



# VETRAZZO 2.0® FABRICATION GUIDE

This guide is intended for use by Vetrazzo Fabricators and Installers as a reference. The guidelines incorporated herein, including references to third-party publications, must be adhered to in order for any product warranty to be valid. Any deviation from these procedures must be approved in writing by Polycor Vetrazzo, Inc. prior to commencement.

Updates to this guide will be issued periodically.

Vetrazzo 2.0® Recycled Glass Surfaces

Manufactured by Polycor Vetrazzo, Inc.

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VETRAZZO 2.0

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Vetrazzo 2.0 is in process to be tested and certified by NSF International.



Vetrazzo 2.0 is made in the U.S.A.



# VETRAZZO 2.0® FABRICATION GUIDE

## **ADOPTION OF THE MARBLE INSTITUTE OF AMERICA**

You are now a part of a growing network of Vetrazzo Fabricators. At Vetrazzo, we respect the skill and experience necessary to achieve a good reputation as a stone fabrication professional and, as a result, have adopted the Fabrication and Installation Guidelines of the Marble Institute of America, as stated in the MIA's Dimension Stone Design Manual (ver. 6) and the Technical Module for Residential Stone Countertop Installation (rev. 2005). Where applicable, references to Granite should be followed over other stone types.

While granite fabrication guidelines are to be followed, every material has unique attributes that warrant practice prior to completion of the first customer V2.0 job. Vetrazzo 2.0 is no exception. Specific techniques, tooling recommendations and maintenance protocols are discussed later in this guidebook.

Always feel free to contact Vetrazzo with questions or comments by emailing

[info@vetrazzo.com](mailto:info@vetrazzo.com).





# VETRAZZO 2.0®

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### AN INTRODUCTION TO VETRAZZO 2.0

Vetrazzo transforms recycled glass into exquisite, one-of-a-kind surfaces that showcase unique design and appreciation of the earth and its limited resources.

Vetrazzo 2.0 surfaces are:

- Fabulous for countertops, vanities, tabletops and islands
- Composed of up to 87% recycled materials (wow!)
- Manufactured proudly in the U.S. by passionate, experienced craftspeople

The glass is thoroughly mixed throughout the full slab thickness. Polished edges reveal more gorgeous dimensions of glass.

Vetrazzo 2.0 uses 100% recycled glass including both post-consumer and post-industrial sources such as beverage bottles and containers, glassware, windows, windshields, optical lenses, traffic light lenses and a variety of other fascinating sources. There is, quite literally, a Story in Every Surface™.

### APPLICATIONS

Vetrazzo 2.0 can be used in a variety of commercial and residential applications:

- countertops
- bar tops
- tub decks
- shower surrounds
- tables and desks
- islands
- vanities

\*not warranted in freeze / thaw condition



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### PRODUCT DIMENSIONS

Vetrazzo 2.0 is manufactured in 9' X 5' panels with two thicknesses 1.18" (3 cm) and 0.79 (2 cm) weighing approximately 700 pounds. Vetrazzo 2.0 weighs approximately 145 lbs/cu. ft.

### TOLERANCES

Joint (seems) Widths

Lippage

Pane Thickness

Between two panels the joint should be 1/16" with a tolerance of  $\pm 1/64$ " for a typical countertop application.

Maximum permissible height difference should be 1/32" limited to the center, front to back. The front planes need to align visually, the rear planes need to align enough to allow for successful backsplash installation.

Variance should be limited to 1/8" for slabs used in the same project.

### HANDLING & STORAGE

Please inspect all panels for cracks prior to lifting. Damage may have occurred during transportation. Always use caution when moving panels.

Vetrazzo 2.0 can be handled with the same equipment used for natural stone or engineered stone (quartz) slabs of a comparable size and weight.

Protect Vetrazzo 2.0 panels from scratching or damage when placing on A-frames. Carpet or foam works well for padding under strapping and clamps. Protect material from flexing by providing proper support. Always adhere to OSHA guidelines.

Although Vetrazzo V2 is highly UV stable, it is recommended to store slabs indoors or under cover.



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Document serial numbers from panels when they arrive at the shop for fabrication. You will use this information for your records should you have any issues with slabs. Slab serial numbers are necessary for fulfilling warranty claims.

