

KEY #108 EPOXY TERRAZZO MATRIX

Product Information Sheet



DESCRIPTION

KEY #108 EPOXY TERRAZZO MATRIX is a pigmented, 100% solids, two component epoxy resin binder mixed with a wide selection of decorative aggregates and trowel applied to 3/8" nominal thickness to create the highly decorative **KEY EPOXY TERRAZZO SYSTEM**. This system provides outstanding durability and wear resulting in the lowest life cycle cost of any flooring system available. **KEY EPOXY TERRAZZO** does not support bacterial growth and is also available in conductive and novolac formulations. Crack-resistant installations of **KEY EPOXY TERRAZZO** can be achieved when installed in conjunction with a **KEY #580 Waterproofing and Crack Isolation Membrane**.

KEY ADVANTAGES

- Extensive color selection allows for unlimited design variations
- Colors will not fade or wear thin
- Chemical and stain resistant
- High wear, impact and abrasion resistance
- Rapid cure and finishing time
- Less weight than marble, granite and cement terrazzo, more suitable for multi-story buildings
- Low odor during application and cure, can be applied in occupied buildings
- Low maintenance, sanitary
- Resists bacteria and fungal growth
- Lowest life-cycle cost decorative flooring available
- Low odor for use in occupied areas
- Meets USGBC LEED criteria for low VOC
- Meets NTMA and TTMAC standards for epoxy terrazzo
- Key Resin Company is a member of the NTMA and TTMAC

KEY CONSIDERATIONS

- Substrate temperature must be a minimum of 50°F and relative humidity below 85% for proper curing
- Substrate must be free of dirt, waxes, curing agents, and other foreign materials
- All expansion joints in the substrate must be revealed with the appropriate divider strips in the terrazzo topping
- Control/contraction joints (sawcuts) should also be revealed with divider strips unless properly treated with membrane following Key Resin guidelines

COLOR SELECTION

KEY #108 allows the interior designer an unlimited choice of colors from deeps reds and blues to pastels. Colors will not fade or wear thin.

COMPOSITION

100% solids epoxy resin, amines and fillers.

APPLICATION

SURFACE PREPARATION

Surface Preparation is the most critical portion to any successful resinous flooring system application. All substrates must be properly prepared as outlined in **Key Resin Technical Bulletin #1**. Work must be performed by trained or experienced contractors or maintenance personnel. The **Key Resin Technical Service Department** is available to answer any questions.

INSTALLATION

Installation of **KEY EPOXY TERRAZZO SYSTEM** involves several steps including setting divider strips to the architects specifications, priming, troweling to specified thickness, grinding, grouting, polishing and sealing. For specific installation guidelines, contact **Key Resin Technical Service**.

CLEAN UP

Clean skin with soap and water. Tools and equipment should be cleaned with xylene or lacquer thinner. Consult Safety Data Sheet (SDS) for safety and health precautions.

TYPICAL USES

KEY EPOXY TERRAZZO SYSTEM is ideal for almost any area where a monolithic, heavy duty decorative floor surface is needed. With the ultimate in beauty, design, durability and sanitation, it is the best flooring choice for commercial and institutional facilities, such as airports, sports arenas, museums, shopping malls, schools, hospitals, building lobbies/corridors, and numerous other types of facilities.

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SYSTEM PHYSICAL PROPERTIES

Abrasion Resistance	ASTM D4060 CS-17 Wheel, 1000 cycles	35 mg loss
Adhesion to Concrete	ASTM D7234	300-400+ psi (Concrete Failure, varies by concrete strength)
Compressive Strength	ASTM C579	10,000 psi minimum
Critical Radiant Flux	ASTM D648	1.0
Electrical Conductivity		Non-Conductive Conductive Available
Flammability	ASTM D635	Self-Extinguishing
Flexural Strength	ASTM C580	6,500 psi
Fungus & Bacteria Growth	MIL-F-52505 §4.4.2.11	Will not support growth of fungus or bacteria when subjected to mildew and bacteria tests
Indentation	MIL-D-3134J	Withstands 2,000 lbs/sq in for 30 minutes without indentation
Impact Resistance	MIL-D-3134J	Withstands 16 ft/lbs without cracking, delamination, or chipping
Resistance to Elevated Temperature	MIL-D-3134J	No slip or flow at required temperature of 158°F
Tensile Strength	ASTM C307	2,500 - 2,600 psi
Thermal Coefficient of Linear Expansion	ASTM C531 ASTM D696	25×10^{-6} inches per inch per degree °F to 140°F maximum
Thermal Shock Resistance	ASTM C884	Passes
Water Absorption	ASTM D570	0.010%

AVAILABILITY

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

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.

NEAT RESIN TECHNICAL DATA

Mixing Ratio	5 Parts A:1 Part B by Volume	
Solids Content	100% Solids by Volume	
Volatile Organic Content (VOC) (EPA Method 24)	0 g/L, compliant to low VOC Rule 1113 in all 50 states	
Chemical Resistance	ASTM D1308	No deleterious effects by chemical reagents for 7 days
Compressive Strength	ASTM D695	10,000 psi minimum
Flexural Modulus	ASTM D790	2.3×10^5
Flexural Strength	ASTM D790	6,500 psi
Hardness, Shore D	ASTM D2240	65-85
Tensile Elongation	ASTM D638	4-8%
Testing and Evaluation of Chemical Emissions from Indoor Sources using Environmental Chambers	ASTM D5116 CA Section 01350	Meets Requirements
Ultimate Tensile Strength	ASTM D638	3,000 psi

MAINTENANCE

KEY #108 is used as a binder resin, refer to the **KEY EPOXY TERRAZZO SYSTEM** 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.