



Countertop Surfacing Systems

Unlimited "Authentic Designs and Artistic Finishes"

Countertops, Bar Tops, Tabletops, Vanities, Walls, Art and More

The Original and Award-Winning Resurfacing System!



Includes

Recipes

- > Granite
- > Marble
- > Concrete
- > Wood
- > Other Stone
- Other Synthetic

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

Our Mission
Globally support wholesalers
and professional installers with
financially rewarding
opportunities through
our highly innovative
surfacing systems.

Equally important to 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" has been designed 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 if 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 guarantees you make in your installations are strictly between you and your clients.

How to Get Training for our Systems:

Original Countertop Surfacing

For those needing more firsthand 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 firsthand 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.

Tool Lists

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

	Torre (otarior – o r	APPLICATION	S	Р
	SHOP VAC	Clean Up and Fabrication	Х	
LEE NAM	DE-HUMIDIFIER	During Epoxy in humid conditions	X	
	SPACE HEATER	Drying Texture Maintain Room Temp for Epoxy	Х	
	TABLE SAW	Fabrication		Х
	PORTABLE AIR COMPRESSOR	Fabrication		Х
	PEDESTAL FANS	Drying Texture		Х
	CHOP/MITER SAW	Fabrication		x

Power Tools

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

	SKILL SAW	Fabrication	Х
	JIG SAW	Sink Cut	Х
	BISCUIT SAW	Fabrication	Х
	PLUNGE ROUTER	Sink Cut / Machined Wood Edges	Х
	BRAD NAILER	Fabrication	X
Zon A P	ROTOZIP	Removing Backsplashes	Х
The state of the s	SAWSALL	Removing Backsplashes	Х
	½" DRILL	Mixing Texture	х

Tool Fittings

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

Hand Tools

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

Supplies - Disposables

	APPLICATION	S	Р
Wood Glue			Χ
Loctite			Χ
Mirror Glue			Χ
Clear Silicone Caulk			Χ
Small Propane		Χ	
Disposable Gloves		Χ	
Formula 409		Χ	

Windex		Х	
Scouring Pad		Х	
Cleaning Alcohol		Х	
5-gallon mixing pail		Х	
Quart Measurers		Х	
5 Qt. Measurers		Х	
2 Gallon Pails		Х	
Paint Stir Sticks		Х	
10-20 Spray Bottles		Х	
3" Chip Brushes		Х	
3" Foam Brushes		Х	
Tile Sponges		Х	
Sea Foam Sponges		X	
0000 Steel Wool		X	
Marking Pencil		Х	
2" Painters Tape		Х	
1/2"-Groutline Tape		Х	
¾" Grout Tape		Х	
36" Craft Resin Paper		Х	
Roll 2 mil Plastic		X	
13" Masking Paper		X	
18" Masking Paper		Х	
Paper Towels		X	
Rags		Х	
Contractors Hand		Х	
Soap			
GRANICRETE	Sanding discs to detail your epoxy countertop	Х	•
DETAILING KIT	finishes (see countertop detailing in index)		

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 pails 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 jobsite. 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.

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 from 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 \$2 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 section of the countertops may be best 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 tabletop, 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 looks. 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 making 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 an undermount sink as it is denser and can better hold mounting clips and loaded weight of the 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 undermounted. 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 an 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 on site due to its size and shape. To fabricate and coat offsite and deliver on site 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 tomeasure the length and width of each individual piece including the backsplashes. Calculate for overhangs when doing island measurements as well as backsplashes. Be sure to measure the inside edges of the sink cabinet to determine the 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 will equal 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 into 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 flushed 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 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 $\frac{1}{4}$ $\frac{1}{2}$ ".
- 2. Use a level (4'-6' long) to run along the wall to verify they are 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 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 them 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 ½ - ¾" 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 more 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 1/8" for texture and epoxy and so will the top edge of the splash. Therefore, you will want to give room for around 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.

<u>Water Damage</u> – 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.

<u>Delamination</u> – 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 / Screwdriver

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 Rotozip 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 crowbar chisel, tap the chisel down behind the splash slowly and gently popping it away from the drywall.

45° vs. 90° 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 $(1/2" - \frac{3}{4}")$ 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

<u>Sound Construction</u> – 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.

<u>Enough Support</u> – 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 enough 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.

<u>Water Damage</u> – 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 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 <u>tiled</u> surfaces. Consider the following:

- 1. Do the two brush coats over the tile. Allow each coat to dry thoroughly. (Or a coat of Granicrete Versa Primer followed by one brush coat.)
- 2. Do one thin trowel coat to fill the grout lines and create flat surface drying thoroughly.

- 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.
- 4. Do another thin brush coat and dry thoroughly.
- 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 fabricating 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. Granicrete's Versa Primer can be used before doing 1 brush coat.

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 had 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 building up under the texture.

Allow surface to thoroughly dry using towels and fans. Do not begin the texturing steps until the granite is dry. Granicrete's Versa Primer can be used before doing the first brush coat.

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 including SL-P60 and Polyurea 80C. Contact Granicrete with recommendations for your 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 main water line off.
- 2. Turn on faucet and remove all pressure in the faucetlines.
- 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 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.

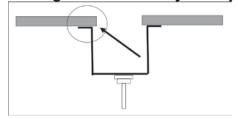
Cutting a new sink template

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 bowledges by 1/8" to ½". 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 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 easy 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 not uncommon 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 ¾" 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 ¾" down from the top edge of the sink. Do your texture steps keeping the edges very 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 drain rim, cover the drain whole, and replace the drain rim after completion. Monitor your colors and epoxy to prevent 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 undermount sinks

- 1. If possible, flip 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 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 have just installed a beautiful and functional undermount or drop-in sink.

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 are 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 areas by placing duct tape up and under the inside of the cabinets and caulk from the top side.

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 it 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, use a sander or grinder to remove and then paint the exposed with Hydro Barrier Membrane.

Formica non-drip edges need surface planing to make them level. Tile drip edges need to be removed. All exposed wood needs to have the Hydro Barrier brushed on.



How you know you are now "Clean and Sound"

Rule #1 is clean and sound. If you are 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 clean and the soap is removed. Clean the counter with Windex to remove all residues. Allow it 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 kraft 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 halfway 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 3/4" 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 wellbeing. 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 our 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.

Granicrete 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.

Another area is the back outside edge of the MDF where it will be placed against the wall. Treating that back and underside will also prevent water intrusion leading to wood swell and countertop texture delaminating.

Hydro Barrier is also brushed where wood pieces are joined. This includes the faux edges and joint seams on the deck of the countertop.

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

INTERIOR FABRICATION

Granicrete is designed and engineered to resurface over existing tile, Formica, cultured marble, and other solid surface countertops. However, many times when a remodel is started it may require fabrication of one or all the countertops.

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 Granicrete. A new top must be fabricated using MDF (medium density fiberboard). For the area around an undermount sink or where exposure to water is more prevalent MedEx, Extera, or MDO is <u>RECOMMENDED</u>. 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 Granicrete 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 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 Granicrete 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.

Granicrete 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 ½" or ¾" MDF. ½" 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 horizontal you will have to color, seal and finish the backsplashes placed flat and then glue them in place.



When building full splashes don't 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 provide 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 ½" shorter. The ½" 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 recommended wood for building interior countertops. MedEx, Extera or MDO should be used for undermount 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 are a requirement.

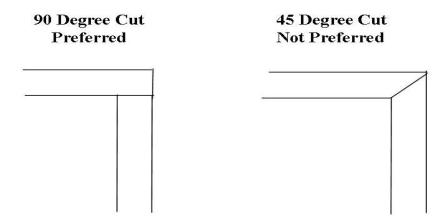
Always use the straight edges of your fiberboard (typically each sheet is 97"x49"x3/4"). Using a T-square and tape measure be sure to draw your outline accurately for making your cuts. Check twice so you only cut once.

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, hire a carpenter or go to 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 make your joint cuts near the sink or 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 each other with the 90° edge cut on the left being 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 $1/8" - \frac{1}{4}"$ of lift on the surface.

BISCUITS & MITER BOLTS

Tools Required:

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



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

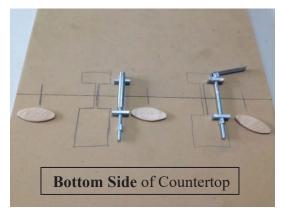
Joining pieces together requires the proven method of biscuits and miter bolts. This proven method should not be deviated from. The biscuits provide reinforcement so the two countertop sections don't shift up and down. The miter bolts pull the two separate sections together for a tight fit.

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.

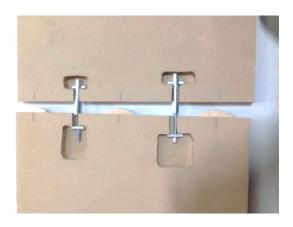
Using a flat surface, flip the pieces being joined upside down so that you are working on the bottom surface. Align the pieces together and make markings for the biscuits and miter bolts.

Trace the "dog bone" shape snuggly 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 $\frac{1}{2}$ 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 is squeezed out when the miter bolts are tightened. If the joint is not sealed with glue when the countertops are flipped over and 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 $\frac{3}{4}$ " MDF, the exposed edges must have a strip of MDF attached below the top to create a false edge that is $1\frac{1}{2}$ " thick. Rip $\frac{3}{4}$ " pieces from the $\frac{3}{4}$ " MDF. These strips should be glued to the undersides of the countertop that are visible and attached with a $1\frac{1}{4}$ " 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 ½" 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 avoid the pieces from moving by strapping them to supports. Do not over tighten.

Be sure you have 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" shaped 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 that 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 if 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 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.

Exterior Fabrication

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. Granicrete does not recommend epoxy being used outside even when being applied under a covered patio.

When building a countertop for exterior applications you need to make sure that Hardiebacker® is used as your substrate that you apply Granicrete Countertop Blend directly to. If Granicrete's Countertop Blend is used to coat over wood for exterior application there is a good chance that it will delaminate from expansion and contraction of the wood. Hardiebacker and Cement Board are cementitious products that expand and contract at a similar rate as Granicrete Texture Blend & Countertop Blend.

Outdoor Table or Top:

Typically, you will need a wood substrate to mount your base or legs to the table, but since it is exterior you need to have Cement Board or Hardiebacker® as the surface you will be coating. Follow these easy steps to build a long lasting durable outdoor tabletop.

