of this product are beyond the control of manufacturer and distributor. Manufacturer and distributor disclaim any liability incurred in connection with the use of this product or information contained herein.

CONVERSION CHART

1 SQUARE FOOT	0.093 SQUARE METERS
60 SQUARE FEET	5.57 SQUARE METERS
1 INCH	2.54 CENTIMETERS
1 FOOT	0.305 METERS
1 OUNCE	29.57 MILLILITER
1 PINT	473. 17 MILLILETER
1 QUART	946.35 MILLILITER
1 GALLON	3.78 LITER
75°FAHRENHEIT	23.89 CELSIUS
120° FAHRENHEIT	48.88 CELSIUS

MARKETING

MARKETING

Marketing is crucial to the success of your business. We have mapped out a great plan to aid you in this endeavor. Below is a detailed checklist of what you'll want to implement immediately. One of the keys to operating your business at full potential and growing at an exponential rate is to generate all the business and contact everyone you can. Get the business first and figure out how to service it later.

1. Stationary/Website - Get all of your selling tools together i.e. business cards, brochures, website design, portfolios, postcards, media kits, press kits.

2. Compile a list of local industry professionals:

Designers (Librarian)	Architects	Builders
Landscape Architects	Remodelers	Furniture Stores
Paint Supply Stores	Specialty Art & Craft Stores	Lighting Gallery
Cabinet Suppliers	Home Expo Centers	Tile/Marble/Stone Shops
Flooring Stores	Specialty Trim Suppliers	Pool/Spa Showrooms
Realtors	Referral Groups/Clubs	Chamber of Commerce
Local Magazines	Newspapers	Aircraft/Yacht
Builders/Refurbishers		

3. Identify "EVERY" person and/or business that falls within these categories. Compile a complete profile of contacts including business name, owner's names, phone numbers, address, email addresses as well as any industry specific information. Don't bother sending out mailers unless you can follow up with a phone call.

4. Keep in mind you are providing a phenomenal alternative to stone. Granicrete is durable, environmentally friendly, heat resistant, stain resistant, exterior rated, beautiful and completely customizable to your clients' needs.

5. Make a point to become friendly with your local businesses. Put them to work for you. Get them to refer your services to their clientele by stopping in occasionally with breakfast or lunch. Give them a finder's fee for jobs they have sent you and they will be your best sales and marketing tools without you having to hire them. The best sales and marketing strategy is a free one. A few examples are real estate agents, paint stores, local hardware stores, cabinet makers, furniture builders/refinishers, photographers, general contractors, plumbers, electricians, molding installers, home stagers, interior decorators/designers, people from the boat and private airplane industry – whether they are in sales, building or refurbishing.

6. Make initial appointments to meet with people at your local coffee shop or restaurants and make sure to bring a few of your samples. Others walking by WILL notice and stop to admire, ask questions and ask for a business card. On the same note, stop in your local paint, hardware, design firms, etc., with your samples. Place your samples in a highly visible location and go "shopping". You will be amazed at the response you will get.

7. “Educate” the public in decorative finishing techniques, applications, and the array of finishes available. The general public is truly unaware of the vast capabilities decorative finishers and decorative artists have to offer. Although there are many books, shows and demonstrations on the subject, the information given is often outdated, incorrect, misunderstood or poorly organized. Potential clients may think they know what they want until they see a professional finisher’s portfolio.

8. “Shows” – offer to give free demonstrations at your local paint stores, design firms, residential clubhouses, group meetings...These businesses/groups are always looking for ways to get people in their doors for business or social gatherings. They will even provide the advertising, refreshments and sometimes products. Choose simple, easy finishes to demonstrate but still have an exciting, interesting array from your portfolio displayed.

9. Open House – Invite local businesses, real estate agents, designers and decorators, artists and finishers, general contractors, anyone you think could benefit from what you have to offer. This is a great way to plant seeds for the future by making the necessary contacts in a fun and festive atmosphere. Send out professional invitations with the date, time and location. Ask local businesses if they are willing to post a sign or hand out flyers for you. Offer refreshments and door prizes. Make the event fun and informative.

10. Newspapers and magazines, whether local or national, are always looking for subject matter. Contact newspapers and magazines ask to speak with someone about obtaining a media/press kit. Fill out the forms and return them promptly. Someone will contact you for more information. Don’t be shy when dealing with newspapers and magazines, tell them what you are trying to accomplish and let them steer you in the right direction.

Make contacts everywhere you go. Hand out business cards to as many of those contacts as possible. Take and keep detailed notes on all appointments, this way you always have them to refer back to. This also gives the impression that you remember that potential client or contact.

