

Tiger Mountain Innovations, LLC

Best Practices for Fabrication and Installation of Squak Mountain Stone and Trinity

Version 1.3

BEST PRACTICES FOR FABRICATION AND INSTALLATION OF SQUAK MOUNTAIN STONE AND TRINITY SLABS AND TILES

1.0 DISCLAIMER

1.1 Using this Guide. This guide is not intended to be a replacement for competency and skill in construction. Squak Mountain Stone and Trinity should be installed only by qualified, skilled persons, who are capable of following safety precautions and have equipment and means to carry and safely transport these very heavy slabs of stone.

The following guidelines are intended to familiarize qualified installers and contractors with the specific characteristics and considerations for Squak Mountain Stone and Trinity. It is not a substitute for hiring a competent professional installer.

1.2 Slab Fabrication Can Be Dangerous.

Squak Mountain Stone and Trinity are heavy yet can be broken if not handled properly. These two items alone can result in injury if someone is not familiar with installing such materials. The tools necessary to install Squak Mountain Stone and Trinity are also of a dangerous nature and should not be used by persons unfamiliar with their operation and the necessary safety precautions for them.

1.3 Competency of the Fabricator. Successful fabrication starts with understanding the possibilities and limitations of Squak Mountain Stone and Trinity. However, equally important is that a Fabricator has the competency, training, supervision as well as the personal interest in doing the work.

Many of the recommendations in this guide are from the Marble Institute of America's *Dimension Stone Design Manual, VII* (MIA DSDM.)

References to excerpts from this manual will be made throughout this Guide. It is recommended that any Fabricator who is attempting to install Squak Mountain Stone or Trinity must have sufficient knowledge and experience with these standards.

This guide only makes recommendations and is based on general practices and experiences discovered during fabrication and installation of TMI products over the last several years. Given the fact that Squak Mountain Stone and Trinity are variable in the same way natural stones are, strict adherence to these best practices does not guarantee success. It is presumed that a skilled, competent Fabricator knows when variation from the recommendations is necessary and can adapt as needed.

1.4 Local Codes and Jurisdictions. Nothing in this Guide is to be construed as taking precedent over any local codes or jurisdictions. All installations should be approved by an independent architect, engineer or contractor, who is experienced with natural stone installations. TMI will not review, warrant or guarantee any installations.

2.0 AESTHETICS & APPEARANCE OF SQUAK MOUNTAIN STONE AND TRINITY

2.1 Decision Based on Not Just Looks. While Trinity and Squak Mountain Stone are offered in a variety of colors to fulfill many designs, it is still important for Specifiers and Buyers to equally consider the other elements of the materials during their selection process. For example, Squak may have the desired aesthetic appeal for a customer but lack the durability or expected performance for their application or project.

2.2 Patterns and Veining. Squak Mountain Stone and Trinity both offer interesting colors and patterns that are the results of the casting and finishing processes. These are not errors but are precisely what gives the materials their natural characteristics and are often highly valued for their decorative qualities in interior installations.

2.4 Filling and Slurrying. An issue that dominates with cementitious precast materials is the emergence of pinholes in the surface. These surface holes are very much like the pitting common in granites. The pinholes, when found in the shop during finishing, are filled in with a color-matched slurry. However, shipping and use of the countertop can reveal more pinholes. These pinholes do not affect the durability of the countertop and do not qualify it as a “defective” material.

If the Buyer finds the pinholes to be objectionable, they can be filled by the Fabricator with techniques similar to grouting marble or travertine with resin, cement, or a color-matched soft wax filler.

2.5 Scratches. Because Squak Mountain Stone and Trinity both have similar characteristics to marble and travertine, they are susceptible to scratching. Squak can be scratched more easily than Trinity. However, if sand, sharp glass or glazed ceramic rubs across the Trinity surface, it

can leave a deep, permanent whitish mark on the face.