- 1. Cut a piece of exterior plywood the size and shape of your desired table.
- 2. You will also need to cut the Hardiebacker or cement board to the proper size of your table. Don't forget to cut strips to cover your edges.

(Be sure to use the right tools and saw blades. Use a diamond blade or Hardiebacker blade when using a circular saw to cut Cement board or Hardiebacker and always wear the proper PPE)



3. **Glue and screw** Hardiebacker or Cement Board to the top and sides of the plywood. Keep the sides as tight to the edge as possible so the gap on the top corner is small. (Push down on sides to see if movement in seam occurs.)

Hardiebacker Over Exterior



Tops and Edges - Glued AND Screwed



ALLOW GLUE TO DRY

4. Use cement board fiber mesh tape to tape over all seams including the top edge.

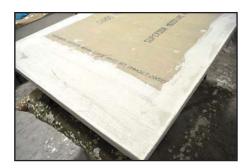
Professional Tip: Before starting the coating process it is best to mount the table to permanent or temporary legs. This will help prevent the wood from warping during the coating process which puts stress on your seams. Make sure you have ample cross

reinforcement under your decking to spread weight stress.



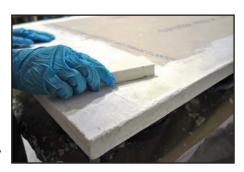
At the bottom edges, use Granicrete Hydro Barrier Membrane to coat underside of wood substrate adjoining the Hardiebacker or cement board.

5. Cover all taped seams with Granicrete Texture Blend (follow mixing instructions on the bag) or Granicrete Countertop Blend (mixed slightly thicker than 3:1). Keep the application thin; do not create a heavy build up over the joints AND be sure to <u>push</u> texture into the seams filling them under tape.



ALLOW TEXTURE TO DRY.

 Using a Granicrete 60-grit rubbingstone knock down all the joints that were filled. This is a light knock down, do not sand through your tape. Dust off the surface before proceeding.



PUSH DOWN TO SEE IF CRACKS OR MOVES.

7. Trowel a thin coat over the entire surface, edges, and bottom of edges using Granicrete Countertop Blend (mixed 3:1) or Granicrete Texture Blend (follow mixing instructions on the bag). (Push on surface and determine if 2nd coat needed.) (After drying, you can mist seams with water and allow to sit overnight. See if



hairline cracks appear. If appear then seams are not yet tight.

ALLOW TEXTURE TO DRY AGAIN

- 8. Prime the surface with 2-parts water: 1-part Granicrete Super Concentrated Polymer before proceeding.
- 9. You have two directions you can go from this point to finish your table or top:
 - ❖ Use Granicrete Flooring products to create a natural stone finish that will have some texture (Flagstone, Barn Wood, Travertine, Slate...)
 - ❖ Use Granicrete Countertop Blend to create a flat surface that will resemble granite, marble, or polished concrete surface. When using Granicrete Countertop Blend there is no need to apply brush coats at this point since you have already created a build-up on the substrate. You can proceed straight to edges and trowel coats.
- 10. Follow the directions in your Countertop or Flooring manual to finish texturing the surface and read the section on sealing exterior countertops.

Remember that NO epoxy is suitable for exterior application! Since epoxy will not be used to seal your table you <u>cannot</u> use FX-Shades or Advanced Suspension colors.

BARN WOOD TABLE



Outdoor Countertops:

Most countertops and bars you coat for exterior application will be for BBQ Islands. Make sure you follow your local codes and regulations when it comes to building the island structure and sub-top. As for the countertop follow the instructions above for building an outdoor table. If you cannot use plywood because it is adjoining to the Grill, then you need to at least double or triple stack your Hardiebacker or cement board to get the thickness your customer desires.

Another option is pouring a concrete top over your base. Make sure you allow the concrete top to fully cure out before coating and sealing the surface. This will be a more costly and time-consuming process.



COATING PROCESS

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, avoid shortcutting 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. Aquality 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.

1st – Brush Coat (Some use Granicrete Versa Primer for this step.)

2nd – Brush Coat

3rd – Edge Profile

4th - Trowel Coat

5th - 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 High Strength Countertop Blend.







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 (e.g., two 32 oz cups texture to one 32 oz cup water). Start with this size container and identify your coverage and mx more as you need to complete this 1st coating step.

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



Tip: Instead of dipping brush and applying, pour the mix and use the brush to move but be sure to do a thin even translucent coat. This technique is much faster.

It is critically important to run the brush strokes the <u>length</u> 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.

Undermount Sink Planning Tip: Be sure to apply on inside edge of the sink cut out <u>and</u> brush back from the underside approximately two-three inches as well. With your brush, remove any drips on the bottomedge.

2nd Brush Coat - "Profile Coat"

Once the first coat has dried completely the second coat is applied 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 very different. The 1st coat is essentially a primer coat to which the 2nd will adhere. You will be building a bit thicker brush profile and will not see any sign of substrate (i.e., laminate, MDF, tile...) exposed through this brush-coated 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 <u>and</u> 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 TOEGES

Edges

MIXING RATIO

4 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.

Squaring Front Edge and Backsplash if Needed:

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 buttery consistency. 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** 1/4" **thick.**

Allow the material to stiffen and <u>use the clean edge of the margin trowel to</u> "<u>s</u>have" 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.

TIP: Using a rounded edge of a slightly damp tile sponge to roll the edge smooth with deck top and edge face "melded" together.

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: This edging material is also mixed at 4:1. This edge is left completely square but requires the buildup of at least a 1/8" 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 also requires the "melding" over the top lip of the edge. Instead of frosting like the chiseled edge, it is just important to get material on thick enough, preferably about $\frac{1}{8}$ ". 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. The lightly damp sponge can be tapped on the texture to soften trowel lines.

<u>Professional Tip</u>: If you overwork 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 knocked-down stipple will occur like 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. **You will not do a 4:1 edge coat.** Then 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 or trowel 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 Texture to Water ratio. There are many types of trowels to choose from but a 14" pool trowel or plaster finishing trowel. Magic Trowels also work great for the 1st trowel but not for the 2nd 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.

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

Concrete Countertop Texturing Because of the Non-Epoxy Finish:

Some customers may want a surface that more resembles a solid pour concrete countertop. Granicrete is the perfect alternative to solid pour because of the quick installation, unlimited color selection and better performance.

To achieve a concrete countertop finish you will want to trowel the surface as flat as possible to replicate a polished concrete countertop. A mild texture can remain as the Crystal Top Epoxy will completely fill in texture for indoor projects. If texture is left in the finish trowel coat you will be able to feel it after sealing the surface.



To provide a flat finish when sealing with polyurethane you need to make sure the final texture is flat.

To achieve the flattest texture, follow these simple steps:

- 1. Apply your 2nd Trowel Coat slightly thicker than normal.
- 2. Wait until the surface loses its shine (this occurs when most, but not all moisture has escaped from the surface)
- 3. Using a pool trowel at a 15-20 angle and mild pressure make multiple passes over the surface knocking down any texture and smoothing out the finish trowel coat.

Note: Granicrete's 40 and 60 grit and 100-grit sanding discs that mount to a random variable orbital sander can provide a smooth texture finish to compensate for slight imperfections in hand troweling.

<u>Professional Tip</u>: The concrete countertop trowel process will be colored and will be sealed using a choice of Granicrete's UV inhibitor polyurethane sealers instead of epoxy.

ALLOW TROWEL COATS TO FULLY DRY BEFORE PROCEEDING

Pre-color Preparation

A few final steps before coloring will ensure 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 fisheye.

Concrete Countertop Sanding:

The first step in the sanding process is using Granicrete's rubbing stone to clean up any big bumps or pieces stuck to the surface. Do not over sand as this will cause scratch marks.

The second step is sanding the surface with our 40 & 60 and 100-grit diamond resin pads using a random 5" orbital at its higher speeds. Using these discs will help create a smoother finish, but they are not required.

Do not over sand the surface with these pads. Over sanding will polish the surface creating closed pores that doesn't allow for proper color penetration or proper bonding of your polyurethane.



Installation Steps of Real Metallix Countertops

CA-FD or Crystal Top Epoxy infused with Granicrete Mica Essence metallic powders for marble and designer finishes.





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 may be required to strengthen the countertop substrate and bridge seams or imperfections in the substrate. If the substrate is sound, flat and no 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 a must 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.

<u>Step 2: PRIMER</u> (Only needed if coating directly over laminate <u>without</u> the use of Countertop Blend) Apply Granicrete Versa Primer to ensure good adhesion over exiting laminate and solid surface countertops. Allow a couple hours for Versa Primer to get initial full dry. Then use needed amount of CA-FD or METALLIX EPOXY mixed with 226 grams (1 jar) of Mica Essence to 1.5 gallons of mixed epoxy.

The benefit of adding Mica Essence to your primer is simple. Should the primer coat become revealed from the misting alcohol or solvent into your 2nd coat of Mica Essence infused epoxy, your primer coat may be revealed. The contrast for such you establish by choosing the color(s) in your primer coat.

Step 3: REAL METALLIX COAT

This is the fun step!! CA-FD, METALLIX EPOXY, and Crystal Top Epoxies can be used to create unlimited designs and colors.

Crystal Top Epoxy - 100% solids certified countertop epoxy designed for interior applications only. Granicrete's Countertop Epoxy will provide a high build beautiful finish that is easy to work with. **Granicrete's CA-FD and Metallix Epoxies** will set faster and hold your design the best.

Real MetalliX is done for all types of surfaces and has become a widely accepted artform. Hence, you need to learn of these ways to create movement through playing on your own time before performing for pay.

Real MetalliX is play time where you get to unleash the artist within.

The Movements created in the MetalliX coat using the following techniques:

Apply different colors of Mica Essence infused epoxy in irregular patterns and allow to start 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. Real MetalliX will always have some movement with shading and light and dark areas.*

- 1. **Move by tools:** This can be Magic Trowel, Finishing Trowel, Brush, comb, sponge, or about anything.
- 2. Move by air: Using a hobby air pistol attached to an air-compressor you can blow the curing colored epoxy into specific directions and into itself. Such permits creation of veins or softening like cloud or soft marble. You will also see variations of colors applied to take place as the Mica Essence blends together. This can be repeated until the epoxy begins to set. A misting of alcohol or solvent can extend the period of repetition.
- 3. Move by solvent or alcohol: Mist or dribble solvent onto epoxy.
 - Crystal Top Epoxies: May wish to wait 20-30 minutes for epoxy's self-leveling earlier may wash-out the effects desired.
 - CA-FD and MetalliX epoxy: May wish to wait 10-15 minutes.