The serial numbers, two letters and 10 digits, are found on the edge of the Vetrazzo panel.

### INSTALLATION & LAYOUT CONSIDERATIONS

Every panel of Vetrazzo 2.0 is unique. Variations in the pattern and distribution of glass are an inherent part of its beauty. Every effort is made to ensure visual and color consistency between panels, however, the supply of recycled glass is always changing.

As glass variations are greater between batches, materials throughout an installation should be from the same batch and should bear labels with same batch number to improve color consistency.

- Visually inspect materials to be used for adjacent pieces to assure acceptable color blend.
- Inspect in lighting conditions similar to those at the installation site.
- Have client approve layout prior to cutting.
- Dry fit pieces in shop. Check color blending at seams! Use care to protect the finished edges and surface when transporting and installing. Keep the surfaces free from grit and use padding under straps and clamps.

### TEMPLATE LAYOUT

Template layout is vital; as with any material, Vetrazzo 2.0 requires thoughtful placement of templates on the material before cutting. The first concern is shading or color matching. Shading differences with Vetrazzo 2.0 is minimal. Always get a second opinion before cutting a project that will need to be seamed. Customer's involvement here cannot be over stated! Any high-end product should be given extra attention; an unwanted surprise will provide an unhappy client. Call the client before cutting with an explanation of lay out or email them a digital photograph. These simple steps can save a lot of agony.



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### COLOR BLENDING

Because of the unique nature of Vetrazzo 2.0 and our glass sources, no two panels are exactly the same. While we endeavor to manufacture product as consistent as possible, Vetrazzo will exhibit variations in color, shade, glass size and glass particle distribution.

This is part of the inherent character and beauty of mixing post-consumer and/or post-industrial recycled glass. These variations are not structural; however consideration should be given when planning the layout. Where seaming is required, start with panels from the same batch and inspect each panel for the best possible blending. We recommend multi-panel jobs be purchased from the same Production Lot number. Always remember to write down the Panel ID.

### FABRICATION TECHNIQUES & TOOLS

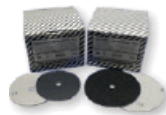
Fabrication equipment and tools used for granite fabrication, such as CNC machines and gantry saws, may be used to fabricate Vetrazzo 2.0 panels.

Diamond saw blades and core bits are strongly recommended and will yield the best results.

As with all materials, avoid stress fractures when possible by using a radius on inside corners.

Since every shop will have different equipment; experiment with speed, feed rate, diamond cutting blade size and type to determine what works best. Too aggressive approach may cause excessive dislodging and chipping of glass along the cut. Inspect cutting tools frequently to ensure the highest quality results.

50 grit pads should be used to remove cutting marks, deep scratches and minor shaping. It is recommended to always polish edges using water. Proceed to the next grit levels: 100, 200, 400, 800, 1500, 2000, end with 3000 for the full gloss factory finish. We recommend high quality wet diamond polishing pads formulated for engineered stone such as those available from Braxton Bragg and Alpha. Do not surface polish the face of the slab.





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### EDGING

The profile edge of Vetrazzo 2.0 offers another view of the incorporated glass; the cross section has its own inherent beauty. Simple edge treatments best showcase this unique perspective. We recommend a minimum 3/16" edge radius. Be aware that sharper edges are more prone to chipping and dislodging of glass. Below are some common edge details fabricators have successfully created with Vetrazzo 2.0. If a more complicated edge detail is requested, test it first.

Polycor Vetrazzo Inc. does not warranty glass chipping or dislodging. Edges are the responsibility of the fabricator.

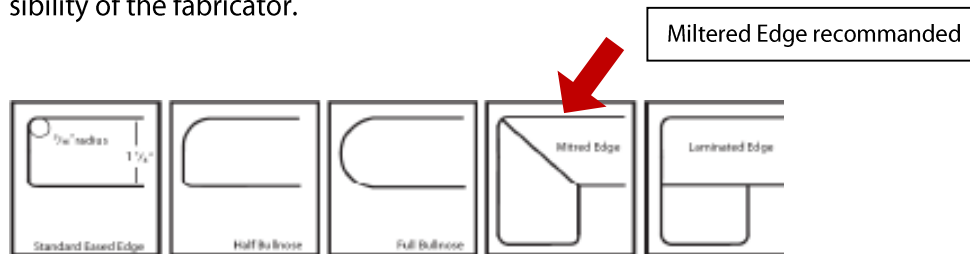


Image courtesy of Marble Institute of America from the "Residential Stone Countertop Installation Module" (rev. 2005)

For the best results, shape edge and polish to 120 grit. Color match epoxy/polyester resin and apply to any void or glass blow out. After the fill cures, proceed with final polish.