In many cases, the scratches can be sanded or polished out to make the scratch unnoticeable. With Squak, sanding out a scratch requires a 150 grit sanding sponge or cloth (not sandpaper, this can be too rough or gritty). Carefully using light to normal hand pressure, the sanding sponge should be moved around in a tight circular motion so that the entire area is blended in with the surrounding areas. **Never sand straight down the length of scratch as this will leave a light, wide line along the path of the scratch and make it more noticeable.** Just as with pinholes, a scratch on the Squak surface will actually blend quite nicely with the rest of the surface and can often be left alone.

A non-sanding method to repair scratches is to use a soft-wax stick or crayon to color into the scratch.

For Trinity, light scratches (those that can't be felt with the hand) may be hidden with a dab of oil rubbed into the scratch. For deep scratches, however, particularly those from sand that have left the glass frosted and chipped away, scratches can only be repaired with a resin filler and mechanical polishing.

2.6 Cracks. There are two major types of cracks found in Squak Mountain Stone and Trinity. The first kind is “thermal cracks” or crazing. These occur during the curing process when the material has gotten too hot or dried out too quickly. Unless they are within the 1-1/2” perimeter of the full slab, Squak and Trinity slabs should not contain thermal cracks.

The second kind of cracking occurs during handling, fabrication, transport, or installation. When cracks are detected in slab material prior to fabrication, the best method is to simply avoid including them in the installation through selection during the layout process.

If the crack cannot be avoided and the Buyer is willing to accept it because it occurs in a non-structural part of the installation, then the crack may be repaired. In Trinity and other natural stones, cracks are repaired by injection of a penetrating resin adhesive, which may be dyed to match the stone, and then rebuffering the area after curing of the resin. It is possible that the entire slab must be re-polished to make the repair unnoticeable or inconspicuous. For Squak, a similar method or a color-matched grout filler can be used to repair.

2.7 Pitting. Pitting or chip-outs is a commonly seen characteristic on natural stone, such as granite, and can be seen on Trinity as well. Because the slabs are made up of different materials of different hardness, the mechanical polishing process can loosen up tiny bits of glass and pop them out.

The pits or chip outs do not make the Trinity less durable but can be objectionable to the Buyer. It is usually best to not attempt repair of pits, as most repair techniques will not cosmetically improve the countertop, but if filling them is desired, it is recommended to use a resin filler, color-matched for the countertop, or a clear beeswax paste.

2.8 The Finish. The factory finish, visual and tactile, is a key element in the appearance of Squak and Trinity. The finish supplied by TMI is not the only one possible on our two products. A customer desiring something a little different will need to work with the Fabricator to alter the factory-finish on the materials.

2.9 Factory Finish. Visually, Squak Mountain Stone's "natural" finish is a dull sheen. From a tactile perspective, there is generally a smooth feel and touch to the material. However, there are some areas that are rougher, due to the nature of the product and the hand-finishing process. These rougher areas are not defects. If a Buyer or Specifier is concerned with these

areas, they should be allowed to see and feel samples that have these spots on them or select their slabs from the Distributor's inventory.

Squak's finish is not the result of a coating. Once it has been sanded, it will be altered and cannot be restored. When sanding is necessary on Squak Mountain Stone, it is advised to start off using 100 or 200 grit hand sanding sponges and light to normal hand pressure, to avoid over-sanding the finish away. More experience in installing Squak will yield a higher level of competency and confidence in using mechanical means for repair.

Trinity is mechanically polished on a state-of-the-art line polishing system. It has a glossy, smooth feel across the surface. In some areas, as noted earlier, pitting or fine pinholes may be felt but should not be reflective of the vast majority of the stone surface.

With both products, the Fabricator needs to be aware of tactile differences. Layouts should take these possible differences into account to avoid utilizing areas of slabs with a disproportionate amount of roughness.

2.10 Alternative Finishes. Changes in the finish appearance of Squak can only be achieved through the use of different sealants. Generally, for Squak customers, the preferred finish is a matte/low sheen finish, supplied by a topical sealer or wax. However, using a high-gloss sealer is also possible. The Buyer or Specifier should work directly with the Fabricator to achieve this.

It is possible, however, to modify the factory finish on Trinity. If a customer wants a honed finish on Trinity, it is possible for the Fabricator to "knock down" the shine by polishing the surface with 200 or 400 grit diamond polishing tools. This will provide a smooth feel with a dull sheen. The Buyer should be made aware that a honed finish

is more susceptible to staining than a polished surface.