The different solvent and alcohol effects:

- Isopropyl will soften lines and yield minimal elements of pearlescent looks.
- Denatured alcohol will yield more line softening and more pearlescent finishes.
- Acetone will have significant line softening and deeper 3D-like pearlescent bubbles or hammered finish.
- Other solvents (i.e. mineral spirits) should be guarded in use as they may carry oils that weaken the epoxy. Such may be more appropriate for "art pieces" hung on walls and yield a strong hammered finish.
- Caution: Do not over saturate the surface as this can cause solvent entrapment or delamination.
- Mica Essence mixed in the solvents: Adding Mica Essence with solvent and spraying from a spray bottle will penetrate into the epoxy and create additional marvel looks and stunning finishes.
- 4. Move by flame (plumber's torch): Extreme caution must be used if you have infused solvent and alcohol. If such has oversaturated the epoxy, the torch can set the epoxy on fire. Using the torch can move the epoxy and create varying and finer pearlescent looks. Note: Too much torching infuses carbon dioxide from the end of the flame into the epoxy which can cause premature yellowing of epoxy especially for lighter colors like Charred Pearl.

Step 4: CLEAR COAT

After completing coloring and surface has dried, then apply the Clear Coat of your choice (Crystal Top Epoxy, Crystal Top AHD, WB-P53, SL-P60, Polyurea 80C). This is required to lock in and coat over any colorant that is at the surface.

If applying Crystal Top or Crystal Top AHD as your clear coat, sand the MetalliX coat with 1000 grit to aid in removing lint and enhance adhesion of the clear coat. Using acetone wipe is very good for removing the dust from sanding.

Before applying your clear coat, we recommended that you take 400 or 800-grit sanding discs to remove lint or surface imperfections. This sanding will give you a much better finish for rolling out your clear coat of sealer. After sanding, wipe the dust with alcohol or acetone.

MetalliX Installation Options & Procedures

Option 1:

- **Step 1:** Prime with Granicrete Versa Primer.
- **Step 2:** Apply Colored CA-FD or Mica Essence infuse CA-FD, MetalliX Epoxy, Crystal Top, or Crystal Top AHD
- **Step 3:** Same epoxies are used and are poured out into individual infused colors of Mica and mixed separately. These then are placed on the surface for coating and play. Note: Mica Essence comes in 226-gram quart jars which are good for 1.5 gallon of epoxy. Breaking these into smaller portions requires the same of the Mica Essence. A small scale is helpful.
- **Step 4:** Topcoat with Crystal Tops or WB-P53. Granicrete carries WB-P53 in both 1.5 gallon and in 24-oz kits. The smaller kit is great for Countertop Projects and yields up to about 75sf.

KEY POINTS FOR OPTION 1 - REAL METALLIX

- High Build
- Low Odor
- Installation Time Versa Primer to
- Inexpensive Metallix System

FAST VERSION OPTION 1: 1-Day System!

1. Versa Primer (3 hours). 2. MetalliX Epoxy or CA-FD coat (4 hours). 4. Seal with Polyurea 80C or WB-P53.

Option 2:

- Step 1: Granicrete Countertop Blend Follow steps detailed earlier in this manual.
- Step 2: Crystal Top Epoxy Add 226 Grams of Mica Essence per 1.5 gallons of Mixed Crystal Top
- Step 3: Desired topcoat (WB-P53, Crystal Top Epoxy)

Using Countertop Blend as your base coat will provide a stronger countertop and help bridge any imperfections in the substrate.

KEY POINTS FOR OPTION 2 – REAL METALLIX

- Residential- Commercial
- Thick Build
- Low Odor (WB-P53 as topcoat after MetalliX Coat)
- 2-3 days for installation
- 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 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

Twelve to 24 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 similar to that of granite and Corian® surfaces. Your customer's understanding of ongoing care is important to ensure 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 more friendly 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 abrasive sponges, brushes, or harsh chemical cleaners or contain abrasives.**

Polishing

A good quality Beeswax, applied using the wax manufacturer's instructions, is advised. A high-speed orbital buffer will create a wonderful additional protective shine to your counters. Granicrete also carries Polarshine polishing cream for a higher gloss finish.

Scratches or Cuts

Granicrete, as do all countertop manufacturers, recommends using a cutting board and not cut directly to the surface. Minor and moderate scratches and surface marring can be sanded out using Abralon pads and spray-on beeswax or buffed with Polarshine. Start with 800 or 1000 to remove the scratches and then work up in grit to your desired sheen. Granicrete has all your countertop sanding, polishing, and maintenance products.

Heavier gouges and cuts may also be repaired using Granicrete techniques.

Burns

This epoxy has been <u>indirect heat tested</u> up to 500°F using MDF as a substrate. As do all countertop manufacturers, we also recommend that hot pads and cooling racks be used for your kitchen pots and pans. *Read the 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 great addition to any home or business 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 appeared; if they are not satisfied with the color the first time, wipe it away and re-color.

Granicrete offers distinct types of coloring products. Three of them will be used in this basic class with the other two reserved for experienced applicators. With these three coloring products you can recreate almost any look of granite, stone or marble. Here is a brief explanation of the types of colors and how they are used:

Color charts are available in Granicrete University or may be ordered from Granicrete's headquarters.

Concentrated Dispersion colors - These colors are also liquefied pigments. They 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 pigmented acrylic stains that you dilute with water for use in a variety of techniques to create some very interesting effects.

Mica Flakes – Can be mixed into your last texture coat of Countertop Blend. They are troweled into the texture and dry. During the drying process you can take a damp tile sponge and wife the surface to remove the texture that has hazed over the mica. The revealed mica yields a highly authentic stone texture finish. They can also be placed in your primer coat of epoxy for beautiful looks.





Acrylic Concrete Stains – Developed to replicate acid stain finishes without the acid. These stains provide natural variation over existing concrete or over Granicrete's Alternative Countertop & Flooring Systems. When applying over existing concrete follow the directions on the product information sheet. Color Charcoal is great for black speckles.

Webbing Spray – 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 are Available in Black, White, Silver and Gold and found at many retailers.



20 colors in an ultra-fine grade (like a woman's cosmetic blush) for excellent mixing and dispersion without clumping. They hold their brilliant color even when alcohols and solvent come in contact.

There are many metallic powders in the market that clump and lose their color intensity. This does not happen with Granicrete.







Coloring Techniques

Be sure you used great spray bottles. Granicrete carries great bottles. Spray heads for liquid spray cleaners will fail. Spraying pigments requires a more powerful spray head. Also, all spray heads need to be dial adjustable for variation of spray from mist to streaming.

Granicrete's spray bottles come with labels that you can write in the color and mix ratio. How many spray bottles should you have? You should have a bottle for every color you use and a couple for backup. Putting a couple glass marbles in the bottom of your spray bottles will enhance shake up, swirling, and mixing for each use. A spray bottle for a single colorant can be used and refilled for years.

To help manage the life of your spray head, after a day's use the spray head should be removed and then spray water through it to flush out the color. Acrylic pigments can dry in the stem, sprayer, and trigger. When this happens the spray head may be damaged or be subject to getting damaged.

Successful coloring requires the following:

- 1. Good spray bottles.
- 2. Understanding the few terms for color techniques.
- 3. Understanding how to adjust your spray bottle.
- 4. Following the coloring recipes and writing down yours so you can replicate yours.
- 5. Recognizing how different colorant types interact with each other based on their being dry or wet upon contact.
- 6. Play is practice. In no time you can gain a great feeling to become a color pro. With our recipes you can advance your professional abilities very quickly and as fast as your first project.

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-Veining: 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.

Speckling: 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 also 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 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. At the seminar it will be demonstrated on the Yucatan pattern.

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

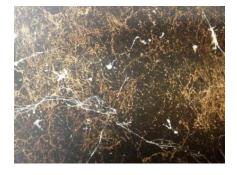


solid vein if needed.

Acrylic Concrete Stains have slower absorption rates and can yield a very articulated speckled look when applied in a misting capacity. They are also effectively used to create overall concrete stain finishes and can be blotted with a cloth to enhance their drying process.



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.



Poly Low Odor to create cracks and thin veins.

Poly Low Odor Gloss is a neutral-odor, water-based, poly-urethane sealer that is designed to seal the surface in order to create a thin veined marble look. It must be applied in very thin coats and is best sprayed over the surface from a spray bottle set to a mist.

Drying times are short. After 15–20 minutes of drying, inspect the Sealer. Any puddle areas will appear white and should be removed with a sponge or brush. One coat is plenty.

After Poly Low is dry, use a razor knife to cut through the sealcoat and into the texture. Cut the desired veining crack with the knife held at a 45° angle then re-cut from the opposite side. Wipe off all loose pieces with your fingers, and then apply the desired color to the exposed veins. Dispersion and Acrylic colors can be applied directly from the bottle using a damp sponge. Remove the excess color from the veins and surrounding areas with a wet sponge. The Poly Low Odor protects the rest of the counter from receiving color. Now you are ready to epoxy.

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 for 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 of you. Byplaying 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 custom looks by you. By developing your own styles and finishes you are increasing your "sellable" factor as well as increasing the likelihood 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 commonly 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 in gloss or satin 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 to reduce any application marks. Application can be done with a roller and Granicrete recommends a couple such as the P53 data sheet and countertop application guide for P53.

Crystal Top Epoxies and WB-P53 are Low VOC and Low Odor



WB-P53 is available in Gloss and Satin 1.5 gal or 24 oz kit.



Beginning Steps to a Successful Professional 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 as 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 application. It is both heat and scratch resistant, crystal clear in curing and easy to apply and is excellent in self-leveling. For an epoxy, Crystal Top is UV stable but can amber slightly over time, so it is advisable to avoid white countertops. Multiple coats of WB-P53 are the ideal sealer for white countertops. The other option for a higher build is Polyurea 80. Both should be practiced before using.

NOTE: Companies telling you their epoxy can be used outdoors and will not amber are very likely misleading their customers. Too many good installers have lost their entire business due to epoxy failures and customer dissatisfaction because of such misleading claims!

