

KEY #116 EPOXY SLAB GLASS

Product Information Sheet



DESCRIPTION

KEY #116 SLAB GLASS EPOXY is a room temperature casting system designed for casting between slabs of faceted glass to form strong and weather resistant stained glass windows. Specially formulated to match the expansion and contraction of slab glass during weather cycles, **KEY #116 SLAB GLASS EPOXY** is the ideal epoxy casting resin for faceted glass windows. Stronger and more resistant to heat loss than conventional faceted glass systems, **KEY #116 SLAB GLASS EPOXY** is ideal for large windows exposed to varying weather cycles.

KEY ADVANTAGES

- Excellent bonding capabilities to faceted glass.
- Stronger and more resistant to heat loss than conventional faceted glass systems.
- Low odor for use in occupied areas.

KEY CONSIDERATIONS

- Minimum application temperature of 70°F.
- Faceted glass and lay-out area must be free of any foreign materials.
- Slight color variation can be expected from batch to batch.

COLOR SELECTION

KEY #116 Epoxy Slab Glass is available in four distinct color choices: Bronze, Charcoal, Limestone, Mortar

COMPOSITION

100% solids, silica-filled, amine cured epoxy resin.

TYPICAL USES

KEY #116 EPOXY SLAB GLASS is the standard for faceted glass windows. The tenacious bond between the epoxy and faceted glass in conjunction with the higher strength and lighter weight of epoxy-faceted glass windows bring new dimensions in design and creative possibilities to an ancient art form. Specifically formulated to absorb the differences in thermal expansion and contraction between the pieces of faceted glass and the window or jamb frame.

APPLICATION

SURFACE PREPARATION

A flat, rigid working surface capable of supporting the weight of the panel without flexing is needed for faceted glass projects. Depending on percentage of glass and thickness, a panel can weigh 9 to 13 pounds per square foot. Multiple layers of 3/4" plywood may be used in order to allow the panels to be moved from the work area after overnight curing (16 hours). Sufficient layers of plywood should be used so that when moving the panel it cannot flex. The panel requires one week at room temperature (77° F) in a fully supported, horizontal position to fully cure.

INSTALLATION

Installation of **KEY #116 EPOXY SLAB GLASS** involves several steps including setting up a framework of polystyrene and plywood, placing faceted glass, applying fine aggregates, mixing and applying #116 Key Epoxy Slab Glass and allowing the panel to properly cure. For specific installation guidelines, contact **Key Resin Technical Service**.

CLEAN UP

Disposable containers and utensils are recommended when working with epoxies. However, when disposable materials are impractical, uncured epoxy can be removed by cleaning equipment with solvent. Observe appropriate precautions when using flammable solvents. Solvent-cleaned utensils should be thoroughly dried before reuse. Any remaining solvent can contaminate the next mixture.

KEY #116 EPOXY SLAB GLASS

Product Information Sheet



PHYSICAL PROPERTIES

Colors:	Bronze, Charcoal, Limestone, Mortar
Mixing Ratio:	100-A to 6-B by weight
Minimum Epoxy Thickness:	5/8", but 3/4" preferred
Maximum Panel Size:	16 square feet
Maximum Length to Width:	Ratio 4:1
Panel Curing Time (70-85°F):	One week at room temperature

PERFORMANCE PROPERTIES

Hardness:	ERF 9-82	96 (Shore D)
Tensile Strength:	ERF 6-82	6,200 psi
Tensile Elongation:	ERF 6-82	1.8%
Compressive Strength:	ASTM D-695	12,800 psi
Compressive Modulus:	ASTM D-695	0.7×10^6 psi
Flexural Strength:	ASTM D-790	9,500 psi
Flexural Modulus:	ASTM D-790	1.2×10^6 psi
Izod Impact Strength:	ASTM D-256	0.52 ft lbs
Coefficient of Linear Thermal Expansion:	ERF 11-82	18.9×10^{-6} in/in/°C
Thermal Conductivity:	9.63 (cal x cm) / (sec x cm ² x °C)	

AVAILABILITY

Key Resin materials are available throughout the United States and a number of other countries. Contact the **Key Resin Representative** in your area for details.

MAINTENANCE

KEY #116 Epoxy Slab Glass is used as a binder resin, refer to the **KEY #116 Epoxy Slab Glass** Technical Data Sheet for further information.

TECHNICAL SERVICE

Key Resin Company provides services and consultations on material selection, specification, troubleshooting, and other information on the proper repair and protection of concrete surfaces. **Key Resin Sales/Technical Representatives** are available to assist. Telephone 888.943.4532 or visit www.keyresin.com.

WARRANTY

Key Resin Company ("Key") warrants for a period of one (1) year that its products will be free of manufacturing defects and will be in conformity with published specifications when handled, stored, mixed, and applied in accordance with recommendations of Key. If any product fails to meet this warranty, the liability of Key will be limited to replacement of any non-conforming material if notice of such non-conformity is given to Key within (1) one year of delivery of materials. Key may in its discretion refund the price received by Key in lieu of replacing the material. No customer, distributor, or representative of Key is authorized to change or modify the published specifications of this warranty in any way. No one is authorized to make oral warranties on behalf of Key. In order to obtain replacement or refund the customer must provide written notice containing full details of the non-conformity. Key reserves the right to inspect the non-conforming material prior to replacement. EXCEPT FOR THE EXPRESSED WARRANTY STATED ABOVE, THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE. KEY'S OBLIGATION SHALL NOT EXTEND BEYOND THE OBLIGATIONS EXPRESSLY UNDERTAKEN ABOVE AND KEY SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO THE PURCHASER OR ANY THIRD PARTY FOR ANY LOSS, COST, EXPENSE, DAMAGE OR LIABILITY, WHETHER DIRECT OR INDIRECT, OR FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.