Most important, be positive and passionate about your profession.

Example of Your Profitability for Granicrete Designer Tops:

Shown on...

**ABC's Extreme Makeover:
Home Edition**

A&E's Flip This House

TLC's Flip That House

HGTV's Designed To Sell

DIY's House Crashers



GRANICRETE DESIGNER TOPS SYSTEM

60 SQ. FT (Average Kitchen)

GRANICRETE COUNTERTOP SET (Approximate 60 sq. ft.) **\$750**

DISPOSABLES **\$ 50**

OWN LABOR

(Day 1: 8-10 hours, Day 2: 6-8 hours, Day 3: 2-4 hours, Day 4: 2-4 hours)

INSTALLERS CHARGE TYPICALLY \$55 — \$80 PER SQ. FT.

AT \$55.00... \$3,300

AT \$80.00... \$4,800

TAKE HOME PROFIT OF \$2,500 TO \$4,000

POTENTIAL ANNUAL INCOME OF \$125,000 - \$200,000

Interested in \$125,000 - \$200,000+ per year?

Why Granicrete Countertops?

Who would have imagined resurfacing ordinary countertops to achieve incredible stone finishes by simply using the following?

- 1) A couple brushes
- 2) A hand trowel
- 3) A spray bottle

Granicrete did so in 2006 as we launched what has now become the countertop surfacing industry. Granicrete's engineered polymer-modified concrete is brushed over the countertop and then smoothed with a trowel. Our coloring system is fully integrated to produce authentic stone finishes by spraying them on our concrete. Then those beautiful colors are sealed. Our easy process is less than 1/4" thick, is stronger than concrete, and can be done in just a few days



Throughout the ages technology has always proven to be the superior choice for the consumer ... otherwise we would be still be living in caves.

To help you in promoting Granicrete over stone, understanding and communicating the following will help you in your successful selling of Granicrete.

CONFIDENTLY KNOW AND SPEAK YOUR ADVANTAGES!

Comparing Granicrete to granite, marble, and other stones:

1. "Granite and marble are inferior to Granicrete as our tops are several times stronger."

Granite and marble are typically offered in 2cm (0.75") and a 3cm (1.2") thickness. Both are fragile with the 2cm being lower priced. If you drop a pound of frozen ground beef on the granite it will likely crack and not be very repairable. You can hit our surface with a hammer with little to no damage. If you do damage it, it is repairable. We get calls from consumers asking to repair their granite and marble. They have dropped something or nicked the edge with something and it has chipped or cracked.

2. "The seams for granite and marble make those surfaces inferior to Granicrete's seamless surface."

Granite and marble are increasingly becoming inferior in quality. This was to be expected as these materials have been so commoditized. The resulting pressure for lower stone prices has pushed that industry to quarry stone that is more brittle and cracks more easily. Grades of granite and marble of been cheapened. We now hear of infusing resins into them so as to build strength to compensate for being brittle. To reduce cracking in fabrication, transport, delivery, and installation, you are finding unsightly seams being added particularly at stress points like the front and back of where the sink is cut out. The additional and unsightly seams are even more apparent in the edges. The seam from the glued under-edge is seen throughout the face of your countertop edge. The seams do not blend together. Seamless finish yields the perception of a large slab of stone. This too adds to the value perception of your finished project.

3. "Granicrete's custom effects and veining are superior to granite and marble."

With granite and marble you have neither control of natural birthmarks nor the resulting misdirection of flow from seams and mounted backsplashes. To maximize use of the slab, the fabricator is forced to cut it so as to keep fit the countertop and splashes. This often results in a disregard for flow or pattern of the stone. Consumers are stuck with the end result and told that if they had wanted the pattern to flow better it would have required an additional slab and would have raised the price. Not only can our custom coloring be carried throughout the whole surface but can also compliment the backsplashes and islands. Your guests will wonder how you found (and could afford) such a large slab of stone.

4. "Granicrete is superior to granite and marble because the finish I do for you cannot be replicated for another consumer."

Granite and marble stone types have become common. Popularity of some makes them common to be seen in multiple homes on the same street. Who wants the same countertops as their neighbors?

5. "Granicrete is superior to granite and marble because of its immediate return on investment."

Quality granite and marble have little to no way to get a return for their investment. Appraisers will tell you that you are lucky to get 90% back from their investment. So a \$5,000 installation of such stone may only yield up to \$4,500. With Granicrete that same installation may be done for \$3,500 and be appraised for the \$4,500. You get an immediate return for your investment with Granicrete.