Although it is highly unlikely that any glass will dislodge during edge polishing, should it occur, retain the piece(s) and reattach with a knife grade tintable epoxy/polyester resin. We recommend AKEMI Platinum, clear knife grade. If the glass is not recoverable, tint the clear epoxy/polyester resin using manufacturer's pigments to re-create the dominant color.



**AKEMI**



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Color matching the fill with the material will determine the success of the overall installation. Use a razor blade to remove excess resin, let fully cure and buff to match surrounding finish. Follow manufacturer's directions and recommendations with polyester resins, epoxies and tints.

### MITRE AND STACK LAMINATING

Vetrazzo can be laminated either by stacked or mitered techniques. Always cut the material to be laminated from the same panel. When using the stacking technique, observe a 3 layer limit for a total width of 2,25 inches. Occasionally milling may be necessary to remove the bottom surface of the panel if it doesn't appear to contain glass. Use standard stone techniques to create mitered edges.

Prepare the surface for adhesion by using a diamond cup wheel to score the surfaces. Thoroughly remove any dust before adhering. After applying adhesive, clamp every 4-6" inches.

Large aprons and skirting add significant weight, additional attachment methods will be necessary. For example, an apron longer than 4" needs "L" brackets every 8"-10" countersunk and glued in place or use stone glue blocks.

Laminations and seams are fabrication techniques and are not covered by Vetrazzo's warranty. Neither is the strength or appearance of laminations and seams since both are dependent upon fabricator skill and not the material itself. Vetrazzo 2.0's warranty covers the material only.

The process of stack laminating is to cut 1.25 to 1.5 inches past the determined edge of the finished counter top and to roll the lamination under the top 180 degrees. By doing so you've achieved a book matched edge that represents the natural flow of the material.

As with any material, check for any deterring factors before gluing the edge in place. For example, look for excessive white lines on the bottom of the panel and the edge of the lamination to be glued together.





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### MITRE

Because of the perceived difficulty, this edge will always be met with a degree of anxiety yet, thanks to the strength of Vetrazzo 2.0 the miter cuts will be clean and sharp with little to no chipping. With a properly tuned saw, a focused craftsman can produce substantially more lineal foot-age, with less effort, than required for other edge treatments.

Mitre laminating is a process of laminating or creating skirts. Extra thought and template layout should be given when using this approach. Distance from the cabinet edge needs to be considered as the thickness of the mitered self-edge is pre-determined. After the distance of the counter top is determined the saw will cut the lamination at a 46 degree angle with the length of the skirt measured to arrive with the proper length when glued to the counter top. The counter top will be cut at a 46 degree angle, this allows the lamination or skirt to fit with approximately 2 degrees of room at the inside edge and a tight fit at the outside edge. Adjust the edge with a square to assure a 90 degree drop down angle. This type of edge can have a more predictable outcome and the seam line is harder to see.

If there is excessive chipping or glass dislodging it is probable to :

- The saw need to be tuned
- The blade is glazed and needs to be dressed
- The feed rate need to be adjusted

### SMOOTHING ROUGH OR UNEVEN EDGES

If a client calls with concerns over rough or uneven edges, identify the area and tape it off to prevent damaging neighboring surfaces. Start with the 7" backer on your grinder; to prevent removal of too much material, always start with the lighter grit and work towards coarser paper if needed.

The 7" paper provides more lineal surface to the area being worked on and evens out the hard and soft spots in the material. Always be light handed while working with Vetrazzo 2.0, it is not as hard as some granites. Work up to the 7" 320 papers, then blend the shine using the 5" as you see fit. Start with the fine grit and work towards coarse grit as needed.

Vetrazzo 2.0 is very easy to work with and matching shine is simple with practice.



