

The Fabrication Manual

For

MEGANITE

Solid Surface

MEGANITE[®]
Acrylic Solid Surface

www.meganite.com

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INTRODUCTION

The extensive color palette and renewable qualities of Meganite® 100% acrylic solid surface give elegance and value to any design.

Meganite® has a variety of uses in both residential and commercial applications:

- ▶ Kitchen Countertops
- ▶ Food Service Countertops
- ▶ Restaurant Interiors
- ▶ Displays
- ▶ Hospital Work Surfaces
- ▶ Bar Tops
- ▶ Wainscoting
- ▶ Window Sills
- ▶ Reception Desks
- ▶ Conference Tables
- ▶ Bank Countertops
- ▶ Interior Signage
- ▶ Custom Furniture
- ▶ Vanity Countertops
- ▶ Tub and Shower Surrounds
- ▶ Toilet Partitions
- ▶ Table Tops
- ▶ Store Fixtures

Meganite® offers a variety of kitchen, bar and vanity sinks that can be bonded directly to the countertop. Virtually seamless in appearance, Meganite® sinks are durable, stain-resistant and easy to maintain.

A color-matched Meganite® seam adhesive is available for each color and pattern of Meganite® solid surfacing, allowing for inconspicuous seaming.

CARE AND MAINTENANCE

Meganite® can be found throughout the United States in fine homes as well as in commercial applications, attesting to its elegance and durability. With simple routine maintenance under the guidelines outlined, Meganite® will give years of carefree service.

- The sanitary properties of Meganite® prevent penetration by food, dirt and germs.
- Routine cleaning with soap, water and a sponge, or window cleaner and paper towels, will remove most dirt and stains.
- To disinfect, wipe the surface with a solution of equal parts household bleach and water. Always towel dry to remove water spots.
- For stubborn stains, removal procedures will vary, depending on the finish of the surface.

Matte Finish

Basic Care

Most countertops have a matte finish. For this finish, rub the stain with an **abrasive** cleanser such as Ajax® or Comet® and a maroon or green Scotch-Brite® pad with water. Always rub in a circular motion. Rinse and towel dry. Rubbing the entire surface occasionally will maintain the finish.

Scratch Removal

Hand sand the cut or scratch using 220 grit paper, sanding in a circular motion. Follow by using a 320 or 400 grit paper, again in a circular motion, and rub the area with a maroon or green Scotch-Brite® pad.

Semi-Gloss Finish

Basic Care

Use a **non-abrasive** cleanser with diluted bleach, rubbing with a white Scotch-Brite® pad. Rinse and towel dry. A non-abrasive polish may be used to enhance the shine.

Scratch Removal

Sand the area as described for a matte finish, plus 600 grit. Follow with a white rubbing compound such as Soft Scrub® applied with a soft cloth and then rub the area with a white Scotch-Brite® pad.

High-Gloss Finish

Basic Care

If the counter has a polished or high-gloss finish (not recommended for countertops or other high-use or high traffic areas) use a bleaching, **non-abrasive** cleanser applied with a sponge or use a white polishing compound rubbed with a soft cloth.

Scratch Removal

Sand the area as described for a semi-gloss finish. Follow with 600 grit paper, always sanding in a circular motion. Buff the area with a white polishing compound using a low-speed polisher equipped with a wool pad. If desired, a non-abrasive countertop polish may be applied.

Note: White or maroon Scotch-Brite® pads are usually available at most hardware stores.

PREVENTIVE CARE

- **Always** use a hot pad or a trivet with rubber feet under heat-producing appliances or hot pots and pans.
- **Never** cut directly on the surface of the countertop. Always use a cutting board.
- Do not allow harsh chemicals such as acetone (nail polish remover), drain or oven cleaners or paint removers to contact the countertop. Wash these chemicals off with water immediately if they contact the surface.
- Avoid sliding hard objects across the countertop as this can cause scratches. Placing felt protectors on the bottom of these objects will greatly reduce the risk of scratching.
- **Always** run cool water into the sink simultaneously when using an instant hot water dispenser or pouring boiling water into a Meganite® sink.

SAFETY AND HEALTH

Meganite[®] 100% acrylic resin solid surface material is non-toxic. However, some activities during fabrication and installation pose potential safety and health hazards. These activities include but are not limited to:

- The use of hand and power tools
- The use of adhesives and cleaners
- The use of flammable components
- Exposure to dusts and chemical vapors
- Heavy and awkward lifting and materials handling

When working with Meganite[®] solid surface materials, all normal safety precautions must be followed. First aid supplies, including eye wash station, must be readily available within quick reach of the work area.

- Use approved eye and ear protection.
- For the safest and best performance, always keep tools clean and sharp.
- Never use a tool to do a job for which it was not designed.
- Always keep the work area clean and organized.

Exposure Control

The work area should be adequately ventilated to prevent any excessive vapor accumulation and inhalation. If styrene vapor levels are excessive, approved organic vapor respirators must be worn. Dust collection and control should be sufficient, and approved NIOSH (National Institute for Occupational Safety and Health, www.osha.gov) dust respirators should be worn. The same exposure considerations should be made when working with Meganite[®] as when working with other solid surfacing materials.

Waste Disposal

Dust generated during fabrication activities is non-hazardous with regards to waste disposal and should be disposed of in accordance with local statutes. Acrylic resins and hardeners are hazardous waste if disposed of in liquid form. However, when mixed and allowed to set up, they are considered non-hazardous solid waste. Dispose of seaming cartridges by mixing the components, allowing them to solidify, and then disposing of them in accordance with local industrial waste statutes.

TOOLS

Meganite® can be fabricated using many conventional woodworking tools and equipment. Additionally, many specialized tools have been developed specifically for solid surface fabrication. The following tool list is the minimum required for quality fabrication:

Saws

- Table or panel saw
- Miter saw
- Radial arm saw

Routers

- 2 HP with 12mm (1/2") collet for general purpose work
- 3 HP with 12mm (1/2") collet/plunge base for heavy duty work
- 1/2 HP with 12mm (1/2") collet for edge detail
- 12mm (1/2") shank carbide bits

Sanders

- 150mm (6") dia random orbital sander
- Scotch-Brite® pads
- 3M Microfinishing or Trizact® sanding disks

Straight Edges, Clamps and Levels

- Metal or phenolic straight edge
- Spring clamps
- C-clamps
- Bar clamps
- 4' level

Other

- Hot melt glue gun
- Hot melt glue sticks/cartridges
- Clear packing tape
- Meganite® seam adhesive gun
- Heat reflective tape

Safety Equipment – see *Safety and Health Section*

- Dust collection/control equipment (highly recommended)
- Respirators/dust masks
- Gloves
- Safety glasses/eye protection
- First Aid kit/materials

STORAGE AND HANDLING

Storage

- Meganite[®] solid surface sheet goods should be stored perfectly flat on racks or pallets with sufficient support.
- Keep sinks in their original boxes until ready to use and stack according to box instructions.
- Seam adhesive kits should be kept in a cool, stable environment. Refrigeration will increase the shelf life of the adhesive.
- **Never** allow seam adhesive kits to freeze.

Handling

- Full pallets should be unloaded from the delivery vehicle using a forklift.
- Individual sheets should be carried vertically (on edge) by two people, keeping bending and flexing to a minimum.
- **Always** use the proper safety equipment when handling material.

Product Inspection

- Inspect **all** material before cutting process begins.
- Meganite[®] sheets are matched by lot numbers printed on or adhered to each sheet.
- **Always** pay close attention to lot numbers to ensure color matching if sheets are to be seamed together.

Here are some of the items to look for when making a visual inspection of the product prior to fabrication:

- Color match from sheet to sheet
- Cracks or chips
- Color consistency within each sheet
- Particulate distribution
- Flatness of sheet goods
- Sanding qualities

JOB EVALUATION AND PREPARATION

The job only begins with the sale. Successful job completion requires forethought and planning. The use of written contracts with diagrams for all orders and change orders is recommended. They will reduce errors and misunderstandings.

A standardized order form should include at least:

- Customer name and phone numbers
- Job site address
- Contact name and phone number
- Material color selection (use both color name and number)
- Edge treatment
- Finish selection
- Sink selection
- Cooktop (manufacturer and model number)
- Type and location of all cutouts
- Any special items/conditions or upgrades (inlays, radius corners, additional support required, etc.).
- Jobsite access and workspace
- Availability of power
- Dust control and cleanup requirements

Ensure Accessibility

Evaluate the job site and conditions prior to fabrication. Pay special attention to potential trouble spots such as doors, stairs, elevators, low ceilings, cabinetry and corners that are to be negotiated. Adjust the fabrication sizes accordingly to accommodate these conditions.

Inspect Installation Area

A common cause of solid surface failure is cabinetry not installed perfectly level. For that reason, always inspect the cabinets to be sure they are level, secure, and structurally sound to ensure they can properly support the weight of the counter tops (including water filled sinks) and anything that will be placed on them. Pay special attention to cabinets supporting sinks, slide-in appliances and corner units. Correct any unsatisfactory conditions before installation.

MEASURING AND TEMPLATING

Most jobs will require a template for a professional fit. Templates must follow cabinet outlines and walls very accurately. The most common method of templating is the use of plywood or Masonite strips joined with hot melt adhesive. Cardboard can also be used but is sometimes less accurate and more difficult to work with.

Mark layout positions such as sink center, stove/cooktop, dishwasher, points of support etc. It is recommended that all jobs that incorporate cove backsplashes be templated.

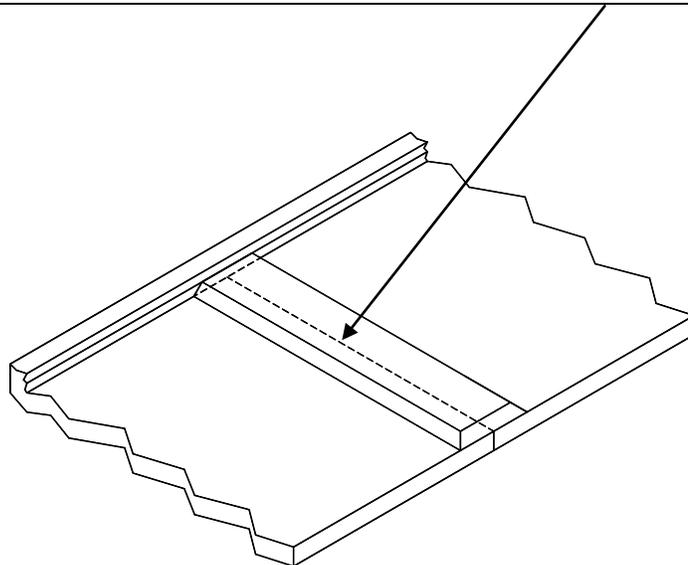
SEAMS

Seam Placement

All seam locations must be chosen with great care and coincide with fabrication guidelines. Seams weaken the overall top structure, and should be limited in number and placed only in low stress locations.

- Deck seams must be offset a minimum of 25mm (1") from inside corners. Never miter seams at inside or outside corner locations.
- Seams must be at least 75mm (3") away from all cutouts, dishwashers or other heat producing appliances.
- Seams must not extend into cooktop cutouts.
- A seam placed through an integral Meganite[®] sink location is approved.

- | |
|--|
| <ul style="list-style-type: none">• All seams must be reinforced by a 100mm (4") wide 45° beveled Meganite[®] seam support adhered (with Meganite[®] seam adhesive) to the underside of the sheets. The seam support must run the entire length of the seam. |
|--|

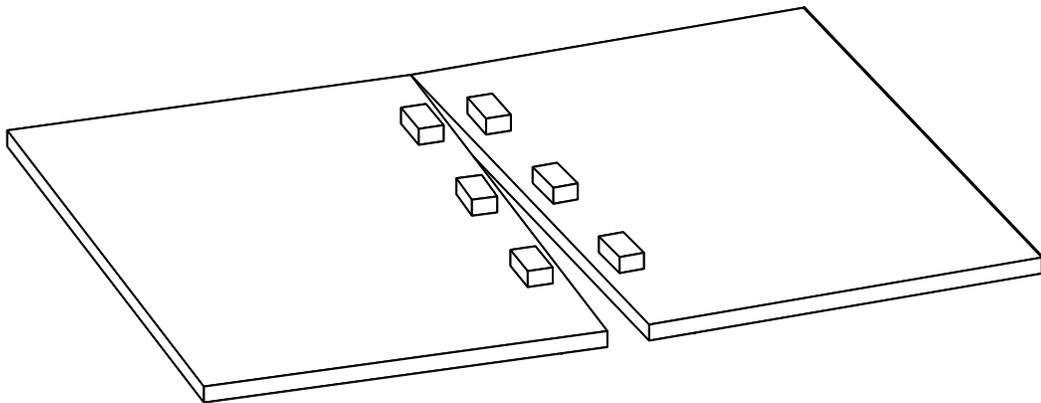


- Offset seams in edge buildups at least 25mm (1") away from all deck seams, additional buildup layers or inside corners.
- Keep butt joints on the buildup layers away from the center of long runs for maximum strength.

