

Fabrication Manual

For Meganite Solid Surface.



TABLE OF CONTENTS

	Page
INTRODUCTION.....	3
SAFETY AND HEALTH.....	4
Exposure Control.....	4
Waste Disposal.....	4
TOOLS.....	5
STORAGE AND HANDLING.....	6
Storage.....	6
Handling.....	6
Product Inspection.....	6
Product Tolerances.....	7
JOB EVALUATION/PREPARATION.....	8
MEASURING AND TEMPLATING.....	8
USING AND STORING MEGANITE SEAM KITS.....	9
USEFUL GLUING TIPS.....	10
ADHESIVE COLOUR SELECTION.....	11-12
SEAMS.....	13
Seam Placement.....	13
Workshop Seams.....	14-15
EDGE FABRICATION.....	16
Stacking Method.....	16-18
On Edge Method.....	19
V- Grooving technique.....	19
INSIDE CORNERS.....	20
Corner Block Method.....	20
Interlocking Corner Block Method.....	20
Vertical Strip Method/Coved backsplash.....	21
SINK INSTALLATION.....	22
Sink Cutouts.....	22
Undermount Meganite [®] Sinks.....	22-23
Undermount Non-Solid Surface Sinks.....	24
Techniques to colour match sinks and sheets.....	25
COOKTOPS.....	26-27
FINISHING.....	28
Sanding Techniques.....	28
Orbital Sanding.....	28
Abrasives.....	28
Finishing Steps.....	29
Matte Finish.....	29
Semi-Gloss Finish.....	29
High Gloss Finish.....	29
Polishing Techniques.....	30

TABLE OF CONTENTS (continued)

	Page
PEARL SERIES FINISHING.....	31
INSTALLATION.....	32
Jobsite Preparation.....	32
Fitting the Countertop.....	32
Web Frame Construction.....	33
Securing the Web Frame to the Cabinets.....	34
Securing the Countertop to the Web Frame.....	34
OVERHANG SUPPORT REQUIREMENTS.....	35
VERTICAL APPLICATIONS.....	36
Scribing.....	36
Seaming.....	37
Installation.....	38
FOOD SERVICE COUNTERTOPS.....	39-40
DESIGN AND FABRICATION TIPS FOR MEGANITE® TRANSLUCENT SERIES....	41-43
MOVEMENT SHEET TECHNIQUES.....	44-57
METALLIC/SPARKLE TECHNIQUES.....	58-63
BRIGHT SOLIDS TECHNIQUES.....	64-67
THERMOFORMING.....	68-72
REPAIR TECHNIQUES.....	73-74
INSTALLATION CHECKLIST.....	75
FINAL INSPECTION AND CLEANUP.....	75
COMMON CAUSES OF COUNTERTOP FAILURE.....	76
TOOLS AND ACCESSORY CODES.....	77
CARE AND MAINTENANCE.....	78
FABRICATOR/INSTALLER CERTIFICATION REVIEW CHECKLIST	79-81
CERTIFIED FABRICATOR’S ACKNOWLEDGEMENT OF RESPONSIBILITIES.....	82-83

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.



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

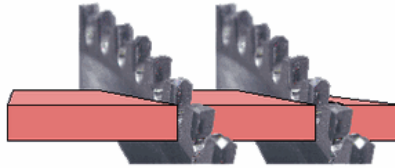
Dust generated during fabrication activities is non-hazardous with regards to waste disposal and should be disposed of in accordance with local statutes. Acrylic resins and hardeners are hazardous waste if disposed of in liquid form. However, when mixed and allowed to set up, they are considered non-hazardous 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
- SOLIDTRENDS 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

- Solid Surface[®] 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.



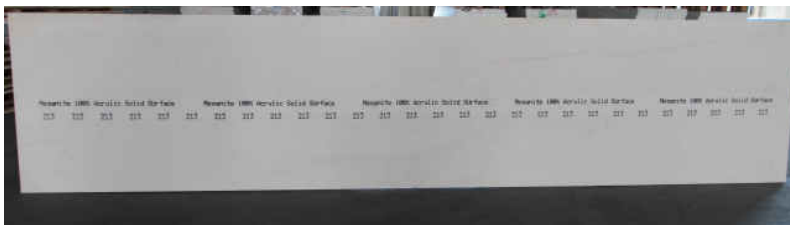
Handling

- 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. The central 3 digit number is the batch pour (20 sheets to one pour), for example 213 here is the pour.



MEGANITE SHEET TOLERANCES

Sheet Size Tolerances

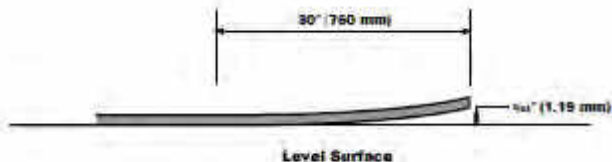
Thickness = +/- 0,49mm

Length = +/- 2mm

Width = +/- 1mm

Warpage

Warpage can occur with sheets in length or width up to 1.19mm per 760mm length



Warpage can also occur beyond this parameter if correct storage is not adhered to by Distributor, Fabricator.

This can also be rectified by correcting the storage as the sheet will naturally re-shape (reversing the bow).

Surface defects

Allowable surface defects, contaminants, ie black, white, coloured particles are possible, smaller in diameter than the following are permitted

Solid décor 0,9mm diameter,

Granites 1.8mm diameter

Minor Scratches, Pinholes, bumps, voids can occur in the surface and can normally be removed with orbital sanding and/or filling pinholes with seaming adhesive.

MEGANITE is sold as a one-sided product, irregularities such as pinholes, pattern difference in the backside of the sheet is not a manufacturing defect.

All sheets are factory finished 320G straight sanded on the surface, on dark decors very fine sanding pattern can be seen but is easily removed when fabrication sanding process is started with orbital sander.

Corner/edge chips 5mm long/deep are maximum allowable sheet acceptance.

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.

USING AND STORING MEGANITE SEAM KITS

Storage of Meganite adhesive

Adhesive is supplied in 250ml & 50ml cartridge , each are supplied in a sealed bag together With 2 mix nozzles , shelf life is 18 months from production date , date is stamped on the cartridge Label . storage temperature of the cartridges should be 5-10 deg C to give optimum shelf life , and Should be packed in a box for transporting to avoid exposure the sun/excess temperature, refer to MSD for health and safety recommendations. 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 (Methanol or Isopropyl) 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.



IMPORTANT ADVICE FOR MEGANITE ADHESIVE.

- Maximum shelf life can be achieved by storing in 5-10 deg C temp (18-24 months from production label)
- Higher temperature storage will reduce shelf life
- Never use first amount out of the nozzle when applying Glue , discard in bin first 5 cm and then apply ensuring Hardener has mixed.
- Always with all gluing apply 2 beads (2 passes of glue) Again this ensures the hardener is mixed .
- Always put the separator and cap back on the cartridge Once finished and storage.
- Working time once applied depends on room temp, 10-15degC , 3 mins to clamp, 16-25 degC , 2mins.
- Drying time similar , room temp 10-15 deg C , 50 mins, 16-25 deg C 40 mins dry time , adhesive bead should be hard.
- When using glues with later production date 9 months + or cartridges that have already been previously part used.

Before applying the nozzle , remove the cap and separator and Disperse a small amount of glue out cartridge to check both Resin and hardener are running, only then attach the nozzle.



- Also in the winter with lower room temperature curing time can take longer , in this situation put the cartridge in very hot water for 10min before using , this improves flow and cure time.
- Usage stats
250ml cartridge = 12m metres of gluing
50ml = 3 metres

on average 4 mix nozzles used per 250ml cartridge.

MEGANITE® ACRYL ADHESIVES Colour Reference Chart

MEGANITE® ADHESIVE COLOUR CHART/ KLEBSTOFFE FARBKARTE

MEGANITE® ADHESIVE COLOUR CHART/ KLEBSTOFFE FARBKARTE

decor-Nr.	MEGANITE sheet colour	cartridge250ml	Cartridge 50 ml
630A	Antique White	Antique White	Antique White
062A	Aqua Glow		Aqua Glow
780A	Aspen Granite	Snow White	Snow White
033Z	Acrymed Medi White	Snow White	Snow White
903A	Barneys Rubble		Shadow Concrete
701A	Blanca Granite	Antique White	Antique White
510A	Blue Bayou		Steel/Lava
913B	Blue Ice	Clear	Clear
003A	Bone	Bone	Bone
820S	Botanic Gemstone		Chocolate
001A	Bright White		Bright White
503S	Brown Eyed Girl		Chocolate
504AR	Canella Stone		Calicio
312AR	Canvas Mist	Ivory	Ivory
M023	Charcoal Concrete		Charcoal Concrete
091A	Chocolate		Chocolate
679A	Cinder Granite		TaupeConcrete
846A	Cotton Boulder	Antique White	Antique White
661A	Delta Granite		Chocolate
625AR	Desert Stone	Bone	Bone
088A	Fire		Fire
033T	Flexy White	Snow White	Snow White
9745B	Frosted Ice		White Glow
311X	Galaxy Mist Dark	Black	Black
819AR	Goldrush Gemstone		Chocolate
056A	Gray		Pearl Grey
912B	Green Ice	Clear	Clear
072A	Ivory	Ivory	Ivory
019X	Jet Black Dark	Black	Black
904A	Just Beachy		Cinnamon
428A	Kauai Beach		Kauai Beach
429A	Lanikai Beach	Bone	Bone
053A	Lemon Glow		Lemon Glow
060A	Lime		Lime
9926SB	Midnight Gemstone	Clear	Clear
265A	Midnight Sky Mist	Anthracite	Anthracite

decor.-Nr.	MEGANITE sheet colour	Cartridge 250ml	Cartridge 50 ml
932SA	Mottled Gray		Mottled Gray
M007	Mount Carrara	Carrara	Carrara
M009	Mount Crema Carrara		Crema Carrara
M020	Mount Grigio		Mount Grigio
M005	Mount Jade		Jade
M002	Mount Vancouver	Black	Black
349A	Papyrus Mist	Ivory	Ivory
093X	Pewter Dark		Storm
290A	Polar Mist	Ivory	Ivory
519SA	Rain Cloud		Rain Cloud
810A	Raven Boulder	Anthracite	Anthracite
698S	Red Diamond Sparkle		Red Diamond
503A	Rio Grande Stone		Rio Grande
729AR	Rocky Road	Bone	Bone
501A	San Rafael Stone	Bone	Bone
M021	Shadow Concrete		Shadow Concrete
9927B	Shell Mosaic	Bone	Bone
430S	Shine on Me		Misty Grey
923S	Silver Lining		Pearl Grey
219AR	Silver Mist		Lava
930SA	Silver Shards		Taupe Concrete
040A	Slate		Steel
703SA	Snow Owl		Snow Owl
033A	Snow White	Snow White	Snow White
005A	Soft White		Soft White
933SA	Solar Eclipse		Chocolate
811A	South Beach		Soft White
508SX	Starry Starry Night Dark	Black	Black
502A	Staten Island		Cinnamon
426A	Summer Beach	Ivory	Ivory
063A	Summer Glow		Summer Glow
079A	Sunshine		Sunshine
077A	Tangerine		Tangerine
M022	Taupe Concrete		Taupe Concrete
505S	Under the Boardwalk		Cinnamon
505A	Volterra Stone		Cinnamon
266AR	Wheat Mist	Bone	Bone
813A	White Crystal		White Glow
094A	White Glow		White Glow
800A	Winter Boulder		Pearl Grey

SEAMS

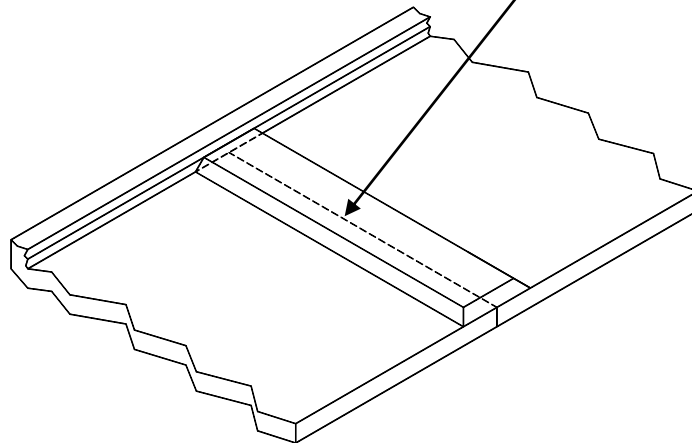
Seam Placement

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 sink location is approved.



- 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.

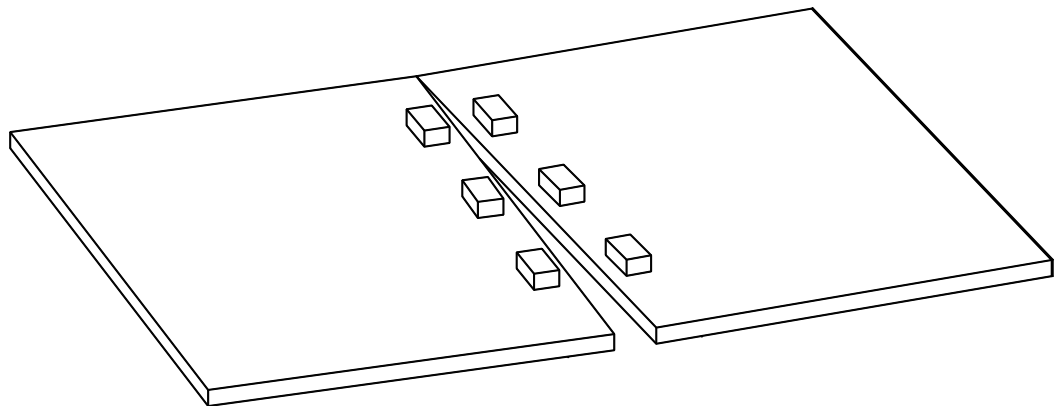


- Offset seams in edge buildups at least 25mm (1") away from all deck seams, additional buildup layers or inside corners.
- Keep butt joints on the buildup layers away from the center of long runs for maximum strength.