6. "Granicrete is superior to granite and marble because we are non-porous and NSF certified."

Granicrete is the only resurfacing system certified by NSF in the world! Simply clean with a germ killing non-acid, non-corrosive cleaner with a soft cloth and you are good to do. Granite and marble are not a good choice for easy care surfaces. Being porous those surfaces are harder to truly clean. They absorb moisture out of cheese, can easily stain with wine and juice, and tend to be prone to retaining food-borne bacteria.

7. "Granicrete is superior in our customer care requirements."

Granite and marble have manufacturer care requirements that are often not disclosed. These surfaces are not recommended to be cut on nor heat applied to. Recommendations for detailing and/or resealing can be as often as every six months. Our surfaces can be maintained by the consumer with bee's wax and period wipe on - wipe off polishing per the need and desire of the consumer. As your installer I can offer you a service option for me to come out and perform period detailing as you wish. Further, should the consumer damage the surface it can be repaired.

8. "Granicrete is the superior choice for preserving the environment."

Granite and marble have a large negative carbon footprint upon the environment. These include: Quarry - Excavation - Slicing >> Overseas Shipping>> Delivery to Dealer >> Dealer Water Cutting and Polishing >> Delivery to Consumer >> Removal and Landfill waste of old top. Granicrete's comparative footprint is often as little as: Quarry and Production of cement and additives >> Transportation to Consumer ... that's all.

**What else to know and point out when the consumers say
they can get granite or marble cheaper...**

Some countertop dealers because of ever increasing pressures to drive sales in weak margins are not always providing the whole story behind their advertised pricing. Here are common examples seen across the country for advertised \$39 and \$49 granites. Common additional costs not mentioned:

- The advertisement is typically for 2cm granite and not 3cm and does not disclosed assuch.
- Edging is an additional \$22-\$60 per linear ft. (Equals \$11-\$30 per sq. ft.)
- A chisel edge is typically \$25-45 per linear ft. (\$12.50 -\$22.50 per sq. ft.) if offered at all. For Granicrete, it is our easiest edge to do.
- Backsplashes are normally extra.
- An under-mount sink cut-out can be an additional \$250.00.
- A top mount sink cut-out can be an additional \$100. Core drill outs for faucets and outlets can be up to \$20.00 each.
- If a portion of a second slab is required, the cost of whole slab is added. So when they show \$45 per

square foot for a 32 square foot slab and the kitchen is 50 square feet including splashes, at a minimum there is 16 square feet unused but will be charged for. The result = 16 x \$45 is \$720 and divided by 50 sq. ft. adds \$14.40 per foot!)

The case for Granicrete vs. high-end stone countertops:

The key is to know those high-end stone tops and where they are available (if even available) in your local market. Because of rarity, they may cost \$90 - \$140 per square foot to be installed. The savings to the consumer is greater through Granicrete while adding greater profitability to the installer. *Higher end stone finish techniques are taught in Granicrete's Designer Tops classes.*


The case for Granicrete vs. fabricated concrete countertops:

The early adopters for granite countertops and to set the trend for granite were the high-end consumers. They were the only ones who could afford granite in its early days. These high-end consumers are now wishing to move away from their granite they have had for years as get new countertops that is too expensive for others to afford.


Concrete countertops are becoming more popular and specified by designers for their clients. Such countertops run \$90-\$190 per square foot. As the wealthy trend setters move toward concrete countertops, the nation of consumers will follow. Because of this long-term market opportunity, Granicrete provides you with many advantages in this arena through our series of custom concrete countertop finishes.

1. Granicrete is superior to concrete countertops because our finishes more often look better. Most concrete countertops are integrally colored. They are bland and boring.
Ours are eye-catching.
2. Granicrete is superior because our whole system is superior.
3. Our **comprehensive strength is higher** which means concrete is softer and more prone to dents and scratching.
4. Our **sealers are superior** for scratch and nick resistance.
5. Our texture material is superior as is **not subject to spider cracking** which can later develop into major cracking.
6. You can transform tops in 3 days vs. 28+ days for a fully cured concrete countertop.
7. Being many times lighter, our material will **not create weight bearing stress** to cabinets, floor trusses or foundation.
8. As fabricated concrete tops can be from \$90 - \$190 per square foot. The **savings you can offer to the consumer is significant** along with the profitability you achieve.

Order your marketing materials and download many needed items from Granicrete University!