Mixing Crystal Top Epoxy:

We know that success in mixing Crystal Top Epoxy can been accomplished in many ways. The procedure identified in this manual may be "overdoing it." But we know from many years of experience 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 two-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 12-15 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 to assure a thorough blending while being able to monitor application.

Mixing the epoxy must be done but hand. It is easy to do, 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 separate paint stir stick for each measuring container, 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 scrape the bottom and sides of the 5-quart bucket in order to make sure your mixing is thorough. Continue wiping your stir stick on an inside edge while mixing to get the epoxy mixed off it as well. Do this for approximately 3-4 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 is to ensure 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 clearer. Epoxy strings will disappear too. You will see tiny bubbles form in 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 3-4 minutes.

Tra er 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 AS DRILL CREAT TRAPPED BUBBLES.

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 backsplashes are separate, do your countertop and then do your backsplashes 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 a foam brush or ¼" neoprene notched squeegee, <u>lightly</u> spread the epoxy. Using too much brush pressure will challenge the self-leveling properties of the epoxy. A soft hand will ensure a more even flow that will support the self-leveling process. Float and guide the epoxy. Avoid "brushing" it.
- 5. Do not worry about your edges at this time. Get your surface properly coated to the edges.
- 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 not distorted, then the epoxy is good. If the reflection is distorted or wavy, then it must be applied thicker in that area. Wearing a head lamp will show spots missed as they will not be shiny and reflect. You must not miss any spots.

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 1.5 - 2hrs after application

<u>IMPORTANT NOTE:</u> 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 it with water or sand. Start mixing a fresh batch per instructions provided.

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 torch at 1-2" past the end of the flame glancing the epoxy. Do this across the surface being sure that the end of the flame is not touching the surface. Cast across the entire epoxied surface. You should see the trapped 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 if needed. 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 in the texture as epoxy cured. When the hot item is placed on epoxy, a moisture ring develops under it. Option to resolve is blowing the area with a heat gun, keep temperature of epoxy under 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, torching to closely to the epoxy, torching at a too downward direction, 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 and water 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 guestions?

For further assistance look for the Crystal Top Epoxy Troubleshooting Guide in the "U", watch the videos on the U, or contact our headquarters directly.

Detailing Epoxy Countertops: The Professional's Touch

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.

Read the following two sections in the manual index for proper detailing instructions:

Sanding & Detailing Epoxy Finishes, WB-P53 Protective Coating

WB-P53 Process for the Concrete Countertop Finished Look

You will need: WB-P53 (Gloss, Satin) – 2 Parts "A": 1 Part "B"

Poly Low Odor (Gloss) – (Option)

Granicrete Spray Bottle

Several clean wooden stir sticks

Two 2-3" foam brushes (clean) (Do not use brushes for oil base paints) Three quarter inch nap shed resistant roller covers with roller handle

Two 2-qt. plastic measuring bucket. One – two tubes Clear GE Silicone II Caulk

Windex

Paper Towels (Better yet soft throw away rags)

1st Sealer Coat: Poly Low Odor Gloss or WB-P53 Gloss

With your colored surface fully dry and any debris brushed off, take a spray bottle and pour Poly Low Odor into it. Adjust the nozzle setting on your spray bottle to mist. Mist all the surfaces of your top. Begin with the backsplash and then the front edges of the counter. Finish spraying by misting the rest of the deck surface. Immediately take a lint free roller brush and begin to roll the misted sealer into the surface to gain 100% coverage of the surface. THIN TO WIN!

Use a foam brush to dab sealer into the corners or to soak up excess sealer buildup in these corners. Any surface missed just mist the Poly Low Odor and roll.

Apply WB-P53 Gloss by pouring mixed product into roller pan, roll your roller brush through, and then apply roller to surface. Use P53 Satin for 2nd Coat.

Allow it to completely dry before applying the next coat.

Poly Low will typically dry in 1-2hours. WB-P53 Gloss will dry in 6-8.

2nd Sealer Coat: Poly Low Odor Gloss

Repeat the steps of the 1st Sealer Coat if you used Poly Low Odor Gloss. If you used WB-P53 as your first coat, then go directly to the next step.

Tip: To create an even smoother finish, once the surface is again completely dry it is best to handsand the surface lightly with 220 grit sandpaper before proceeding to the next step. Once sanding is done a damp rag should be used to wipe off the dust.

Last Sealer Coat: WB-P53 Gloss or Satin

Mix the two components per their instructions. Approximately 24 ounces of this combined mix is all that is needed for 60 square feet coverage. Read product data sheet.

The amount of water depends on the applicator's preference and the humidity levels in the room. With higher humidity less water should be added. Remember that water is not required.

KEY POINTS FOR MIXING WB-P53

Make sure you have 2 parts A & 1 Part B in a clear container.

Mix Thoroughly for 4-5 minutes.

Tra er to a new container and mix for another 1-2 minutes Make sure to scrape the sides and bottom of the bucket while mixing.

Slow speed drills should be used.

Questions and Answers:

Should the product be looking milky during or after application?

WB-P53 does go down looking like skim milk. It should be a translucent white surface immediately after application, but it will dry to a crystal-clear finish. If the surface dries white it means the product was applied too thick or there was moisture on the surface when the P53 was applied.

Why does my WB-P53 have dimples?

Dimpling can be caused by having too much moisture in the texture and/or too much humidity in the air. Make sure the surface you are sealing is completely dry before applying your sealers. Over thinning P53 can also cause the product to dimple.

Will bleach damage P53?

P53 can be sanitized and disinfected with a bleach solution without losing strength or performance. Although straight bleach can discolor P53 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 surface should not occur.

READ MORE ABOUT SPECIFIC ROLLING INSTRUCTIONS OF WB-P53 ALONG WITH OBSERVING THE VIDEO FOR THIS TOPICAL APPLICATION FOR COUNTERTOP IN GRANICRETE UNIVERSITY.

Granicrete's Outdoor Countertop Sealers

The number 1 rule for sealing outdoor countertops is **DO NOT USE EPOXY!**

Epoxies are great for interior countertops, but unfortunately, they will amber when exposed to direct UV Rays and even if under outdoor shade. It is true that applying a polyurethane coating like WB-P53 over Crystal Top Epoxy will block over 75% of those harmful rays that cause the epoxy to amber. Since it does not block 100% of the UV rays you are only prolonging the potential ambering process may still exist. There are plenty of great options when it comes to sealing exterior countertops that epoxy does not need to be used.

When deciding which sealer to use for exterior application there are three main factors that come into play:

Gloss Factor: Does the customer want a satin or gloss finish? Both options are available for exterior application.

Thickness or Build: Does the customer want to feel the texture of the surface (low build) or do they want more of an epoxy like finish (higher – thicker build)? There are many different build options that can be created using Granicrete's High Performance Polyurethanes and Polyurea.

<u>Overall Protection</u>: How much use and abuse will this countertop receive? If it is commercial you will want to put a thicker build on the surface. Multiple coats can help achieve a higher build.

Once you have educated the customer on the possibilities for sealing their project it is best to show them different samples with the options listed below. Don't show a customer an epoxy sealed board and expect to create that finish and look without using epoxy. Polyurethanes are great coatings to protect a surface that is exposed to direct UV rays, but they do not replicate epoxies. They have their own great look and feel.

Satin or Gloss Finish, Low Build, Residential and Commercial Protection:

1st Coat: SL-P60 (Gloss) – Thin with acetone per spec sheet first coat if desired.

2nd Coat: SL-P60 (Gloss or Satin)

Satin and Gloss Finish, Low Build, Residential and Commercial Protection:

1st Coat: WB-P53 (Gloss) – Thin with water per spec sheet

Gloss Finish, Higher Build, Commercial or Residential Protection:

1st Coat: Polyurea 80C Gloss – Thin with acetone per spec sheet if desired.

2nd Coat: Polyurea 80C Gloss or Satin.

Follow directions on the product information sheets for each coating. Two component sealers have exceptional chemical and scratch resistance but generally take longer to tack and cure. The Polyurea 80C dries the quickest just taking a couple hours.

Being so, you must watch the weather and debris from wind so as not to contaminate the surface and cause failure before curing.

We recommend at least 24 hours before the customer puts it into use.

COLOR RECIPES



Concrete

For this finish you will need:

- 1. Cherokee Dispersion
- 2. Groutline Grey Dispersion (Philly Blue can be used instead of Groutline Grey for a darker and bluer finish)
- 3. Wickenburg Grey Acryli-Shade



Mixing Procedure:

- 1. Mix Cherokee (3 caps to 24oz of water) into a *Granicrete* professional spray bottle.
- 2. Mix Groutline Grey or Philly Blue (3 caps to 24oz of water) into a *Granicrete* professional *spray* hottle
- 3. Mix Wickenburg Grey (4oz of colorant to 20oz of water) into a *Granicrete professional spray bottle*.

Step-by-Step Procedure:

- 1. Apply all Granicrete Countertop Blend coats per installation instructions.
- 2. Once Countertop Blend has dried sand with 40 and 60 grit Granicrete Diamond Pads if a flatter finish is desired. Brush or vacuum to clean.
- 3. Flood surface with Cherokee and rub down with a rag. Allow to completely dry before proceeding.
- 4. Mist about 70% of the edges and top surface with Wickenburg Grey.
- 5. While this Grey is still wet mist about 30-40% of the surface with Groutline Grey or Philly Blue. This will slightly darken the Wickenburg White and create a more natural concrete finish.
- 6. Allow to partially dry and then using a rag blot the surface to blend the colors together and form an almost uniform concrete color.
- 7. A light mist of Groutline Grey or Philly blue while the surface is still damp will create a darker finish.
- 8. Follow instruction in manual to seal using Poly Low Odor (Gloss) and WB-P53. This series of sealers yields a finish more applicable to concrete countertops. If the countertop will be in a high use indoor commercial environment (restaurant / bar) and you desire a higher build sealer, then Crystal Top Epoxy may be used but it should be detailed by choice of sanding/polishing or topcoat of WB-P53.

<u>Professional Tip:</u> When blotting the surface with a rag your goal is to create a natural looking concrete finish. Blotting to late will leave the surface looking speckle and more Granite like. Periodically rotate rag to have a dry blot surface. Avoid contact with towel seams and edges when blotting.