SEAMS (continued)

WorkShop Seams

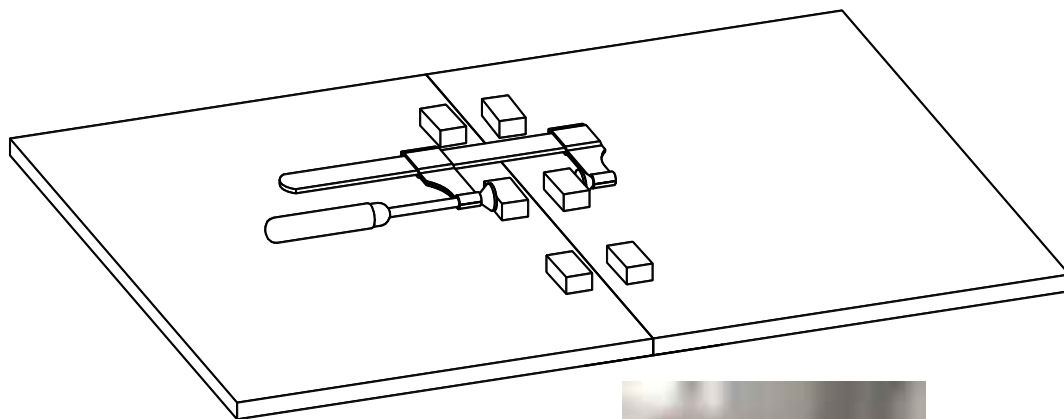
- Clamp and “mirror image” rout the seam using a router with a 12mm (1”) 2-flute carbide bit and a straight edge.
- Seams should come together tightly when dry fitted.
- Lightly sand and clean around the seam to provide a bonding area for wood clamping blocks.
- Hot melt wood clamping blocks on each 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 SOLID SURFACE® seam adhesive and push the sheets together. Clamp the joint tightly (using spring clamps, vacuum clamps or bar clamps approx every 40cm) allowing the excess adhesive to squeeze out. **Over tightening the clamps will cause starved or weak seams.** Do not remove excessive adhesive at this point ,
]



Alternative Suction clamps.



- 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.

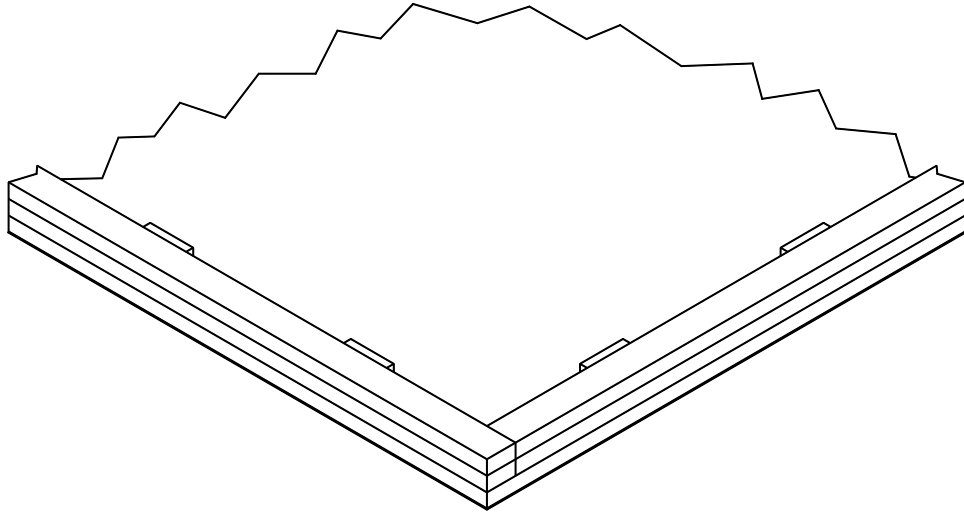
Field Seams

- 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.

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.

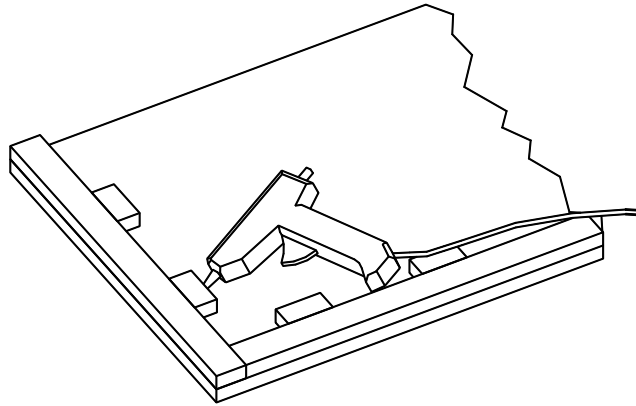
Stacking Method (surface to surface)



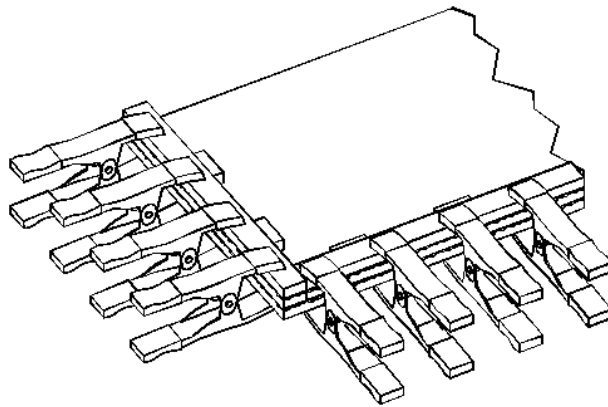
- The stacking method is preferred and is the strongest.
- Stacking a contrasting color of Meganite® within the edge is a popular option.
- **Never** sandwich other materials (wood, laminate, metal, etc.) between the Meganite® edge pieces. Always use a routed groove for these types of thin inlays.

EDGE FABRICATION (continued)

- 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.

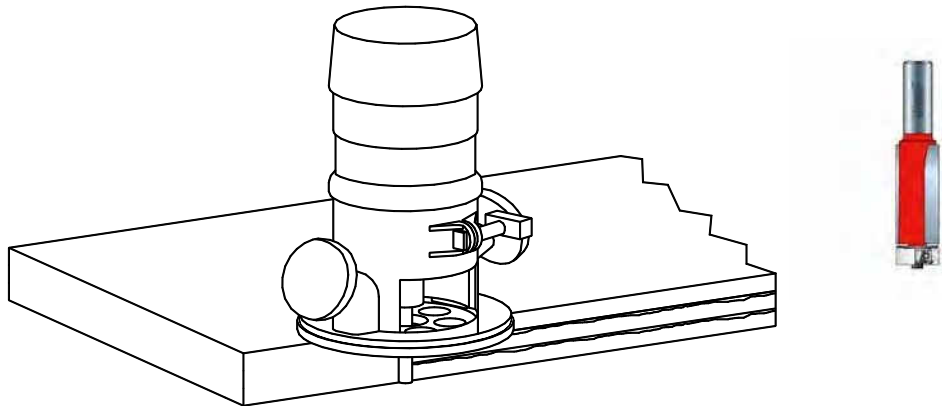


- Remove all clamps and buildup strips. Thoroughly clean all surfaces that are to be glued using denatured alcohol and a clean white rag.
- Apply Meganite[®] seam adhesive making sure there is enough adhesive to squeeze out free of voids along all seams.
- Apply spring clamps no more than 75mm (3") apart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



EDGE FABRICATION (continued)

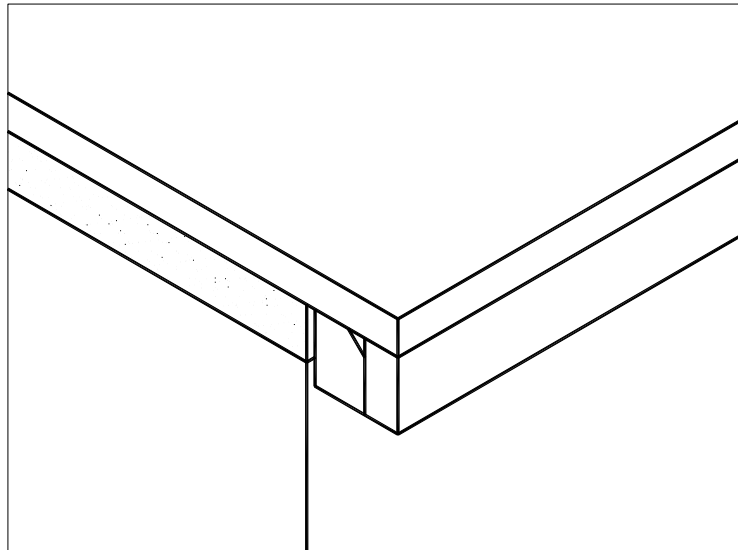
- Using a straight edge and a router, flush trim the edges.



- 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.

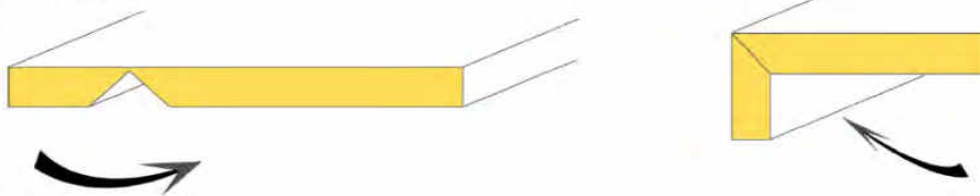
EDGE FABRICATION (continued)

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.
- Below recommended alternative for veined, metallic, translucent decors

For edge build-up we strongly recommend using V groove method or machining all edges 45 degree mitre this will give a consistent finish between top and front edge, and reduce showing .



Alternative method is to rebate the edge to the top 3-4mm down from the top face.



INSIDE CORNERS

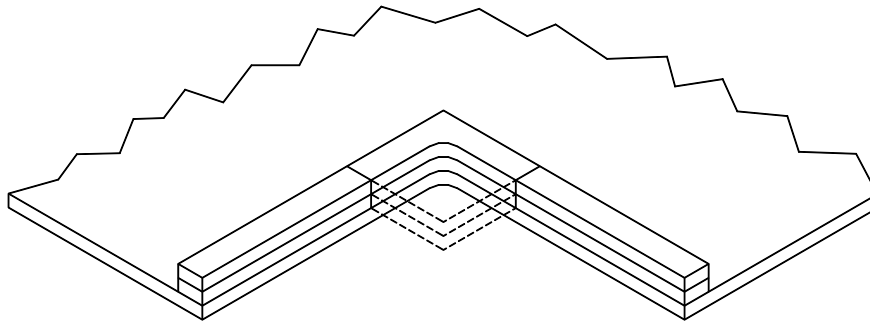
Special reinforcement is required on inside corners because they are subject to higher stress than other areas.

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.

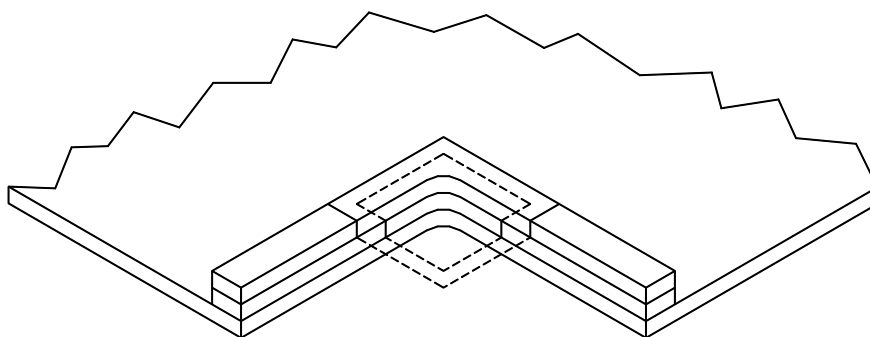
Corner Block Method

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

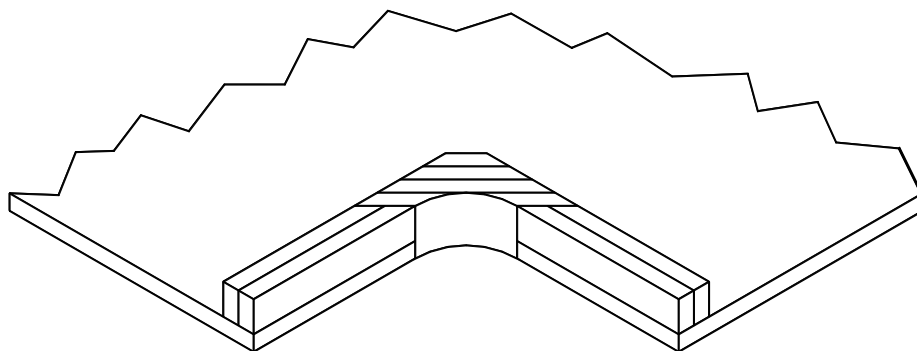
Corner block buildup pieces are aligned with seams offset by 25mm (1")
This method will provide greater strength.



INSIDE CORNERS (continued)

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.



Constructing Coved Backsplash

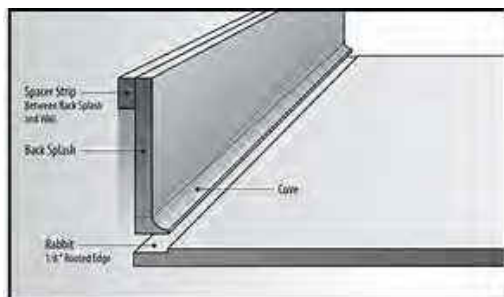


FIGURE 21

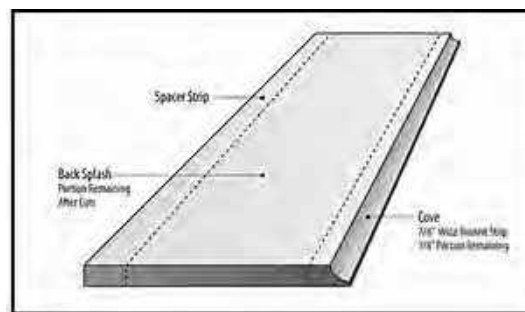


FIGURE 20

Coved backsplash consists of three part
Cove section routered 9mm radius
21x3mm rebate in back of top to glue
in cove
and upstand to glue on top of Cove .