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### FILLING SURFACE VOIDS

Before proceeding with this process, use Painter's Plastic to tape off areas that could be stained or damaged.

1. Use a scrap of cardboard and mixing stick to prepare the epoxy. Use an epoxy that has a base color closest to neutral or clear. When mixing the color, choose the color that is most prominent in the Vetrazzo 2.0. Create an opaque mixture, keep in mind the hardener is white and will lighten the color.
2. Clean the void with compressed air and wipe with denatured alcohol. Apply the epoxy, forcing the epoxy fully into the void.
3. Let it harden and scrape flush with a very sharp blade the excess by holding down the blade at a 90-degree angle to the surface and rubbing back and forth until the epoxy is flush with the surface.
4. On occasion, the void is too shallow for the epoxy. We recommend, "Akemi Platinum and Wood and Stone Acrylic Super Penetrating or other Cyanoacrylate-type glue".

### SEAM FILLING

Seams are often the site of most complaints, whether it's from shading or poor application of epoxy/polyester. We recommend clear epoxy/polyester resins which should be tinted to achieve proper color matching.

Installer should tape each side of the seam to avoid "shadowing"- discoloration of surface caused by unwanted glue absorption-razor off excess glue while it is still workable. Remove tape before the epoxy/polyester hardens and razor off any excess.

### COMMERCIAL BATHROOM-SOAP DISPENSER LOCATION

Dripping soap will degrade any material. Avoid the problem by installing soap dispensers positioned so drips fall into the sink.





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### SINK REINFORCEMENT

Top mount and/or undermount sinks may be used. Undermount sinks can be mounted using standard stone practices. \*\*\*

### OTHER REINFORCEMENT

Splines. Particularly narrow seems may be splined together with a steel or stainless key. The metal is fully encapsulated with polyester or epoxy resin and fitted to closely cut slots in the panel, similar to the "biscuit" joint reinforcements used in woodworking. See the drawing below regarding reinforcement. All countertop seams / joints require full support underneath. Do not locate seams in the middle of open spans.

### SPANS & CANTILEVERS

- Spanning between two supports shall be limited to 2'0"
- Cantilevers 8" or longer require corbels
- Corbels must be installed a minimum of 24" on center
- Corbel length must support cantilever distance within 2" of overall length
- All inside corners must have a minimum 3/8" radius

### SEALING

Vetrazzo 2.0 doesn't need to be sealed.

### QUESTIONS OR COMMENTS?

Vetrazzo 2.0 is a unique material and its properties and fabrication techniques, like any other material, require practice to master. It is important to us that you feel comfortable working with Vetrazzo 2.0 prior to fabricating a customer job. Should you have any questions about Vetrazzo or the fabrication process, please email us at [tech@vetrazzo.com](mailto:tech@vetrazzo.com)

### CARE & MAINTENANCE



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### **WILL IT STAIN?**

Vetrazzo 2.0 is less likely to stain than marble and equivalent to some granite. But you do have to care for it.

87% of the surface is glass, which is impervious to stain. However, staining agents like spices (especially curcumin - component of turmeric and yellow mustard for example) will stain the matrix of the surface (the resin area between glass) if not cleaned up right away. And acids (like red wine, balsamic vinegar) will leave a trace if allowed to remain on the surface for a prolonged period.

If you clean messes up quickly, your Vetrazzo 2.0 will remain unchanged.

### **THE DETAILS**

Caring for Vetrazzo surfaces is easy and comparable to caring for natural stone or quartz. The following are suggestions for keeping your Vetrazzo 2.0 as gorgeous as when it was first installed.

### **MAINTENANCE**

Of course, the best way to maintain any surface is to wipe up immediately with soap and water and not let the common household offenders - such as sauce with spices (especially with curcumin), wine, vinegar, coffee, tea - sit too long.

To remove difficult spills, soak the area for 10 minutes with soap and water or a pH neutral cleaner, then clean away with a soft cloth. If the matrix of your V2.0 counter top is WHITE, and if the spill is resistant, you can use a cotton impregnated with bleach. For dried stain, such as food and gum, remove by gently scraping off the surface (using a spatula), and then clean using warm water and soap with a soft.

Do not use any chemical sealant products. Some common household chemicals and solvents can damage the surface.