2.11 The Affect of Age on Color. Because both Trinity and Squak have residual moisture in the slabs throughout their lifetimes, it is important to realize that the age of a slab can have an effect on the color of the material. As the moisture evaporates from the stone, the stone will lighten slightly. This effect may not be entirely evident until two different aged slabs are seamed side-by-side. There is no way to get multiple slabs to match exactly in color.

It is therefore recommended to NEVER complete single orders from multiple stocks in different locations unless the layout allows for the possible variation OR slabs of the same or similar age can be sourced.

3.0 SELECTING, RECEIVING and STORING THE MATERIALS

3.1 Stone Samples and Vignettes. Although TMI has taken the time and expense to manufacture samples of all our products in a variety of sizes, it must be understood that a sample is only a small 'snapshot' representing a part of the range of the inherent shade, tone, and textural variations of full slabs. TMI also works with local dealers and showrooms to make sure full-sized displays are in place for Buyers to view our products in the proper context. Assuming that all major decision factors support the desired choice in a given application, expectations as to final appearance must be realistic. Unless a choice is made and marked on an actual slab, variation from a submitted sample is a fact with using Squak Mountain Stone or Trinity slabs, and should not come as a surprise and the deviation thereof is not a material defect.

3.2 Inspection Required Upon Delivery or Will Call. All material should be inspected thoroughly before signing off the carrier as "Free and Clear" or leaving the Distributor's warehouse.

The following should be looked for on all slabs in a shipment:

- Chips
- Cracks
- Scratches
- Anything else that may render the shipment (either in part or in full) unusable for the project.

If the carrier's bill is signed off with no exceptions and no shortages or damage are noted, it means the Recipient, in this case, the Fabricator, has accepted the product "As Is" and a freight claim is no longer possible. Therefore the Fabricator assumes the responsibility for any damage that has been missed or overlooked. As a result, the Recipient, not the Shipper, is also responsible for any shortages or damage claims thereafter, such as the cost of purchasing replacements,

restocking fees and shipping charges for replacement materials.

The Fabricator is allowed to accept damaged materials, in part or in full at their discretion, especially if they feel they can accommodate the damage in the layout and fabrication of the material. However, the damage found must be noted in as much detail as possible on the carrier's bill, whether it is accepted or refused.

When a shipment is refused, it is returned to its origin, whether that is TMI directly or the Distributor. If a shipment is accepted, even with what might be considered acceptable damage, the Shipper should be notified with the details of the damage within two business days and include photos. It should be noted that in most cases, TMI does NOT arrange shipping and that the party responsible for any claims will usually be the dealer or fabricator or some third party.

Furthermore, Tiger Mountain Innovations, LLC or its Distributors will not be responsible for any loss or claims due to vague, poor, incomplete, or lack of proper exception/damage descriptions on the carrier bill at the time of delivery.

3.3 Selecting Material in Warehouse. If the Fabricator is selecting the material from a Distributor's stock, the Fabricator is required to inspect the material and select slabs that are appropriate for the project in question. Aside from looking for obvious damages or surface defects, the Fabricator should inspect the material for the following:

- Color Hue Consistency
- Matching Patterns
- Flatness

The Fabricator is responsible for determining if the slabs are fit for the project/job and should inspect the materials upon receipt. If the slabs are not suitable, they should be exchanged before the slabs are cut or modified in any way. Once a slab has been cut and/or installed, it can no longer be returned to TMI, its Distributors, or its Dealer/Showrooms. TMI is not obligated to reimburse for labor or material when slabs are cut and installed without adequate inspection or approval.

3.4 Scheduling the Installation. Damage can occur, regardless of shipping or packaging methods. **Installation should not be scheduled until after materials arrive and are inspected.** TMI or its Distributor is not liable or responsible for claims or damages due to rescheduled installations.

If material is damaged during shipment or fabrication and replacements are not in stock at a local Distributor or at TMI's facility, the Buyer should expect a delay of at least 4 weeks for replacements.