Back spacer is used mainly when the
wall is not flat so it can be scribed.

alternative is to glue 21x12mm strip in top
rebate first , glue upstand and top and then
router cove shape with a coving router.



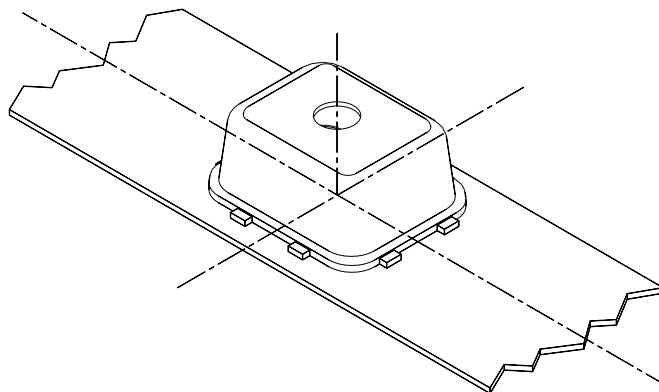
SINK INSTALLATION

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.

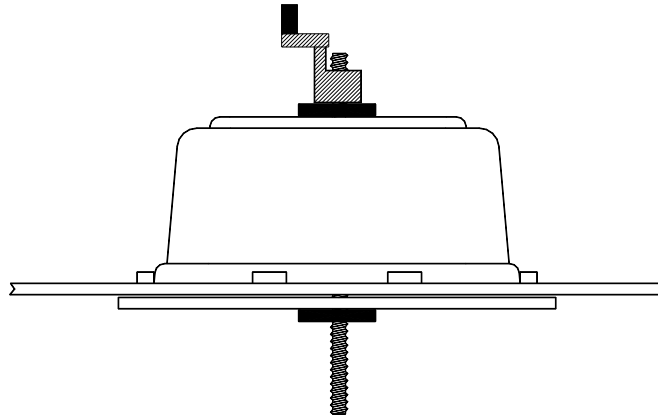
Undermount Solid Surface Sinks

- 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.



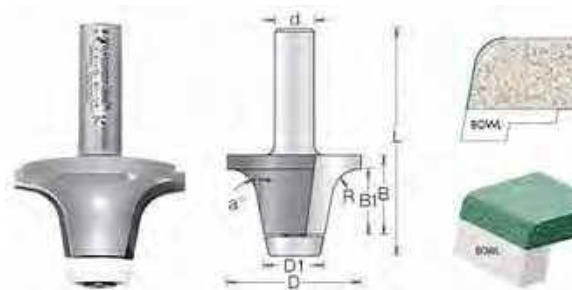
Undermount Meganite® Sinks (continued)

- 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.

Typical sink/bowl cutter



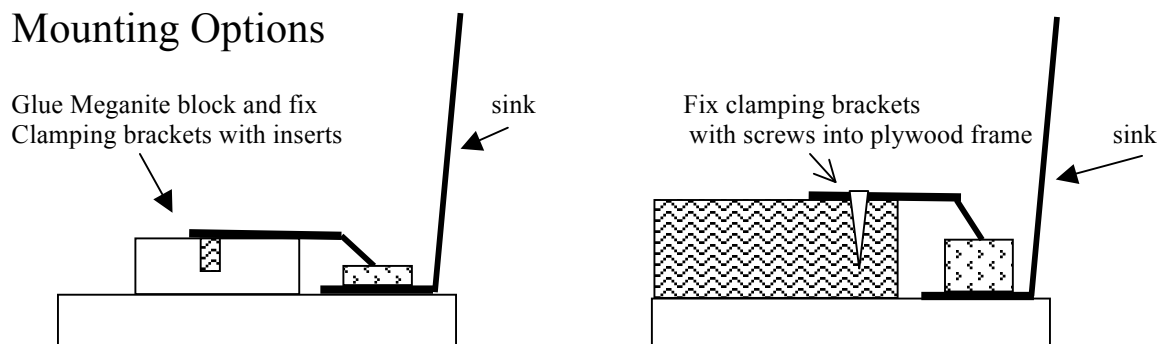
Undermount Non-Solid Surface Sinks

- 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.

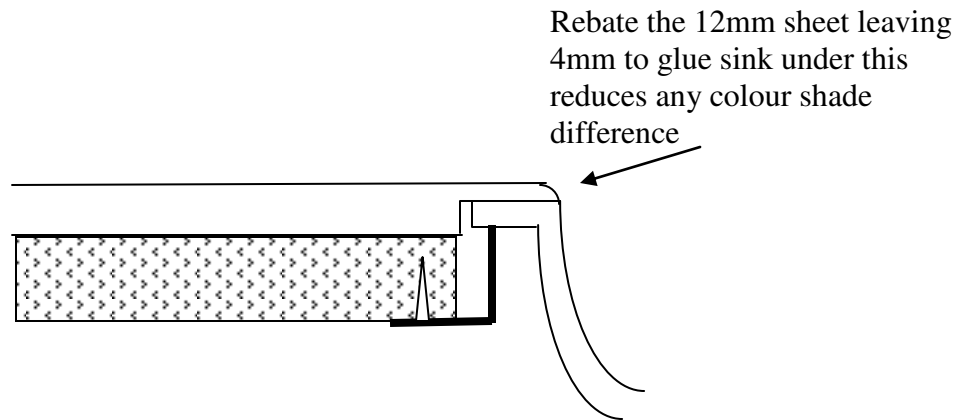
FAUCET HOLES

- 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.

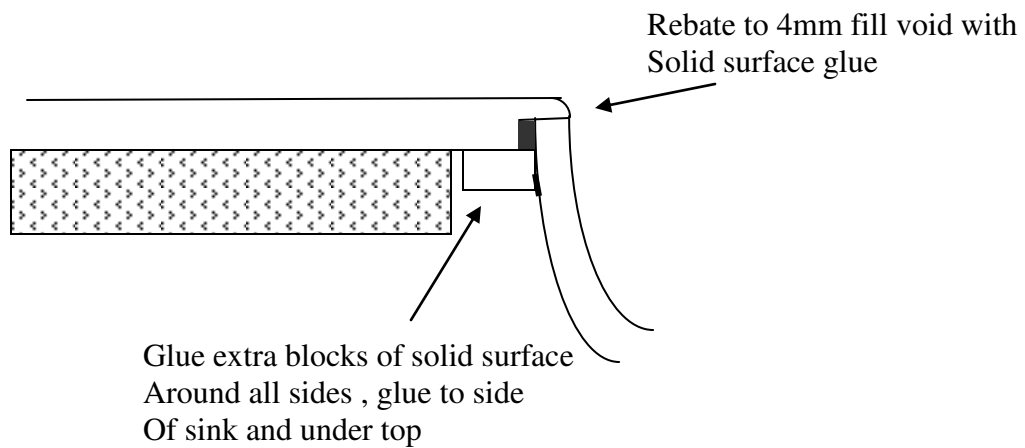
Mounting Options



Installing match sinks/bowls under sheets

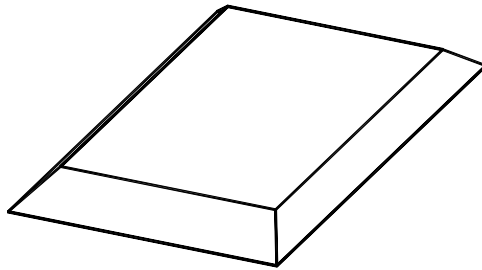


Hand made sinks/bowls from sheets

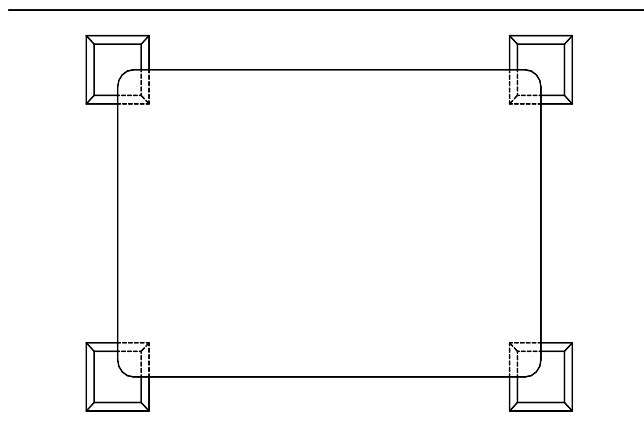


COOKTOPS

- 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°.



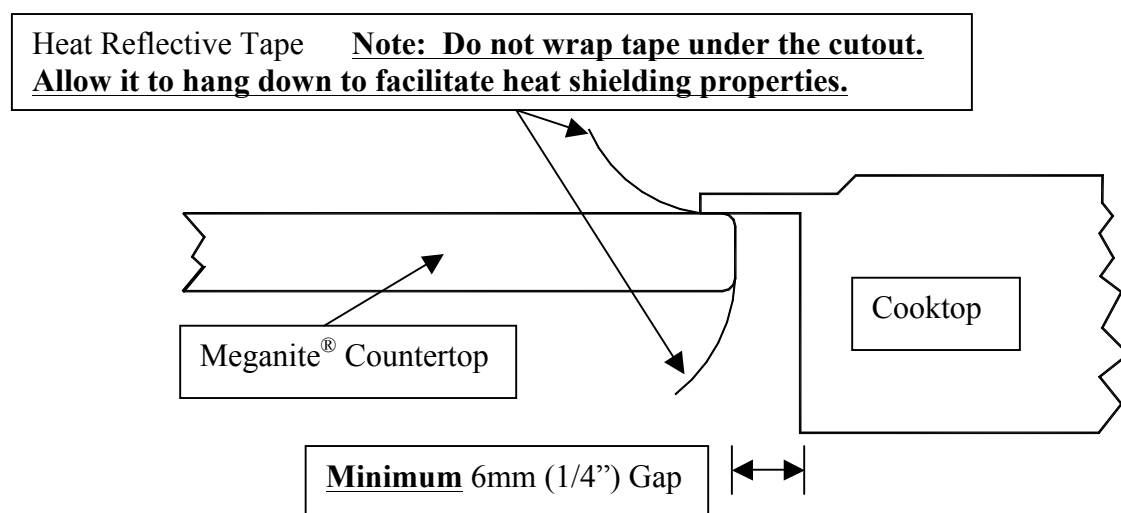
- Adhere the Meganite® corner blocks using only Meganite® seam adhesive.



- 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.

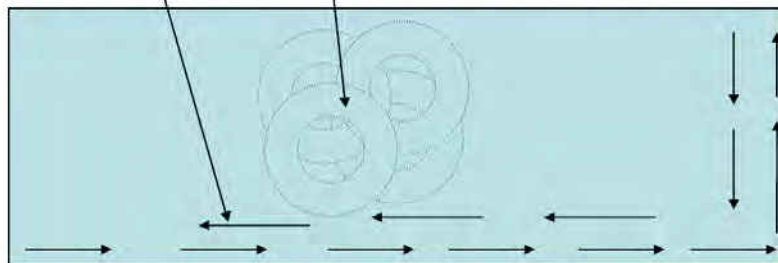
High-Gloss Finish ... a polished finish that enhances the visual depth and beauty of the material **(not recommended for countertops or other high use areas, as this finish is the most difficult to maintain).**

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.

To ensure flat, even sanding finish, with each grade(320,600) sand along the length of the worktop, pass back 50% overlapping last sanding. After sanding whole top repeat across width of worktop finally blend in sanding with random sanding all over.



Abrasives

- We recommend using 3M Microfinishing or 3M Trizact® 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

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

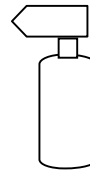
When used in an appropriate application (vertical or decorative surfaces only), a polished finish can be very pleasing. The end user should be advised of the special care and attention needed to maintain this surface.

- 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 250ml 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.

DOCUMENT PURPOSE

This update refers to the Meganite® “Shell Series” of colors including:

#424A	Makena Beach	#429A	Lanikai Beach
#426A	Summer Beach	#430S	Shine On Me
#428A	Kauai Beach	#9927B	Shell Mosaic

These colors contain natural materials that create an iridescent dimensional appearance which is exclusive to the Meganite® brand. The textured surface variations found in these colors are inherent to the material and are considered a feature. They offer unique natural tactile and visual properties along with all the usual benefits of solid surface - seamless appearance - integrated sink options - ease of maintenance - and a ten year warranty.

These colors are not suitable for thermoforming and should not be used in those applications. Normal fabrication tooling and procedures should be used with these colors. Due to the construction of these colors and the natural ingredients used, you may experience some small voids within the sheets as you process them. These can be filled using color matched joint adhesive. Please inspect the material during the fabrication process and fill any voids if necessary.

You may find that the natural materials used to create this unique appearance may cause some minor additional tool wear if high quality tooling is not used. It is recommended that you use proper tooling. Dull or poor quality bits and tooling may increase tool wear.

The finishing process can be completed using the same steps used for other Meganite® colors but we strongly recommend the use of 3M Micron™ and 3M Trizact™ or a high quality equivalent. Please reference the Finishing Guide in the Meganite Manual for more details. Proper finishing techniques must be used with these colors to achieve a suitable final product. A slightly higher finish will enhance the depth and appearance of the natural materials, but may change care and maintenance requirements.

Prior to cutting and or fabrication these colors, you should assure that your customer, end user, and or owners understand this new and unique natural tactile and visual finish. Please contact us with any questions or concerns.

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.