Support at Granicrete University  51


- Order custom Sales Brochures, Door Hangers, Business Cards, Site Signs
- Agreement Templates, Service Agreements
- SDS (Safety Data Sheets)
- Product Specifications & Tips
- Video Instruction / Pictures / Logos Use



Email

Password

or [forgot my password](#)



WHAT ' S

Checklist to Success

Your guide to success as an independent installer

GET TO DO	TIME FRAME	CHECKED OFF
Detail samples from training (<i>read countertop detailing section in index</i>)	Immediate	
Order Granicrete products for practicing and installation	Immediate	
Acquire tools, disposables, sample board wood	Immediate	
Be making additional "show-ready" boards to share	Immediate	
Watch for email with certificate and password to U	3 business days	
Order Online Marketing Training	Upon access to U	
Order Site Signs, Door Hangers, Etc. (<i>store.granicrete.com</i>)	Upon access to U	
Go through Online Marketing Training One Received (<i>Repeatedly</i>)	For 5-7 days	
Create a call and visit list for sharing your show-ready boards	In those 5-7 days	
Practice Marketing Training Skills before showing boards	In those 5-7 days	
Become more aware of local market of advertisements by advertisers	In those 5-7 days	
Read Specs and download MSDS into a binder for field access (OSHA)	ASAP	
Establish your business as may be needed per local code	ASAP	
Incorporation or LLC? (Business name)		
Business and/or Tax License		
Contracting License? (Specialty, Handyman, not GC)		
Business Insurance(s)		
Review and modify contract templates in U per your needs		
Create 1-2-3 Website for credibility (Do not worry about SEO)	ASAP	
Identify Marketing and Networking Events To Show Off At	ASAP	
Home and Garden Show(s)		
Farmer's Market, Street Markets		
Networking Groups (Realtors, Property Managers, ID's)		
Create Show Booth and Mini Booth		
Identify outsource help (plumbing, floor demolition, electrical)	ASAP	
Identify Business Referral Opportunities To Generate Appointments	ASAP	
Tile Stores Needing Exterior Installations		
Cabinet Stores Needing Floor and Countertop Installations		
Furniture Stores Needing Floor and Countertop Installations		
Specialty Stores Needing Table Tops and Installations		
Establish Progressive Targets (This month, quarter, next quarters)	ASAP	
Network Meetings Per Month		
Appointment Visits Per Week		
Installation Agreements Signed (by type) Per Week		
Installation(s) Completed Per Week and Profits		
Establish Internal Growth Strategy	ASAP	
Re-investing for equipment to enhance install pace		
Adding helper to become eventual crew leader		
Adding crews, sales, admin team		

Most important, look to someone (friend, relative, spouse) that you may entrust to help hold you accountable.

Having such help and support can be important in keeping on track.

Have fun ... do not let yourself get overwhelmed. Approach this as an adventure and learn and grow.



SANDING & POLISHING METHODS FOR DETAILING EPOXY COUNTERTOP FINISHES

GRANICRETE CARRIES ALL THE PADS FOR SALE TO OUR CUSTOMERS

We have long recommend detailing of your sample boards and countertops. You have a couple choices for detailing. You can either apply a protective coating of WB-P53 or perform a process of sanding and buffing. WB-P53 has a gloss or satin (slightly less than gloss) option.

Detailing both reduces the scratching of the surfaces and moves the gloss appearance to be close to polished stone. If your countertops are of dark finish (especially black) this detailing is an absolute must as surface scratches are more readily apparent over a dark finish.

Detailing by sanding yield an exceptional feel of a super smooth honed surface rather than an epoxy plastic-like surface.

Detailing your sample boards makes for smart marketing. Have your prospects select from a truly finished product that has been detailed both ways. The “or” close becomes their choice and knowing that choice you can then establish your estimate for service.

Granicrete’s Abranet-Abralon Method: Updated ...

Why our Mirka Method: We have tested many different sanding pads. We find the Mirka method to be best because the Mirka pads are a “sponge-like” material. Even with the epoxy being “level” there may be some low spots and the sponge pad will get those.

The other reason for the Mirka Method is that these pads are less likely to “burn through” the top deck edges when your sander is held level or slightly leaned back to the deck. Burning an edge is cutting through the epoxy and topical colorant leaving a “white edge” which then needs color touchup and either epoxied again or sealed.

- A method for dry or wet sanding and buffing is as follows using a 5” or 6” random orbital sander (at highest speeds). These pads are used with Festool professional polishers too.
- Your epoxy must be completely tack free before starting the sanding and detailing process (typically 18-24 hours).
- **If sanding and polishing new epoxy, you may start with Abralon 500 or 1000 grit wet and then work up.**
- **If sanding and polishing older epoxy with scratches you may need to start with 180 or 360 dry**

and move up and at 500 grit go wet. Or use the Abranets 400 and 800 dry. Deep scratches can be targeted.