SEAMS (continued)

Shop Seams

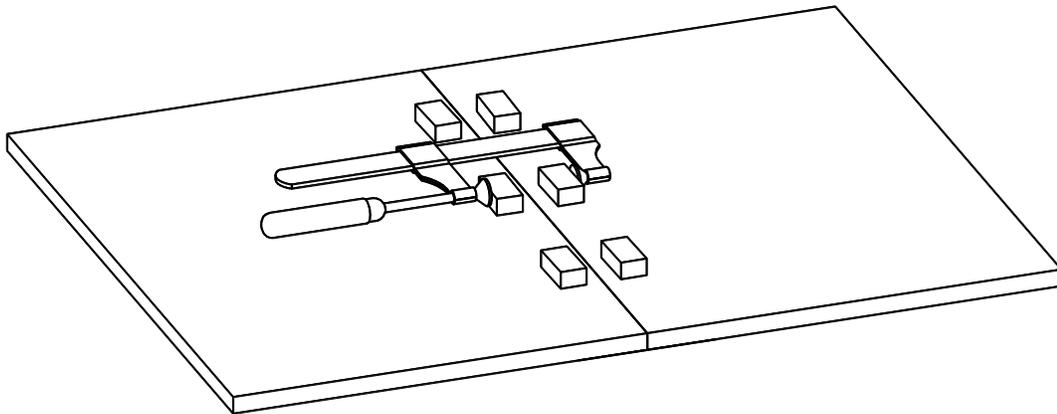
- Clamp and “mirror image” rout the seam using a router with a 12mm (1”) 2-flute carbide bit and a straight edge.
- Seams should come together tightly when dry fitted.
- Lightly sand and clean around the seam to provide a bonding area for wood clamping blocks.
- Hot melt wood clamping blocks on each side of the seam and directly across from each other. Use at least three sets of blocks for a 600mm (24”) deep countertop, or a set about every 200mm (8”) for other sizes.



- Sand the edges to be glued lightly with 80 grit sand paper on a hard wood block, taking care not to round over the edges.
- Prepare the seam by cleaning thoroughly with denatured alcohol and a clean white rag.
- Place a strip of release material such as clear packing tape or wax paper under the seam and center the edges to be joined leaving a 3mm (1/8”) gap.

Shop Seams (continued)

- Purge the adhesive cartridge and tip to ensure proper mixture. If an air void appears while applying the adhesive, purge the cartridge again to avoid improper mixing.
- Fill the gap between pieces one-half full with the appropriate colored Meganite® seam adhesive and push the sheets together. Clamp the joint tightly (using spring clamps, vacuum clamps or bar clamps) allowing the excess adhesive to squeeze out. **Over tightening the clamps will cause starved or weak seams.** Do not remove the excess adhesive at this point.



- The clamps may be removed when the adhesive has fully cured.
- Remove the hardened squeeze out with a router. **Never** use a chisel or belt sander on seams.
- Adhere the Meganite® seam support to the joint area (using Meganite® seam adhesive) covering the entire length of the seam.

Field Seams

- Take great care when fabricating the countertop sections in the shop to ensure that all field seams fit tightly when taken to the jobsite.
- Field seams must follow all shop seam fabrication guidelines.

USING AND STORING MEGANITE SEAM KITS

Always store adhesive in an upright position. Adhesive should be stored in the cooler areas of the shop, with temperatures 5-15 deg centigrade. Storing the adhesive in a separate refrigerator (from lunches, snacks, drinks), will prolong the life of the adhesive. Do not freeze the adhesive.

When using a fresh, unopened tube, squirt a little material out (with no tip attached) to ensure that you have both adhesive and catalyst flow. Many fabricators squirt this out into their trash can or onto a piece of paper. Then attach tip, squirt out into the trash a little bit of adhesive and you are ready to begin seaming or buildups.

After you are done using the adhesive, many fabricators leave the tip on the tube. The material will set up in the mix tip, but will not set up in the cartridge or in the feed chamber. You can stand the tube in the upright position, with the tip attached. Then when you need to reuse the tube of adhesive, simply take off the set up tip, and squirt a little out to make sure you have adhesive and catalyst flow. Attach a clean, new tip onto the cartridge, squirt a little adhesive out of the tip into the trash and you are ready to begin seaming.

Helpful hints when using acrylic adhesive to make seams or buildups.

Always use mirror cutting techniques to cut the seam. Routed mirror cut seams provide the cleanest seams and often help reduce gaps due to router chatter.

Always dry fit seams. If you can't see the seam when it's dry fitted, you will probably not see the seam once it is finished. For best bonding strength, use an 80 grit or 100 grit paper to "rough up" the seamed areas. Be careful not to round off the top edges of the edges to be seamed. It is always best to wipe the seam with denatured alcohol immediately prior to seaming in order to remove dust or oily films left by your hand.

It is recommended to use some type of spring clamp when making seams or buildups. This will provide consistent pressure with no need to check the clamps during the curing process. Use extreme care when using any type of screw clamps, which can put too much pressure on the seam forcing the adhesive out of the joint.

It is always best to lay two small beads down, rather than one large thick bead. Having two smaller beads ensures that you have sufficient catalyzation.

ADHESIVE COLOUR SELECTION CHART

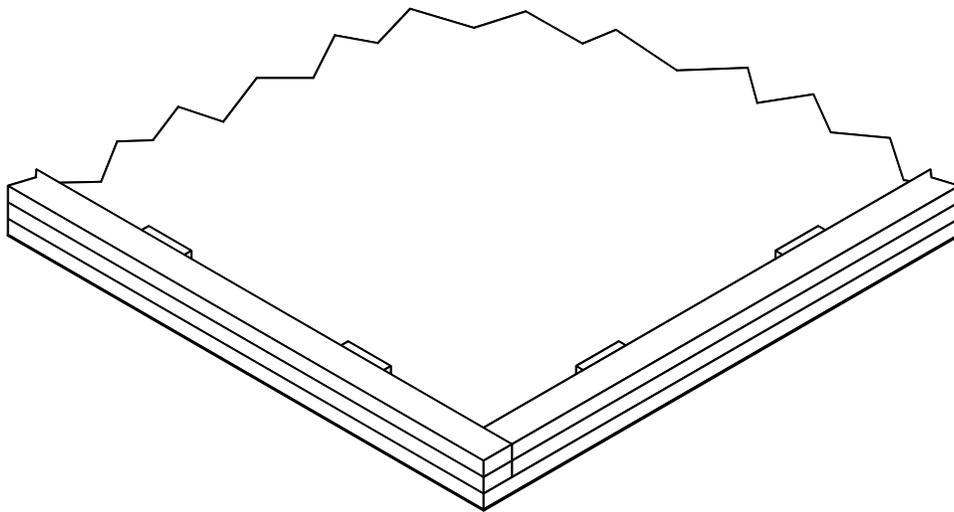
Sheet Colour Name	Glue Colour	Sheet Colour Name	Glue Colour
Snow White (033A)	Glacier*	Canela (504AR)	Calico*
Flexy White (033T)	Glacier*	Staten Island (502A)	Cinnamon*
Ivory (072A)	Ivory	Blue Bayou (510A)	Steel
Soft White (005A)	Soft White	Volterra (505A)	Cinnamon*
Bone (003A)	Bone	Rio Grande (503A)	Rio Grande
Grey (056A)	Pearl Grey	Antique White (630A)	Antique White
Slate (040A)	Steel	Aspen (780A)	Glacier
Pewter (093A)	Storm*	Rocky Road (729AR)	Bone
Jet Black (019A)	Sable*	Desert Stone (625AR)	Bone
Fire (088A)	Fire	Delta (661A)	Chocolate Sparkle*
Tangerine (077A)	Tangerine	Cotton Boulder (846A)	Antique White
Sunshine (079A)	Sunshine	South Beach (811A)	Soft White
Lime (060A)	Lime	Winter (800A)	Pearl Grey
Chocolate (091A)	Chocolate	Just Beachy (904A)	Cinnamon*
White Glow (094A)	White Glow	Cinder (679AR)	Cinnamon*
Summer Glow (063A)	Summer Glow	Barney's Rubble (903A)	Lava*
Lemon Glow (053A)	Lemon Glow	Raven (810AR)	Anthracite
Aqua Glow (062A)	Aqua Glow	Under The Boardwalk (505S)	Cinnamon*
White Crystal Boulder (813A)	White Glow	Brown Eyed Girl (503S)	Chocolate Sparkle
Frosted Ice (9745B)	White Glow	Starry Starry Night (508S)	Anthracite
Blue Ice (913B)	Clear	Red Diamond Sparkle (698S)	Red Diamond
Green Ice (912B)	Clear	Botanic Gemstone (820S)	Chocolate
Polar (290A)	Ivory	Goldrush Gemstone (819SAR)	Chocolate
Canvas (312AR)	Ivory	Silver Lining (923S)	Pearl Grey
Papyrus (349A)	Ivory	Shine On Me (430S)	Antique White
Wheat (266AR)	Bone	Midnight Gemstone (9926SB)	Clear
Silver (219AR)	Lava*	Beyond The Sea (416A)	Ivory
Midnight Sky (265A)	Anthracite	See Glass (418A)	See Glass
Galaxy (311A)	Sable*	Surfin' Safari (419A)	Soft White
Blanca (701A)	Antique White	Shell Mosaic (9927B)	Calico*
San Rafael (501A)	Bone		

* Also in 50ml Cartridges

EDGE FABRICATION

Edges are most commonly fabricated using either the “stacking method” or the “on edge method”. When fabricating material with large particulate it is recommended that the “on edge” method of edge fabrication be used. This will greatly reduce the possibility of visible lines (caused by repeated visual breaks in the large particulates, where one sheet ends and another sheet begins) when the material is seamed together.

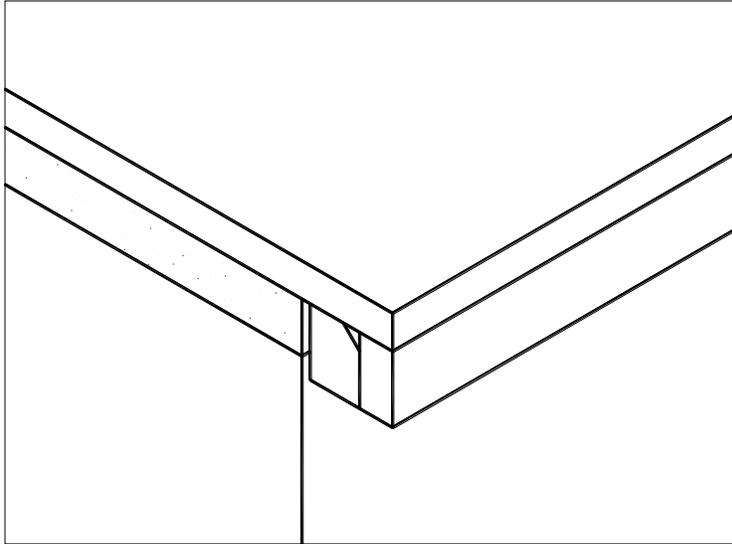
Stacking Method (surface to surface)



- The stacking method is preferred and is the strongest.
- Stacking a contrasting color of Meganite[®] within the edge is a popular option.
- **Never** sandwich other materials (wood, laminate, metal, etc.) between the Meganite[®] edge pieces. Always use a routed groove for these types of thin inlays.