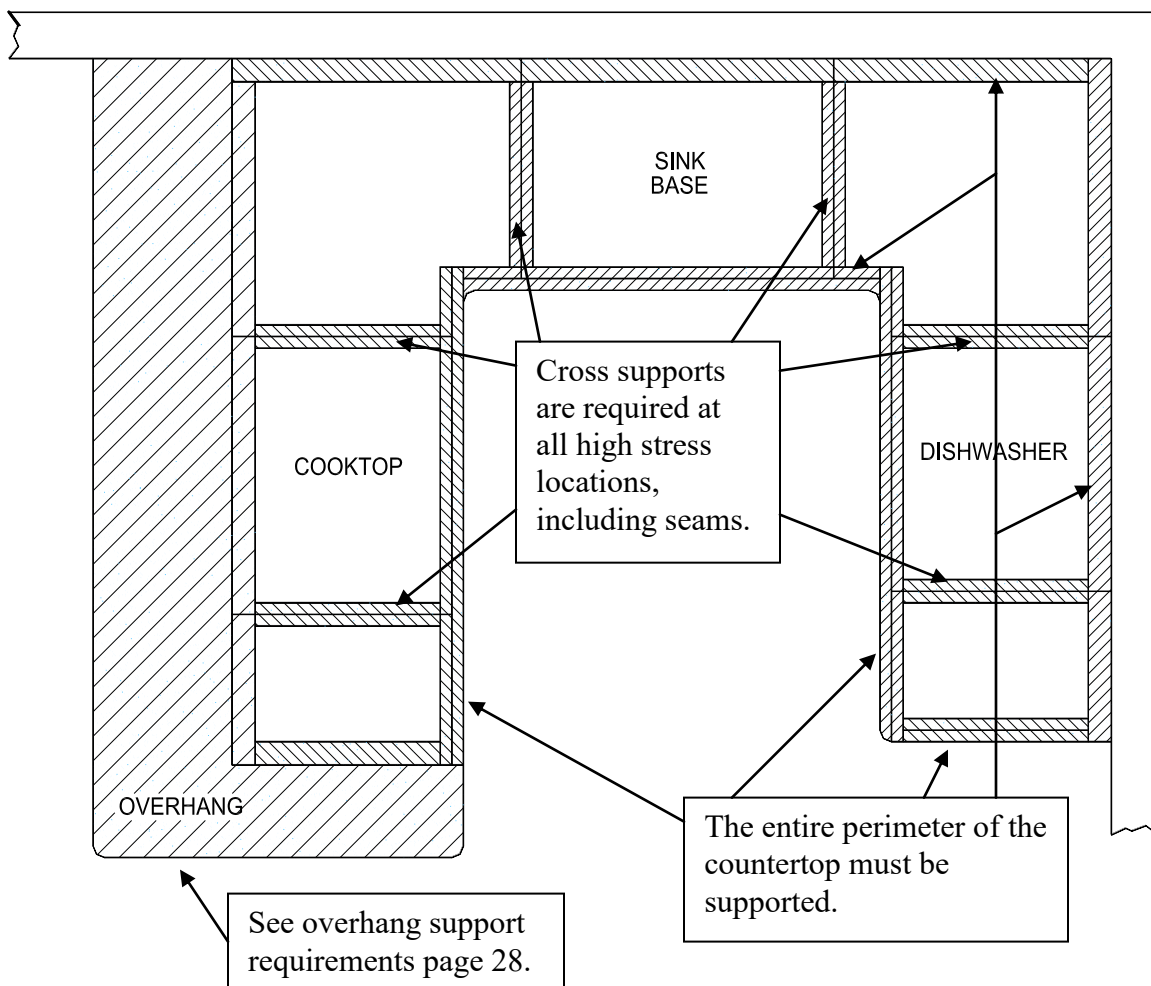
INSTALLATION (continued)

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, $\frac{3}{4}$ " plywood underlayment
30,3-45cm overhang...	Brackets and , 18mm, $\frac{3}{4}$ " plywood underlayment
45,3-60cm overhang...	Support legs or columns and 18mm, $\frac{3}{4}$ " 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.

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)

Wall Seaming

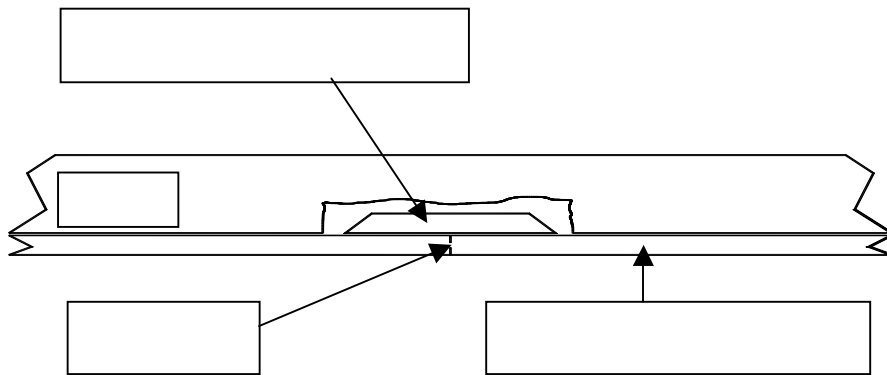
Hard Seam Meganite® Wall Panels

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

Seam Meganite® Wall Panels
The two approved methods are:

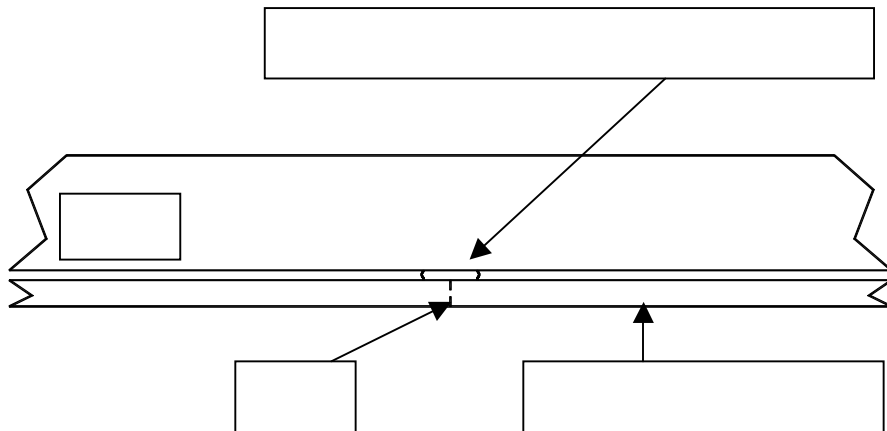
Reinforced Seam Method

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)

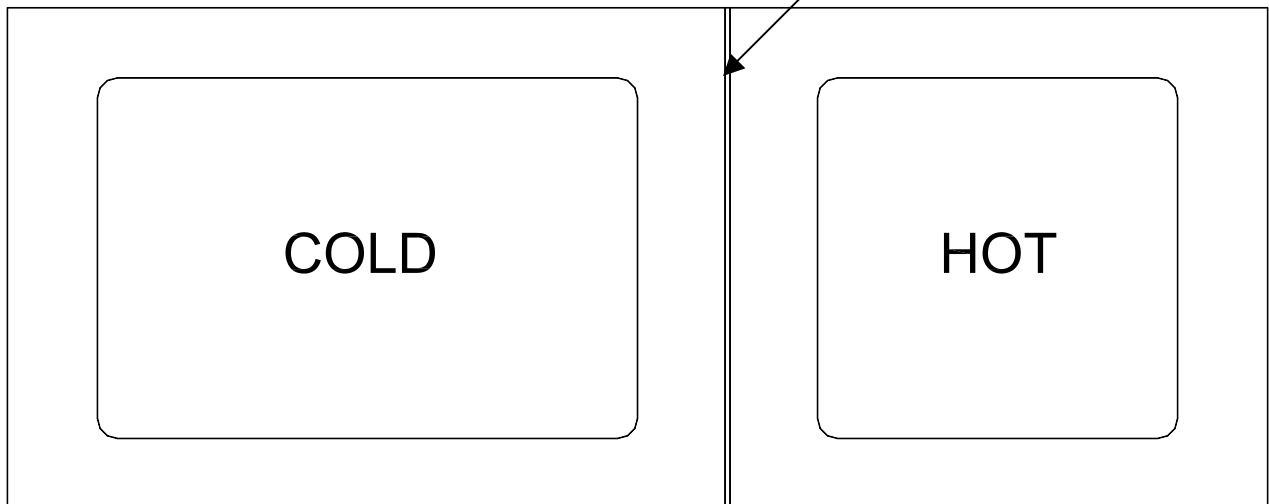
Installation

- 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.

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-aloe/>
 - 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

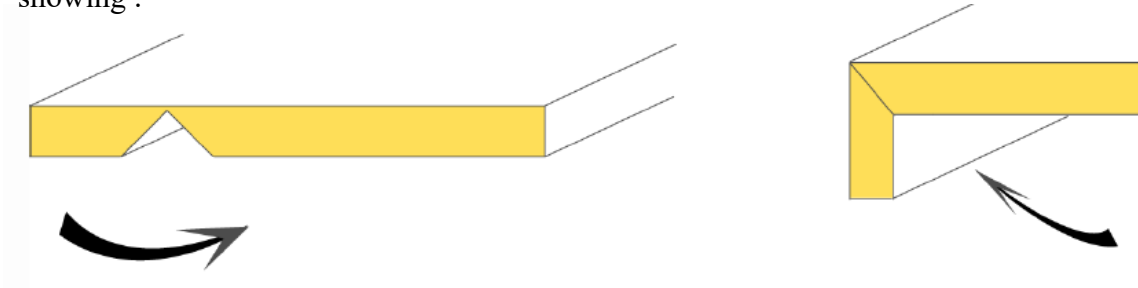
Other suggestions that should be considered when fabricating a top with translucent properties:

- 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 ($\frac{1}{2}$ ") 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.

For edge build-up we strongly recommend using V groove method or machining all edges 45 degree mitre this will give a consistant finish between top and front edge, and reduce showing .



Alternative method is to rebate the edge to the top 3-4mm down from the top face.



DOCUMENT PURPOSE

This bulletin will offer best practices and design ideas to achieve the best possible appearance when fabricating Veined Series designs. By utilizing these techniques and quality craftsmanship, a fabricator will be to provide the consumer inconspicuous seams and beautiful edge details.

** Drawings in this bulletin utilize a simulated vein pattern for instructional purposes.*

SETTING PROPER CUSTOMER EXPECTATIONS

Setting proper customer expectations is as important as proper fabrication, the following items are recommended to do this properly -

- Deck seam sample to show the customer, so they can have an expectation of how the deck seam will appear.
- Edge detail samples, stacked edge, mitered edge, drop edge.

Seam appearance and edge detail appearance are the responsibility of the fabricator, appearance is not warranted by Meganite Solid Surfaces.

ABOUT Movement Veined SERIES

The veined Series is manufactured with a natural, random veining design that runs the length of the sheet and is directional and must be fabricated according to the direction of the veining.



VEINED FABRICATING TECHNIQUES

- **Cutting**

It may be difficult to determine veining direction on smaller parts, it is suggested that you make multiple direction marks on the sheet before cutting the sheet into multiple parts.

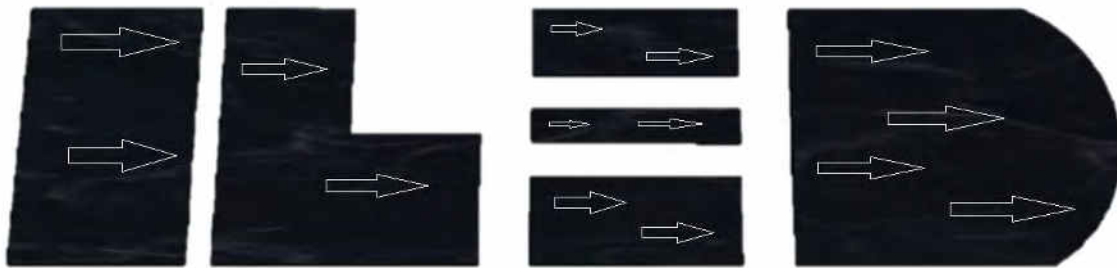


Figure 2. Directional marks on SolidTrends Veined before cutting parts

- **Veined Deck Seams**

With proper technique and care, veined Series deck seams can be created to have an inconspicuous appearance to satisfy your customer. Taking time to visually assess the pattern in the sheet, before cutting, will give you the best finished project.

The following techniques are suggested for properly blending the veining, when creating an inside corner.

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 1 inch from inside corners.
- Mitered inside corner seams in the Veined Series colors are approved if a 6 inches' support strip is used. The 6 inches' support strip **MUST** fit against the backside of the inside corner block and be fully filled with adhesive, see **Figure 15**.
- Seams must be at least 3 inches away from all cutouts, dishwashers or other heat producing appliances.

- Inside Corner Deck Seams-Mitered - (continued)



Figure 14. Veined miter joint topside utilizing the “Interlocking Corner Block Method”

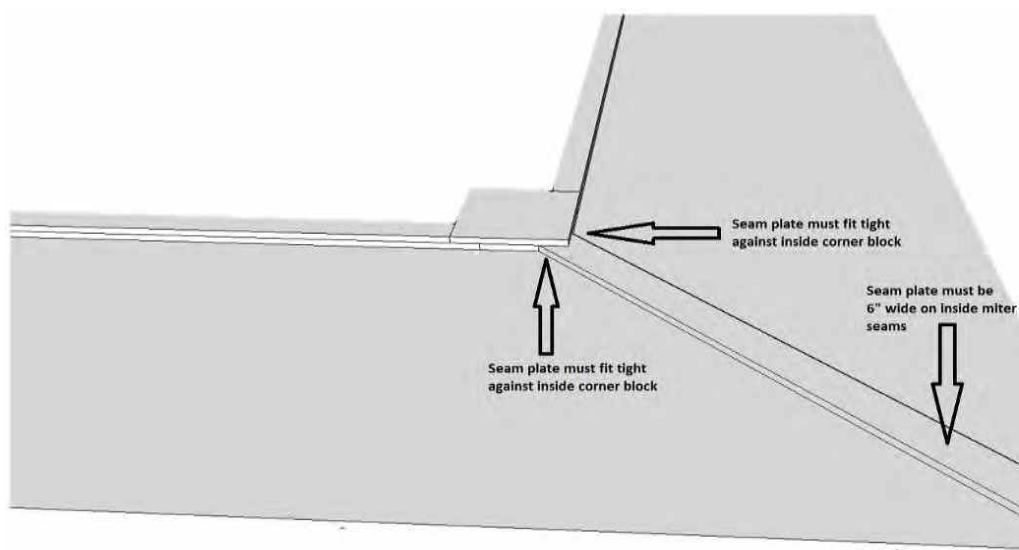


Figure 15. Veined miter seam shown from underside showing seam plate and inside corner block detail

Seam Placement - (continued)

- Seams must not extend into cooktop cutouts
- A seam placed through an integral solid surface sink location is approved.
- All seams must be reinforced by 4 inches wide for straight seams, 6 inches on inside mitered seams.
- All seam supports must be adhered with solid surface seam.
- Adhesive, to the underside of the sheets. The seam support must run the entire length of the seam.