### **REPAIRS**

Vetrazzo 2.0 is extremely durable, and may never need repair. However, should it become damaged and you need it repaired, contact your Vetrazzo Certified Fabricator. Just like if an edge of granite was damaged, if a piece of glass chips out of the edge, keep the glass if you can. The fabricator can re-adhere it. If the glass is not available, don't worry. The fabricator can still repair it.



## VETRAZZO 2.0® FABRICATION GUIDE

### VETRAZZO® TECHNICAL DATA

**Product Description:** Vetrazzo® is a recycled glass surfacing material ideal for residential and commercial applications.

**Product Composition:** Vetrazzo is manufactured using a patent pending composition that combines up to 87% recycled glass with an epoxy resin. Years of research, combined with strict manufacturing tolerances and quality control, produce panels with depend-able performance characteristics.

**Product Slab Size:** Vetrazzo 2.0 slabs are 60" x 108", 2 or 3-cm thickness. Vetrazzo weighs approximately 145 lbs/cu.ft

**Color and Finish:** Vetrazzo 2.0 is available in a wide array of colors with a high-gloss, polished finish. Only white color background are available at the moment.

Test performed	Procedure #	Result
Food Safety	NSF/ANSI 51	In progress
Compressive strength	ASTM C579-12	22,200 psi
Flexural strength	ASTM C880-15	3,805 psi
Water Absorption	ASTM D570-10	0.00%
Scratch Resistance	Moh's Hardness	6.5 glass/ 5 matrix
Slip resistance (coefficient of friction)	ASTM C1028-07	0.8 (dry)/ 0.62 (wet)
Abrasion resistance	ASTM D4060-14	Loss of material: 0.04%
Heat resistance	Melting point	> 400°C

\*\*Additional testing results will be added as completed.



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Nationwide Availability: Vetrazzo panels are available through a dedicated nationwide network of North American distributors and fabricators equipped with the latest tools, machinery and technology. Use of a Vetrazzo Fabricator ensures a professional job performed by craftsmen who are fully supported by Vetrazzo's Technical Services Team.

The glass content information is dependent on the information we receive from our recycled glass vendor source. Every attempt has been made to keep this information current and correct. Occasionally, percentages of Pre-Consumer and Post-Consumer glass in a mix could shift based on glass availability and product quality.

Vetrazzo 2.0 slab color	Epoxy resin	Pre consumer glass	Post consumer glass	Pre consumer oyster shell	Pre consumer crushed marble
Red Robin (1)	12.5%	87.5%	0%	0%	0%

(1) Product Manufactured in process to be NSF Certified

### RECYCLED CONTENT

Product Information: Vetrazzo 2.0 is 87% recycled glass by weight. Because we use only recycled glass, every panel of Vetrazzo is unique. Inherent in this process, variation in color, shape, size and distribution of glass is not unusual. Occasionally, colored glass pieces not standard in a specific Vetrazzo 2.0 mix may occur. This visual effect is not uncommon, adds character to the surface, emphasizes Vetrazzo's recycled content and is an inherent part of Vetrazzo's beauty. Samples are cut from actual panels and therefore represent a limited appearance of the actual design and characteristics of a Vetrazzo 2.0 mix.

Besides being beautiful and distinctive, Vetrazzo 2.0 has many unique performance characteristics. Vetrazzo 2.0 can withstand temperatures up to 600o Fahrenheit with no effect, although a trivet is recommended. Vetrazzo 2.0 is very durable and resistant to everyday common surface use and wear. However, Vetrazzo 2.0 is not scratchproof or completely resistant to impact. At times, chips may occur due to impact especially at high traffic areas such as sinks and dishwashers. Scratches may also occur and are most noticeable in the monotone colors.



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## **Material Safety Data Sheet**

**MSDS Date: September 2015**

**Product Name: Vetrazzo 2.0® Recycled Glass Surfacing**

## **1. PRODUCT AND COMPANY DESCRIPTION**

Polycor Vetrazzo Inc.

P.O. Box 238

200 Georgia Marble Lane,

Tate, Georgia 30177, U.S.A.