Concrete Countertop Notes:



Cracked Stone

For this finish you will need:

- 1. Cherokee Dispersion
- 2. Tasha Dispersion
- 3. Stonehenge Dispersion
- 4. Antique White Acryli-Shade

Mixing Procedure:

- 1. Mix Cherokee (3 caps to 24oz of water) into a *Granicrete* professional spray bottle.
- 2. Mix Tasha (3 caps to 24oz of water) into a *Granicrete* professional *spray bottle.*
- 3. Mix Stonehenge (3 caps to 24oz of water) into a *Granicrete* professional *spray bottle*.
- 4. Mix Antique White (4oz of colorant to 20oz of water) into a *Granicrete professional spray bottle*.
- 5. Spray bottle of water only.

Step-by-Step Procedure:

- 1. Apply all Granicrete Countertop Blend coats per installation instructions.
- 2. Using Tasha, Stonehenge and Cherokee create random speckled veins through the surface. Be sure to carry the veins over the edge of the board.
- 3. While spraying your dispersions it is important to not apply too much color. When dispersions are sprayed on top of each other while still wet they will form a new color, which may not be desirable.
- 4. Work in sections so you can keep the colors wet. Do not allow the colors to dry in between steps.
- 5. Leave some open areas on the surface to lay in Antique White, so just the edges of the Antique White are touching the dispersion colors.
- 6. Allow Antique White to slightly dry and then mist Cherokee over the surface of the Antique White in a non-uniform fashion.
- 7. Spray some more Antique white over the wet areas of the surface.
- 8. Use a light mist of water to soften any areas where the Antique White or Cherokee left spots, helping to blend colors.
- 9. Allow surface to completely dry and then apply Granicrete Crystal Top Epoxy per product instructions.
- 10. Detail per choice the hardened Crystal Top Epoxy the following day.

<u>Professional Tip</u>: When working colors wet on wet it is important to control the amount of liquid on the surface. If the top gets saturated with color everything will blend together and form an undesirable Grey Cloud.



Cracked Stone Notes:



Desert Classic and Copper Classic

For this finish you will need:

- 1. Cherokee Dispersion
- 2. Stonehenge Dispersion
- 3. Antique White Acryli-Shade
- 4. Acrylic Concrete Stain Rust or Cappuccino

Mixing Procedure:

- 1. Mix Cherokee (3 caps to 24oz of water) into a *Granicrete* professional spray bottle.
- 2. Mix Stonehenge (3 caps to 24oz of water) into a *Granicrete* professional *spray bottle.*
- 3. Mix Antique White (4oz of colorant to 20oz of water) into a *Granicrete professional spray bottle*.
- 4. Rust or Cappuccino (or mix of both) either straight or 1:1 with water.
- 5. Spray bottle of water only

Step-by-Step Procedure:

- 1. Apply all Granicrete Countertop Blend coats per installation instructions.
- 2. Using Stonehenge and Cherokee creating random speckled veins through the surface. Be sure to carry the veins over the edge of the board.
- 3. While spraying your dispersions it is important to not apply too much color. When dispersions are sprayed on top of each other while still wet they will form a new color, which may not be desirable.
- 4. Work in sections so you can keep the colors wet. Do not allow the colors to dry in between steps.
- 5. Leave some open areas on the surface to lay in Antique White, so just the edges of the Antique White are touching the dispersion colors.
- 6. Allow Antique White to slightly dry and then mist Cherokee and/or Stonehenge over the surface of the Antique White in a non-uniform fashion.
- 7. Use a light mist of water to soften any areas where the Stonehenge or Cherokee left spots, helping to blend colors.
- 8. Allow surface to completely dry and then apply Granicrete Crystal Top Epoxy per product instructions.
- 9. Detail per choice the hardened Crystal Top Epoxy the following day.

<u>Professional Tips</u>: When working colors wet on wet it is important to control the amount of liquid on the surface. If the top gets saturated with color everything will blend together and form an undesirable Grey Cloud. You can add the Rust or Cappuccino (or mix of both) either straight or 1:1 with water on top of wet Antique white to create a higher end finish known as the Copper Classic Finish.





Desert Classic Notes:

Copper Classic Notes:



Emerald Green

For this finish you will need:

- 1. Teal or Saguaro Green Dispersion
- 2. Groutline Grey Dispersion
- 3. Night Sky Black Acryli-Shade
- 4. Tasha Dispersion (4 caps to 24 oz)

Mixing Procedure:

- 1. Mix Cherokee (3 caps to 24oz of water) into a *Granicrete* professional spray bottle.
- 2. Mix Groutline Grey (3 caps to 24oz of water) into a *Granicrete* professional *spray bottle*.
- 3. Mix Night Sky Black (6oz with up to 6oz of water) into a *Granicrete* professional *spraybottle*.
- 4. Mix Night Sky Black w/Tasha (4 oz to 4oz plus 16 oz water) into a Granicrete professional spray bottle

Step-by-Step Procedure:

- 1. Apply all Granicrete Countertop Blend coats per installation instructions.
- 2. Mist and speckle 70-100% of the surface using Teal or Saguaro Green. Allow it to dry completely before proceeding.
- 3. Speckle 20-30% of the surface using Night Sky Blackl. Allow it to dry completely before proceeding.
- 4. Speckle 20-30% of the surface using Night Sky Black -Tasha mixture. Allow it to dry completely before proceeding.
- 5. Speckle 40-60% of the surface using Groutline Grey. Allow it to dry completely before proceeding.
- 6. A light speckle of Night Sky may be applied again if needed.
- 7. Allow surface to completely dry and then apply Granicrete Crystal Top Epoxy per product instructions.
- 8. Detail per choice the hardened Crystal Top Epoxy the following day.

Professional Tip: You may go heavier in your Night Sky even straight from the bottle if you wish.

For smaller speckling, consider misting colors through a splatter screen. Hold the screen upright in front of sprayer head and mist the colors through it. Wipe excess colors off the screen and keep screen away from surface to avoid dripping.

Emerald Green Notes:



Ivory Brown

For this finish you will need:

- 1. Cherokee Dispersion
- 2. Desert Rose Dispersion
- 3. Night Sky Black Acryli-Shade
- 4. Table Mesa Tan Acryli-Shade



Mixing Procedure:

- 1. Mix Cherokee (3 caps to 24oz of water) into a *Granicrete* professional spray bottle.
- 2. Mix Desert Rose (3 caps to 24oz of water) into a *Granicrete* professional *spray bottle.*
- 3. Mix Night Sky Black (6oz with up to 6oz of water) into a *Granicrete* professional *spraybottle*.
- 4. Mix Table Mesa Tan (4oz of colorant to 20oz of water) into a *Granicrete* professional *spray bottle*.

Step-by-Step Procedure:

- 1. Apply all Granicrete Countertop Blend coats per installation instructions.
- 2. Mist and speckle 70-100% of the surface using Cherokee. Allow it to dry completely before proceeding.
- 3. Speckle 20-30% of the surface using Night Sky Black. Allow it to dry completely before proceeding.
- 4. Speckle 70-100% of the surface using Table Mesa Tan. Allow to dry completely before proceeding.
- 5. Speckle 20-30% of the surface using Desert Rose. Allow it to dry completely before proceeding.
- 6. Speckle 20-30% of the surface using Cherokee. Allow it to dry completely before proceeding.
- 7. A light speckle of Night Sky may be applied again if needed.
- 8. Allow surface to completely dry and then apply Granicrete Crystal Top Epoxy per product instructions.
- 9. Detail per choice the hardened Crystal Top Epoxy the following day.

Professional Tip: You may go heavier in Night Sky colorant (even undiluted) if you desire.

For smaller speckling, consider misting colors through a splatter screen. Hold screen upright in front of sprayer head and mist the colors through it. Wipe excess colors off the screen and keep screen away from surface to avoid dripping.

Ivory Brown Notes:



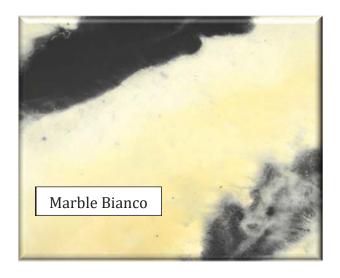
Marble Bianco and Marble Nero

For this finish you will need:

- 1. Blinding White Acryli-Shade
- 2. Night Sky Black Acryli-Shade
- 3. Table Mesa Tan Acryli-Shade

Mixing Procedure:

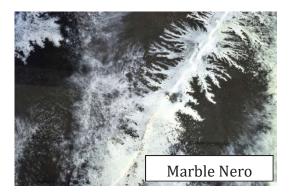
- 1. Mix Blinding White (5oz of colorant with up to 20oz of water) into a *Granicrete* professional spray bottle. More brilliant = reduced water even consider 1:1 or undiluted.
- 2. Mix Night Sky Black 1:1 at same ratio as Blinding White.
- 3. Mix Table Mesa Tan (4oz of colorant to 20oz of water) into a *Granicrete* professional *spray bottle*.



Step-by-Step Procedure:

- 1. Apply all Granicrete Countertop Blend coats per installation instructions.
- 2. Mist and flood entire surface using Blinding White. Proceed to next step while surface is still wet.
- 3. Speckle 10-20% of the surface using Table Mesa Tan. Proceed to next step while surface is still wet.
- 4. Light spray in veins of Night Sky Black while the surface is still wet. Blowing the Night Sky Black with a straw can help create natural veins.
- 5. Allow surface to completely dry and then apply Granicrete Crystal Top Epoxy per product instructions.
- 6. Detail per choice the hardened Crystal Top Epoxy the following day.

<u>Professional Tip</u>: To create **Marble Nero** switch Blinding White and Charcoal in the steps above. This is a simple change in coloring that makes a dramatic difference.



Note: Epoxies by nature amber over time. Less white is better. Less torching is better. Moderate interior daylight is better. Epoxies will amber slightly over time which is noticeable on white surfaces like this Marble Bianco. Keeping epoxy thickness to a minimum, and then detailing with WB-P53 can reduce ambering or better yet, only seal with WB-P53 or Polyurea 80 without using Crystal Top Epoxy.

Marble Bianco Notes:

Marble Nero Notes...