3.5 Crating And Protection for Transport. All Squak Mountain Stone or Trinity slabs are to be moved or shipped on an A-frame or otherwise protected for transport to the project site. Once the product has been loaded onto a Fabricator's vehicle, the Fabricator is responsible for any damage that may occur during transport.

3.6 Slab Sizing Before finalizing the design, particularly on a larger project, make sure that there is sufficient material. All slab sizes in Squak Mountain Stone and Trinity are nominal. There is generally an edge of "waste" that is approximately 1-1/2" in on all sides. This means the 56"x96" slab may yield only 53"x93". The Fabricator should be involved with the final ordering of the material after they have templated the project to make sure seams are placed appropriately and the right amount of material is ordered. For smaller projects, the local Distributor

may have on hand or have access to "partial" or half-slabs in both products.

3.7 Matched Patterns and Color Hues. Even with carefully controlled pigment dispersing during casting and finishing procedures, there will be some variation in the color saturation and surface patterns with both Squak Mountain Stone and Trinity. Generally, with the large slab sizes available, cutting adjacent pieces from the same slab usually will give the best aesthetic results. Also, choosing slabs that have Slab ID numbers indicating a close or same casting date will also help to reduce the degree of difference because of similar casting conditions.

The Slab ID is written down the edge of the slab and is placed on the slab by TMI during manufacturing. See the example below for a breakdown on the ID number elements. If a project requires multiple slabs to be seamed together, seeking to select best matching slabs or having the Buyer pre-select slabs is the best way to help ensure satisfaction with end result.

Slab ID Number Example:

01.03.062609.04

01 = Squak Mountain Stone

03 = Otter color

062609 = Cast date of June 26, 2009

04 = Mold #4

If the Fabricator was not involved in the determination of the number of slabs needed and did not order the materials, and a shortage in material is discovered, the Buyer or Customer should be informed of the possibility that replacements or additional materials ordered at a later time will likely have some pattern or color variation from the original slabs.

3.8 In-Shop Storage. Like all cement-based materials and natural stone, proper storage of Squak Mountain Stone and Trinity are necessary to prevent or minimize the effects of moisture during storage.

- DO NOT store outside, even if well covered. Condensation can create difficult to remove shadowing or etching.
- Store in A-Frames. Do not store horizontally.
- Slabs should be clamped on A-Frames to prevent creep regardless of quantity.
- Store with finished face away from A-Frame.
- When storing multiple slabs, store finish-face to finish-face to avoid scratching and similar damage. Avoid storing with back side out to avoid bowing and creep.
- After cutting, do NOT stack different sizes and shapes against each other, even face-to-face. Shadowing will occur.
- If you are working on several projects or a very large single project, please consult with your Distributor for proper storage techniques for larger quantities of our product.

4.0 FABRICATION

4.1 Proper Layout of Materials. Since, similar to natural stone, all Squak Mountain Stone and Trinity slabs are unique, it is important to do preliminary layouts of the templates or designs on the slabs to ensure that any undesirable features are minimized or eliminated in the final installation. Also, checking for any warp in the slabs before finalizing cuts and seams can eliminate possible problems with dressing seams for lippage.

4.2 Marking Slabs for Cutting. Squak Mountain Stone is a soft material, like marble and travertine, and can be scratched easily. We recommend AGAINST marking slabs with a scoring tool as it will require potentially difficult repair to remove these marks later. For both products, Fabricators should also not use markers, permanent or other, as that can leave a stain on the slabs.

It is recommended to use a wax pencil or graphite pencil. The wax residue can be wiped off with acetone when the cutting is complete.

WARNING: Leaving templates on the slabs for long periods of time, especially during and after wet-cutting, can leave shadows on the stone that may not evaporate out. Therefore templates must be removed as quickly as possible and the area sealed by the template should be saturated with water so that the moisture levels are able to balance with the wetter areas of the slab. **We do NOT recommend the use of tape for layout due to the possibility of staining or other damage to the surface.**

4.3 Cutting and Routing. Thoroughly PREWET slabs before cutting to achieve the best results. The density of both Squak and Trinity are similar to other calcium based natural stones. Therefore, using a wet-blade for marble or concrete is recommended over granite blades.