Figure 3. Veined Series sheets laid out for seaming



Figure 4. Veined Series sheets seamed together

- **Serpentine Deck Seam**

With the use of templates or CNC cutting, serpentine seams can help to achieve a seamless appearance, see **Figure 5** and **Figure 6** for details.

- Serpentine Deck Seam - (continued)



Figure 5. Serpentine deck seam, cut mirrored joint shape



Figure 6. serpentine seam finished

- Inside Corner -

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 25mm radius (the larger the radius the better).

** One of the following reinforcement procedures must be used.*

- **Inside Corner** - (continued)

- **Corner Block Method**

Buildup pieces cut to a minimum size of 75x75mm 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.

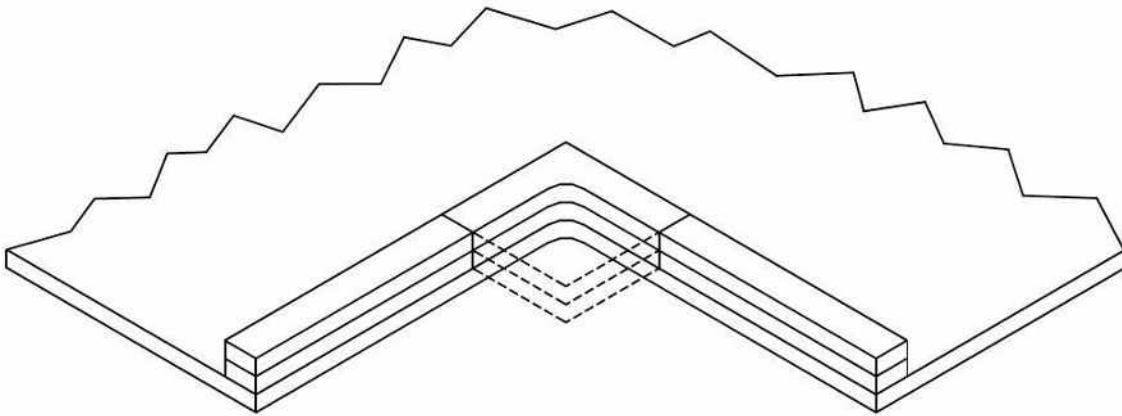


Figure 7. Corner Block Method shown from underside.

- **Interlocking Corner Block Method**

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

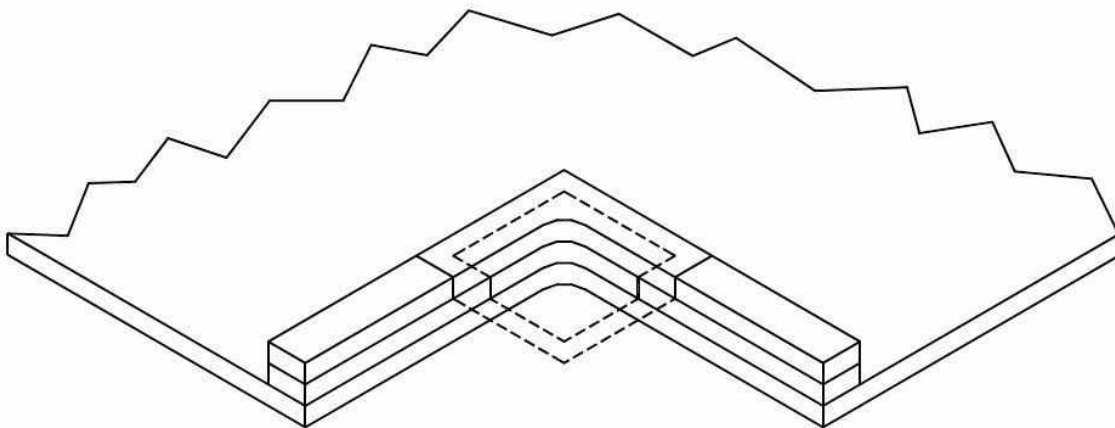


Figure 8. Interlocking Corner Block Method

- Inside Corner - (Continued)

- **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 SOLIDTRENDS vertically to form the inside corner block. The block is then adhered to the underside of the countertop in the inside corner.

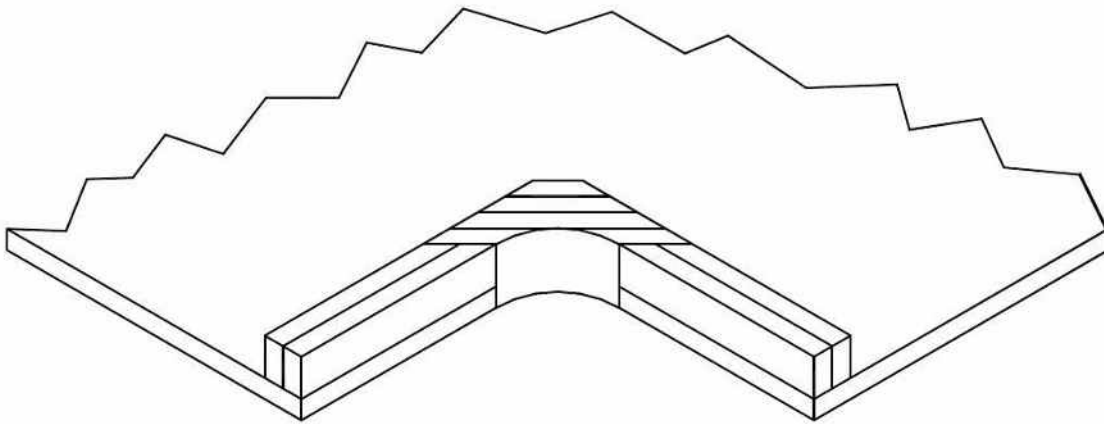


Figure 9. Vertical Strip Corner Block Method

- Inside Corner Desk Seam-Offset -

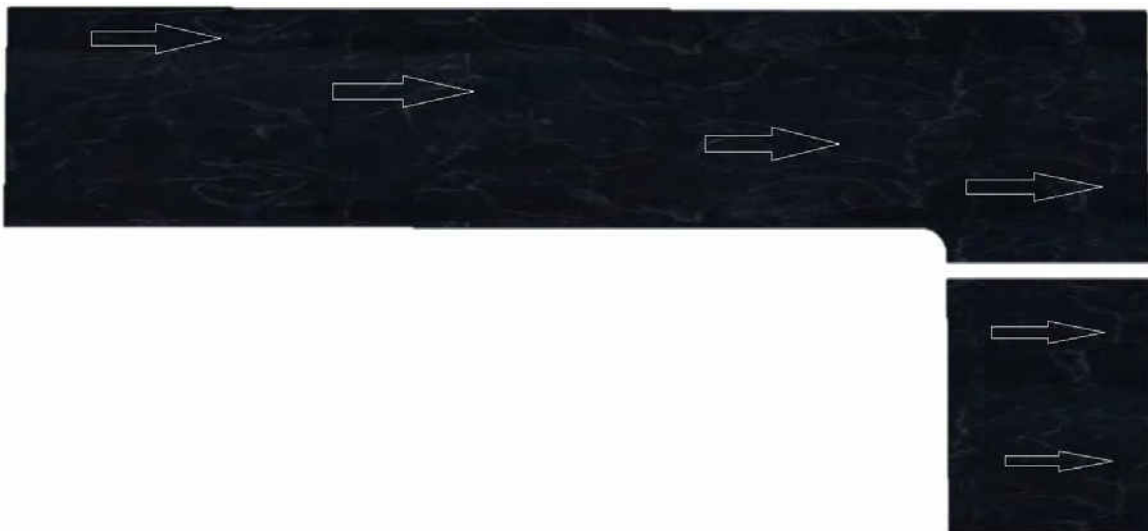


Figure 10. Offset inside corner laid out for seaming

- Inside Corner Deck Seams-Offset - (Continued)

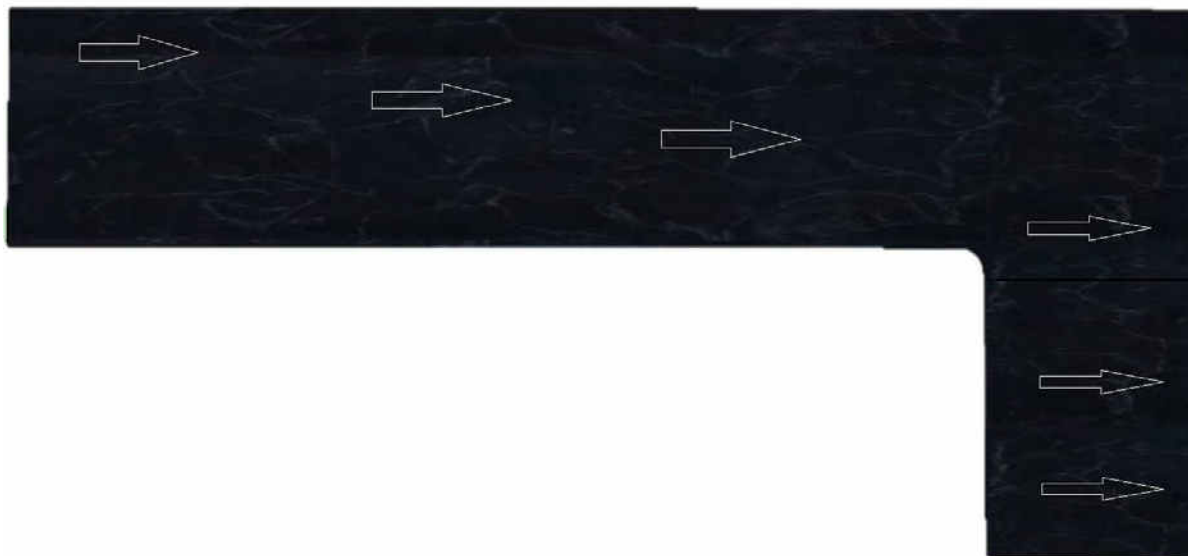


Figure 11. Offset corner seam pulled together

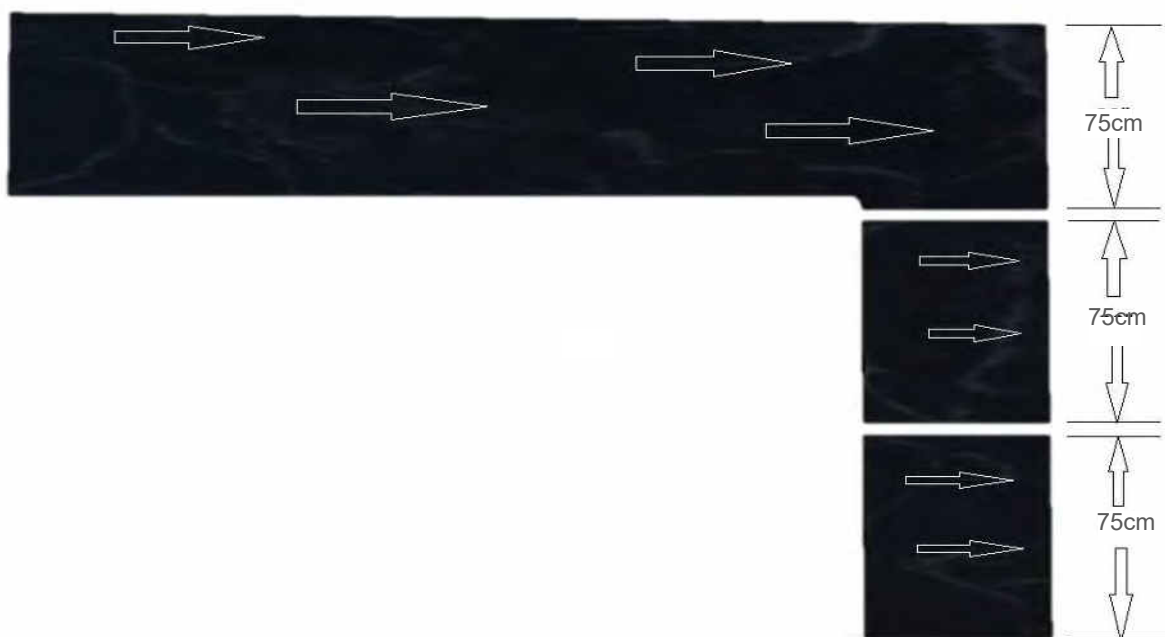


Figure 12. Meganite Movement Series pieces seamed with veining running in same direction, offset inside corner.

- **Inside Corner Deck Seams- Mitered**

If running the sheets perpendicular, on an inside corner, the use of a mitered inside corner can help the veining have a nice flow from sheet to sheet.

- **Miter Seams** on inside corners are approved with a full seam plate.
- **Seam plates on mitered inside corner seams must be a minimum of 150mm wide, 75mm inches on each side of the seam** See figure 15.
- **ALL** joints must be filled with adhesive, including the joints where seam plates butt to inside corner blocks.
- **ALL** seam plates must be supported on both ends.
- See **Figure 14 and 15** for inside corner block details.