- Sanding dry, not wetting the surface, allows for the remaining scratch to be completely apparent as a white line. Note: You should sand the entire surface with the same disc that you used to target the scratch but do so without the aggressive targeting used at the point of the scratch.. If you used the 180, graduate to the 360 and then the 500 grit. If you used the Abranet 400, graduate to Abranet 800 and then wet Abralon 1000 over the entire surface and work up.
- NOTE: Do not skip graduation of one pad grit level to the next for in doing so it is difficult to get a uniform final finish.
- Wetting the surface should be done with just water. As you move up to a finer grit pad, clean the entire surface with water and towel dry. A wet surface will achieve desired results and extend the use of your pads for multiple projects.

Be careful with the edges of your surface. Best to avoid coming to the deck edges until you have the 1000 Abralon wet pad or above. To play it safe, you may choose to get close to the edges with the 2000 or 4000 pads. Be sure to keep the pad level to the deck and not at an angle out at the edge. Do not corner of edges. If a flat level is not kept, the sanding pad could burn through the epoxy and chip off your coloring.

SANDING AND POLISHING DETAIL KIT:

1. 400 grit Abranet: dry sand is used for deep cuts and imperfections. More for target use rather than being used across the entire countertop.
2. 800 grit Abranet: dry sand to begin polishing up the 400 grit or to start target sanding of cuts and imperfections not as severe as would be targeted by the 400 Abranet. The value of dry sanding is the sanding debris settles into the cut until the cut disappears.
3. 180 and 360 grit Abralons: used dry or wet and safer near deck edges and comparable to the 400 grit Abranet.
4. 500 grit Abralon: used wet is great to use for detailing new cured epoxy. Your series is to use Abralons 500 then 1000 then 2000 then 4000.
5. Then progress to Mirka Abralon pads...
 - a. 1000 grit Abralon wet sand with water wipe of surface before and after and will only need one pad for several projects. This pad should be the first you can be comfortable to use when held level to the outside deck edge so as not to burn through the epoxy and score out the coloring below.
 - b. 2000 grit Abralon wet sand with water wipe the same and pad life the same. If can avoid the need for
 - c. 4000 grit Abralon wet sand with water wipe the same and pad life the same.
 - d. Finish polishing by spraying and wiping by terry towel the Bee's Wax. This will give you a nice polished finish of honed stone. But if you want to go to higher shine, skip the Bee's Wax and go to #6 below.

Be sure to clean residue after each sanding level using water and terry towel or Windex and terry towel.

6. As for the edge fascia, do de-gloss the fascia of the deck edges from the onset. This can be done by using the above Abralon pads freely in your hand (no sander) or using a fine Scotch-Brite sdt

pad. Use Then either polish as above with 4000 Abralon and finish with either Bee's Wax or Polarshine. If you have a chiseled edge you will apply Granicrete WB-P53 (Satin / Gloss) to the edges to bring to a similar finish as the top. 1 coat will be applied depending on the shine of the top

BUFFING AND POLISHING KIT:

7. **After the 4000 polishing, you can take the shine to a higher level using a 7" handheld polisher with at 1800 to 2000 rpm. This polisher is needed to take the shine to a much higher gloss** (like the original Crystal Top finish) using the 7" twisted wool pad followed by 7" foam polishing pad, and then finished with the soft white 7" lamb's wool pad.
 - a. It is important to de-lint the twisted wool before using it. Turn on the polisher and with a flat edge of a margin trowel to fluff and de-lint.
 - b. Then apply dabs of Polarshine on the twisted wool (about 6-8 dabs across the pad making an "x". Then smear the wool pad into the countertop surface to minimize sling off and begin to burnish the surface. Keep the wool damp but not soaked with polish. Extra polish can be wiped away with micro-fiber towel. Work the section and then repeat dabs as needed when more polish is needed for the next section..
 - c. After completing the entire top with the twisted wool, then use the Black Foam polish pad. Again a few dabs on the pad and smeared into the surface and then begin to burnish/polish. Wipe extra material with micro-fiber. Repeat dabs as needed when more polish is needed. Repeat this process until deck is finished. Be sure to wipe off any cream that that may build up on the edge fascia.
 - d. Finish with a lamb's wool pad (**dry do not add polish**) for an extra shine and more consistent shine.