Cutting speed should be adjusted to avoid chipping and breakage on the edges, to further minimize additional repair work later. Rinse completely after cutting to avoid stains from the cutting slurry.

Both Trinity and Squak can be routed on a CNC machine. It has been found that suction cups for holding the material in place can leave behind a shadow (from the vacuum sucking moisture from the slab) or actually some pitting (as is particularly the case with Squak). Prewetting slabs can help to minimize this. Slabs should not be left on a CNC under suction for long periods of time, to avoid permanent shadows. Pitting or scratching on the Squak surface from the CNC can be lightly sanded by hand to blend in. Lighter areas under the suction cups, from moisture being pulled out, should be saturated with water, to balance the moisture levels as much as possible. It has been found that pre-sealing with a PENETRATING sealer can limit shadowing from suction devices. Precautions should still be taken to avoid surface damage from suction since pre-sealing will have no effect on this sort of possible damage.

4.4 Drying. Cement materials are hygroscopic in nature, meaning they readily absorb water and attract moisture from the environment. During fabrication, exposure during water cutting and polishing is unavoidable and the slabs will soak up the water much more than will natural stones such as granite and marble.

Therefore, after cutting, all slabs must be given sufficient time to dry out completely before installation of the slabs. This means that the slabs need to be stored in a dry location, without any obstructions on the face or back. They should not be stacked up against other stones as this will delay the drying process.

Squak or Trinity can be dried with a warm, moving air, such as from a heater or fan. But they should NEVER be dried with a torch, as this can cause pop-outs and cracking.

Fabricators should expect that this drying time, depending on the amount of water exposure the slabs received, to be at least 48 hours (possibly longer if the temperature is cool or if the humidity in the shop is high) and should account for this time in the fabrication and installation process. Fabricators should also communicate this with Buyers or Dealers when placing orders for materials. Do not wait until the last minute to begin fabricating the stone, potentially installing damp slabs. Slabs with too much moisture present in them will develop shadows from objects being left on the surface and the excess moisture will inhibit the curing and performance of any sealers applied to them.

4.5 Seams. Regardless of fabrication methods used, seams in Squak Mountain Stone and Trinity are visible and can be felt. Seams are typically filled with color coordinated fill material, such as grout or resin, to achieve the best feel and appearance. There is no such thing as an invisible seam, especially with varied materials like Squak and Trinity.

The easiest way to get durable seams on Squak Mountain Stone is to use a color-matched fortified tile grout. Don't apply the grout AFTER the slabs are seamed together as it will increase the likelihood that it will shrink into the gap between the slabs. The Fabricator should butter up the full height edges of the slabs with grout immediately before pushing the pieces together. Then simply smooth away excess material that squeezes out the top of the joint using a wet sponge. Because the grout completely fills the joint top to bottom, it's less apt to shrink and sink. Suitable materials include pre-mixed tile grout, grout-caulk, or fortified dry grout, mixed with water or acrylic additives. At the end of Section 4 is a chart of some brands of grout that we have

found to have satisfactory matches to the various Squak colors.

For Trinity, using tinted resins is more appropriate due to the higher gloss and sheen of the material's surface.

If the appearance of seams is a concern for the Buyer or Specifier, please show them an example of a typical seam for Squak and/or Trinity.

4.6 Lippage. Squak Mountain Stone and Trinity are both cast materials which, like other cast products and even natural stones, can develop a degree of warping or curling. As a result, when seaming slabs together, lippage becomes possible and is sometimes unavoidable. Per the Marble Institute of America's standards, the maximum allowable lippage at the center of the countertop is 1/32" (0.8mm) with no lippage at the front or rear of the countertop.

Removing lippage in Squak Mountain Stone or Trinity by grinding on the face is not advised as it will alter the face of the stone dramatically and the gloss or surface will not match the "manufactured" finish. Also, when grinding on cementitious materials, the factory-finish will be removed and the core of the stone exposed. **There is no way to restore the factory-finish once it has been altered or removed.**

Fabricators should examine all pieces to determine the amount of warp in the slabs prior to fabrication and plan accordingly. If there is enough warp in the slab to create a seam that will exceed 1/32" at the center, the Fabricator should make the seam slightly wider to create a smoother transition from one slab to the next.