EDGE FABRICATION (continued)

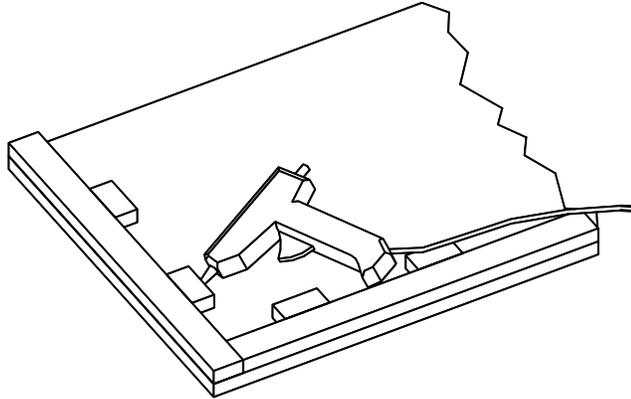
On Edge Method (stand up)



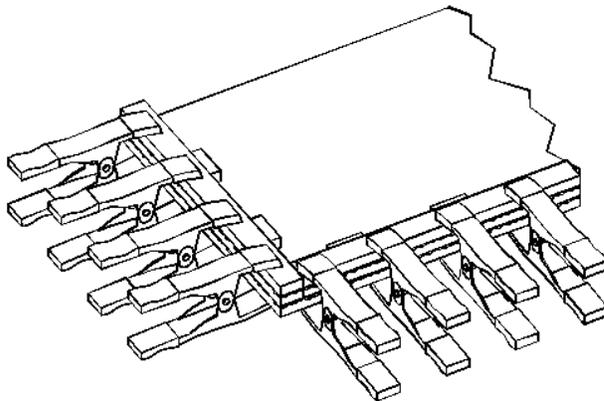
- Edges can also be attached vertically on edge.
- This method will not be as strong as the stacked edge.
- Be sure to back up this edge with a wood reinforcement strip to increase its strength.
- Use only 100% silicone adhesive when attaching wood to Meganite[®].
- Always allow a 3mm (1/8") gap between the Meganite[®] edge and the wood for expansion and contraction.

EDGE FABRICATION (continued)

- Sand the backside of the sheet and buildup strips as needed.
- Dry fit and clamp edge buildup strips to the backside of the sheet.
- Hot melt wood clamping blocks tightly against the edge buildup strips.

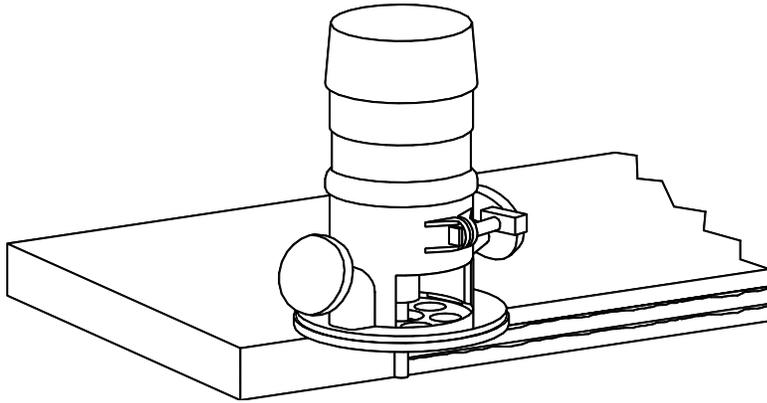


- Remove all clamps and buildup strips. Thoroughly clean all surfaces that are to be glued using denatured alcohol and a clean white rag.
- Apply Meganite[®] seam adhesive making sure there is enough adhesive to squeeze out free of voids along all seams.
- Apply spring clamps no more than 75mm (3") apart to the entire gluing area.
- Allow the adhesive to dry completely and remove clamps and wood blocks.



EDGE FABRICATION (continued)

- Using a straight edge and a router, flush trim the edges.



- Rough sand the edges to remove any router chatter.
- The edges are now ready to be routed to the desired profile.
- Note extra care and sharp tooling is important with some large particulate decors from Meganite® Pearls range, some minor voids can occur during machining in these decors, these can easily be filled with the recommended matching adhesive.

INSIDE CORNERS

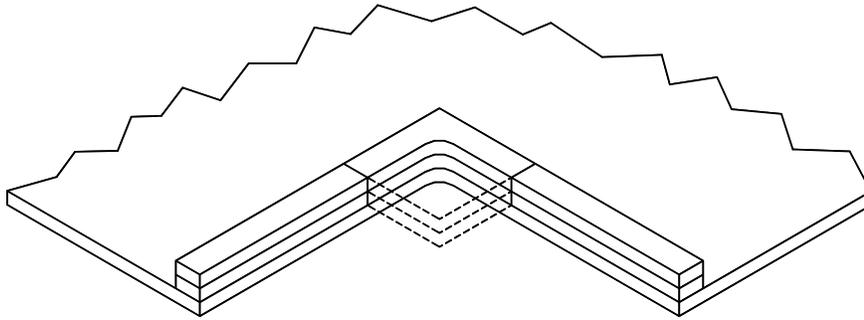
Special reinforcement is required on inside corners because they are subject to higher stress than other areas.

Finished inside corners **must be routed to a minimum 12mm (1/2") radius** (the larger the radius the better).

One of the following reinforcement procedures must be used.

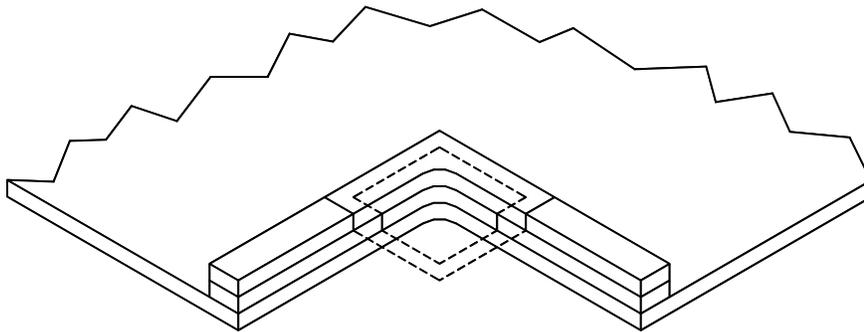
Corner Block Method

Buildup pieces cut to a minimum size of 75x75mm (3"x3") are sanded, glued and clamped to the underside of the countertop in the inside corner. This will form a square block that is then routed to the exact size of the inside corner.



Interlocking Corner Block Method

Corner block buildup pieces are aligned with seams offset by 25mm (1")
This method will provide greater strength.

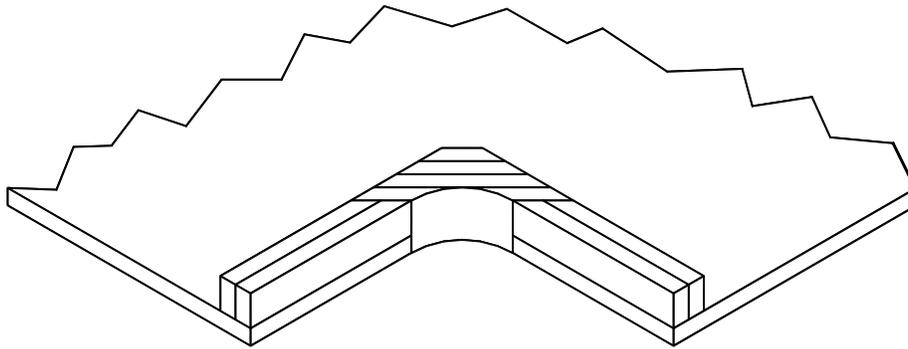


INSIDE CORNERS (continued)

MEGANITE®

Vertical Strip Corner Block Method

The vertical strip corner block can be used with either the “stacking method” or the “on edge method”. Pre-glue and square Meganite® vertically to form the inside corner block. The block is then adhered to the underside of the countertop in the inside corner.



DOCUMENT PURPOSE

This document offers recommended fabrication techniques for fabrication of bright solid colors, vibrant solid colors and dark solid colors of Meganite Acrylic Solid Surface.

MEGANITE COLORS INCLUDED IN THIS CATEGORY

Grey 056A	Parapet Grey 090A	Slate 040A	Pewter 093A	Jet Black 019A
Fire 088A	Tangerine 077A	Sunshine 079A	Lime 060A	Chocolate 091A

**DUE TO THE INHERENT REFLECTIVE PROPERTIES OF THESE
COLORS, THE FOLLOWING PAGES INCLUDE ILLUSTRATED
FABRICATION TECHNIQUES FOR YOUR REVIEW.**

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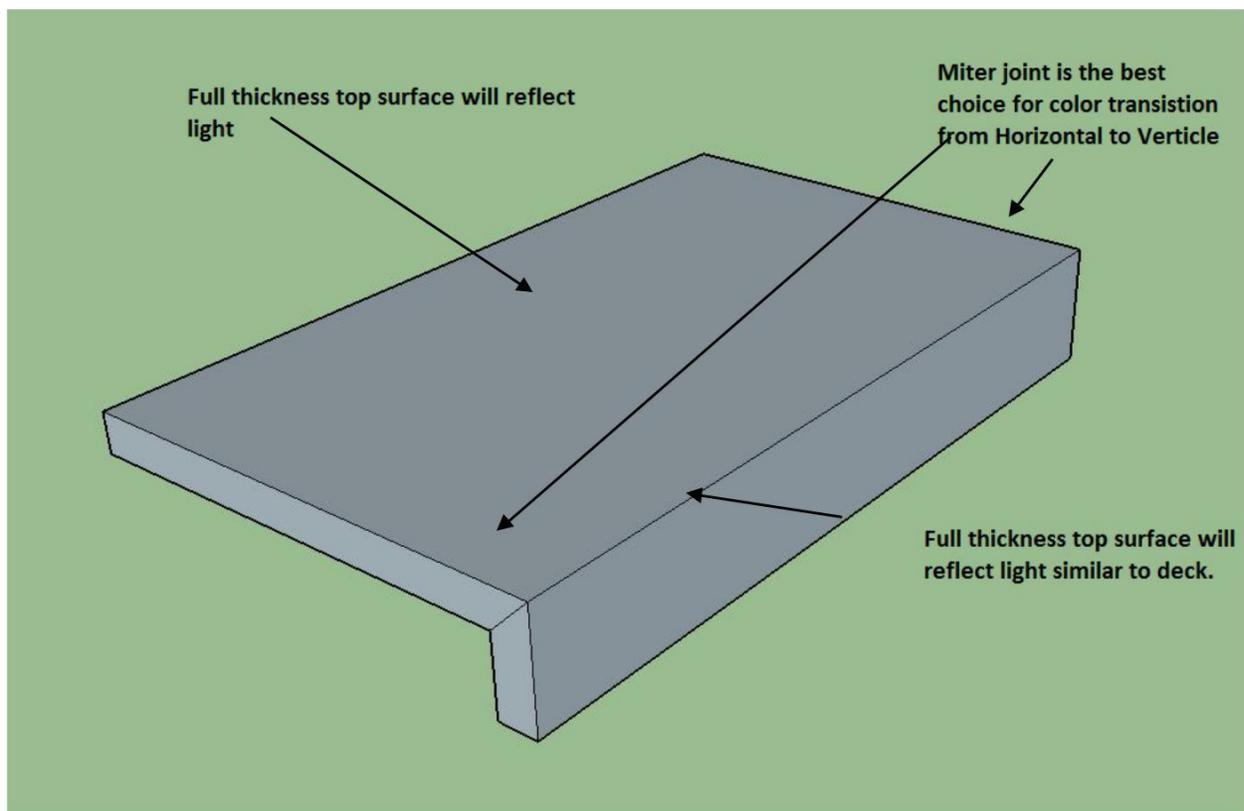
TECHNICAL
BULLETINS

BRIGHT, VIBRANT, AND DARK SOLID COLOR
FABRICATION RECOMMENDATIONS

===== - MITER EDGE FOR BUILDING AN EDGE

Diagram 1 is a sample of the =====, to give the edge and deck surface the most consistent color appearance. Always do a mock up test piece to make sure you and/or your customer is satisfied with the final product.