When sanding let the pads work for you. Do not over apply pressure to the sander.

WB-P53 APPLICATION OVER CRYSTAL TOP EPOXY

Tech Question: Why am I getting orange peel or bubbles using WB-P53 over the Crystal Top Epoxy? *(Note: We are keeping this question posted for another month if you have not already read this special update.)*

Reasons:

1. Using the wrong roller. The typical white foam roller not made for urethanes will push the sealer but also its "webbing" design pulls of the sealer as it rolls as well. Foam rollers are not our recommended choice.
2. Using a 9" lint-free roller. This size roller does not offer you the control of a 6" 'weenie' roller. It load more product than needed and often results in over-rolling and lifting sealer back off leading to orange peel. When de-linting do not wrap your roller to tight. Doing so will result in tape lines and impressions in the roller causing dimpling patterns as you roll out the WB-P53.
3. Using a paint pan to roll off excess. We are finding installers in imprinting the markings of the roller pan into their roller and transferring the marking on the countertop leaving skips and marks in the rolling. The result is the need to over-roll to eliminate these which then leads to orange peel finishes.

Suggestions:

1. First begin with practicing on your time than to have to perform when on someone else's dime. Get confident in what you do before doing it.
2. Consider a light sanding and cleaning of the dried countertop epoxy.
3. Use a good clean roller. Sherwin Williams **6" Black Foam Roller for urethanes is excellent.**
4. Mix the A. Mix the B. Be sure to use a slow speed drill. Do not mix on high speed to avoid creating air bubbles.
5. Filter and mix your WB well. Pour each through a paint strainer. Then Mix the A+B together. You have the option to then add up to 1 oz water per 24 mixed ounces and mix some more. Granicrete carries WB-P53 in convenient 24oz kits for smaller projects like countertops and WB-P53 comes in satin and gloss. Mixing in small amounts like this can be done by stir sticks. The purpose of the strainer is to filter out any lint or the de-glossing agents that come with the product.
6. Pour a small amount (about an 8-10" puddle) on your countertop, load the roller through it and begin to roll out the sealer from that puddle over an area of 4-6 sq. feet. If you are using the Black Foam Roller you may roll it longer. Roll quickly in "V" and "W" shape. **Keep the material thin. DO NOT FLOAT THE MATERIAL!** Apply moderate pressure while moving through section to section. Each section repeats with small pour and then rolls out.
7. Do not roll your front edges or front yet. Save to roll the edges as you will get imprints into the roller. The key is to roll out, don't over roll, don't leave puddles and streaks, and get to the next 4-6 sq. ft. section. **Move quickly and keep it thin to win! Feel like you are rolling the material out with some pressure like an ink roller.**
8. Try to keep the roller in constant contact with surface without lifting it up. Work the section and move over. Pour your next puddle and repeat.

AFTER COATING THE ENTIRE SURFACE...

9. Extra Immediate Step Technique Option 1: Installers are having success in taking the 1/4" nap delinted roller that is dry, and with the surface just rolled with the WB-P53, and with a very light hand, lightly draw over the surface with the dry roller to pull up excess and smooth the WB-P53 at the same time. You can continue to use the same foam roller or change to a new foam roller with the light hand technique.

As the formulation of WB-P53 enhanced July 2019, the use of a perfume mist of Denatured Alcohol is not needed and has not been continued for use with this new formulation.

AFTER DRYING OVERNIGHT ...

10. You will find the orange peel can be further reduced if need be by polishing using the 4000 Abralon Cushion Pad the following day.

Do keep room, surface, and product temperature in the 70's the best you can when preparing to roll and after rolling while the WB-P53 surface settles to tack-free. If humidity over 30% exists, do consider a de-humidifier during the process and its curing.

Installer Frequently Asked Questions

How do I apply WB-P53 over itself if I need to re-coat the surface?

Sand existing WB-P53 with 400 Abranet. The surface needs to be completely de-glossed and flat before cleaning and applying. If you have dimples or imperfections in the surface those need to be completely sanded out before re-coating.

What is the difference between the Gloss and Satin versions of WB-P53?

Gloss will give a very high shine when applied over Crystal Top Epoxy. Satin gives a very similar finish to natural un-polished stones and marbles. It has a light shine that provides a very natural stone like appearance. If you are looking for a more matte finish, then 400 and 800-grit Abranets and stop at 1000 or 2000 Abralon.

There are some imperfections in my finish coat, how can I repair?

If you experience any problems during your application process (bubbles, streaks, cloudiness...) then you will need to sand and remove all the imperfections before re-application.