Mayantina

For this finish you will need:

- 1. Tasha Dispersion
- 2. Antique White Acryli-Shade

Mixing Procedure:

- 1. Mix Tasha (3 caps of colorant to 24oz of water) into a *Granicrete* professional spray bottle.
- 2. Mix Antique White (4oz of colorant to 20oz of water) into a *Granicrete* professional *spray bottle*.



Step-by-Step Procedure:

- 1. Apply all Granicrete Countertop Blend coats per installation instructions.
- 2. Mist and flood entire surface using Tasha. Proceed to the next step while surface is still wet.
- 3. Speckle 30-50% of the surface using Antique White. Allow to partially dry
- 4. Using a rag or sea sponge blot the surface to create a natural texture and appearance. Periodically rotate rag to have a dry blot surface. Avoid contact with towel seams and edges when blotting.
- 5. Allow surface to completely dry and then apply Granicrete Crystal Top Epoxy per product instructions.
- 6. Detail per choice the hardened Crystal Top Epoxy the following day.

<u>Professional Tip</u>: This is a great color look to seal with Poly Low Odor (Gloss) and WB-P53 instead of using epoxy. Follow the instructions in your manual for proper technique.

Mayantina Notes:



Old World

For this finish you will need:

- 1. Cobalt Blue Dispersion
- 2. Stonehenge Dispersion
- 3. Rust and/or Cappuccino Concrete Stain



Mixing Procedure:

- 1. Mix Cobalt Blue (3 caps to 24oz of water) into a *Granicrete* professional spray bottle.
- 2. Mix Stonehenge (3 caps to 24oz of water) into a *Granicrete* professional *spray bottle.*
- 3. Mix Rust and/or Cappuccino Concrete Stain straight or 1:1 with water into a *Granicrete professional* spray bottle. Some installers mix both stain colors together.
- 4. Spray bottle of water only.

Step-by-Step Procedure:

- 1. Apply all Granicrete Countertop Blend coats per installation instructions.
- 2. Lightly mist entire surface with water
- 3. Lightly mist 20-30% of the surface using Rust and/or Cappuccino Concrete Stain. Proceed to the next step while still wet.
- 4. Mist Cobalt Blue directly over Rust and/or Cappuccino Concrete Stain.
- 5. Water may be needed to mist around the edges to help soften and blend.
- 6. Allow it to dry before proceeding.
- 7. Mist 80-100% of the surface using Stonehenge.
- 8. Blot the surface with a sea sponge or rag if desired.
- 9. Allow surface to completely dry and then apply Granicrete Crystal Top Epoxy per product instructions. This finish must use Crystal Top Epoxy to best seal and bond the Acid Free Finishing Stain
- 10. Detail per choice the hardened Crystal Top Epoxy the following day.

<u>Professional Tip</u>: Cobalt Blue (Dispersion) and Rust and/or Cappuccino Concrete Stain interact when applied on top of each other to form a beautiful, aged effect.

Old World Notes:



Red Granicrete

For this finish you will need:

- 1. Red Leather Dispersion
- 2. Brick Red Dispersion
- 3. Night Sky Black Acryli-Shade
- 4. Wickenburg Grey Acryli-Shade

Mixing Procedure:

- 1. Mix Red Leather (3 caps to 24oz of water) into a *Granicrete* professional spray bottle.
- 2. Mix Brick Read (3 caps to 24oz of water) into a *Granicrete* professional *spray bottle.*
- 3. Mix Night Sky Black in 1:1 ratio with water into a *Granicrete* professional *spraybottle*.
- 4. Mix Wickenburg Grey (4oz of colorant to 20oz of water) into a *Granicrete* professional *spray* bottle

Step-by-Step Procedure:

- 1. Apply all Granicrete Countertop Blend coats per installation instructions.
- 2. Mist and speckle 50-70% of the surface using Red Leather. Allow to dry partially before proceeding.
- 3. Mist and speckle 30-40% of the surface using Brick Red. Allow to dry completely before proceeding.
- 4. Speckle 30-40% of the surface using Night Sky Black. Allow it to dry completely before proceeding.
- 5. Speckle 20-30% of the surface using Wickenburg Grey. Allow it to dry completely before proceeding.
- 6. Speckle 40-50% of the surface using Red Leather. Allow it to dry completely before proceeding.
- 7. A light speckle of Night Sky may be applied again if needed.
- 8. Allow surface to completely dry and then apply Granicrete Crystal Top Epoxy per product instructions.
- 9. Detail per choice the hardened Crystal Top Epoxy the following day.

Professional Tip: You may increase the concentration of color in Night Sky mix if desired.

For smaller speckling, consider misting colors through a splatter screen. Hold the screen upright in front of sprayer head and mist the colors through it. Wipe excess colors off the screen and keep screen away from surface to avoid dripping.

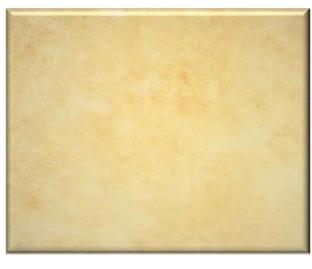
Red Granicrete Notes:



Rosie Quartz

For this finish you will need:

- 1. Tasha Dispersion
- 2. Table Mesa Tan Acryli-Shade
- 3. Blinding White Acryli-Shade



Mixing Procedure:

- 1. Mix Tasha (3 caps to 24oz of water) into a *Granicrete* professional spray bottle.
- 2. Mix Table Mesa Tan (4oz of colorant to 20oz of water) into a *Granicrete* professional *spray bottle*.
- 3. Mix Blinding White (4oz of colorant to 20oz of water) into a *Granicrete* professional *spray bottle*.

Step-by-Step Procedure:

- 1. Apply all Granicrete Countertop Blend coats per installation instructions.
- 2. Mist and speckle 80-100% of the surface using Table Mesa Tan. Proceed while still wet.
- 3. Speckle 30-40% of the surface using Blinding White. Proceed while still wet.
- 4. Speckle 30-40% of the surface using Tasha. Allow to partially dry.
- 5. Blot surface using a rag or sea sponge.
- 6. Speckle 70-90% of the surface using Blinding White. Proceed while still wet.
- 7. Speckle 20-30% of the surface using Tasha. This step can be left out for a lighter finish.
- 8. Allow surface to completely dry and then apply Granicrete Crystal Top Epoxy per product instructions.
- 9. Detail per choice the hardened Crystal Top Epoxy the following day.

Professional Tip: This is a great color look to seal with Poly Low Odor (Gloss) and WB-P53 instead of using epoxy. Follow the instructions in your manual for proper technique. Epoxies will amber slightly over time which is noticeable on white surfaces like this. Better yet, eliminate Crystal Top and use WB-P53 or Polyurea 80 to seal your countertop.

For smaller speckling, consider misting colors through a splatter screen. Hold the screen upright in front of sprayer head and mist the colors through it. Wipe excess colors off the screen and keep screen away from surface to avoid dripping.

Rosie Quartz Notes:



Rustic Brown

For this finish you will need:

- 1. Cherokee Dispersion
- 2. Table Mesa Tan Acryli-Shade

Mixing Procedure:

- 1. Mix Cherokee (3 caps of colorant to 24oz of water) into a *Granicrete* professional spray bottle.
- 2. Mix Table Mesa Tan (4oz of colorant to 20oz of water) into a *Granicrete* professional *spray bottle*.



Step-by-Step Procedure:

- 1. Apply all Granicrete Countertop Blend coats per installation instructions.
- 2. Mist entire surface with water.
- 3. Mist entire surface with Cherokee. Allow to partially dry before proceeding.
- 4. Mist and stream 30-40% of the surface using Table Mesa Tan.
- 5. Blot with a rag or sea sponge if needed. Periodically rotate rag to have a dry blot surface. Avoid contact with towel seams and edges when blotting.
- 6. Allow surface to completely dry and then apply Granicrete Crystal Top Epoxy per product instructions.
- 7. Detail per choice the hardened Crystal Top Epoxy the following day.

Professional Tip: This is a great color look to seal with Poly Low Odor (Gloss) and WB-P53 as a concrete countertop finish instead of using epoxy. Follow the instructions in your manual for proper technique.

Rustic Brown Notes:



Saddle Bag

For this finish you will need:

- 1. Stonehenge Dispersion
- 2. Walnut Acrylic Concrete Stain

Mixing Procedure:

- 1. Mix Stonehenge (3 caps of colorant to 24oz of water) into a *Granicrete* professional spray bottle.
- 2. Mix Walnut Acrylic Concrete Stain (50% Stain to 50% water) into a *Granicrete* professional *spray bottle*.



Step-by-Step Procedure:

- 1. Apply all Granicrete Countertop Blend coats per installation instructions.
- 2. Mist entire surface with Walnut Stain covering 100% of the surface. While still wet use a rag or sea sponge to blot the surface and rub in stain.
- 3. While surface is still damp lightly mist 30-40% of the surface with Stonehenge.
- 4. While Surface is still damp lightly mist 60-80% of the surface with Walnut Stain.
- 5. Allow colored surface to dry overnight before sealing with Poly Low Odor (Gloss) and WB-P53 for a concrete countertop finish. If the countertop will be in a high use commercial environment (restaurant / bar) and you desire a higher build sealer, then Crystal Top Epoxy may be used but it should be detailed by choice of sanding/polishing or topcoat of WB-P53.

<u>Professional Tip</u>: Acrylic Concrete Stains can build residue on the surface if they are applied to heavy. When in doubt take a dry micro-fiber cloth and lightly wipe down the surface after the colors have completely dried. Blotting the stains with a rag or sea sponge while they are still wet will help eliminate the buildup of residue. Periodically rotate rag or sponge to have a dry blot surface. Avoid contact with towel seams and edges when blotting.

Saddle Bag Notes:



Sierra Pearl

For this finish you will need:

- 1. Desert Rose Dispersion
- 2. Night Sky Black Acryli-Shade
- 3. Blinding White Acryli-Shade

Mixing Procedure:

- 1. Mix Desert Rose (3 caps to 24oz of water) into a *Granicrete* professional *spray bottle.*
- 2. Mix Night Sky Black Acryli-Shade 1:1 with water into a *Granicrete* professional *spray bottle*.
- 3. Mix Blinding White (5oz of colorant with up to 20oz of water) into a *Granicrete* professional *spray bottle*.