Diagram 1
Miter Edge (Best Option)



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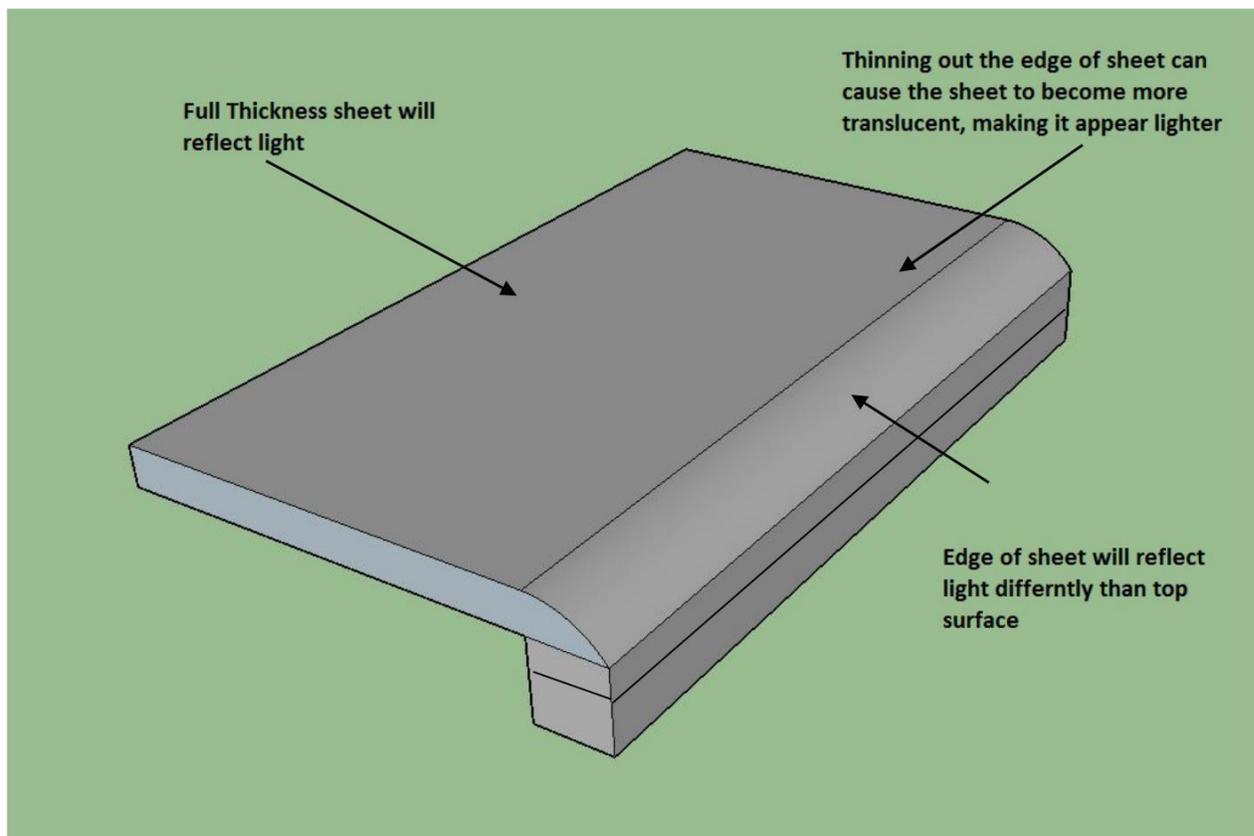
TECHNICAL
BULLETINS

BRIGHT, VIBRANT, AND DARK SOLID COLOR
FABRICATION RECOMMENDATIONS

STACKED LAMINATED EDGE

The top surface of these colors can reflect light differently than the edge of the sheet. As a result, the top surface might look differently in color compare to the edge. Diagram 2 is an over exaggerated diagram of how a laminated edge may appear. Always do a mock up test piece to make sure you and/or your customer is satisfied with the final product.

Diagram 2
Stacked Laminated Edge



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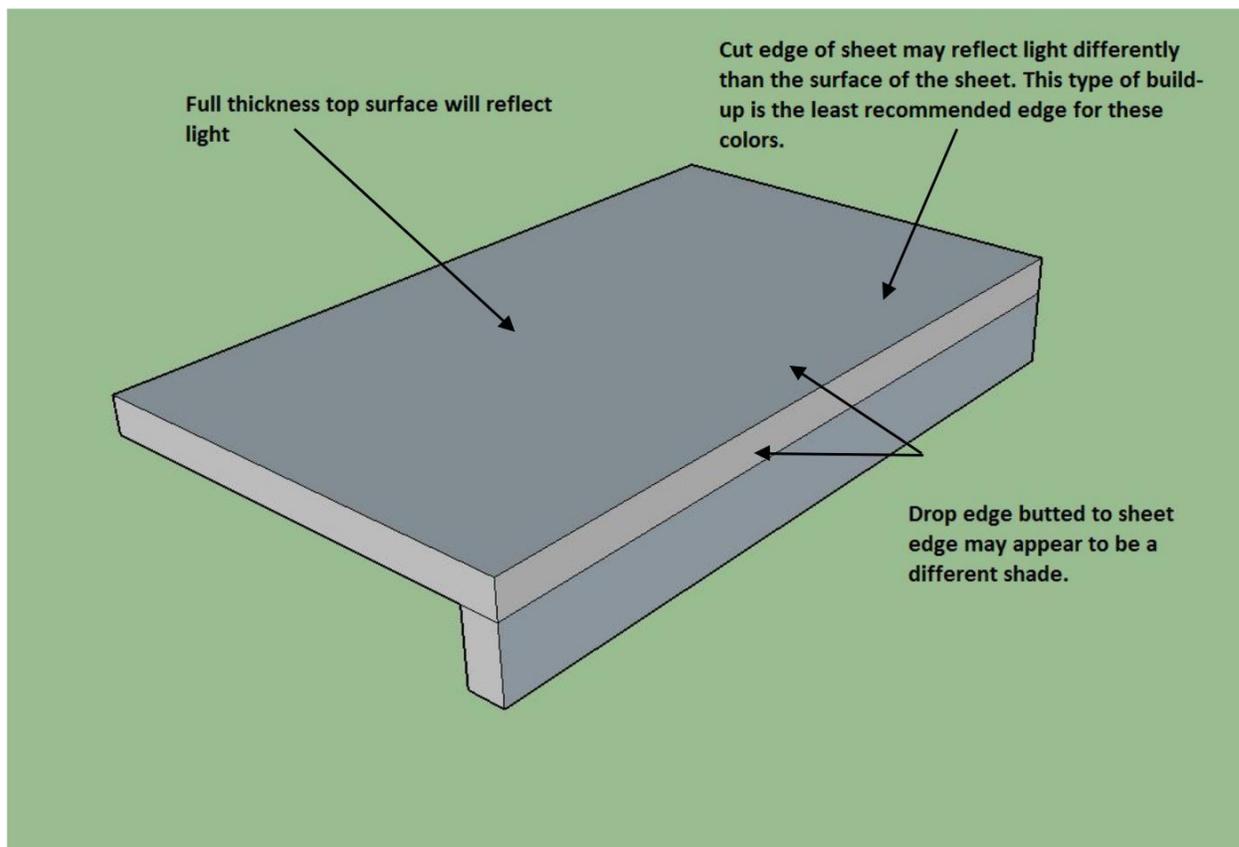
TECHNICAL BULLETINS

BRIGHT, VIBRANT, AND DARK SOLID COLOR FABRICATION RECOMMENDATIONS

DROP EDGE

The top surface of these colors can reflect light differently than the edge of the sheet. As a result, the top surface might look differently in color compare to the edge. Diagram 3 is an over exaggerated diagram of how a drop edge may appear. Always do a mock up test piece to make sure you and/or your customer is satisfied with the final product.

Diagram 3
Drop Edge



IF YOU HAVE QUESTIONS, PLEASE CONTACT MEGANITE SOLID SURFACE REPRESENTATIVES, AUTHORIZED FABRICATORS, DISTRIBUTORS OR EMAIL US AT INFO@MEGANITE.COM.

ALL TECHNICAL BULLETINS CAN BE FOUND @ WWW.MEGANITE.COM

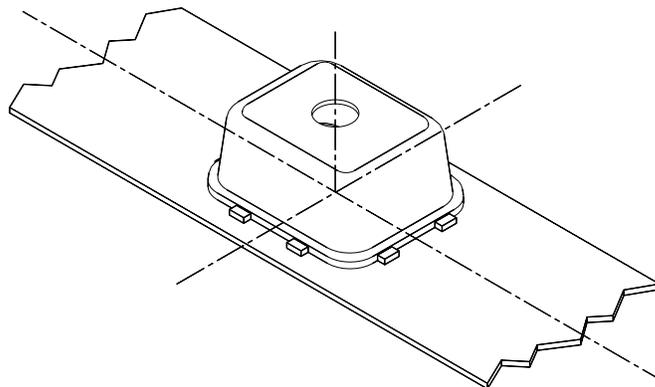
SINK INSTALLATION

Sink Cutouts (for drop in sinks)

- Cutouts should be made using a router. Plunge routers make this job much easier. **Never** use a jigsaw.
- Measure the actual sink for exact dimensions. Specification sheets have been known to be incorrect, and such an error is costly to the fabricator.
- Round over **both the top and bottom edges** of the cutout using a 3mm (1/8") radius bit and sand the edges leaving them smooth and free of router chatter.

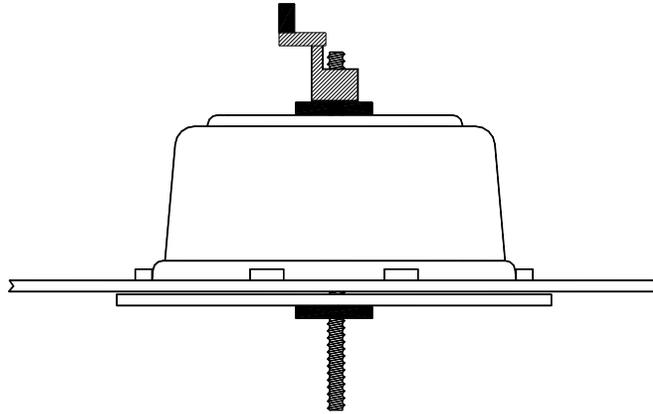
Undermount Solid Surface Sinks

- The use of solid surface sinks or bowls other than a Meganite® or Transolid® product is not recommended, and will affect your warranty. Please check with your Meganite® representative for more information.
- Before installation, make a close visual inspection of the solid surface sink to verify the color and look for imperfections such as discoloration, spots, chips, etc.
- Lay out the sink location carefully, marking the centerlines of the sink base cabinet. Be sure to allow adequate clearance for the faucet and other fixtures.
- Lay the sink in place on the back of the sheet. Lightly sand and clean around the sink to provide a bonding area for wood blocks.
- Hot melt wood glue blocks around the sink leaving about 3mm (1/8") gap between the blocks and the bowl. These will help to hold the sink in position during the gluing process.
- Mark the drain hole positions on the countertop and remove the sink. Using a router cut a hole in the countertop at each drain hole location that is large enough for a pipe clamp.



Undermount Meganite® Sinks (continued)

- Lightly sand and clean areas to be bonded. Apply the Meganite® seam adhesive to the rim of the sink and place the sink on the countertop.
- Make sure the sink is aligned properly. Clamp the sink tightly using pipe clamps and clamping boards. The adhesive must squeeze out around the entire sink perimeter free of voids. Continue to check the pressure on the clamp throughout the curing process.



- Remove clamps and wood blocks only after the adhesive has hardened.
- Using a flush trim bit with an oversized bearing, rout the sink opening.
- Use the appropriate bowl profile bit to rout the opening to its desired shape.
- Sand the area as required to achieve the desired finish.

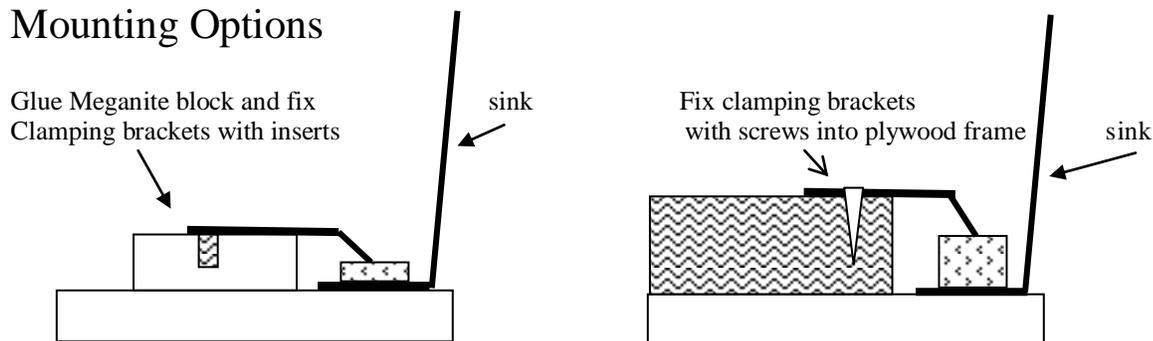
Undermount Non-Solid Surface Sinks

- Using a template, rout the sink opening to its finished size. Round over **both the top and bottom edges** using a 3mm radius bit and sand the edges leaving them smooth and free of router chatter.
- The use of sink clips to undermount the sink to the sheet is allowed.
- Cut 25x25mm (1") mounting blocks (with rounded corners and eased edges) from the Meganite® sheet and secure them 18mm (3/4") from the sink using Meganite® seam adhesive.
- Drill a 6mm (1/4") diameter hole into the center of the mounting blocks and tap in brass anchors. **Never** install brass anchors directly into the Meganite® sheet.
- Thread a wing nut onto the bolt. With the sink clip in place, tighten the bolt securely to lock the brass anchor.
- Use only 100% silicone to bond the sink to the Meganite® sheet.
- With the sink clips in place on the rim of the sink, tighten all the wing nuts evenly until the clips begin to bend.
- Allow the silicone to cure.
- **Do not** remove the sink clips.