T 1-770-735-2611

F 1-770-735-2236

Email: [info@vetrazzo.com](mailto:info@vetrazzo.com)

For Product Information/Emergency Contact: Polycor Vetrazzo Inc. T 1-770-735-2611 Product Use: Vetrazzo recycled glass surfacing

## **2. HAZARDS IDENTIFICATION**

Emergency Overview: Exposed glass edges may pose a cutting or puncture hazard. Use caution in handling exposed edges.

Appearance/Odor: Multi-colored recycled glass & resin surfacing. No odor

Potential Health Effects:

- Product in finished form does not present a health hazard through eyes, skin, inhalation, ingestion or prolonged exposure.
- Dusts and flying particles generated during cutting, grinding and forming may cause irritation and injury as specified below:



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- Acute Eye: Dust and particles may cause irritation or injury.
- Acute Skin: Dusts generated from this product may cause skin irritation.
- Acute Inhalation: Dusts from product may cause irritation to respiratory tract, nose, throat and lungs.
- Acute ingestion: Not considered a potential health hazard via this route of entry. This product may cause gastrointestinal irritation if large quantities of dusts are swallowed.
- Chronic Exposure: The adverse health effects from silica exposure - silicosis, cancer, scleroderma, tuberculosis, and nephrotoxicity - are chronic effects.
- Aggravation of Pre-existing Conditions: None identified.

### 3. HAZARDOUS CHEMICAL COMPOSITION

#### **Component: Recycled glass**

As shipped, this material does not pose any health hazard because it does not contain ingredients which are known to cause immediate or serious effects.

#### **Component 1:**

- Physical State: Liquid
- Color: Yellow
- Odor: Ammoniacal
- Density: 920-100 kg/m<sup>3</sup> @ 25o C (typical)
- Dynamic Viscosity: 0.05 - .2 Pa.s @ 25o C
- Flash Point: Over 100o C
- Ignition Temperature: Over 200o C
- Solubility in water: Negligible
- N-octanol/water partition coefficient: Data not available
- 0 % Organic solvents in water





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### Component 2:

- Physical State: Liquid
- Color: Clear / Pale Yellow
- Odor: Slight
- Density: 1100 – 1200 kg/m<sup>3</sup> @ 25o C (typical)
- Dynamic Viscosity: 8.0 – 13.0 Pa.s @ 25o C
- Flash Point: over 100 C
- Solubility in water: negligible
- N-octanol/water partition coefficient: Data not available

### 4. FIRST AID MEASURES

- Eye Exposure: Immediately flush it with copious amounts of water for a minimum of 15 minutes. Seek immediate medical attention if adverse effect occurs.
- Skin Exposure: Wash skin with soap and water. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Seek medical attention if adverse effect occurs.
- Inhalation: Remove person to fresh air. If necessary, use artificial expiration.
- Ingestion: If the material is swallowed, seek medical attention or advice.

### 5. FIRE FIGHTING MEASURES

- Auto-ignition: None.
- Flash Point: Vetrazzo 2.0 is non-combustible and non-explosive.
- Flammability Limits: NA
- Extinguishing Media: NA



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### 6. ACCIDENTAL RELEASE MEASURES

Cleanup and Disposal of Spill: Solid panels or partial panels can be collected as necessary. If large amounts of dust or wastes are generated by cutting process, vacuum or sweep up material avoiding dust generation or dampen spilled material with water to avoid airborne dust. Wear sufficient respiratory protection and protective clothing where necessary and/or use engineering methods for dust control.

If excessive amounts of material dust enter the waterways contact the Environmental Protection Authority, or local Waste Management Authority. Dispose of waste in accordance with local, state and federal regulations.

### 7. HANDLING AND STORAGE

Avoid breathing dust. Wash hands before eating, drinking, smoking, or using toilet facilities. Wash thoroughly after work using soap and water. Good industrial hygiene practices should be followed when handling this material. Product is heavy and breakable; handle with care to avoid injury and prevent damage.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines: Avoid activities that cause dust to become airborne.

- Engineering Controls: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the MSDS. Wet saws and cutting methods as well as wet shaping and polishing methods are recommended to reduce dust exposure during fabrication.
- Respiratory Protection: If respiratory protection is needed, use only protection authorized in the U.S. Federal OSHA Standard (29 CFR 1910.134), applicable U.S. State regulations, or the Canadian CSA Standard Z94.4-93 and applicable standards of Canadian Provinces.
- Eye / Face Protection: During cutting, grinding or sanding operations safety glasses with side shields or goggles should be worn.
- Skin Protection: During cutting, grinding or sanding operations use body protection appropriate for task including work gloves if handling sharp or rough edges and steel-toed shoes if lifting product.