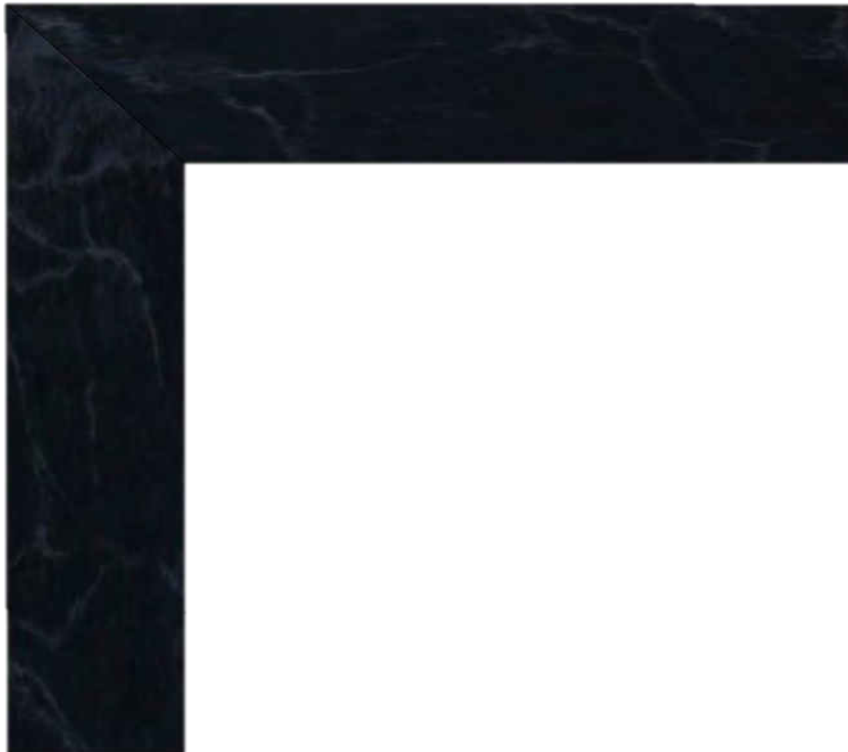


Figure 13. Mitered inside corner seam

- **Veined Series Edge Details** -

With proper fabrication, Veined edge details can be fabricated to have a seamless appearance. The following edges are suggested and listed from best option to least favored option.

- Best option - Miter/V-groove seam - **Figure 14.**

Mitering the Veined Series material will give you the best flow and appearance on your edge treatment as it only shows the surface of the sheets at the glue line. By V-grooving or miter cutting the pieces you are keeping the original flow of the surface design/veining.

- Least favorite option - Drop/Butt edge - **Figure 17.**



Figure 16. Best option - Miter / V-groove edge

- VeinedSeries Edge Details - (Continued)

- Better option - Rabbeted drop edge - **Figure 15.**

Cutting a 8mm inch rabbet in the underside of the deck, to receive the front edge, will minimize the amount of the sheet's edge that is exposed and will offer a good blending option for a drop edge.



Figure 17. Better option - Rabbet drop edge

- Good option - Laminated/Stacked edge - **Figure 16.**

Creating a laminated/stacked edge is acceptable but there will be difference between the edges of the sheet and the top surface of the sheet, both in the veining and light reflectivity.

Routing a decorative profile into the edge can help to minimize the visual difference between the edge and the top surface.

- Veined Series Edge Details - (Continued)



Figure 18. Good option - Laminated / Stacked edge



Figure 19. Least favorite option - Drop edge, least favorite option.

- **Veined Movement Series Integrated Backsplash**

The following techniques are suggested to achieve the best appearance when fabricating integrated backsplashes.

The following techniques are listed in order of best to least favorite.

- Best Option - V-groove technique - **Figure 20 and 21.**
- Good Option - Stacked technique - **Figure 22.**



Figure 20. V-groove technique folded together



Figure 21. V-Groove edge before gluing and folding

- Veined Series Integrated Backsplash - (Continued)



Figure 22. Stacked Integrated/Cove splash option

MEGANITE®

TECHNICAL
BULLETINS

SPARKLE AESTHETIC AND GREY-TONE DECOR
FABRICATION RECCOMENDATIONS

DOCUMENT PURPOSE

This document offers recommended new fabrication colors containing “sparkle aesthetic.”

September 2015, Meganite Inc. introduces a new exciting aesthetic containing millions of light reflective flakes, implemented thru the full thickness of the sheet.

To take full advantage of this new reflective technology, Meganite Inc. recommends the following fabrication techniques for the below decors:

090A Parapet Gray, 508SA Starry Starry Night, 519SA Rain Cloud, 703SA Snow Owl, and 704SA Urban Habitat.

Please review and advise your fabricator, design, architects, millwork, etc.

MEGANITE®

TECHNICAL BULLETINS

SPARKLE AESTHETIC AND GREY-TONE DECOR FABRICATION RECCOMENDATIONS

SURFACE APPEARANCE/SHEET LAYOUT

Sheets are directional, with the light reflective flakes flowing lengthwise thru the sheet, be sure to layout jobs with sheets running in the same direction for a consistent appearance. This technique is most important in L-shaped and U-shaped projects and will ensure that the reflective material flows nicely around corners and the seams remain inconspicuous.

Illustrations below show the most effective fabrication techniques for L-shaped and U-shaped projects.

*All illustrations are for layout reference, seam off-sets, inside radius', seam plates, etc. are still required.

Because the directional flow of the sheet is very subtle, it is recommended to mark the underside of the sheets with directional arrows, upon receipt of the sheet and before cutting your project parts.

Mark sheet in multiple areas so all project parts are labeled

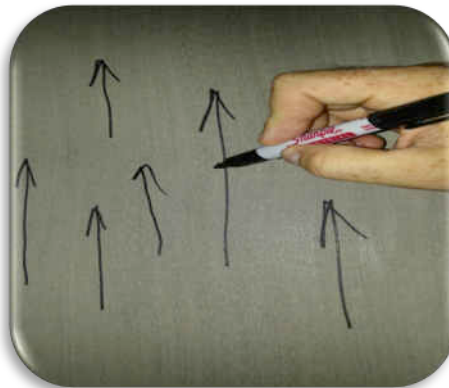


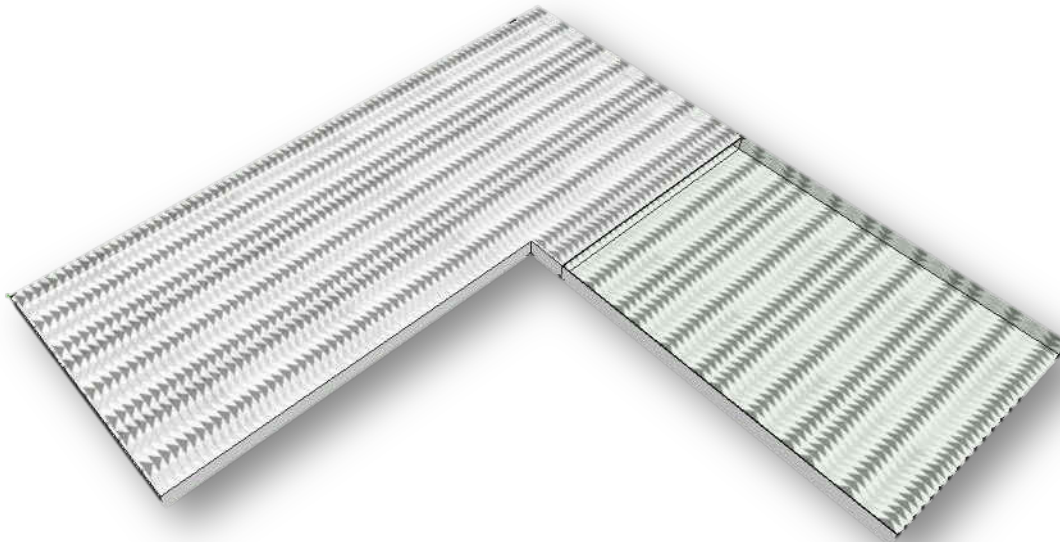
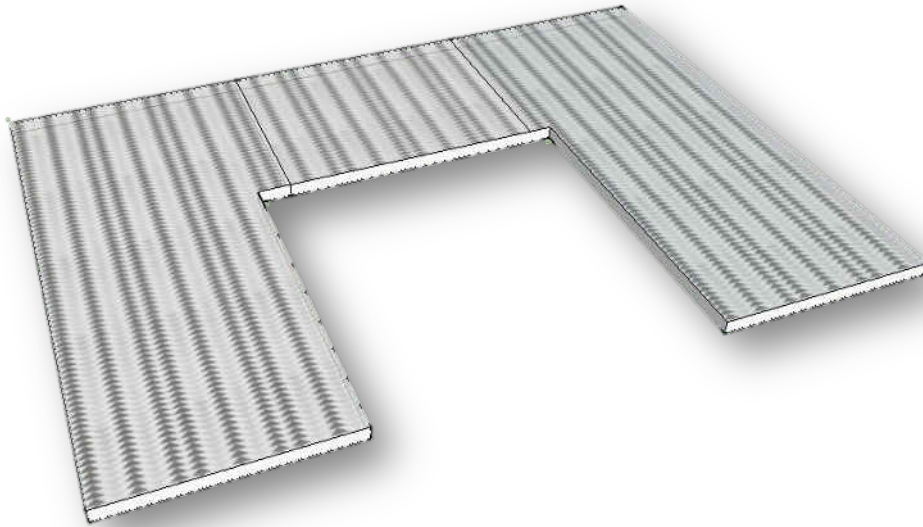
Figure 1-manually mark sheet direction before cutting

MEGANITE®

TECHNICAL
BULLETINS

SPARKLE AESTHETIC AND GREY-TONE DECOR
FABRICATION RECCOMENDATIONS

Proper L-shape and U-shape layout,
keeping sheets in the same direction



Keep all parts running in the same direction.

MEGANITE®

TECHNICAL
BULLETINS

SPARKLE AESTHETIC AND GREY-TONE DECOR
FABRICATION RECCOMENDATIONS

Edge Treatments

Follow these fabrication techniques to get the best color flow and consistency.

**Mitered-edges maximize surface
exposure and flake reflection**



Figure 2-Miter Edge sample

MEGANITE®

TECHNICAL
BULLETINS

SPARKLE AESTHETIC AND GREY-TONE DECOR
FABRICATION RECCOMENDATIONS

Stacked-edges give the best appearance
from top to edge transition

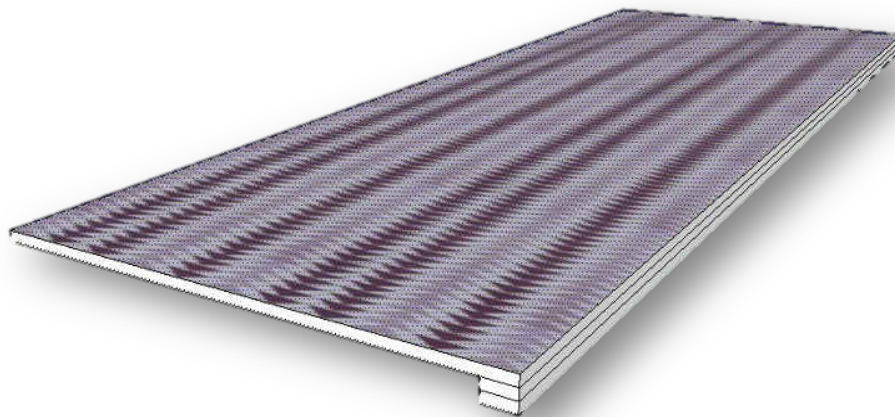


Figure 3-Stacked Edge sample

MEGANITE®

TECHNICAL
BULLETINS

SPARKLE AESTHETIC AND GREY-TONE DECOR
FABRICATION RECCOMENDATIONS

Drop-edges are NOT recommended as
they will highlight the shade differences
between the top and edge

