

GLASS RECYCLED Reference Guide

GLASS RECYCLED converts recycled glass and porcelain bound for the landfill into elegant, sustainable and ecological hard surfaces and landscaping materials.

GlassSLAB COUNTER TOPS

SIZE DIMENSIONS (CUSTOM SIZES AVAILABLE)

18"x48"x1" (6.00 sq. ft.) x \$60 per sq. ft. = \$ 360 27"x84"x1" (15.75 sq. ft.) x \$60 per sq. ft. = \$ 945 30"x84"x1" (18.00 sq. ft.) x \$60 per sq. ft. = \$1080 60"x84"x1" (35.00 sq. ft.) x \$60 per sq. ft. = \$2100 72"x84"x1" (42.00 sq. ft.) x \$60 per sq. ft. = \$2520 84"x84"x1" (49.00 sq. ft.) x \$60 per sq. ft. = \$2940 84"x96"x1" (56.00 sq. ft.) x \$60 per sq. ft. = \$3360

FABRICATION AND INSTALLATION NOT INCLUDED

All GlassEPOXY Resin and GlassSCAPE Colors and Sizes Available!

CUSTOM SIZE NOT TO EXCEED 84"X96"X1"

CRATE & FREIGHT

Crate Fee: \$300

Freight Fee: \$10 per sq. ft.

Average Weight: 15 lbs. per sq. ft. Maximum lbs. per Crate: 2400 lbs.

- ♦ Seam is 1/64" virtually seamless when color-matched resin colors are applied.
- GlassSCAPE recycled glass and porcelain aggregates, custom resin colors, and custom sizes are available. For more details please visit www.glassrecycled.com
- ♦ Fabrication is done by a local professional fabricator best to ship slab directly to Fabricator. Any experienced Fabricator can utilize the same tools, equipment, polishing procedures and installation techniques they have performed with granite, marble and stone products.
- How do you find a fabricator? Here's a good place to start: http://www.marbleinstitute.com/directory/index.cfm (enter city and state or just state)
- ♦ GR can ship fabricator an 8" x 8" test piece to practice on.

GlassPLANK TILES AND PANELS

TIER I:

Sizes: 6"x36", 12"x12", 12"x36"

Thickness available in 1/4", 3/8" or 1/2"

Pricing: \$30 per square foot

ALL GLASSEPOXY AND GLASSSCAPE COLORS AND SIZES AVAILABLE

TIER II:

Sizes: 24"x24", 24"x36"

Thickness: available in 3/8", 1/2", and 5/8"

Pricing: \$30 per square foot

ALL GLASSEPOXY AND GLASSSCAPE COLORS AND SIZES AVAILABLE

TIER III:

GlassPLANK Shower / Wall Panels

Maximum Size: 72"x84"x5/8" Pricing: \$50 per square foot

All GlassEPOXY and GlassSCAPE colors and sizes available

Freight Cost: \$2.50 per Sq. Ft.

Crate Fee: \$250

Maximum Weight per Crate: 1000 lbs.

- Intended for flooring but also works as cladding on walls, showers, and as countertop backsplashes.
- ♦ Average weight per square foot; 6 pounds
- ◆ Can be laid out in a staggered or random bond fashion to achieve the look of a wood floor.
- ♦ Butt-joint can be as small as 1/32" (same as large format stone tiles). GlassPLANK is rectified.
- ◆ Pricing is established by GR and is available in (3) tier options. Refer to Pricing Schedule
- GlassSCAPE recycled glass and porcelain aggregates, custom resin colors, and custom sizes are available. For more details please visit www.glassrecycled.com
- ♦ Slipperiness: Meets ASTM Horizontal Slip Resistance ADA/OSHA COF-1028 Dry: 1.13 Wet: 0.60
- ♦ Experienced tile installers can install GlassPLANK.
- ♦ SHIPPING/HANDLING:

GlassPLANK tiles are shipped in custom-made wood crates. Refer to Crate & Freight Schedule.