Step-by-Step Procedure:

- 1. Apply all Granicrete Countertop Blend coats per installation instructions.
- 2. Mist and speckle 70-100% of the surface using Desert Rose. Allow it to dry completely before proceeding.
- 3. Speckle 20-30% of the surface using Night Sky. Allow it to dry completely before proceeding.
- 4. Speckle 20-30% of the surface using Blinding White. Allow it to dry completely before proceeding.
- 5. Repeat steps 3 and 4 at least 1 time or until desired effect is achieved.
- 6. Allow surface to completely dry and then apply Granicrete Crystal Top Epoxy per product instructions.
- 7. Detail per choice the hardened Crystal Top Epoxy the following day.

<u>Professional Tip</u>: Use different base colors to create many different looks and finishes. Replace Desert Rose with Taupe, Red Leather, Stonehenge or any of the other dispersions for great natural granite finishes.

For smaller speckling, consider misting colors through a splatter screen. Hold the screen upright in front of sprayer head and mist the colors through it. Wipe excess colors off the screen and keep screen away from surface to avoid dripping.

Sierra Pearl Notes:



Travertine

For this finish you will need:

- 1. Cherokee Dispersion
- 2. Tasha Dispersion
- 3. Groutline Grey Dispersion
- 4. Wickenburg Grey Acryli-Shade

Mixing Procedure:

- 1. Mix Cherokee (3 caps to 24oz of water) into a *Granicrete* professional spray bottle.
- 2. Mix Tasha (3 caps to 24oz of water) into a *Granicrete* professional *spray bottle.*
- 3. Mix Groutline Grey (3 caps to 24oz of water) into a *Granicrete* professional *spray bottle*.
- 4. Mix Wickenburg Grey (4oz of colorant to 20oz of water) into a *Granicrete professional spray bottle*.



- 1. Apply all Granicrete Countertop Blend coats per installation instructions. Create fishers and dimples in the texture using a Dash Brush or carving into the surface with your trowel. Make sure to knock down texture with a pool trowel.
- 2. Lightly mist 100% of the surface using Tasha.
- 3. While still wet mist 100% of the surface with Groutline Grey.
- 4. Allow surface to partially dry and then blot with sea sponge or rag work colors into to textured areas to help add depth.
- 5. Allow to completely dry before proceeding.
- 6. Mist 30-40% of surface using Wickenburg Grey. Allow to partially dry and blot with rag or sea sponge.
- 7. Mist 30-40% of the surface using Cherokee.
- 8. Allow surface to completely dry and then apply Granicrete Crystal Top Epoxy per product instructions.
- 9. Detail per choice the hardened Crystal Top Epoxy the following day.

Professional Tip: Misting water on the surface after steps 2 and 3 can be used to help push color down into the textured areas creating darker pits and a lighter top.



For smaller speckling, consider misting colors through a splatter screen. Hold the screen upright in front of sprayer head and mist the colors through it. Wipe excess colors off the screen and keep screen away from surface to avoid dripping.

Travertine Notes:



Yuca-Tan

For this finish you will need:

- 1. Cherokee Dispersion
- 2. Groutline Grey Dispersion (Philly Blue can be used instead of Groutline Grey for a darker and more blue finish)
- 3. Wickenburg Grey Acryli-Shade



Mixing Procedure:

- 1. Mix Cherokee (3 caps to 24oz of water) into a *Granicrete* professional spray bottle.
- 2. Mix Groutline Grey or Philly Blue (3 caps to 24oz of water) into a *Granicrete* professional *spray* bottle.
- 3. Mix Wickenburg Grey (4oz of colorant to 20oz of water) into a *Granicrete professional spray bottle*.

Step-by-Step Procedure:

- 1. Apply all Granicrete Countertop Blend coats per installation instructions.
- 2. Flood surface with Cherokee and rub down with a rag. Allow to completely dry before proceeding.
- 3. Mist the entire surface with Groutline Grey and allow it to completely dry.
- 4. Mist and speckle 70-80% of the surface using Wickenburg Grey. Allow to partially dry then blot with rag or sea sponge. Periodically rotate rag or sponge to have a dry blot surface. Avoid contact with towel seams and edges when blotting.
- 5. Follow instructions in manual to seal using Poly Low Odor (Gloss) and WB-P53 for a concrete countertop finish. Crystal Top Epoxy can also be used over this finish. If using Crystal Top, detail per choice the hardened Crystal Top Epoxy the following day.

<u>Professional Tip:</u> When blotting this surface with a rag your goal is to create a natural stone appearance leaving the Wickenburg white speckles but softening their appearance.

Yuca-Tan Notes:

ALABASTER

COLOR	MIXING	SPRAY BOTTLE SETTING	APPROXIMATE SURFACE COVERAGE	BEFORE NEXT STEP	TIME TO DO
WICKENBURG GREY	4 oz. to 16 oz. water	Mist	50%	While still wet go to next step.	5 min.
BLINDING WHITE	4 oz. to 16 oz. water	Mist	50%	While still wet go to next step.	5 min.
BLINDING WHITE	4 oz. to 16 oz. water	Mist	100%	 Allow to dry 5-10 minutes, Then blot spotted areas to soften as desired. 	15 min.
YOUR CHOICE Wickenburg White or Cherokee or Stonehenge	3 CAPS. to 24 oz. water	Mist	5-10%	Light blot to soften color as desired. Be sure to keep clean edge on your blotting cloth.	15 min.

SEAL THE NEXT DAY USING OUR URETHANE SEALER --- NOT CRYSTAL TOP!



Badgercrete

COLOR	MIXING	SPRAY BOTTLE SETTING	APPROXIMATE SURFACE COVERAGE	BEFORE NEXT STEP	TIME TO DO
CHEROKEE	3 CAPS to 24 oz. water	Mist	100%	 Blot white spots only allow for heavy and light-colored areas. Allow to dry 30-60 minutes before going to next step. 	15 min.
GROUTLINE GREY	3 CAPS to 24 oz. water	Mist	100%	 Allow to dry for 10 minutes. Then blot to soften the entire surface. 	25 min.
WICKENBURG GREY	4 oz. to 16 oz. water	Mist	100%	While still wet go to next step	5 min.
GROUTLINE GREY	3 CAPS to 24 oz. water	Mist	20-30%	Lightly blot to desire softening of colors.	10 min.



BUCKSKIN

COLOR	MIXING	SPRAY BOTTLE SETTING	APPROXIMATE SURFACE COVERAGE	BEFORE NEXT STEP	TIME TO DO
CHEROKEE	3 CAPS to 24 oz. water	Mist	70%	While still wet begin next step	15 min.
STONEHENGE	3 CAPS to 24 oz. water	Mist	30% targeting the white areas	Lightly blot with rag to pull up puddles, to soften and even color out, then ALLOW TO DRY 1 HOUR BEFORE SNOW CAP	15 min.
BLINDING WHITE	4 oz. to 16 oz. water	Mist	30-40%	While still wet begin next step	15 min.
STONEHENGE	3 CAPS to 24 oz. water	Mist	30-40%	While still wet begin next step	15 min.
CHEROKEE	3 CAPS to 24 oz. water	Mist	30-40%	Lightly blot as did before	15 min.



BURL

COLOR	MIXING	SPRAY BOTTLE SETTING	APPROXIMATE SURFACE COVERAGE	BEFORE NEXT STEP	TIME TO DO
WALNUT ACRYLIC CONCRETE STAIN	4 oz. to 4 oz. water	Mist	100%	While still wet go to next step.	5 min.
CHARCOAL ACRYLIC CONCRETE STAIN	4 oz. to 4 oz. water	Mist	100% and fill light areas left from Walnut	While still wet go to next step.	5 min.
WALNUT ACRYLIC CONCRETE STAIN	4 oz. to 4 oz. water	Mist	100%	Allow to dry as is or blot to desired soften finish.	15 min.

SEAL THE NEXT DAY!



CAPPUCCINO

EASYDIY COLOR	MIXING	SPRAY BOTTLE SETTING	APPROXIMATE SURFACE COVERAGE	BEFORE NEXT STEP	TIME TO DO
CAPPUCCINO	4 oz. to 4 oz. water	Mist	100%	While still wet go to next step.	5 min.
WALNUT	4 oz. to 4 oz. water	Mist	100%	While still wet go to next step.	5 min.
CHARCOAL	4 oz. to 4 oz. water	Mist	100%	Blot spotted areas to soften as desired.	15 min.
CAPPUCCINO	4 oz. to 4 oz. water	Mist	100%	3. Allow to dry 5-10 minutes,4. Then blot spotted areas to soften as desired.	15 min.

SEAL THE NEXT DAY... Please closely follow the video's directions.



CINNAMON

COLOR	MIXING	SPRAY BOTTLE SETTING	APPROXIMATE SURFACE COVERAGE	BEFORE NEXT STEP	TIME TO DO
WALNUT ACRYLIC CONCRETE STAIN	12 oz. to 12 oz. water	Mist	90-100%	While still wet begin next step	5 min.
CAPPUCCINO ACRYLIC CONCRETE STAIN	12 oz. to 12 oz. water	Mist	50%	Lightly blot and then allow to dry 30 minutes before doing the next step	5 min.
WALNUT ACRYLIC CONCRETE STAIN	12 oz. to 12 oz. water	Mist	100%	 Allow to set for 5-10 minutes. Then blot drops still remaining to soften and blend colors as desired. 	20 min.

SEAL THE NEXT DAY!