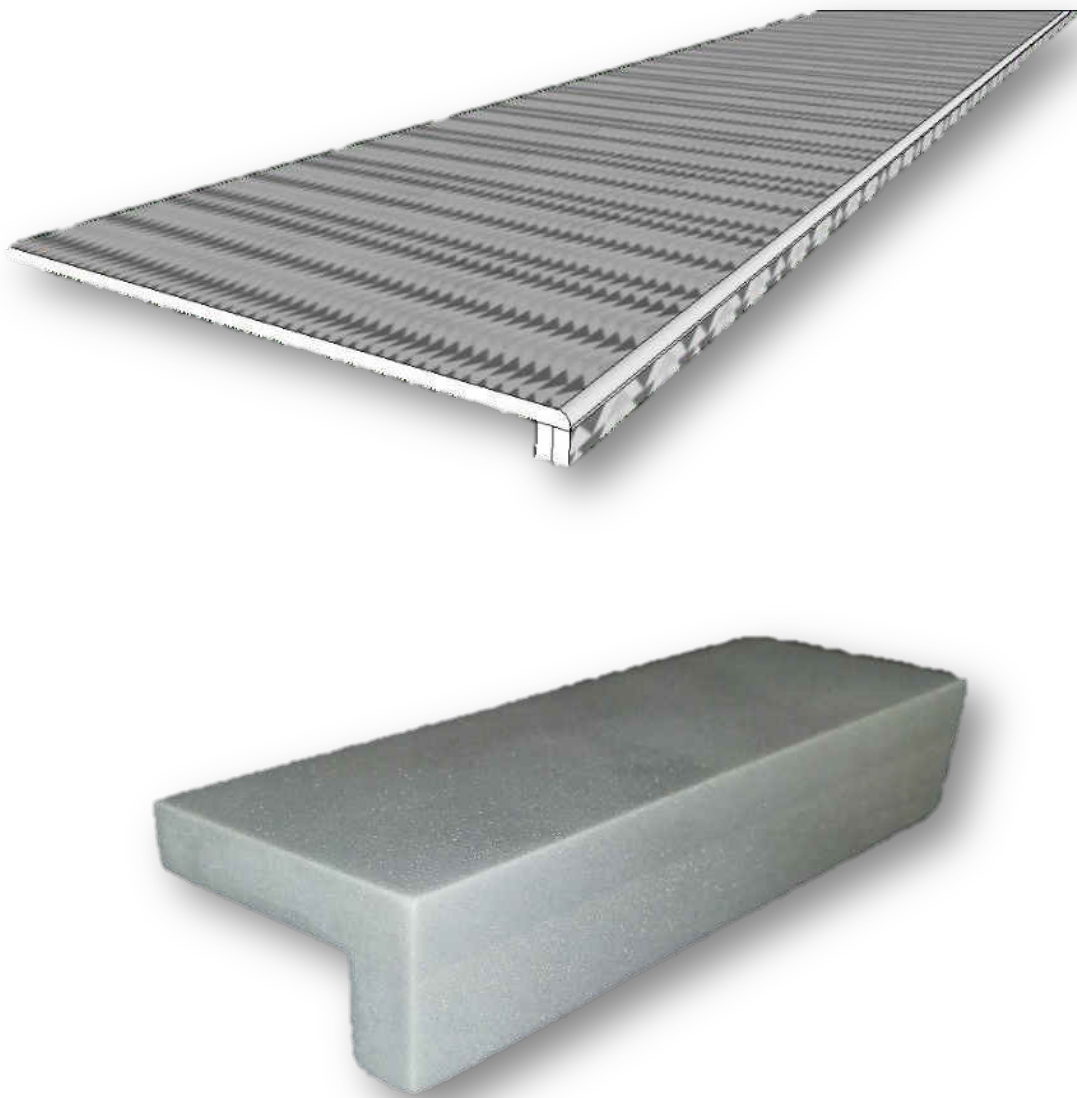


Figure 4- drop edge sample- NOT recommended

MEGANITE®

TECHNICAL BULLETINS

BRIGHT, VIBRANT, AND DARK SOLID COLOR FABRICATION RECOMMENDATIONS

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

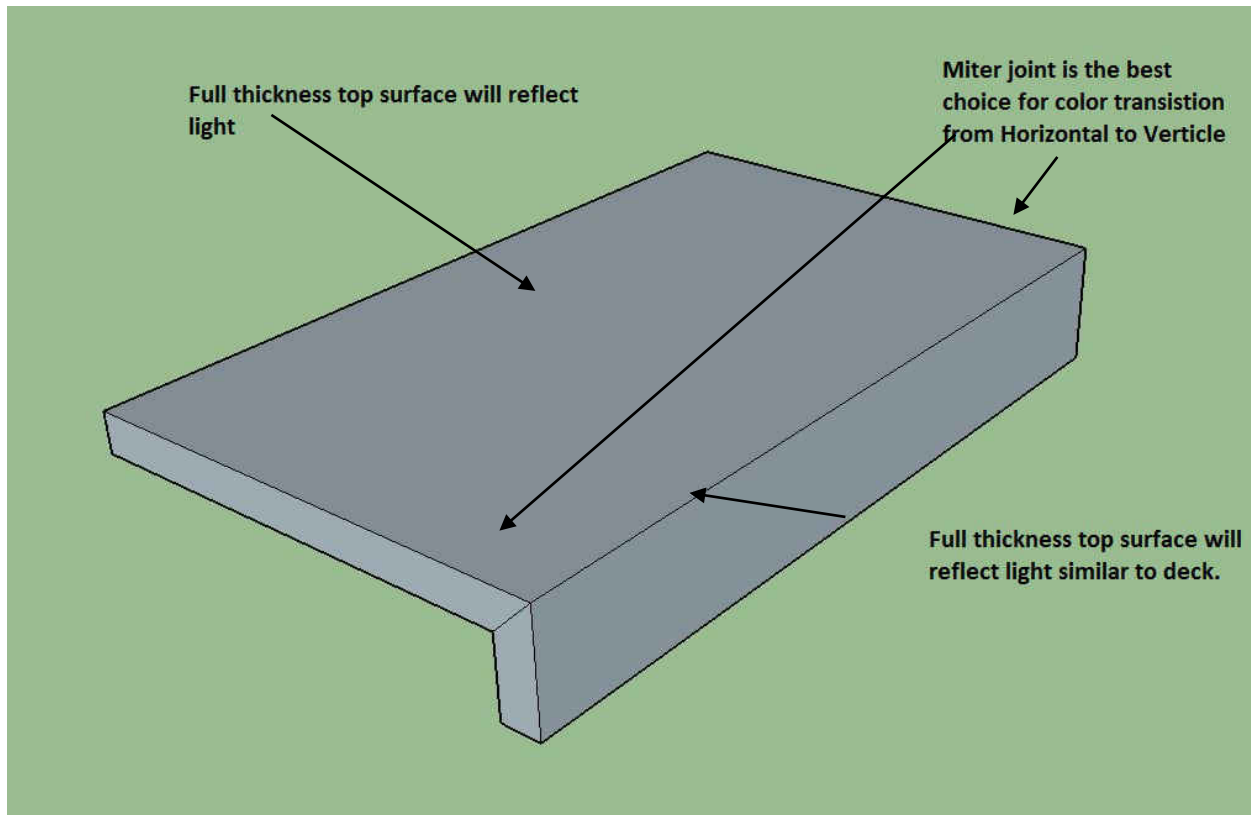
Grey 056A	Parapet Grey 090A	Slate 040A	Pewter 093A	Jet Black 019A
Fire 088A	Tangerine 077A	Sunshine 079A	Lime 060A	Chocolate 091A

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

BEST OPTION - MITER EDGE FOR BUILDING AN EDGE

Diagram 1 is a sample of the best fabrication technique, 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.

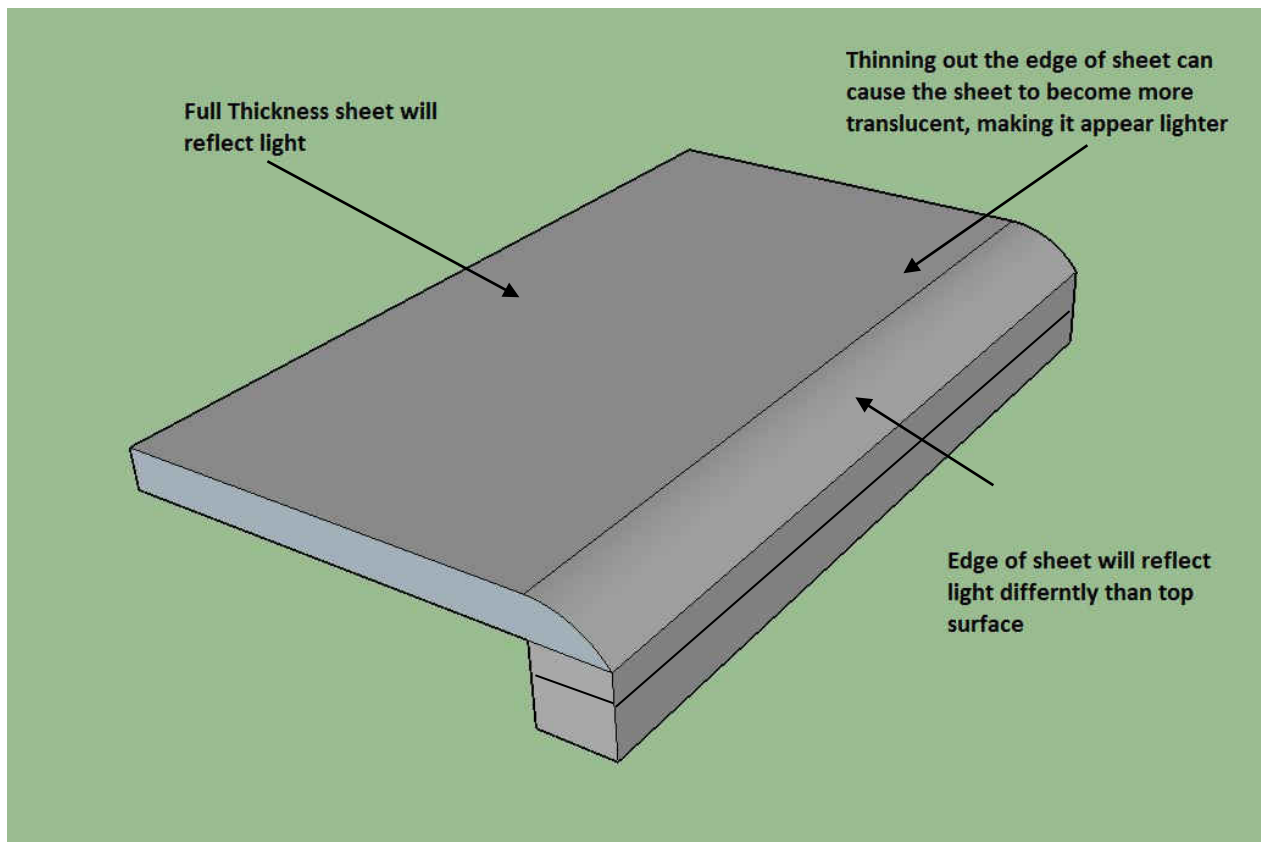
Diagram 1
Miter Edge (Best Option)



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.

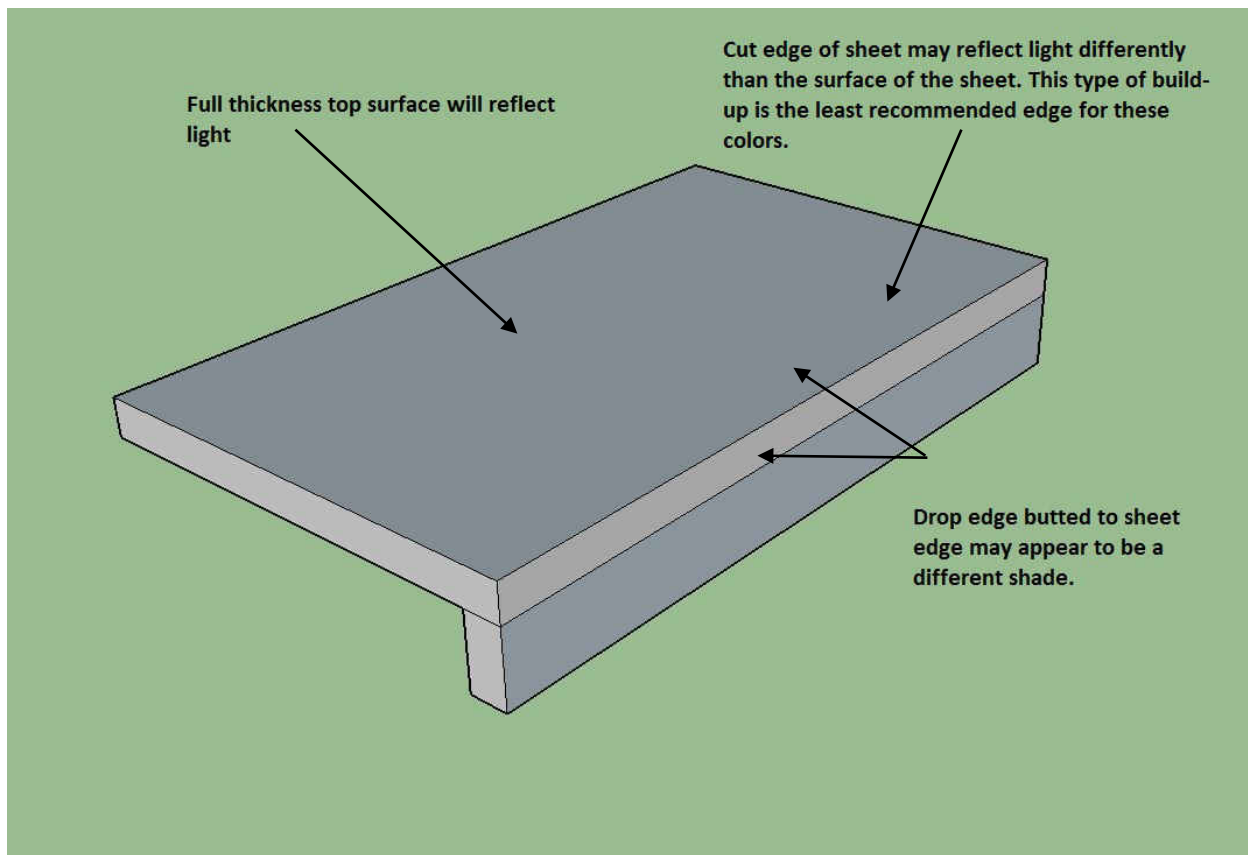
Diagram 2
Stacked Laminated Edge



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

THERMOFORMING

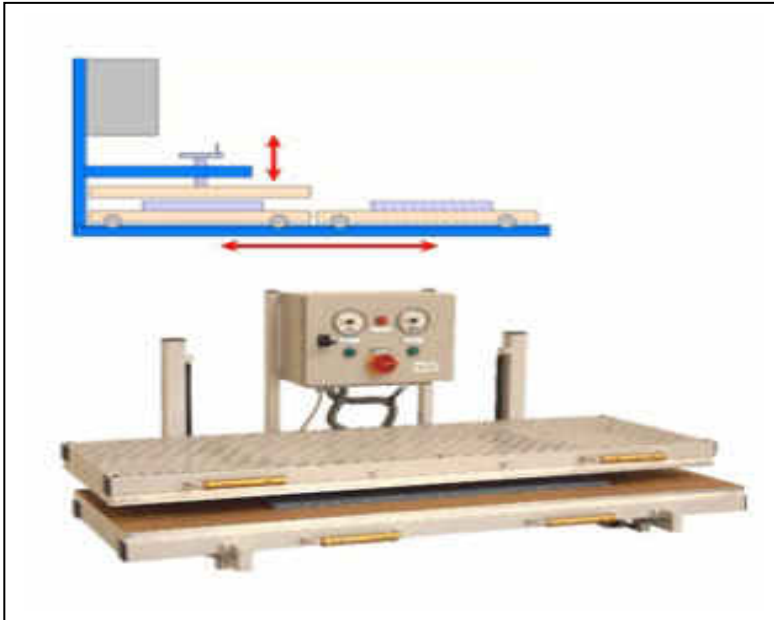
Meganite® solid surface, like any 100% acrylic solid surface, is thermoformable. Since environmental conditions change, a sample of the material should be tested before attempting to form the finished pieces. Variation in temperatures needed for forming between different solid surface colors is normal.

- 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 product 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 155°C and 165°C. Heating times vary depending on the oven used and the size of material and the décor, but usually range from 20-40 minutes.(inc flexywhite)
- 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 155°C and 165°C. (inc flexywhite)
- 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.

Special tips for best thermoforming Flexy White

To achieve the smallest radius or intricate 2 or 3 D forming,
a double hot plate oven
Gives the best results and makes the material the most plyable.