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### 9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical Appearance: Multi-colored recycled glass and resin surfacing material
- Odor: None
- pH: NA
- Water Solubility: Insoluble
- Melting Point: More than 600F
- Freezing Point: NA
- Boiling Point: NA
- Vapor Pressure: NA
- Percent Volatiles by Volume: NA
- Evaporation Rate: NA
- Viscosity: NA
- Flash Point: NA
- Explosion Limits: Lower: ND, Upper: ND
- Auto-ignition Temp: NA

### 10. STABILITY AND REACTIVITY

- Chemical Stability: Stable
- Conditions to Avoid: Extreme heat
- Materials / Chemicals to Be Avoided: None known. Avoid high content acid product.
- Hazardous Decomposition Products: Upon decomposition, various hydrocarbons, carbon dioxide, carbon monoxide fumes, and water may be released.
- Hazardous Polymerization: Will not occur.

### 11. TOXICOLOGICAL INFORMATION

#### Acute Effects:

No known acute toxicological effects.

#### Chronic Effects:

Silicosis: The major concern is silicosis, caused by the inhalation and retention of respirable silica dust. Symptoms include: Silicosis develops over time when dust-containing silica is inhaled into the lungs. For some unknown reason silica in crystalline form is toxic to the lining of the lungs. When they come into contact with each other a strong inflammatory reaction occurs. Over time this inflammation causes the lung tissue



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to become irreversibly thickened and scarred –called fibrosis. The most common form of silicosis is called chronic silicosis, and the symptoms develop over many years of exposure. However, in the rarer form, called acute silicosis, the symptoms develop very quickly after only a short period of exposure to high levels of silica dust.

Because this disease maybe debilitating, it is very important to seek medical treatment as soon as possible. The American Thoracic Society position on the issue of silica carcinogenicity was published in Adverse Effects of Crystalline Silica Exposure, American Journal of Respiratory and Critical Care Medicine, Vol. 155, pp. 761-765 (1997). The official statement concluded that “The available data support the conclusion that silicosis produces increased risk for bronchogenic carcinoma. The cancer risk may also be increased by smoking and other carcinogens in the workplace.”

Scleroderma: There is evidence that exposure to respirable crystalline silica or that the dis-ease silicosis is associated with the increased incidence of scleroderma, an immune system disorder manifested by a fibrosis (scarring) of the lungs, skin and other internal organs.

Tuberculosis: Individuals with silicosis are at increased risk to develop tuberculosis, if exposed to persons with tuberculosis.

Nephrotoxicity: There are several recent studies suggesting that exposure to respirable silica or that the disease silicosis is associated with the increased incidence of kidney disorders.

Mutagenicity: No Data

Reproductive Effects: No Data

Developmental Effects: No Data

## 12. ECOLOGICAL INFORMATION

Environmental Fate: Not Determined

Environmental Toxicity: Not Determined



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### 13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations.

### 14. TRANSPORTATION INFORMATION

- Proper Shipping Name: Not Regulated
- Hazard Class: Not Regulated
- ID Number: Not Regulated
- US Department of Transportation Packing Group: Not Regulated

### 15. REGULATORY INFORMATION

- Federal Regulations: NA
- SARA Title III Hazard Classes: None
- Fire Hazard: No
- Reactive Hazard: No
- Release of Pressure: No
- Acute Health Hazard: No
- Chronic Health Hazard: Yes

U.S. State Regulations: California Prop 65 List: Crystalline silica (quartz) is classified as a substance known to the state of California to be a carcinogen.

### 16. OTHER INFORMATION

National Fire Protection Association NFPA(R) and Hazardous Materials Identification System (HMIS) Hazard Ratings:

- Health Hazard: 1
- Flammability: 0
- Reactivity: 0



# VETRAZZO 2.0® FABRICATION GUIDE

## **MATERIAL SAFETY DATA SHEET DISCLAIMER**

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