If you just have dust particles that landed on your countertop then you can detail the surface using Abralon 4000 pads. It is a good idea to detail every countertop with Abralon pads to provide a smooth finish that will give the look and feel of natural stone.

What is the heat resistance for WB-P53?

It is always recommended that trivets or hot pads be used when placing pots and pans on your countertops. Extreme heat can cause damage to the surface. If damage does occur, call Granicrete Tech Support for help in directions for repairing the surface. WB-P53 will withstand normal operating temperature in a kitchen, but it is not designed for direct heat (direct from flame or electric burner) contact.

Can WB-P53 be used for exterior applications?

Sunlight should not cause any problems to this sealer. We do not recommend epoxy under this sealer or any sealer for outdoor applications.

Is this a difficult application?

Whenever you are applying a clear coat over a perfectly smooth surface like Crystal Top Epoxy you need to practice. It is not difficult to apply, and it requires attention to detail. With just a little practice you can become a pro of proper technique. WB-P53 is sold in 24oz kits so you can practice your technique on sample boards before coating a customer's kitchen.

Will WB-P53 scratch?

Yes, all coatings will scratch. P53 does have exceptional scratch resistance and is far superior than what is provided from the Crystal Top Epoxy. It does not provide a bullet-proof, scratch-proof surface. It does provide a highly scratch resistant surface that far exceeds countertop industry standards and will last for years with no need for re-seal.



SUBJECT: USDA COMPLIANT EPOXIES AND SEALERS

The following products meet USDA performance requirements per CFR Title 21, Part 175.300 as a concrete epoxy and/or sealer for floors, countertops, or walls:

Epoxies:

- CRYSTAL TOP EPOXY, CRYSTAL TOP EPOXY – AHD, MVEP, CA-FD, METALLIX EPOXY, CASTING EPOXY and NOVOLAC SA220

Sealers:

- Poly Low Odor, WB-P53, SL-P60, Polyurea 80C

These products are manufactured per Granicrete's specifications and supplied by Granicrete International, Inc.

These products are suitable for application and should be applied per our Product Specification-Data Instructions. For U.S.D.A. minimum performance criteria, these products are best applied when the temperature of ambient and surface to be coated is 60°F or above. All coats of these products should be allowed to cure at temperatures of 65°F or above.

Their use will not result in the harming any food products when used and applied as stipulated. These products will stand up to heavy duty cleaning and dampness and are grease and acid resistant. They are impervious to moisture. They do not have any known carcinogens, mutagens, or teratogens classified as substances. They are not listed as pesticides nor do they have any known characteristics associated to pesticides.

Sincerely,

Marc Winkelman, Founder

Granicarete Countertop Care

Cleaning

Most dirt & residue	Use soapy water or quality non-aerosol window cleaner, rinse and wipe completely dry with a soft cloth or non-abrasive sponge.
Preventing hard water marks	Rinse and wipe completely dry after cleaning; clean up spills before they dry using a soft cloth or non-abrasive sponge.
Removing hard water marks	Use a non-aerosol cleaner formulated for removing hard water marks or a mixture of vinegar and water. Rinse and wipe dry within a few minutes after applying using a soft cloth or non-abrasive sponge.
Difficult residue	Use warm water and non-abrasive sponge. Wipe dry using a soft cloth or non-abrasive sponge.
Disinfecting	Occasionally, wipe surface with diluted non-bleach disinfectant. Rinse top thoroughly with water and wipe completely dry with soft cloth. Bleach cleaning solutions must be diluted 3 parts water to 1-part bleach. Straight bleach will yellow the surface.

Avoid getting cleaners and solutions the bleach solution in your eyes or bare skin. Always follow the manufacturer's safety instructions.

Preventing Heat Damage

Always Minimize Direct Heat Contact	DO NOT PLACE HOT POTS, PANS, ETC. DIRECTLY ON THE COUNTERTOP SURFACE. Granicarete <u>should not</u> be exposed to direct heat exchange. Granicarete's scorch resistance has been tested to 500°F and may possibly tolerate a brief moment of direct heat. Always use heat trivets or hot pads when placing any hot object on any surface. Always use a trivet under your portable heat generating appliances such as toaster ovens, griddles, fryers, and crock pots.
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Preventing Other Damage

Avoid Strong Chemicals	Strong chemicals, such as paint and nail remover may damage the finish of your Granicarete countertop. If a spill does occur, promptly flush the surface with water and fully rinse.
Avoid Cuts/Scratches	Do not cut directly on the Granicarete countertop. Use a quality cutting board. Use of coasters and placemats will reduce scratching.