FAUCET HOLES

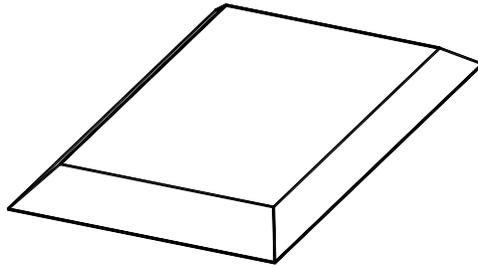
- Faucet and accessory holes can be made by using a router or hole saw. You **must** sand **both the top and the bottom** of the hole to a slight radius, to avoid potential cracking at a later point in the life of the countertop.
- Make sure the size of the hole drilled will allow for expansion and contraction and the hole is rounded over on both the top and bottom.

Mounting Options

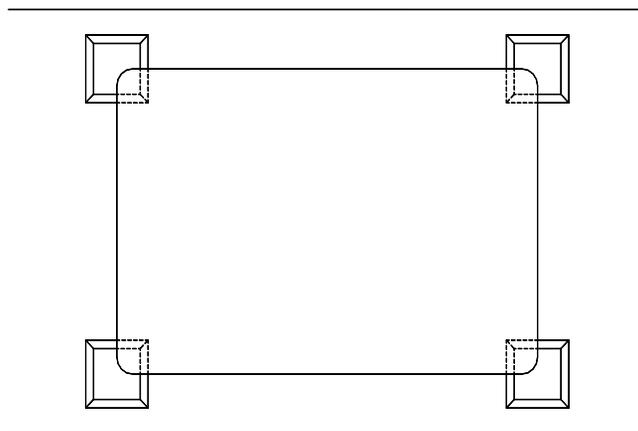


COOKTOPS

- Measure the actual cooktop for exact dimensions. Specification sheets have been known to be incorrect, and such an error is costly to the fabricator.
- Mark the cooktop center so that it lines up with the cabinet below.
- Lay out the cooktop cutout lines allowing a **minimum 6mm (1/4") gap** between the cooktop and the Meganite® countertop.
- **Always** use a router to make cutouts. **Never** use a jigsaw.
- Inside corners must be a minimum 12mm (1/2") radius and reinforced with Meganite® corner blocks with an approximate 25mm (1") overrun into the deck.
- Corner blocks must be a minimum 100mm x 100mm (4"x4") and all sides beveled at 45°.



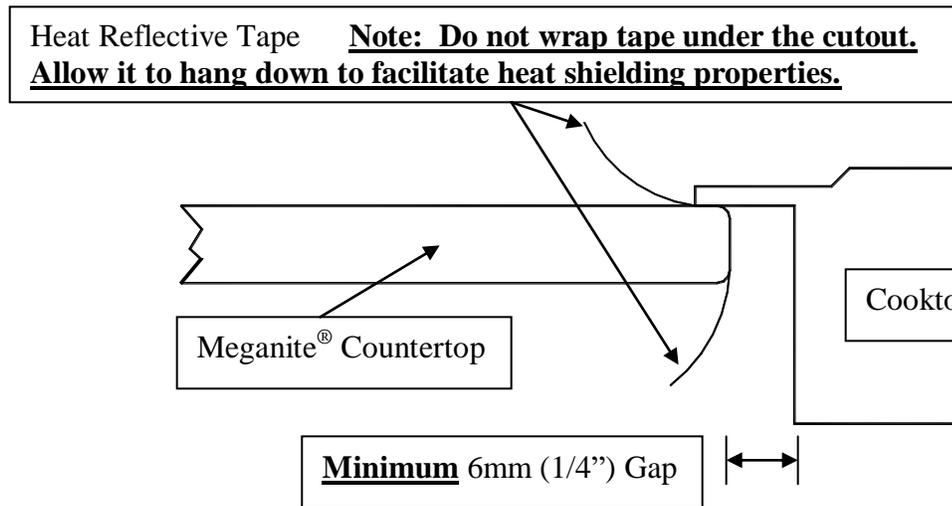
- Adhere the Meganite® corner blocks using only Meganite® seam adhesive.



- Rout a 3mm (1/8") radius on the **top and bottom edges** of the cutout and reinforcing blocks and sand smooth.

COOKTOPS (continued)

- Line the entire cooktop opening with two layers of insulated heat reflective tape. High heat producing units may require additional layers.
- Use **only** 3M #433 heat reflective tape. Other tapes may not meet the specifications required by the Meganite® warranty.
- Place the tape so that the cooktop flange rests on the tape. The excess tape is cut away using a razor knife after the cooktop is installed.
- **Do not** fold the excess tape under the cutout. The excess must be left hanging.



- **Never** fasten cooktops to Meganite® countertops with metal fasteners. If necessary, attach a wooden block for the fastening screws.
- Maintain **at least 6mm (1/4") gap on all sides** between the cooktop and the countertop. **Failure to do so will void the Meganite® warranty.**
- **Make sure the cooktop installer fully understands the Meganite® installation requirements.**

FINISHING

There are three basic finishes for solid surface materials. Each finish has different properties as well as levels of maintenance that should be taken into consideration for each specific application.

Matte Finish a softer finish that is the easiest to maintain.

Semi-Gloss Finish ... a medium finish that enhances the appearance of dark solids and patterns but is more difficult to maintain.

High-Gloss Finish ... a polished finish that enhances the visual depth and beauty of the material (**not recommended for countertops or other high use areas, as this finish is the most difficult to maintain**).

Sanding Techniques

Orbital Sanding

- Move the sander in a left to right direction, overlapping each pass by about one-third. Sand slowly at an even pace and never in a circular motion as this can create a low area in the surface.
- Follow by sanding in a front to back motion and then by sanding at a diagonal in both directions always overlapping each pass by at least one-third.
- Clean the area and repeat these steps using the next abrasive level.
- For edge sanding, remove the abrasive from the pad and hand sand using all the abrasive levels.

Abrasives

- We recommend using 3M Micronfinishing or Trizact or Joest USE-IT sanding abrasives. They usually have tighter control of particulate size and shape, resulting in fewer deep scratches and a better overall finish.
- Refer to the chart of standard finishing steps on the following page for the abrasives needed to achieve the desired finish.
- Use a random orbital pneumatic or electric sander, wet or dry, per 3M specifications.
- **CAUTION: Do not** use electric powered sanders for wet sanding.

FINISHING STEPS

3M Microfinishing Abrasives

MATTE FINISH

STEP 1	366L 100 micron
STEP 2	366L 80 micron
STEP 3	366L 60 micron
STEP 4	7447B Scotch-Brite® pad

SEMI-GLOSS FINISH

STEP 1	366L 100 micron
STEP 2	366L 80 micron
STEP 3	366L 60 micron
STEP 4	366L 30 micron
STEP 5	7448B Scotch-Brite® pad

HIGH-GLOSS FINISH

STEP 1	366L 100 micron	
STEP 2	366L 80 micron	
STEP 3	366L 60 micron	
STEP 4	366L 30 micron	
STEP 5	366L 15 micron	
STEP 6	3M Compounding Material	Use a low-speed buffer and a white pad
STEP 7	3M Finishing Material	Use a low-speed buffer and a yellow pad

3M Trizact® Film Abrasives

MATTE FINISH

OPTIONAL PRE-STEP	366L 100 micron	If necessary to level rough surface
STEP 1	268XA A35	Use dry <i>or</i> with a light to medium water mist
OPTIONAL FINISH STEP	268XA A10 <i>or</i> 7447B Scotch-Brite® pad	Use with a light to medium water mist

SEMI-GLOSS FINISH

OPTIONAL PRE-STEP	366L 100 micron	If necessary to level rough surface
STEP 1	268XA A35	Use dry <i>or</i> with light to medium water mist
STEP 2	268XA A10	Use with a light to medium water mist
OPTIONAL FINISH STEP	268XA A5 <i>or</i> 7447B Scotch-Brite® pad	Use with a light to medium water mist

HIGH-GLOSS FINISH

OPTIONAL PRE-STEP	366L 100 micron	If necessary to level rough surface
STEP 1	268XA A35	Use dry <i>or</i> with a light to medium water mist
STEP 2	268XA A10	Use with a light to medium water mist
STEP 3	268XA A5	Use with a light to medium water mist
STEP 4	568 XA	Use with a medium to heavy water mist

USE-IT ABRASIVES

Step 1	517-A180	180 Grit
Step 2	517-A320	320 Grit
Step 3	7448B Scotch-Brite®	pad (use for matt finish)
Step 4	517-A600	600 Grit
Step 5	128-SG2-1800	1800 Super G (satin finish)
Step 6	28ZPOLIT	worktop spary polish (semi-gloss finish)

Polishing Techniques

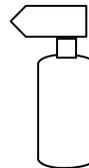
When used in an appropriate application (vertical or decorative surfaces only), a polished finish can be very pleasing. The end user should be advised of the special care and attention needed to maintain this surface.

- Complete 3M micro finishing steps for a matte finish, but do not use the gray Scotch-Brite® pad.
- Re-sand the area using 15 micron abrasive and clean thoroughly.
- Follow with polishing compound using a low-speed polisher and buffing pad.
- Apply 3M Finesse-it® Compounding Material to the surface and work with the #05712 3M Hookit® II SBS Compound Pad (off-white). Remove any excess compound and clean with a damp cloth.
- Apply 3M Finesse-it® Finishing Material to the surface and buff with the #05713 3M Hookit® II SBS Compounding Pad (yellow).
- Polishing compounds must be washed away thoroughly and are not food-safe.

ALTERNATIVE TECHNIQUE WITH USE-IT ABRASIVE

Another technique providing a semi-gloss finish which is more practical and easier to maintain is:

After achieving satin finish (30 micron, 1800G Use-it) apply professional worktop polish (KULA 28ZPOLIT)



This is in a 500ml spray bottle, spray and wipe the polish over the whole surface area, leave wet for 10 mins and buff by hand with a soft cloth, the more times you carry out this procedure the higher the sheen. NOTE: USE-IT Abrasive is not a MEGANITE® product.

INSTALLATION

Jobsite Preparation

- Take great care when cutting and sanding at the job site. These steps produce a great deal of dust. Sanders equipped with a vacuum are recommended for finishing countertops at the installation site.
- Use drop clothes and plastic sheeting to mask off and protect the work area.
- Inspect the cabinets. *A common cause of solid surface failure is cabinetry not installed perfectly level.* For that reason, always inspect the cabinets to be sure they are level, secure, and structurally sound to ensure they can properly support the weight of the counter tops (including water filled sinks) and anything that will be placed on them. Cabinets should be level and screwed to each other and to the wall.
- Install additional supports if necessary. Corner cabinets and dishwashers are areas that usually require wood strips fastened to the wall for support.
- The countertop must be fully supported in both the front and back across all openings.
- Install overhang supports if required.

Fitting the Countertop

- Trial fit the countertop on the base cabinets and make any adjustments necessary to achieve the desired fit.
- Always maintain a 3mm (1/8") clearance at all walls to allow for expansion and contraction.