DEEP LEATHER

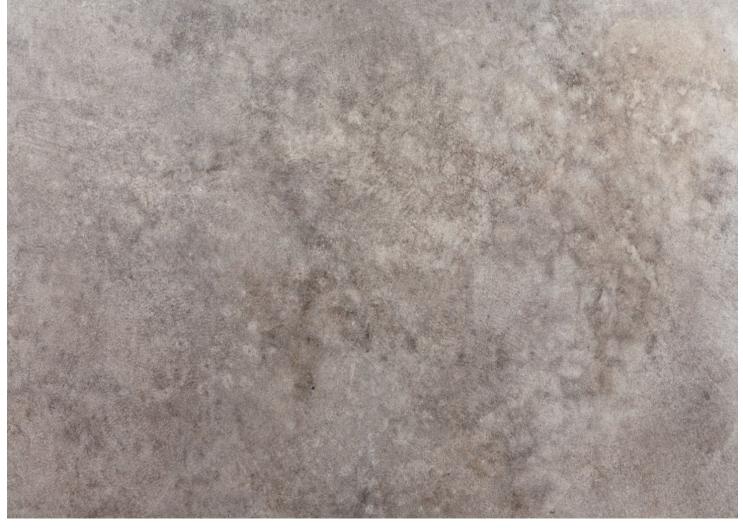
COLOR	MIXING	SPRAY BOTTLE SETTING	APPROXIMATE SURFACE COVERAGE	BEFORE NEXT STEP	TIME TO DO
CAPPUCCINO ACRYLIC CONCRETE STAIN	4 oz. to 4 oz. water	Mist	60%	 Blot with rag to lift spots and puddles. While still wet begin next step 	15 min.
CHARCOAL ACRYLIC CONCRETE STAIN	4 oz. to 4 oz. water	Mist	30-40%	3. Blot with rag as before4. Lift out black spots	15 min.
CAPPUCCINO ACRYLIC CONCRETE STAIN	4 oz. to 4 oz. water	Mist	30%	Blot to hide spots or to lighten areas	15 min.

SEAL THE NEXT DAY!



EVENING GRAY

COLOR	MIXING	SPRAY BOTTLE SETTING	APPROXIMATE SURFACE COVERAGE	BEFORE NEXT STEP	TIME TO DO
WICKENBURG GREY	3 CAPS to 24 oz. water	Mist	100%	While still wet begin next step	5 min.
BLINDING WHITE	4 oz. to 16 oz. water	Mist	20-30% targeting the white areas	While still wet begin next step	5 min.
STONEHENGE	3 CAPS to 24 oz. water	Mist	40-50%	Lightly blot as desired and then allow to fully dry.	15 min.



OBSIDIAN

EASYDIY COLOR	MIXING	SPRAY BOTTLE SETTING	APPROXIMATE SURFACE COVERAGE	BEFORE NEXT STEP	TIME TO DO
GROUTLINE GREY	3 CAPS to 24 oz. water	Mist	100%	With blotting towel rub color into the surface.	15 min.
CHARCOAL ACRYLIC CONCRETE STAIN	4 oz. to 4 oz. water	Mist	100%	 Lightly blot surface. Leave surface still wet. Then allow to dry completely before next step. 	15 min.
CHARCOAL ACRYLIC CONCRETE STAIN	20 oz. straight	Mist	100%	Allow it to dry as is. No need to blot. Wait one day before next step.	5 min.

With the surface dry, rinse with water by wiping it with a damp-wet blotting towel.

Then wait another full day before sealing.





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For t	this finish I needed:	
1.	1. Color:	
2.	2. Color:	
3.	3. Color:	
4.	4. Color:	
5.	5. Color:	
6.	6. Color:	
Mixi	king Procedures:	
1.	1. Dispersions (3 caps to 24oz of water) (Yes / No)
2.	2. Acyrli-Shades (4oz of colorant to 20oz of water) (Yes/No)
3.	3. Acrylic Concrete Stains (50% Stain to 50% water) (Yes/N	0)
Step-	p-by-Step Procedure: (Flood - Spot Flood - Mist S	peckle % Still Wet, Etc.)
1.	1.	
2.	2.	
3.	3.	
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HV	EMNATIONAL
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	Color:
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6.	Color:
<u>Mixi</u>	g Procedures:
1.	Dispersions (3 caps to 24oz of water) (Yes / No)
2.	Acyrli-Shades (4oz of colorant to 20oz of water) (Yes / No
3.	FX Anti-Dispersions (2oz to 20oz of water) (Yes / No
4.	Acrylic Concrete Stains (50% Stain to 50% water) (Yes / No
Step-	by-Step Procedure: (Flood – Spot Flood – Mist Speckle % Still Wet. Etc.)
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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 at, 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 is 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 it 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 with 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. Do not use epoxy in heavily darkened rooms as the absence of light can cause ambering.

* 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

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"

* 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.

Completing the attached Certification Form

By completing the attached Certificate of Completing Training we will be able to begin the process of emailing you a Certificate of Completion. Be sure to modify your spam filtering to permit e-mails from TheTeam@granicrete.com.

Uses and permissions.

Granicrete <u>does not</u> authorize the use of our name for your use in your corporate or trade name or in URLs.

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

Granicrete <u>does</u> authorize the use of Granicrete pictures for the purpose of installing Granicrete products and as long the installer is in good standing with Granicrete International.

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

Visit the "U" for SDS <u>before</u> using these products.

Visit the "U" for Product Specification-Use Sheets before use as well.

Granicrete International, Inc.
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

An Example of Your Profitability for Granicrete Original Tops





















COUNTERTOP SURFACING SYSTEM

55 SQ. FT (Average Kitchen)

1 Person—3 Days, 2 Persons—2 Days

GRANICRETE COUNTERTOP SET

\$430

DISPOSABLES (Typically \$75-\$100 per project)

\$100

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

INSTALLERS CHARGE TYPICALLY \$40-\$70 PER SO. FT.

NET PROFIT AT \$40.00... \$1.670

NET PROFIT AT \$70.00... \$3.320

POTENTIAL ANNUAL **NET PROFIT OF**

\$83,500 — \$166,000

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 cases.

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 have 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 at 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 very 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 the 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 complement 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 \$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."

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 not disclosed as such.
- 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 undermount 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 what those high-end stone tops are 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 are 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 the granite they have had for years and 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 entire system is superior.
 - a. Our **comprehensive strength is higher** which means concrete is softer and more prone to dents and scratching.
 - b. Our **sealers are superior** for scratch and nick resistance.
 - c. Our texture material is superior as is **not subject to spider cracking** which can later develop into major cracking.
 - d. You can complete our tops in 3 days or less vs. 28+ days for a fully cured concrete countertop.
 - e. Being many times lighter, our material will **not create weight bearing stress** to cabinets, floor trusses or foundation.
- 3. As fabricated concrete tops can be from \$90 \$190 per square foot. The savings you can offer to the consumer are significant along with the profitability you achieve.

Go to the U to order generic and custom printed marketing materials.



WHAT'S NEXT... Checklist to Success

Your guide to success as an independent installer

Detail samples from training (read countertop detailing section in index) Order Granicrete products for practicing and installation Acquire tools, disposables, sample board wood Be making additional "show-ready" boards to share Watch for email with certificate and password to U Order Online Marketing Training Order Site Signs, Door Hangers, etc. (store.granicrete.com) Go through Online Marketing Training One Received (Repeatedly) Create a call and visit list for sharing your show-ready boards Practice Marketing Training Skills before showing boards Become more aware of local market of advertisements by advertisers Read Specs and download MSDS into a binder for field access (OSHA) Establish your business as may be needed per local code ASAP
Acquire tools, disposables, sample board wood Be making additional "show-ready" boards to share Watch for email with certificate and password to U Order Online Marketing Training Upon access to U Order Site Signs, Door Hangers, etc. (store.granicrete.com) Go through Online Marketing Training One Received (Repeatedly) Create a call and visit list for sharing your show-ready boards Practice Marketing Training Skills before showing boards Become more aware of local market of advertisements by advertisers Read Specs and download MSDS into a binder for field access (OSHA) In those 5-7 days In those 5-7 days ASAP
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Establish your business as may be needed nor local code
Listabilish your business as may be needed per local code
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 Tabletops 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 as you go and grow.

Safety Data Sheets and Product Specification Sheets are in Granicrete University

INDEX



SANDING & POLISHING METHODS FOR DETAILING EPOXY COUNTERTOP FINISHES

GRANICRETE CARRIES ALL THE PADS FOR SALE TO OUR CUSTOMERS

We have long recommended detailing 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 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 by sanding yields an exceptional feel of a super smooth honed surface rather than anepoxy 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 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 touch up 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 clip off your coloring.

SANDING AND POLISHING DETAIL KIT:

- 1. 400 grit Abranet: dry sand is used for deep cuts and imperfections. More for <u>target use</u> 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 with terry towel the Bee's Wax. This will giveyou 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 andterry towel.

6. As for the edge fascia, do de-gloss the fascia of the deck edges from the onset. This canbe done by using the above Abralon pads freely in your hand (no sander) or using a fine Scotch-Brite soft pad. Use Then either polish as above with 4000 Abralon and finish witheither 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" twistedwool 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 andwith 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 padmaking an "x". Then smear the wool pad onto the countertop surface to minimize sling off and begin to burnish the surface. Keep the wool damp but not soaked withpolish. 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 the deck is finished. Besure 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 off 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 loads 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 imprint the markings of the roller pan onto their roller then 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 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, <u>don't over roll</u>, <u>don't leave puddles and streaks</u>, 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 the 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 access 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.

DO REFER TO GRANICRETE UNIVERSITIY FOR THESE DETAILING TECHNIQUES THAT ARE AVAILABLE AS VIDEOS.

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 deglossed 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 reapplication.

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 then 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, 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 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



Granicrete 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. Granicrete should not be exposed to direct heat exchange.

Granicrete'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.

Preventing Other Damage

Avoid Strong Chemicals Strong chemicals, such as paint and nail remover may damage the finish of your Granicrete countertop. If a spill does occur, promptly flush the surface with water and fully rinse.

Avoid Cuts/ Scratches

Do not cut directly on the Granicrete countertop. Use a quality cutting board. Use of coasters and placemats will reduce scratching.

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

Read by		Installed by				
	Customer	Date	Сотр	oany	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 hardeners **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 epoxy. It is also recommended that a dehumidifier 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:

INTERNATIONAL		Training N	√lodule:				
Are you already a Granicrete I		nstaller?			Yes / No		
	Today's Date				_		
	Today's Training Locaton					_	
	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 ofBirth (mm/dd/yyyy)		1		_		
Δn	plicant's Statement and A	cknowled	ament:				
-	I hereby confirm that the instructor has prov		_		n in connection with the	training	
	with respect to the products and se	vices offered by	Granicrete.				
2.	Granicrete products will be the only product	ts used for the sy	ystem's insta	allations.			
3.	I will be receiving a certificate of course co	mpletion from C	Granicrete II	nternationa	al which permits the pu	rchase of	
	Granicrete products and in no way o	-	-			arranty of the	
	installation of said products. Such a 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 was discontinued. 						
7.	7. I will discontinue the use of pictures of Granicrete installations, logo, trademarks and name immediately upon request of Granicrete.						
Installer's Signature							