GlassSCAPE AGGREGATES

PRODUCT	DESCRIPTION	SIZES	WEIGHT	TL PRICE	LTL PRICE	PER ITEM
GlassPLATE	Mixed Plate	1-2-3	50 lbs.	*44,000 lb. min \$25.00	*2,000 lb. min \$30.00	*50 lb. bag \$35.00
GlassBLUE	Cobalt Blue	1-2-3	50 lbs.	\$30.00	\$40.00	\$50.00
GlassCLEAR	Clear Flint	1-2	50 lbs.	\$25.00	\$30.00	\$35.00
GlassBROWN	Bottle Brown	1-2	50 lbs.	\$25.00	\$30.00	\$35.00
GlassGREEN	Bottle Green	1-2	50 lbs.	\$25.00	\$30.00	\$35.00
GlassMIRROR	Mirror Glass	1-2	50 lbs.	\$25.00	\$30.00	\$35.00
GlassSHIELD-AAG	Aqua Auto	1-2	50 lbs.	\$25.00	\$30.00	\$35.00
GlassSHIELD-CAG	Charcoal Auto	1-2	50 lbs.	\$25.00	\$30.00	\$35.00
GlassMODE	Porcelain	0-1-2-3	50 lbs.	\$25.00	\$30.00	\$35.00
GlassFILL	Clear Sand	40-80	50 lbs.	\$25.00	\$30.00	\$35.00
GlassOLIVE	Olive Green	2	50 lbs.	\$25.00	\$30.00	\$35.00
GlassRED	Red Stain Glass	1-5+	50 lbs.	\$75.00	\$85.00	\$95.00
GlassORANGE	Orange Stain Glass	1-5+	50 lbs.	\$75.00	\$85.00	\$95.00
GlassAMBER	Amber Stain Glass	1-5+	50 lbs.	\$75.00	\$85.00	\$95.00
GlassMOP	Mother of Pearl	2-3	50 lbs.	\$75.00	\$85.00	\$95.00

- Glass color consistency of recycled glass may vary due to glass crushing intervals
- Recycled glass and porcelain may require may require some separation of origin materials
- Certificate of authenticity is available upon request
- FOB Coppell, TX; Prices subject to change periodically
- Landscape Formula: Square feet (x) the depth in inches (x) the multiplier of 7= total number of pounds
- GlassSCAPE aggregates can be sold separately for landscaping and other uses, in addition to selling to poured-inplace terrazzo installers.
- Ponds, aquariums, decorative landscape cover, fountains.
- GlassGLO (Aqua or Green) glows in the dark and is \$35 for a ONE pound bag. Size 2 only.
- ♦ Size 1 = ¼ to 1/8 inch (smaller size); Size 2 = 3/8 to ¼ inch (medium size), Size 3 = 5/8 to 3/8 inch
- ♦ GlassRED, GlassAMBER, GlassORANGE come in one combined assortment of sizes from size 1 to size 7+
- GlassFILL can be used anywhere natural sand is used size 40-80 mesh
- ♦ GlassMODE recycled porcelain sinks, tubs and commodes (Comes in sizes 0-1-2-3)
- ♦ Also GlassMOP (mother of pearl) and GlassLUME (recycled aluminum) is available

SAMPLE OPTIONS

♦ Sample gallery samples:

400+ sample photos can be viewed in the Sample Gallery at www.glassrecycled.com Customers can order samples from these photos by entering the photo code on the sample order page. Normal turnaround time for online samples is 5-7 days. Expedited samples can be shipped if the customer provides us a FedEx account number.

Custom samples (designed by the customer)

May take up to 15 business days and should be ordered online unless they fall outside of the parameters of the order page. If so, please email the request to glassrecycled@gmail.com Custom samples cost \$50 each plus the cost of shipping.