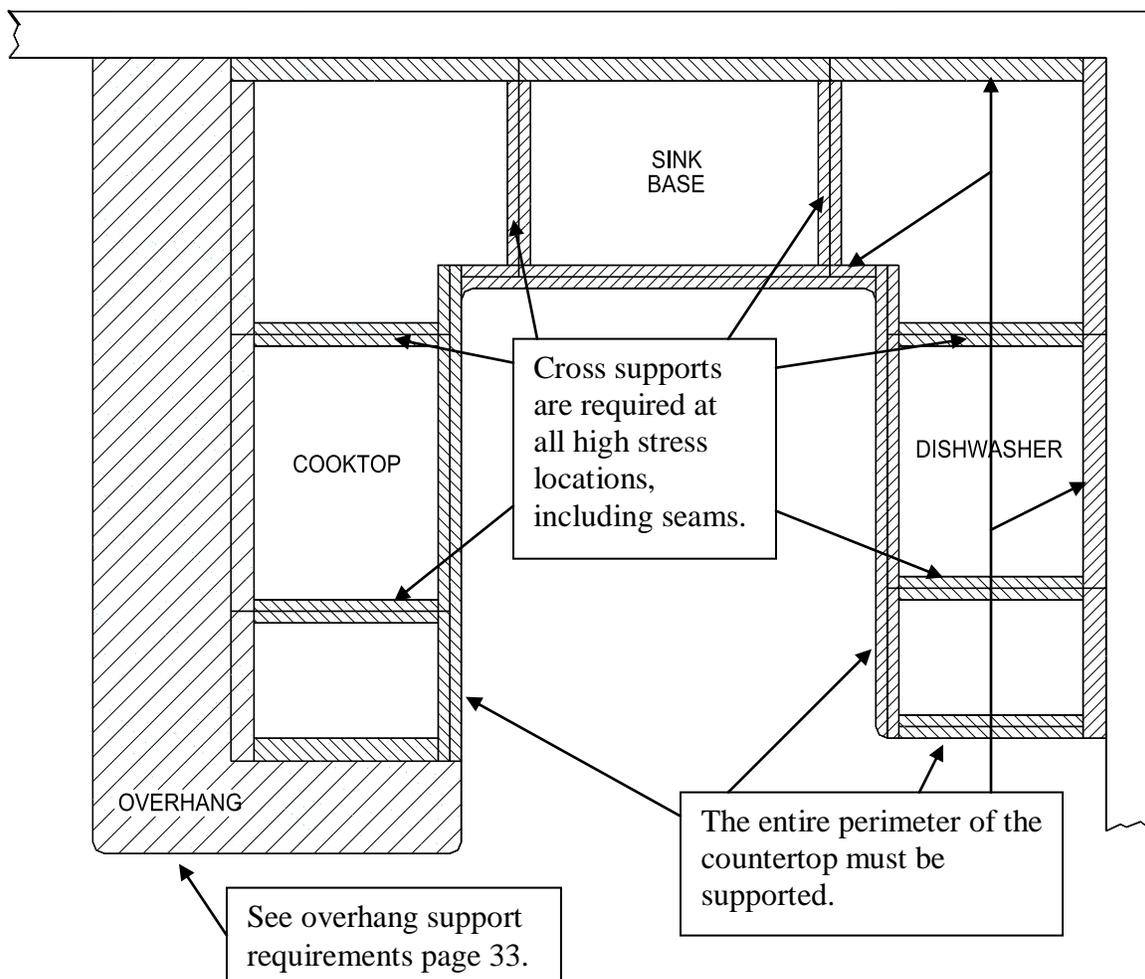
INSTALLATION (continued)

Web Frame Construction

A web frame must be used when installing Meganite® solid surface countertops. The web frame provides support at the front, back and ends of all cabinets, **plus under all seams.**

Recommended web frame materials include

- Plywood
- Medium Density Fiberboard
- Particleboard



INSTALLATION (continued)

Securing the Web Frame to the Cabinets

We recommend attaching the web frame to the back of the Meganite[®] top in the shop during fabrication using only 100% silicone. Another method is positioning the web frame on site and attaching it to the cabinets using either 100% silicone or screws.

- Use 18mm (3/4") dabs of 100% silicone caulking every 30-45cm (12-18") to secure the web frame to the cabinets.
- If using screws, make sure they will not penetrate the substrate and contact the countertop.
- **Never** screw directly into Meganite[®]. This will void the warranty.
- Attach the front and back supports running parallel to the length of the top.
- Cross supports must be attached every 40-60cm (16-24") to coincide with the cutouts and cabinet sides.
- Cross supports are required 25-75mm (1-3") from the sides of all cutouts. Every attempt should be made to rest this cross support on the top of the cabinet immediately outside the cutout.
- Full underlayment cannot be used over cabinets or where heat sources are present, such as dishwashers, ovens or cooktops.
- **Never** use acrylic caulking, mastic, glue or rigid-set construction adhesives when attaching the countertop to the web frame.

Securing the Countertop to the Web Frame

- Use 18mm (3/4") dabs of 100% silicone caulking every 45-60cm (18-24") to secure the countertop to the web frame. Do not use a continuous bead.
- **Never** use acrylic caulking, mastic, glue or rigid-set construction adhesives. These will not allow for the expansion and contraction of the countertop.
- **Never** secure within 30cm (12") of an inside corner.
- All outside corners must be secured.
- **Never** use mechanical fasteners (nails, screws, staples, etc.) to secure a Meganite[®] top to the web frame.

OVERHANG SUPPORT REQUIREMENTS

When countertops overhang the cabinets, additional support is required:

0-15cm overhang...	No additional support is required
15,5-30cm overhang...	Brackets or 18mm, 3/4" plywood underlayment
30,3-45cm overhang...	Brackets and , 18mm, 3/4" plywood underlayment
45,3-60cm overhang...	Support legs or columns and 18mm, 3/4" plywood underlayment

- The support bracket size should be a minimum of 75% of the overhang dimension.
- When plywood underlayment is used, it should extend forward over the entire cabinet.
- The maximum distance between brackets **must not** exceed 60cm (24"). The distance from open ends **must not** exceed 30cm (12"). **Always** use cleats to support the overhang where it meets any wall.
- To add additional support across large unsupported areas, a steel web frame constructed of welded tubular steel is recommended. Attach the steel web frame using only 100% silicone caulking.
- Be sure the strength of the cabinet back is sufficient to support brackets.
- The countertop should not flex under any anticipated load.
- Keep in mind the underside of the overhang can be seen.
- Seams should not be positioned in the overhang. Place seams over the cabinets whenever possible.
- Keep the seam as far from the edge of the cabinet as possible.

If other support methods are used, they **must meet or exceed** the strength capabilities of the support methods listed above.

INSTALLATION OF MEGANITE[®] WINDOWSILLS

- The window ledge area must be smooth, level and structurally sound. Support beneath the window sill must be 100%.
- Clean the surface of the window ledge and allow to dry thoroughly.
- All edges of the Meganite[®] windowsill must be sanded smooth. Sand or rout all edges, top and bottom to break the sharp corners.
- Use 18mm (3/4") dabs of 100% silicone caulk every 25-35cm (10-14") to secure the sill to the window ledge. Do not use a continuous bead. Never use acrylic caulking, mastic, glue or construction adhesives. These will not allow for the expansion and contraction of the sill.
- Once the window sill is in place, lightly caulk where the sill comes into contact with the window frame, using only 100% silicone caulk.
- Maintain a 3mm (1/8") clearance at all walls to allow for expansion and contraction.
- Using small dabs of hot melt glue to hold the sill in place while the silicone cures is allowed.
- Clean the excess silicone using denatured alcohol and a clean white cloth.

VERTICAL APPLICATIONS

Meganite[®] solid surface can be used in a variety of vertical applications, such as full-height backsplashes or tub and shower surrounds.

When using Meganite[®] solid surface in vertical applications, proper wall preparation is essential.

- Examples of acceptable materials for walls are plywood, gypsum board or tile backer board. Consider using moisture resistant substrates in areas where moisture will be present.
- Installation over a ceramic tile surface is allowed, provided the surface is sound and has been properly prepared.
 - *Any loose tiles must be removed and the gaps filled with tile adhesive.*
 - *Clean the tiles thoroughly using denatured alcohol.*
- Meganite[®] solid surface is not recommended for use where moisture is present on the supporting surface. The source of the moisture must be found and corrected before installation.
- A 12mm (1/2") gap between the bottom of the plywood, gypsum or tile backer board and the base must be left to ensure that no moisture can wick up into the material behind the Meganite[®]
- Meganite[®] should not be used in steam rooms, saunas or applications where extreme temperatures are present.

Scribing

It may be necessary to scribe the wall panels to achieve the proper fit, as walls tend to be out of square and not plumb.

- Always trial fit the wall panels, marking them for any cutouts or required scribing.
- Allow 3mm (1/8") for expansion and contraction on all holes cut or drilled in the Meganite[®].
- The panels can be scribed to fit using a router, sander or electric plane.
- Before installation, the edges must be sanded smooth, free of chips and scratches.

VERTICAL APPLICATIONS (continued)

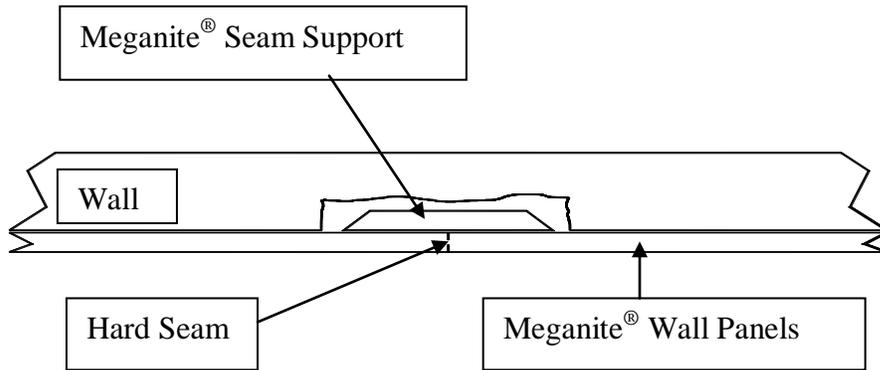
Seaming

To create large one-piece sections, panels can be seamed together using Meganite[®] joint adhesive.

The two approved methods are:

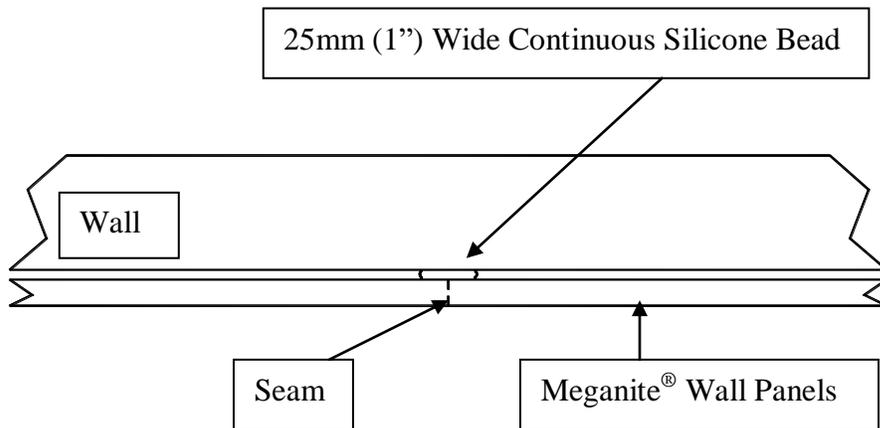
Reinforced Seam Method

When seaming pieces together, use a piece of Meganite[®] for seam support, adhered to the back of the panels using Meganite[®] seam adhesive. This procedure requires a slot cut in the wall to accept the seam support.



Silicone Seam Support Method

On the backside of the panels, apply a 25mm (1") wide silicone bead over the entire length of the seam.



VERTICAL APPLICATIONS (continued)

Installation

- Scribe and trial fit all panels.
- Mirror cut the edges of the panels to be seamed together.
- Using standard seam techniques, seam the panels together using Meganite[®] seam adhesive.
- After seam adhesive has hardened, sand both sides of the seam. Excess adhesive left on the backside of the material can create a stress area when butted against the wall.
- Thoroughly clean the backside of the panels and adhere to the wall using 100% silicone caulking.
- Apply the silicone in an “S” pattern on the back of the panel and a perimeter bead about 25mm (1”) from the edges on all four sides.
- Use hot melt glue to hold the panels in place while the silicone cures.
- Repeat this procedure for all remaining panels.
- Use 100% silicone to caulk all joints.
- Clean the excess silicone using denatured alcohol and a clean white cloth.