4.7 Spans and Cantilevers. In designs where part of the countertop is spanning between supports, the length of the span shall be limited to **3'-0" (900 mm)** for Squak Mountain Stone and Trinity.

In designs where the countertop is cantilevered beyond the supports (overhanging), the cantilever shall be limited to **10" (250 mm)**, but in no case may the cantilevered portion represent more than 1/3 of the width of the countertop. Cantilevered countertops exceeding these dimensions will require corbelled supports beneath the stone.

4.8 Sinks and Sink Mounts. Sinks are supplied in one of several types: Top mount, (or self rimming), undermount, and "farm" or apron. In the case of the top-mounted sinks, the weight of the sink and its contents are transferred to the top surface of the stone counter via the rim of the sink and no additional supports are necessary. For undermount sinks or when the sink (with contents) is excessively heavy, a substrate or auxiliary framing is required for either Squak Mountain Stone or Trinity. Sinks shall **not** be hung or mounted directly to the bottom of the slabs. Refer to MIA DSDM Excerpt 17 for typical details.

4.9 Edge Profiles. Any edge profile can be applied to Squak Mountain Stone or Trinity. However, profiles with narrow projections and sharp corners are more susceptible to chipping than those with large radii. Aesthetically, pencil edges best match the character of both products and are the easiest to apply and repair.

4.10 Rodding. Due to the relative flexural performance of cement-materials, products like Squak Mountain Stone and Trinity benefit from using rodding in the narrow strips of material around cut-outs or overhangs/cantilevers.

Suggested Grout Color Matches for Squak Mountain Stone Fabrication

1. Custom Building Products Grouts
2. MAPEI Grouts
3. LatiCrete&LataPoxy Grouts

Squak Mountain Stone Natural:

1. Bone
2. Mist
3. Light Pewter

Squak Mountain Stone Thunder:

1. Dove Gray
2. Pearl Gray (light sections); Black (darker sections)
3. Raven

Squak Mountain Stone Latte

1. Fawn
2. Harvest
3. Toasted Almond

Squak Mountain Stone Otter

1. Earth
2. Mocha
3. Chocolate Truffle

Squak Mountain Stone Quinault

1. Bay Leaf
2. *No Match*
3. *No Match*

(The Above are offered as suggestions only and may not be the only brands suitable or available to you. No warranties or limitations are granted or implied.)

5.0 INSTALLATION

5.1 Before Installation, Make Sure There is a Good Foundation. Surfaces that Squak Mountain Stone or Trinity will be installed on, whether it be cabinet tops or stair treads, must be within 1/8" (3 mm) of flat and level when measured across a distance of 10'-0" (3 m), including the substrate, if used, per the MIA standards. When cabinets and substrates are not within these tolerances, a notice to proceed with the installation shall be obtained from the Buyer to remove exposure of risk to the Fabricator for potential future problems.

Installations done on surfaces that exceed this standard have the potential for the following:

- Excessive shimming, spaces and wide regions of filler material that maybe visible between the bottom of the stone and the substrate. Any remedy to conceal this condition is not the responsibility of the Fabricator.
- Cracking at weak points in the stone due to an uneven base.

5.2 Substrates. Generally, Squak Mountain Stone and Trinity do not require the use of a substrate. However, if the slab surface needs to carry excessive loads, such as cast iron sinks or equipment, or when using the slabs as treads on stairs or as flooring, a substrate or auxiliary framing may be necessary.

6.0 SEALERS AND MAINTENANCE

6.1 General. It is important for the salesperson to provide the Buyer or Specifier with a copy of the Care & Maintenance Guide for Squak Mountain Stone and Trinity, and to review it with them before they make the final choice to use the products. The more knowledgeable the Specifier and Buyer are about the maintenance necessary for Squak and Trinity, the greater the likelihood that the project will be a quality finished job that will last for years.

6.2 Sealers overview. Long term protection and the type of maintenance required starts with the sealer. Many different types of sealers are being developed every day. As the use of concrete and cement-based materials become more and more common in countertop applications, the technology of sealing will evolve as well. As a result, TMI's recommendations will change as we gain knowledge and test new products as they become available or known to us.

