

**GEOS slabs are made from three primary ingredients:**

100% recycled glass, low VOC polymeric resin and pigment. GEOS slabs do NOT need to be sealed and may be used for countertops, work surfaces, wall cladding, etc. GEOS fabricates similar to quartz and other engineered stone products.

To request samples, product literature or technical assistance email us at [info@eos-surfaces.com](mailto:info@eos-surfaces.com), call us at 800-719-3671, or visit our website [www.eos-surfaces.com](http://www.eos-surfaces.com)

## Recycled Glass Surfaces

### PART 1-GENERAL

#### 1.1 References

- A. ANSI
  - 1. ANSI Z124.3 Meets low VOC Requirements
  - 2. ANSI Z124.6 Section 3, 5.4 Meets Workmanship and Finish requirements, Compiles with knife & skillet drop tests and stain and cigarette burn tests
  - 3. ANSI Z124.6 Section 5.6 Compiles with Heated Pan Test (365 degrees for 10 minutes)

#### 1.2 Submittals

- A. Shop Drawing: Include countertop layout, dimensions, materials, finishes, cutouts and any attachments.
- B. Samples: 2.75" X 2.75" inch recycled glass samples in selected color(s)

#### 1.3 Quality Assurance

- A. Fabricator and Installer Qualifications: Demonstrated experience fabricating and installing recycled glass and/or quartz surfaces.
- B. Mockup
  - 1. Construct countertop mockup: width, depth with splash and skirt
  - 2. Include plumbing fixtures and trim

## PART 2-PRODUCTS

### 2.1 Manufacturers

- A. Contract Documents are based on products by EOS Surfaces, LLC
- B. Substitutions not permitted

### 2.2 Materials

- A. Recycled Glass Countertops:
  - 1. Product: GEOS
  - 2. Composition: Recycled glass, low VOC polymeric resin and color pigments; selected colors have natural shells

### Portland or other cements not permitted

- 3. Total recycled glass: At least 57% recycled glass by weight
- 4. Post-Consumer recycled glass content: At least 14% post-consumer recycled glass content by weight
- 5. Color: To be selected from the GEOS color collection
- 6. Thickness: 2cm or 3cm
- 7. Physical characteristics:
  - a. Food Safety: NSF/ANSI 51
  - b. Volatiles %=0% at room temperature
  - c. Solubility in water=insoluble
  - d. Form= Slabs content
  - e. Specific Gravity=2.2-2.39

### 2.3 Fabrication Requirements

#### A. General

- 1. Fabricator must inspect the slab for damage or defects before fabrication
- 2. Fabricator must inspect slabs for proper color match of slabs used on same job before fabrication
- 3. Proper stone working/diamond tooling must be used for cutting shaping, and polishing
- 4. Lamination should be done using 2-part polyester, epoxy, or acrylic adhesives
- 5. Inside corners without a seam (one piece top) require a minimum of a ¼" radius to reduce inside corner stress
- 6. Inside corners created using 2 pieces utilizing butt seam, European seam or similar do not require inside radius
- 7. Top and bottom edges on straight runs & cut-outs should be rounded over or chamfered to minimum of 1/16"
- 8. Outside corners should have a minimum radius of 1/8"

#### B. Cut-Outs

- 1. Radius cuts recommended but square cuts permitted provided saw-cut in corners do not extend beyond corner.
- 2. Saw-cuts extending beyond corner of the cut-out must be completely filled with 2-part epoxy to prevent cracks
- 3. Minimum 1/8" clearance must be used around any appliance, cook-top and sink for expansion
- 4. Cut-out support within 3" on all sides, no closer than 1" on heat producing cut-outs to avoid trapping heat
- 5. The use of Nomex heat tape is recommended on cut-outs around heat producing appliances.

#### C. Under-Mount Sink Requirements

- 1. Under-mount sinks < 10 lbs. can be mounted using a full bead of silicone & under-mount clips or brackets.
- 2. Under-Mounts >10lbs (e.g. cast iron) must use cradles or approved brackets attached to cabinets.
- 3. Integrated solid surface bowls can be directly adhered using solid surface adhesive with clips or brackets

## PART 3- INSTALLATION

### 3.1 Installation Requirements

1. GEOS is not recommended for exterior installations.
2. Cabinets should be flat and true within 1/8" over a 10 foot span.
3. GEOS should not be installed on any cabinet or base that cannot support at least 18lbs per square foot
4. Installs between walls a minimum of 1/16" gap is required at each end. Gaps may be caulked with flexible adhesive
5. GEOS should be fastened to cabinets or base using dabs of flexible adhesive.
6. NEVER rigidly adhere GEOS to other materials such as wood substrates, steel, etc.
7. Never install mechanical fasteners (screws, nails, bolts) directly into GEOS
8. Never install GEOS over existing countertops

### 3.2 Structural Support

- A. For structures with support on 4 sides
  1. Less than 26", outer perimeter support is sufficient (maximum length is 120")
  2. Greater than 26", additional front to back support is required every 36" in additional to outer perimeter support
- B. For structures with support on 3 sides (e.g. dishwashers, desks)
  1. Less than 26" deep, additional support is required for widths greater than 36"
  2. Greater than 26" deep, additional support is required for widths greater than 24"
- C. Cabinet Overhangs (e.g. snack bars)
  1. Less than 15" no support required
  2. Overhangs 15"-24" use corbels evenly spaced at no greater than 36" intervals
  3. Overhangs greater than 24" use a leg or column
- D. Half-Wall (pony walls, knee walls)
  1. Overhang a maximum span of 2" from edge of wall
  2. Overhangs greater than 2" must be supported by a corbel equal to 75% of the length of the overhang (example; 10" overhang requires a corbel measuring 7.5" under the surface, 7.5" supported by wall surface)

### 3.3 Seaming

1. All seams must be completely filled with a color matched 2-part polyester adhesive
2. Seams must be supported on both sides of seam, both front and back
3. Seaming over dishwasher is not recommended and should be avoided
4. Seaming through a heat producing appliance (e.g. cooktop) is also not recommended
5. Seam appearance is not a warranty issue. Recommended seam width is less than 1/16"; recommended height mismatch is less 1/64"