THERMOFORMING

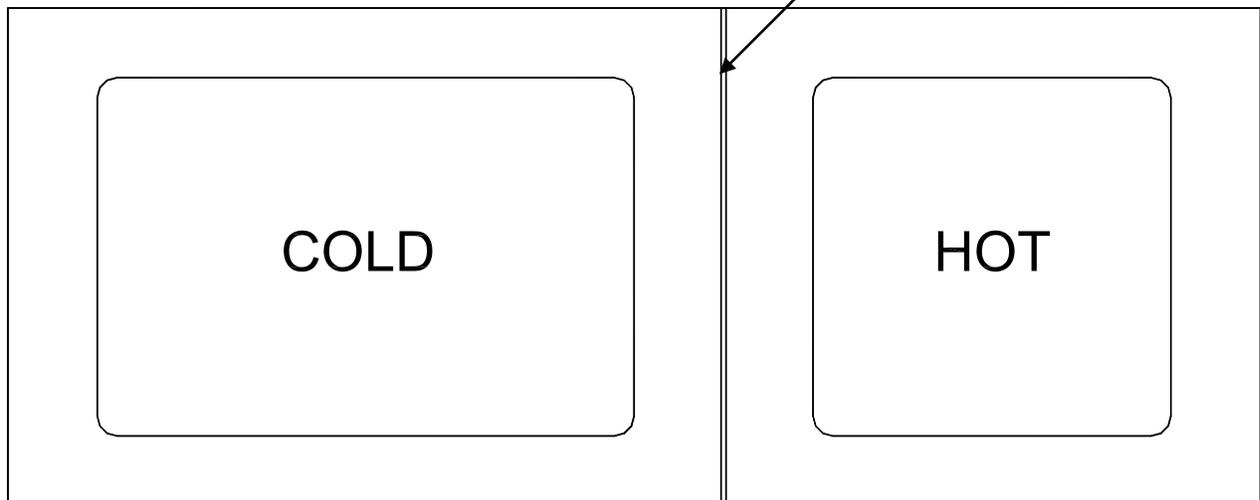
Meganite[®] solid surface, like any 100% acrylic solid surface, is thermoformable. Since environmental conditions change, a sample of the material should be tested before attempting to form the finished pieces. Variation in temperatures needed for forming between different solid surface colors is normal.

- The use of an oven large enough to enclose the entire sheet of Meganite[®] is essential. The entire piece must be heated. Spot heating will produce stress points, leading to eventual cracking.
- **Never** use a process such as a post-former or heat gun that will cause a temperature difference between heated and unheated areas of the sheet. This will cause a stress point to develop between the two areas and could lead to the material cracking.
- The use of smaller conventional ovens can work very well when heating smaller pieces such as edge buildup strips or corners.
- The oven temperature should be between 140°C and 160°C. Heating times vary depending on the oven used and the size of material but usually range from 30-60 minutes.
- Test the oven using a small test piece before heating the actual sheet for the job.
- Before attempting to bend the Meganite[®] make sure it has been heated throughout the thickness of the material to a temperature between 140°C and 160°C.
- Overheating may blister, crack or whiten the material.
- Attempting to bend the material at lower temperatures will crack or whiten the area and cause a stress point.
- Meganite[®] has a minimum bending radius of 75mm (3").
- Meganite[®] **does not warrant** any material that has been thermoformed.
- Note Modified acrylic, will not bend less than 400mm radius, and oven should be temp between 100-120C (212-248°F), some discoloration may occur with these decors.

FOOD SERVICE COUNTERTOPS

The installation of hot and cold food wells can include a wide variety of design options. **It is important that close attention be paid to the adequate support of the countertop as well as to providing proper insulation between hot and cold surfaces.** These applications are subject to higher levels of stress than a typical residential installation. **The fabricator must make sure that the design is within the tolerance level of the solid surface material before the job is fabricated.**

- Make sure the base cabinets are adequately vented. In some cases, a fan may be necessary to assure adequate ventilation.
- Since un-level cabinet installation is a major cause of solid surface failure, always make sure the cabinets are level and secure before installing Meganite®.
- The use of expansion joints separating hot and cold sections is **required**. Use a 3mm (1/8") flexible silicone seam between sections to allow for expansion and contraction of the two surfaces.



- Inside corners of all cutouts must be a minimum 12mm (1/2") radius and reinforced with Meganite® corner blocks with an approximate 25mm (1") overrun into the deck. **Treat this type of cutout with the same care and preparation you would any cooktop cutout.**

FOOD SERVICE COUNTERTOPS (continued)

- All non-flexible seams must be reinforced by a 10cm (4") wide 45° beveled Meganite[®] seam support adhered using Meganite[®] joint adhesive to the underside of the sheets. The seam support must run the entire length of the seam and rest on the cabinet. If the seam position does not allow it to rest on the cabinet, use 1/2" plywood strips or steel tubing under the seam support.
- Heat lamps should be positioned over food wells only and not over the Meganite[®] surface. **Never** place a seam directly under the location of a heat lamp.

Some installations call for metal rods to be used as hot pads or tray slides. A good alternative to metal rods may be rods made from Meganite[®].

- Radius both ends of the rods and rout a rounded groove 3mm (1/8") deep into the Meganite[®] at the desired locations a minimum of 5cm (2") apart.
- Use only 100% silicone to adhere the rod to the Meganite[®] countertop.

The flange of the hot food tray should rest on a support rather than directly on the Meganite[®] surface. If this is not possible, install a Meganite[®] escutcheon ring allowing for a 12mm (1/2") gap between the ring and the heat source.

- All edges must be a minimum 3mm (1/8") radius.
- A 3mm (1/8") continuous bead of 100% silicone must be used to separate the flange from the Meganite[®] surface.
- The use of both Nomex insulation and 3M #433 heat reflective tape are required on all hot well cutouts. Be sure that these are still in place after the heat source is installed.

DESIGN AND FABRICATION TIPS FOR MEGANITE[®] TRANSLUCENT SERIES

The Meganite[®] Ice, Glow Series, Translucent Series, White Crystal 813A, or any colors with translucent property offers a wide opportunity for unusual design applications. These special qualities of translucency need to be considered during the specification, design and fabrication processes to allow for the best end result.

Translucent Properties

As with any translucent products, extra consideration is needed to meet the end result. It is possible that part or all of the structure under the 12mm (1/2”) thick top may show through or “shadow” the top. Care should be given to consider the effects of the wooden support system, edge detail buildup strips, seam blocks, seam adhesive and silicone caulks for example. All of these types of materials may add a darker look to that area of the top, and depending upon the lighting, might be seen from the top of the material. For installations where an undermounted bowl is used, the flange area of them bowl might also “shadow” through and be seen.

These darker shadows may not be acceptable to certain buyers and they need to be cautioned regarding this look. To hide most of these effects, it is possible to reduce or eliminate them by painting the back of the top materials. This will darken the entire top in the areas where there are no support strips, edge detail buildups, etc. and will offer a more consistent color to the final installation.

Working with the Materials with Translucency

It is recommended that when painting the back for this purpose, only the 12mm (1/2”) top needs to be painted – not the areas where the “shadowing “ occurs. The entire top be fabricated first – including all edge detail buildups, seaming, bowl installation, etc. Excess adhesives (“squeeze-out”) should be removed. After all adhesives have dried and the fabrication complete, painting of the backside is then suggested.

For most cases where a backlit application will not be used, painting the backside will be the preferred installation process.

The unique feature of a translucent product will encourage a wide range of design flexibility. The Meganite[®] translucent products will allow you to use the effects of the natural lighting at the installation site to enhance the finished top.

We strongly recommend that you test the ideas prior to jobsite installation and to review them with the specifier, owner, end-user and/or all parties involved. It is critical that they fully understand the hue and effects when purchasing translucent products such as Meganite[®] Ice, Glow Series, Translucent Series, White Crystal 813A, and more.

DESIGN AND FABRICATION TIPS FOR MEGANITE[®] TRANSLUCENT SERIES (continued)

Back Paint Method

To reduce the effects that the surrounding light at the installation site may have on a top manufactured with a translucent product, it is recommended that the backside be painted. Below are tips to help with that painting process:

- Paint the top after it has been completely fabricated – including all buildup edges, seams, bowl installations, etc.
- Clean off all excess adhesive from edge buildups and seams.
- Use 2 coats of paint to obtain an even application.
- Paint all backside Meganite[®] surfaces, including any remaining adhesive that was not removed.
- Paint brands and colors to consider are:
 - Green Ice, Aqua Glow: Sherwin Williams Aloe SW6464(light green)
 - <http://www.sherwin-williams.com/homeowners/color/find-and-explore-colors/paint-colors-by-family/SW6464-alo/>
 - Blue Ice, Summer Glow: Sherwin Williams Rapture Blue SW6773(light blue)
 - <http://www.sherwin-williams.com/homeowners/color/find-and-explore-colors/paint-colors-by-family/SW6773-rapture-blue/>
 - White Crystal 813A, Frosted Ice: General White Paint or light Gray Paint
 - Painted backs could effect your translucency. Please try the painted backs on your fixtures and light source before deciding the color or/and before installation.
 - Lemon Glow: Sherwin Williams Lantern light SW6687 (pale yellow)

(Since these are custom mixed paints, pigments and mixing processes may vary; the final color may differ from one batch to another. While this is not likely to affect the desired purpose, always test the process before installation.)

Other Fabrication Suggestions

Other suggestions that should be considered when fabricating a top with translucent properties:

- Due to the high resin content, these materials may appear to be more brittle. Be sure to always carry sheet “on-edge” and move carefully in the shop and on the jobsite.
- Always use sharp, carbide-tipped tooling that has been properly maintained.
- Cut and rout all processes at a slower rate than acrylic products.
- Always use spring clamps on the edge buildups. Be sure to keep consistent, strong, and adequate pressure along the adjoining strips, and at 50 mm (2”) intervals. A lack of pressure may result in a thin line between these strips on the edge detail.
- Be sure to use enough adhesive to eliminate voids between the buildup strips.

Other Fabrication Suggestions (continued)

- It is not recommended to use a clear acrylic block under the seam, but rather a 12 mm (½”) thick piece of material used for the webbing support, adhered only with silicone adhesive.
- When removing wood blocks on the top, adhered with hot melts, use care to remove prior to sanding and finishing.
- Finishing steps are the same as other Meganite colors. It is important not to skip or rush this process.

REPAIR TECHNIQUES

Most minor scratches can be repaired using a light abrasive cleaner and a ScotchBrite® pad or, in cases of heavier damage, light sanding. Some repairs will require the replacement of small sections of the countertop with matching material from the original installation.

Seam Repair

- Separate the seam slightly and fill the opening with Meganite® seam adhesive. Clamp the area, making sure the countertop remains level.
- After the adhesive has hardened, rout a 6mm (1/4") deep groove into the countertop over the seam.
- Using matching material left by the fabricator at the time of the original installation, cut a piece to fit the routed groove and adhere in place with Meganite® seam adhesive. Failure to use material from the original job may cause color or particulate variation.
- After the adhesive has hardened, the repair material can then be routed level and sanded to the original finish.

Pie-Cut Repairs

- This technique can be used to replace larger sections of the countertop. In addition, it is a quick and less expensive alternative to replacing the entire countertop.
- Make a template to match the size of the area to be repaired. Be sure the inside edges are smooth and straight.
- Clamp the template to the countertop and use a router to cut out the damaged area. The edges of the repair area must be at least 10cm (4") away from any cutout corner.
- Using the same router and template cut a piece of matching material (left by the fabricator at the time of the original installation), slightly wider than the repair area cut in the countertop. Failure to use material from the original job may cause color or particulate variation.
- Trial fit the repair piece until there are no large gaps.

Pie-Cut Repairs (continued)

- Cut a Meganite[®] reinforcement block at least 5cm (2”) larger on each side than the repair area and adhere the block and the repair piece to the underside of the sheet using Meganite[®] joint adhesive.
- After the adhesive has hardened, trim the material using a router and template. Then sand area to the original finish.

INSTALLATION CHECKLIST

Care and maintenance kit		Tape measure	
Cutouts (color match material)		Router and bits	
Seam kits		Saws	
Pencil		Vacuum	
Straight edge		Clamps	
Drop cloth		Saw horses or work tables	
Level		Screws/nails	
Sanders		Masking tape	
Tarps		Caulk	
Hand tools		Hot melt glue gun and sticks	
Extension cords		Sand paper and Scotch-Brite® pads	
Wooden glue blocks		Web frame materials	
100% Silicone		Heat reflective tape	
Shims		Safety glasses	
Clean white rags		Denatured alcohol	
Clear packing tape			

FINAL INSPECTION AND CLEANUP

Finish sand the Meganite® product to remove any scratches that may have occurred during the installation.