Most radius can then be achieved with a temp 155 deg C, for very small radius
Increase temp to 165 deg C , but take care not to discolour the material.

Whichever type of oven you have, convection or hot plate , flexy white will thermoform better than any other acrylic solid surface.

You can see Meganite thermoforming on our training video

www.meganite.com

click on the tab Technical Resources

MEGANITE®

TECHNICAL BULLETINS

GENERAL THERMOFORMING INFORMATION

DOCUMENT PURPOSE

This document offers general information about thermoforming. Use this as a general overview about surface behavior, thermoforming techniques, and preparation suggestions. This document is not intended to replace the Professional's review and practice on actual sheets. Actual result may vary due to variations in designs, equipment, material behaviors, fabrication techniques and experience, and more. Thermoforming is considered an advanced fabrication trade. It's the Professional's responsibility to assure the best performance of thermoforming. Having proper training, right equipment and certain amount of experience are highly recommended for thermoforming projects.

A SAMPLE GUIDE TO OVEN SETTING & BENDING INNER RADIUS

Series	NO.	Direct Heat Double Plate Oven	Indirect Heat Conventional Fan Oven	Common Radius
Solid	0XX	150-160°C, (302-320°F) 10-15 Mins	150-160°C, (302-320°F) 10-20 Mins	≥ 70mm (≥ 2-3/4")
Solid	033T	150-160°C, (302-320°F) 10-15 Mins	150-160°C, (302-320°F) 10-20 Mins	≥ 15mm (≥ 1/2")
AcryMed	033Z	150-160°C, (302-320°F) 10-15 Mins	150-160°C, (302-320°F) 10-20 Mins	≥ 100mm (≥ 3-15/16")
Mist	1XX	150-160°C, (302-320°F) 10-15 Mins	150-160°C, (302-320°F) 10-20 Mins	≥ 70mm (≥ 2-3/4")
	2XX	150-160°C, (302-320°F) 10-15 Mins	150-160°C, (302-320°F) 10-20 Mins	≥ 70mm (≥ 2-3/4")
	3XX	150-160°C, (302-320°F) 10-15 Mins	150-160°C, (302-320°F) 10-20 Mins	≥ 70mm (≥ 2-3/4")
Stone	5XX	150-160°C, (302-320°F) 10-15 Mins	150-160°C, (302-320°F) 10-20 Mins	≥ 100mm (≥ 3-15/16")
Granite	6XX	150-160°C, (302-320°F) 10-15 Mins	150-160°C, (302-320°F) 10-20 Mins	≥ 135mm (≥ 5-1/3")
	7XX	150-160°C, (302-320°F) 10-15 Mins	150-160°C, (302-320°F) 10-20 Mins	≥ 135mm (≥ 5-1/3")
Boulder	8XX	150-160°C, (302-320°F) 10-15 Mins	150-160°C, (302-320°F) 10-20 Mins	≥ 150mm (≥ 5-15/16")
Breccia	9XX	150-160°C, (302-320°F) 10-15 Mins	150-160°C, (302-320°F) 10-20 Mins	≥ 150mm (≥ 5-15/16")
All B-Series	Ending in B	Not Recommended	Not Recommended	Not Recommended
Shell	4XX	Not Recommended	Not Recommended	Not Recommended
Movement I	MXXX	150-160°C, (302-320°F) 10-15 Mins	150-160°C, (302-320°F) 10-20 Mins	≥ 110mm (≥ 3-15/16")

MEGANITE®

TECHNICAL BULLETINS

GENERAL THERMOFORMING INFORMATION

Movement II	MXXX	150-160°C, (302-320°F) 10-15 Mins	150-160°C, (302-320°F) 10-20 Mins	≥ 135mm (≥ 5-1/3")
Movement III	MXXX	150-160°C, (302-320°F) 10-15 Mins	150-160°C, (302-320°F) 10-20 Mins	≥ 170mm (≥ 6-15/16") under certain condition

Notes:

- Heating temperature higher than 190°C (320°F) is not recommended.
- Heating time longer than 30 min is not recommended.
- Every oven is different. Results can vary. PRACTICE ON PARTIAL OF SHEET IS RECOMMENDED BEFORE CARRYING OUT THERMOFORMING ON FULL SHEET.
- Discoloration is possible during thermoforming. Some whitening is expected on tight radius (80 mm or less) of dark and vivid colors.
- Definition of Movement I: M005, M007, M008, M009, M020, M040
Definition of Movement II: M021, M022, M023, M024, M038, M039
Definition of Movement III: M002, M031, M032, M036, M037
- Medium & large chips in series of Granite, Boulder, Gemstone, Breccia and Movement III may come off during thermoforming.
- Veining in Movement series may be stretched during thermoforming.
- Meganite does not warranty the condition of Meganite Solid Surfaces while being thermoformed or such material that is unsuccessfully thermoformed. However, when the material is successfully thermoformed and subsequently incorporated into a finished assembly, it carries the same warranty as other Meganite Solid Surfaces products.

LEARN YOUR OVEN & DO A SAMPLE TEST BEFORE STARTING ANY PROJECT



Solid Color



Large Chip Color



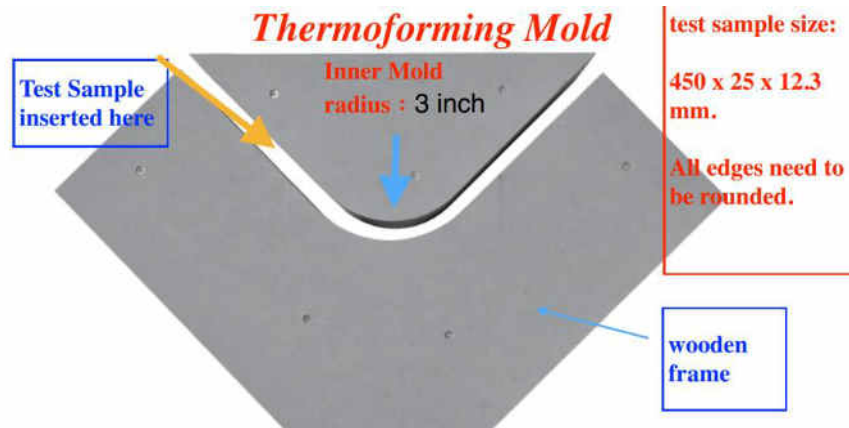
033T Flexy White

MEGANITE®

TECHNICAL BULLETINS

GENERAL THERMOFORMING INFORMATION

SEE THE THERMOFORMING TESTING MOLD, WHICH IS MADE WITH MDF OR PLYWOOD.



We highly recommend you spend some time to learn how your oven performs. Not all ovens are designed the same. The two most common designs are direct heat and indirect heat. A direct heat oven is generally double stainless steel plated and the material is sandwiched between the two plates. An indirect heat oven is similar to a conventional oven with a fan. In general, a direct heat oven heats the material faster and more even. Indirect heat oven is more common due to the cost of the oven.

We recommend you to learn how MEGANITE materials can be heated with a small test strip. The strip can be 100 x 300 x 12 mm or similar. First, preheat your oven to the desired temperature. Then, put the solid surface strip flat in the oven until it is soft throughout. Lastly, bend the material into shapes in above photo. If the material is hard to bend, generally it is because it has not been softened all the way through. Thus, more heat or more heating time could be needed. Follow and repeat above steps until you find the desired bending time and temperature combination. It is extremely important to check the heated and non-heated material for discoloration. Simply place a heated and a non-heated material next to see each other. Sand them at the same time to the desired finish (generally matte or gloss). After sanding, if you can visually tell a difference under normal indoor lighting, then adjustments on heat, duration, heat source distances, and/or other technique is needed.

Darker Colors and Bright Colors

Please be aware when darker colors and bright colors with and without chips can have more visible white stretch marks. This is not a material bending issue. It is generally because the material is bent too fast or not heart through enough.

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

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.

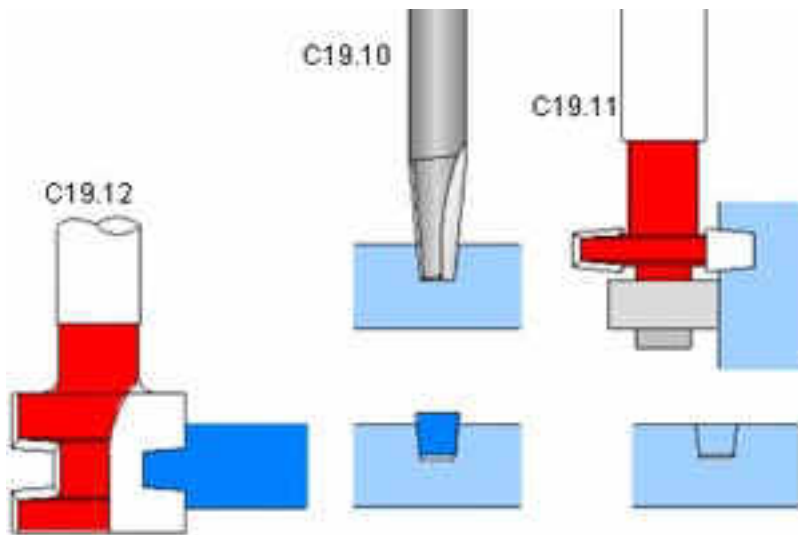
Pie-Cut Repairs

- 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.

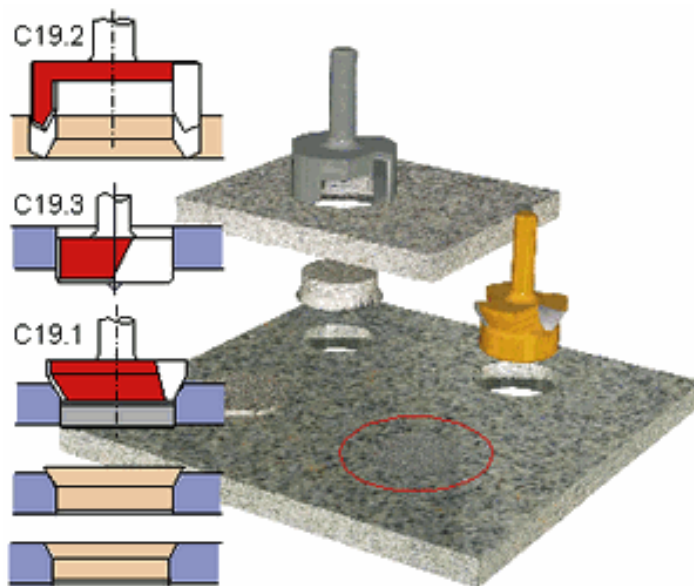
Pie-Cut Repairs (continued)

- 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.

Below are some of the tools available to make repairs easier
available www.albinkraus.at



tool to repair vertical or horizontal joint .



tool to make perfect plug repair anywhere in the surface.

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
28ZALUKL	Roll of Thermo hob tape 63mm wide
28ZKL-50	spring edge clamps 50mm opening
28ZKL-80	spring edge clamps 80mm 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

MEGANITE®

Acrylic Solid Surface

RECOMMENDED CLEANING PROCEDURES FOR MEGANITE SOLID SURFACE TOPS

- TO PREVENT DAMAGE TO THE SURFACE, DO NOT CHOP OR CUT DIRECTLY ON THE MEGANITE, USE A CHOPPING BOARD. NEVER PUT A HOT PAN OR POT ON TO THE SURFACE, USE A TRIVET OR HEAT PAD. ON DARK COLOURS MORE CARE WILL BE NEEDED TO PREVENT SCRATCHES FROM APPEARING, USE MATS UNDER CERAMIC WARE AND AVOID DRAGGING ITEMS ACROSS THE SURFACE.
- CLEAN ALL EVERYDAY SUBSTANCES OFF IMMEDIATELY WITH A CLOTH AND SOAPY WATER. IF STAIN HAS DRIED IT MAY NEED ABRASIVE CLEANER SUCH AS JIF, CIF. ALSO, CLEANERS WITH 5% BLEACH CONTENT ARE VERY GOOD TO KEEP WHITE SURFACES LOOKING PRISTINE.
- REMOVE HARSH CHEMICALS AND HEAVY BIRO MARKS USING A SPONGE AND BAR KEEPERS FRIEND, SCOURING PAD SIDE OF SPONGE MAY BE REQUIRED. DO NOT USE ON DARK SURFACES AS THIS WILL DULL THE SURFACE AND REQUIRE THE WORKTOP POLISH TO BE APPLIED.
- SCRATCHES IN THE SURFACE CAN BE REMOVED USING COURSE AND THEN FINE WET AND DRY SANDPAPER: 320/600 GRIT AND SCOTCHBRITE OR SUPER G PAD. FINISH EACH GRADE WITH FAST CIRCULAR MOTION. DARK COLOURS SHOULD BE GIVEN A FINAL FINISH WITH SOLID SURFACE POLISH; SPRAY POLISH AND WIPE OVER WHOLE AREA, LEAVE WET FOR 10 MINS AND HAND BUFF THE SURFACE WITH A DRY SOFT CLOTH. REPEAT THE POLISH SYSTEM TO ENHANCE THE GLOSS EFFECT.
- CIGARETTE BURNS CAN BE REMOVED WITH BAR KEEPERS FRIEND. HEAVY BURN MARKS MAY REQUIRE SCOURING PAD OR EVEN FINE WET AND DRY.
- TO KEEP YOUR SURFACE LOOKING SHINY AND STAIN FREE WE RECOMMEND REGULAR CLEANING USING ANTI-STATIC GLASS CLEANER OR SOLID SURFACE POLISH, AVAILABLE FROM THE DISTRIBUTOR. We do not recommend dark decors (jet black, chocolate , pewter, fire) for high traffic areas like kitchens, labs etc. These will scratch and show more easily , needing more care , ie use felt protectors under ceramic ware, pots etc, do not drag item across surface. Use solid surface polish to help protect surface.
- **A Solid Surface cleaning kit (code 28ZCLEAN) is available from the distributor containing:**
 - Abrasives
 - Scour pad
 - Professional worktop polish
 - Microfibre polish cloth.

www.kula.de

Email: info@kula.de



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®*

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: _____