All warranty and repairs, implied or explicit, are strictly between the Customer and the Installer.

Read by _____ Installed by _____
 Customer Date Company Phone

EPOXY CURE POINTS

Heat rings from a coffee cup seems to be one of the biggest indicators that the Crystal Top Epoxy is not properly cured. The heat from the rim on the bottom of a coffee cup is very direct and intense. As the epoxy continues to cure out it will gradually grow a stronger resistance to all heat rings, but insuring that you achieved a full cure will prevent this waiting process. To increase the resistance against heat Granicrete has developed Crystal Top Epoxy AHD (Advanced Heat Diffusion). This epoxy when properly cured has eliminated the heat ring issue. We have created some further instructions to help ensure that you achieve a full cure with either epoxy.

The first step in achieving a full cure is storing the epoxy in a room that is 77°F or warmer 24 hours prior to the installation. The next step is mixing the epoxy properly which is detailed in the product information sheet. Also, check humidity levels. If above 30-35% and higher, run a dehumidifier before and during application and for the initial curing period.

Adding more hardener **will** soften the epoxy and **will** prevent the epoxy from reaching an optimal cure. A 1:1 mixture will provide the optimal strength and heat resistance. Always measure out each component before mixing them together. NEVER estimate your mixing ratio.

In order to achieve a proper cure with the epoxy it is essential that the ambient temperature in the room is 77 °F or warmer throughout the entire curing stage. The curing stage on Granicrete's Crystal Top epoxy is 7 days. If an ambient temperature of 77°F is not maintained throughout the curing process it will take significantly longer for the epoxy to reach its optimal strength and heat resistance. Example: If you epoxy in a room that is 60-62 degrees F it will take 14-16 days for the epoxy to reach optimal strength and heat resistance.

During the application process it is essential that the surface, epoxy and ambient temperatures are all above 77°F. The countertop texture and colorant must be completely dry before applying the epoxy. It is also recommended that a de-humidifier is used whenever possible. If moisture is trapped under the epoxy it can cause the epoxy to cloud up, dimple or not fully cure.

If an optimal cure is not achieved a heat gun (not a torch) can be used to finish the curing process. The epoxy needs to be on the surface for at least 24hrs before attempting to use a heat gun. The temperature of the epoxy needs to reach 160°F to complete the curing process. Do not hold the heat gun in one area too long or the epoxy can burn. It is important to wave the heat gun over the surface to increase the temperature. An infrared thermometer can be used to check the temperature of the epoxy while heating it with a heat gun.

By following the proper mixing steps detailed on the product information sheet and following the steps listed above Granicrete's Crystal Top Epoxy will achieve a full cure.

We are always continuing to improve our products and training methods. The last improvement in epoxy was the AHD (Advanced Heat Diffusion) which significantly helped with heat rings. We are constantly working to improve all our products and training materials to keep Granicrete installers ahead of the industry.

This information is for use by Granicrete Independent applicators only

www.granicrete.com

GRANICRETE INTERNATIONAL

Phone: 602.438.9464 Toll Free: 866.438.9464



Independent Installer Application For Certificate of Completion of Course Training:

Training Course: _____

Are you already a Granicrete Installer?

Yes / No

Today's Date

Today's Training Location

Applicant's First Name

Applicant's Last Name

E-mail Address

Company Name

Street Address

Street Address

City

Region - Province - State

Postal Code

County

Phone Number

(Include area code)

Cell Phone

(Include area code)

Date of Birth (mm/dd/yyyy)

/ /

Applicant's Statement and Acknowledgment:

1. I hereby confirm that the Instructor has provided me with curriculum and instruction in connection with the training with respect to the products and services offered by Granicrete.
2. Granicrete products will be the only products used for system's installations.
3. I will be receiving a certificate of course completion from Granicrete International which permits the purchase of Granicrete products and in no way constitutes an agreement by Granicrete nor this instructor to warranty of the installation of said products. Such warranty is strictly between you the installer and your client.
4. I also accept that access and use of Granicrete's support systems is a privilege and not a right.
5. I also acknowledge that the use of "Granicrete" in company name or web domain not to be used.
6. I also agree that the issued certificate is the property of Granicrete International and would promptly be destroyed if my relationship with Granicrete International discontinues.
7. I will discontinue use of pictures of Granicrete installations, logo, trademarks and name immediately upon request of Granicrete.

Installer's Signature

Product Use/Specification
Sheets and Safety Data Sheets
can be found in Granicrete
University.

Review of both are
recommended before use.

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