Always leave the job site clean and free of any debris created from the installation.

Installer Responsibilities

- Provide the homeowner with care and maintenance instructions, and leave the Care and Cleaning Kit on **every** job. If possible, give them a demonstration on the proper techniques of removing scratches and the use of the Scotch-Brite® pad.
- Leave a cutout piece in a secure location at the jobsite to be used in the case of a future repair. Apply the green and white sticker warning of its importance. **Make sure the homeowner is aware of the importance of saving this material.**
- Leave instructions for the plumber and appliance installer to ensure all installation guidelines are followed. Apply the three stickers, which give warnings about standing or laying tools on the countertops, not removing the heat tape at the cooktop opening, and not over-tightening the drain.

COMMON CAUSES OF COUNTERTOP FAILURE

A fabricator's reputation rests on customer satisfaction. Providing a high level of service and quality is essential for the success of every fabricator/installer of Meganite® solid surface products. On each bullet point, the **section** referred to may span many pages, but the page(s) indicates the actual page within that section addressing the potential problem.

- **Countertop was fabricated or modified using improper tooling** (*see Tools page 7*)
- **Seams placed too close to a heat source such as a cooktop or dishwasher** (*see Seam Placement page 10*)
- **Seams placed at inside corners** (*see Seam Placement page 10*)
- **Seam reinforcement blocks not installed correctly** (*see Seam Placement page 10 and Shop Seams page 12*)
- **Too much clamping pressure leading to starved or dry seams** (*see Shop Seams page 12*)
- **Voids not purged from the seam adhesive cartridge before use, or after encountering a void during the application of the adhesive** (*see Shop Seams page 12 and Using and Storing Meganite® Seam Kits page 13*)
- **Inside corners not radiused** (*see Inside Corners page 19*)
- **Edges of sink cutout and faucet holes not rounded over and sanded smooth** (*see Sink Cutouts page 21 and Faucet Holes page 23*)
- **High strength corner blocks not installed in cooktop cutouts** (*see Cooktops page 24*)
- **Edges of cooktop cutout not rounded over and sanded smooth** (*see Cooktops page 25*)
- **Heat reflective tape installed incorrectly or the wrong heat tape was used** (*see Cooktops page 25*)
- **Inadequate clearance between a cutout and a cooktop** (*see Cooktops page 25*)
- **Inadequate support of the countertop** (*see Jobsite Preparation page 29*)
- **Countertop not level** (*see Jobsite Preparation page 29*)
- **Inadequate seam support** (*see Web Frame Construction page 30*)
- **Instructions not given to plumber and appliance installer** (*see Cooktops page 26 and Installer Responsibilities page 45*)

TOOL AND ACCESSORY PRODUCT CODES

Below tools are not MEGANITE® products. They are carried by your local suppliers:

Product Code	Description
517-A180	150mm dia /180 grit abrasive pads
517-A320	150mm dia /320 grit abrasive pads
517-A600	150mm dia /600 grit abrasive pads
128-SG2-1800	150mm dia /1800G finishing pads
STS-150	150mm dia /dust extractor pad
28Z100M1	150mm dia /100 3M micro abrasive pads
28Z60MI1	150mm dia /60 3M micro abrasive pads
28Z30MI1	150mm dia /30 3M micro abrasive pads
28ZFINIS	1 litre finesse it 3M finishing paste
28ZVORPO	4 litre 3M marine cutting paste
28ZPOLIT	500ml counter top spray polish
28ZPOLBA	Dry-cut wax stick course (brown)
28ZPOLST	Dry-cut wax stick course (blue)
28ZPOLWE	Superbuff 250mm lambswool polish mop (course)
28ZPOLGE	Superbuff 250mm lambswool polish mop (fine)
28ZALUKL	Roll of Thermo hob tape 63mm wide
28ZKL-50	spring edge clamps 50mm opening
28ZKL-80	spring edge clamps 90mm opening
28ZLAMEL	Lamello biscuits clear plastic
28ZETHAN	1 litre ethanol 99% joint cleaner
28ZPISTO	250ml manual glue mixing gun
34ZPISTO	250ML economy manual mixing gun
28ZDP200	250ML Pneumatic mixing gun
255PIST1	50ML manual glue mixing gun
28ZM-DU2	Glue mixing nozzles

TRADEMARK INFORMATION

Meganite Corporation manufactures Meganite[®]. Meganite[®] and the Meganite[®] logo are the registered trademarks of Meganite Corporation.

“The REAL Difference is the Price!” is a trademark of Aetna Plywood, Inc.

ScotchBrite[®] and HookIt[®] are registered trademarks of 3M Corporation.

FABRICATOR/INSTALLER CERTIFICATION REVIEW CHECKLIST

Shop Name: _____

Owner Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Shop Phone: (_____) _____ Fax number: (_____) _____

Certified by: _____ Date: _____

Directions: Review all sections of this worksheet using the Meganite® fabrication manual for reference. The fabricator must initial each section upon completion, acknowledging the subject discussed is fully understood.

1. Safety and Health (page 6) _____ section completed

- a) Eye, ear and dust protection.
- b) Keep tools clean and sharp.
- c) Work area must be clean and organized.

2. Tools (page 7) _____ section completed

- a) Use saw blades specifically designed for solid surface materials.
- b) Routers and bits.
- c) Sanders.
- d) Stationary tools.
- e) Do not use a jigsaw, auger-type drill bits or belt sanders.

3. Storage and Handling (page 8) _____ section completed

- a) Store sheet goods perfectly flat until ready to use.
- b) Keep seam adhesive kits cool and never allow them to freeze.
- c) Inspect product prior to cutting for defects.

4. Seams (page 10-12) _____ section completed

- a) Never miter corner deck seams.
- b) Offset seams at least 25mm (1") from inside corners.
- c) Seams must be at least 75mm (3") away from all cutouts, dishwashers or other heat producing appliances.
- d) No seams through cooktop cutouts.
- e) Reinforce all deck seams with beveled seam support.
- f) Offset edge buildup seams at least 25mm (1") from deck seams.
- g) Rout seams to fit tightly when trial fitted.
- h) Use enough seam adhesive to achieve a good squeeze out when clamped together.
- i) Do not over tighten seams.
- j) Clean all surfaces that are to be glued with denatured alcohol.

5. Edge fabrication (page 15-18) _____ section completed

- a) Stacking method.
- b) On edge method.
- c) Never sandwich other materials between Meganite® edge strips, apply these materials as an inlay strip only.

FABRICATOR/INSTALLER CERTIFICATION REVIEW CHECKLIST (continued)

6. Inside Corners (page 19-20) section completed

- a) Corner block method.
- b) Interlocking corner block method.
- c) Vertical strip method.
- d) All inside corners must be radiused a minimum 12mm (½") (the larger the radius the better).
- e) Offset seams at least 25mm (1") from inside corners.

7. Sink Cutouts (page 21) section completed

- a) Use a router for sink cutouts (never use a jigsaw).
- b) All edges must be routed using a 3mm (1/8") router bit and sanded smooth.

8. Solid Surface Sinks (page 21) section completed

- a) Use only Meganite® or Transolid® solid surface sinks.
- b) Lay out and mark the sink location carefully.
- c) Lightly sand and clean all areas to be bonded.
- d) Seam adhesive must squeeze out around the entire sink perimeter free of voids.

9. Undermount Non-Solid Surface Sinks (page 23) section completed

- a) Use a router to cut the sink opening.
- b) All edges must be routed using a 3mm (1/8") router bit and sanded smooth.
- c) Meganite® mounting blocks are required when sink clips are used.
- d) Use only 100% silicone to bond the sink to the Meganite® surface.

10. Cooktops (page 25-26) section completed

- a) Never put a seam through a cooktop cutout.
- b) Seams must be a minimum of 75mm (3") from the cooktop cutout.
- c) Inside corners must be radiused a minimum 12mm (½")
- d) Meganite® corner blocks must be used to reinforce each corner of the cutout.
- e) Use a router to make the cutout.
- f) All edges must be routed using a 3mm (1/8") router bit and sanded smooth.
- g) Cutouts must be lined with 3M heat reflective tape.
- h) Maintain at least a 6mm (¼") space on all sides of the cooktop and the countertop.

11. Finishing (page 27-29) section completed

- a) On Semi-gloss and High-gloss finishes it is difficult to maintain the original finish.
- b) Recommend 3M Microfinishing or Trizact abrasives.
- c) Polishing techniques for high gloss finishes.

12. Installation (page 30) section completed

- a) Cabinets must level and screwed to each other and the wall.
- b) Overhang support requirements.
- c) Maintain a 3mm (1/8") clearance at the walls for expansion.
- d) Use a router or hole saw when making faucet holes.

FABRICATOR/INSTALLER CERTIFICATION REVIEW CHECKLIST (continued)

13. Web Frame Construction (page 31-32) section completed

- a) Use only 100% silicone to attach the countertop to the web frame.
- b) Cross supports are required 25mm-75mm (1" to 3") from the sides of all cutouts.
- c) Never use full underlayment over cabinets, except when used as support for an overhang.

14. Vertical Applications (page 35-37) section completed

- a) Proper wall preparation.
- b) Solid surface should not be used in steam rooms, saunas or where extreme heat is present.
- c) All edges must be routed and sanded smooth.
- d) Allow 3mm (1/8") for expansion at all walls.

15. Thermoforming (page) section completed

- a) Sheets should be adequately supported
- b) No fine cracks from to smaller radius
- c) Surface sanded correctly around curves

16. Food Service Countertops (page 39-40) section completed

- a) Base cabinets must be adequately vented.
- b) Use expansion joints between hot and cold sections.
- c) Reinforce all non-flexible seams with Meganite[®] seam supports.
- d) Heat lamps must not be located over the Meganite[®] surface or deck seams.

17. Repair Techniques (page 41) section completed

- a) Seam repair.
- b) Pie-cut repair.

18. Installer Responsibilities (page 42) section completed

- a) Provide consumer with care and maintenance kit.
- b) Instruct the consumer on proper care and maintenance techniques.
- c) Leave a cutout piece in a secure location at the jobsite in the case of a future repair.
- d) Leave instructions for the plumber and appliance installers to ensure all installation guidelines are followed.

This page is to be signed and kept with the Meganite® Manual

CERTIFIED FABRICATOR'S ACKNOWLEDGEMENT OF RESPONSIBILITIES

In accordance with the responsibilities as a Certified Fabricator of Meganite® solid surfacing products, I agree and acknowledge that I will:

- 1) Perform all fabrication and installation techniques in accordance with current recommendations as described in the Meganite® Solid Surface Fabrication Manual.
- 2) Ensure all products fabricated or installed are free of fabrication or installation defects.
- 3) Warranty my workmanship for a period of ten (10) years after the date of installation.
- 4) Provide a Meganite® Care and Maintenance Kit to end users on all installations.
- 5) Leave color matched repair material affixed under the sink or in a secure location at the jobsite.
- 6) Educate end user on proper care and maintenance techniques as well as product limitations.
- 7) Adhere warning labels to the countertop, instructing the plumber and appliance installer of the installation requirements of Meganite® Solid Surface.
- 8) Respond promptly to all end user claims and complete site inspections within ten (10) working days of receiving the complaint.
- 9) Notify Meganite® warranty administrator of any end user complaint or issue appearing to be manufacturer or distributor-related within ten (10) days of inspection.
- 10) Resolve fabricator-related issues with the end user within 30 days after the date of the first inspection.
- 11) Resolve end user related issues in a timely manner.

I acknowledge that I attended the Meganite® solid surface fabrication training session held on ____/____/____, and that I have received, read, and understand the Meganite® Solid Surface Fabrication Manual and gone through the “Fabricator/Installer Certification Review Checklist” (pages 47-49) in this manual) . I understand that it is my responsibility to notify and instruct all employees of the fabrication and warranty procedures for Meganite® Solid Surface Products.

I agree to be responsible for and cover all costs of any issues arising out of my acts or omissions.

The fabrication and installation procedures as outlined in the Meganite® fabrication manual have been explained, and I thoroughly understand them.

I will be responsible for my failure to follow the procedures and techniques as described in the Meganite® solid surface fabrication manual.

Shop Name: _____ Address: _____

Shop Owner: _____ Date: _____

Meganite® Representative: _____ Date: _____

*This page is to be signed, removed by the Meganite® representative,
and kept on file by Meganite®*

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