The type of sealer that is applied to the stone must be determined by the Buyer or Specifier in conjunction with the Fabricator. It is important to follow all sealer Manufacturer's instructions and warnings when applying the sealer. It is also important to understand the relative benefits and disadvantages of each type of sealer and properly educate the Buyer so that the best choice can be made.

6.3 Sealers for Squak Mountain Stone. It is generally recommended to apply a topical finish/sealer to Squak Mountain Stone, for example **AquaMix Low Sheen & Finish**, or to use a penetrating oil such as Pure Tung Oil. When using a penetrating finish, an added alternative is to use a paste wax, such as Cheng's Carnauba product or **Howard's Citrus Shield Natural Paste Wax**. Topical sealers such as acrylics can pull up or peel away from the stone, however, requiring repair and reapplication. They do, however, provide slightly

superior acid etch performance when compared to penetrating finishes.

6.4 Sealers for Trinity. We recommend a penetrating sealer, such as **511's Porous Plus** or something similar. A wax finish can be applied as well, such as Howard's or using a stone cleaner with micro-wax to help minimize acid etching.

On Trinity's "Absolutely" color (black) the use of an enhancer/sealer, such as **AquaMix's Enrich & Seal** will actually provide a better color & uniformity in appearance across the surface, especially if the slab has any factory-filled fine pinholes. Again, a wax can be used for additional protection.

It is important that a countertop should not be used heavily for at least a week after it has been sealed. The chemical reactions involved in creating the barriers in the slabs to prevent oil and water stains takes several days. While there is a small degree of protection 24-72 hours after application, the sealer may be only 80% cured at the point. Generally our experience at TMI is that most customers who contact us to complain of staining have exposed their countertops too soon to water, acids or other materials and have stained the slabs right away.

Also of importance here is that if a topical acrylic finish is used on Squak Mountain Stone, avoid putting heavy objects, particularly with sticky or rubber feet such as appliances or knife blocks, onto the surface for at least a week after applying the sealer as the feet on the bottoms can actually stick the acrylic as its curing and then pull up sealer as well as stone once the object is moved.

THE MASKING TAPE WARNING: If there is to be any additional work done in the vicinity of the Squak or Trinity installation, the General Contractor should be made aware that masking tape should **NOT** be applied to a newly sealed Squak Mountain Stone installation, especially if it has been sealed with a topical acrylic finish. The masking tape, even the various low-release tapes, will pull up the finish and leave an imprint on the surface of the stone. This will require light hand sanding with 200 grit sand paper or steel wool to buff away the imprint followed by a new application of sealer in the area.

The General Contractor is responsible for the protection of the countertops from other trades after they have been installed, not the Fabricator, and any remedy to repair damage to the stone is the responsibility of the General Contractor.

Choose to protect installed tops using methods OTHER than the practice of taping directly to the countertop surfaces.

During Fabrication, denatured alcohol or acetone may be used on the surface to clean.

Please read these other supporting documents from Tiger Mountain Innovations, LLC:

Care & Maintenance Guide for Squak Mountain Stone and Trinity

Quality Control Standards for Squak Mountain Stone and Trinity

6.5 Normal Maintenance for Counter or Table

Tops. Always use coasters under all glasses, particularly those containing alcohol or citrus juices. Many common foods, drinks, and cosmetics contain acids that will etch or dull the surface of many stones, including Squak Mountain Stone and Trinity. Use trivets or mats under hot dishes and place mats under china, ceramics, silver, or other objects that can scratch the surface. Blot spills with a paper towel or a cloth as they occur or as soon as possible. Clean regularly with a neutral cleaner that does not contain solvents. Avoid the use of abrasive cleaners and scrubs. It is recommended to use a cleaner specially formulated for stone that also contain micro-waxes, to help provide a layer of protection to the stone surface during each cleaning.

6.6 NEVER use any acidic cleaner or chemical on Squak Mountain Stone or Trinity, such as homemade vinegar cleaning solutions. It is best to use a cleaner specifically formulated for stone cleaning.