Larger samples for fabricators to practice on:

Counter Top Fabricators may request a sample template (8"x8"x1") of GlassSLAB to practice on. Please email the request to; glassrecycled@gmail.com

PRODUCT DESIGN

- ♦ 25 standard color pigmented epoxy resin colors are available.
- Custom epoxy resin colors can be requested by providing a paint name and color code by either paint manufactures; (Benjamin Moore or Sherwin Williams).
- ♦ 15 GlassSCAPE recycled glass and porcelain aggregate choices are available. Size 1 (1/4" to 1/8") or Size 2 (3/8" to 1/4") or Size 3 (3/8" to 5/8") are the most common sizes. Larger sizes are available in some colors. Visit www.glassrecycled.com for GlassSCAPE color options and sizes.

ORDERING PRODUCT

- Product lead time is 4-5 weeks from receipt of down payment.
- ♦ Every order is custom made!
- An Authorization to Proceed (ATP) form will be created based on the client information provided. The ATP will be forwarded to the client for review and signature along with a request for 50% deposit which can be processed by credit card, bank wire or check. Final balance due will be required prior to shipment, pickup or delivery.

ENVIRONMENTAL TOPICS

- GlassSCAPE aggregates are post-consumer bottles and jars from recycling programs, old auto windshields, plate glass windows, mirrors, stained glass windows; recycled porcelain from toilets, sinks; recycled mother of pearl buttons; post-consumer aluminum.
- Technically "upcycled" because the glass is not melted down and made into a new container. It's actually
 reclaimed or "reused" glass, which is less-energy intensive than actual recycling.
- ◆ Epoxy resin binder is a non VOC petroleum-based product, represents only 20% of the volume.
- ♦ GR products are VOC free no off gassing of harmful chemicals, nonporous, no chemical seal
- Cement does not bond well to glass. Cement is porous and glass is not, so some type of polymer additive or sealant must be used with recycled glass cement terrazzo in order for a strong bond to occur.

US GREEN BUILDING COUNCIL LEED® ASSESMENT AND EVALUATION

USGBC LEED 2.1 ASSESSMENT AND EVALUATION

B. KIRK TESKE, AIA, LEED AP, CHAIRMAN OF THE USGBC NORTH TEXAS CHAPTER

GlassSLAB countertops and GlassPLANK floor & wall tiles are environmentally beneficial construction materials can aid significantly in the environmental goals of green buildings. Projects seeking certification under the US Green Building Council's (USGBC) LEED® rating system, version 2.1 can expect these products to contribute to USGBC LEED credits listed below. Of the 69 total points available, GlassSLAB countertops and GlassPLANK floor tiles can contribute to (5) or more project points.

RECYCLED CONTENT CREDIT MR CREDIT 4.1 OR 4.2 (1 TO 2 POINTS)

GlassSLAB and GlassPLANK are comprised of post-consumer glass and/or porcelain, recycled glass fillers, and VOC free epoxy resin. The products can be specified with 100% post-consumer glass and/or porcelain. The recycled content, by weight, of the final product is approximately 80%. As a result, up to 80% of the dollar value of the final product will contribute to the LEED targeted percentages of total building recycled material value (5% credit 4.1 and 10% credit 4.2). A less percentage can be expected if you specify as manufactured products.

REGIONAL MATERIALS MR CREDIT 5.1 AND 5.2 (1 TO 2 POINTS)

Recycled glass products can procure the recycled glass and/or porcelain, recycled glass fillers, and epoxy resin from regional sources (within 500 miles) for use in the final product assembly. With suppliers available across the United States, the application of GlassSLAB and GlassPLANK can easily contribute to LEED requirements for both regionally manufactured and regionally extracted materials on most USA projects. GlassSLAB and GlassPLANK are both manufactured in Dallas, TX and shipped to the site for fabrication and installation. Therefore, the regional materials credits apply if the installation site is within 500 miles of Dallas, TX.

CONSTRUCTION WASTE MANAGEMENT MR CREDIT 2.1 OR 2.2 (1 TO 2 POINTS)

Recycled glass products can be a part of the construction waste management team and assist in the reclamation of glass waste from the construction process. In projects that require demolition of existing structures, recycled glass products can be a part of the construction waste management team - reclaiming glass waste and thereby avoiding disposal into the landfill. If desired, the salvaged glass can potentially be used in interior applications of the new building project.

LOW EMITTING MATERIALS - ADHESIVES AND SEALANTS EQ CREDIT 4.1 (1 POINT)

GlassSLAB and GlassPLANK utilize binders, resins and primers with VOC limits that range from zero to 60 g/l (based on information provided to the reviewer). This is considerably below the VOC limits required for compliance with south coast air quality management district rule #1168 VOC limits and the bay area air quality management district regulation 8, rule 51. Most of the epoxy manufacturers of thin set epoxy terrazzo systems have moved to 100% solids formulas, eliminating the addition of any VOC to the material. RGP can provide certification of VOC compliance from its epoxy manufacturer.

INNOVATION IN DESIGN (1 POINT)

GlassSLAB and GlassPLANK can also potentially gain additional points under the USGBC LEED® innovation in design category. Extensive use could also contribute to the project excelling in the recycled content category - reaching the next threshold of total building recycled content value. These and other innovative scenarios can potentially earn the project additional LEED points. Points are awarded at the discretion of the submittal reviewer contracted with the USGBC.

ADDITIONAL TOPICS

- GLASS RECYCLED products are made from pre-selected color pigmented epoxy resin colors along with a combination of recycled glass and / or porcelain aggregates. Please note that our custom designed products are derived from discarded resources and products and as such may contain small defects which are characteristics of discarded items. These defects such as tiny blemishes, fissures and small pinholes are inherent during the manufacturing and finish process. However, our GLASS RECYCLED products performance will not be impaired.
- ♦ Tiny pinholes from air bubbles are a challenge with any solid surface product we fill them during production but occasionally may miss some. They can be filled in by the fabricator/ installer with color matching resins available in the counter top industry.
- ♦ Heat Resistant Because our product is made up of at least 80% glass, it allows high heat to dissipate rapidly. A trivet is recommended when exposed to direct heat over 350 degrees.
- ♦ Stains The following do not affect our product: wine, lemon juice, alcohol, peroxide and bleach.
- ♦ Slip resistance GLASS RECYCLED offers the benefits of non-porosity and a natural drag that reduces slipperiness. Most designers interpret the Americans with Disabilities act (ADA) Coefficient of Friction guideline by specifying a minimum of 0.5 in most public places, with 0.6 being the minimum in hospitals and schools. GlassPLANK Tile installations exceed the coefficient of friction of 0.6 dry, but the slipperiness of any particular finished terrazzo floor is determined by many factors including the presence of water and the application of a wax polish may affect the final ADA Rating.
- ♦ Maintenance: clean with pH balanced, biodegradable cleanser.

INSTALLATION

- ♦ GlassSLAB: Same tools, equipment, polishing pads and techniques used with granite, marble or stone
- GlassPLANK: Any reputable tile installer, or a competent do-it-yourselfer, can use a diamond blade wet saw to cut plank and install it with thin set mortar and grout.
- GlassSLAB and GlassPLANK products are compatible with under-mounted sinks and radiant heating

COMPETITORS

- ◆ Ice Stone New York cement and recycled glass <u>www.icestone.biz</u>
- Vetrazzo California cement and recycled glass <u>www.vetrazzo.com</u>
- ♦ Wausau Tile California <u>www.wausautile.com</u>
- ◆ Paperstone recycled paper countertops http://www.paperstoneproducts.com/paperstone.htm
- ◆ Akemi recycled aluminum countertops www.renewedmaterials.com/alkemi.html
- ♦ American Specialty Glass <u>www.americanspecialtyglass.com</u>
- Heritage Glass Company