# **KEY #108 CONDUCTIVE EPOXY TERRAZZO**

**Product Data Sheet** 



**KEY #108 CONDUCTIVE EPOXY TERRAZZO** is a nominal 1/4"-3/8" thick conductive epoxy terrazzo consisting of ultra high solids epoxy and graded aggregates. It is sealed with low odor Key #467-ESD clear urethane for excellent chemical resistance, wear and abrasion resistance. **KEY #108 CONDUCTIVE EPOXY TERRAZZO** provides a conductive surface testing less than 1 x 10° ohms. Ideal for military/aerospace facilities, pharmaceutical plants, and other facilities needing a conductive floor with a long life-cycle.

#### **KEY ADVANTAGES**

- · High wear, impact, abrasion resistance
- Low odor during application and cure. Can be applied in occupied buildings
- · Low maintenance, sanitary
- · Chemical resistant finish
- Conductive surface
- Lowest life-cycle cost flooring available, will last life of the building
- Contributes to various USGBC LEED® credits

#### **KEY CONSIDERATIONS**

- Substrate temperature must be a minimum of 55°F and relative humidity below 85% for proper curing
- Substrate must be free of dirt, waxes, curing agents, and other foreign materials
- Refer to Key Resin Technical Bulletins for installation requirements.

#### COLOR

Black epoxy matrix is standard for **KEY #108 CONDUC- TIVE EPOXY TERRAZZO**. Colored epoxy matrix is not available. Colored marble and other aggregates provide a decorative terrazzo finish with black epoxy matrix.

## COMPOSITION

100% Solids Conductive Epoxy Resin filled with graded aggregates

# APPLICATION SURFACE PREPARATION

Surface Preparation is the most critical portion of any successful resinous flooring system application. All substrates must be properly prepared as outlined in **KEY RESIN COMPANY'S TECHNICAL BULLETIN #1**. Work must be performed by trained or experienced contractors or maintenance personnel. Contact the **KEY RESIN COMPANY** Technical Service Department with questions.

#### MIXING INSTRUCTIONS

Installation of **KEY #108 CONDUCTIVE EPOXY TERRAZ-ZO** involves several steps including setting divider strips, priming, trowleing to specified thickness, grinding, grouting, polishing and sealing. For specific installation guidelines, contact Key Resin Technical Service.

## CHEMICAL RESISTANCE

ASTM D-1308 - No effect when exposed to the following reagents for seven days

Acetic Acid - 5%		
Ammonium Hydroxide – 10% Solution		
Citric Acid - 5% Solution		
Coffee		
Coco Cola® Syrup		
Isopropyl Alcohol		
Mineral Oil		
Sodium Phosphate – 5% Solution		
Tri-Sodium Phosphate – 5% Solution		
Urea - 6.6% Solution		

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# SYSTEM PHYSICAL PROPERTIES

Abrasion Resistance	ASTM D4060 CS-17 Wheel, 1000 c	35 mg cycles
Bond Strength to Concrete	ASTM D4541	300-400+ psi Concrete Failure
Compressive Strength	ASTM C579	10,000 psi minimum
Critical Radiant Flux	ASTM D648	1.0
Electrical Conductivity	ANSI/ESD S20.20	<1 x 10 <sup>9</sup> ohms
Flammability	ASTM D635	Self-Entinguishing
Flexural Strength	ASTM C580	6,500 psi
Fugus & 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-D3134J <sub>I</sub>	Withstands 2,000 bs/sqin for 30 minutes without indentation
Impact Resistance	MIL-D3134J de	Withstands 16 ft/lbs without cracking, lamination, or chipping
Resistance to Elevated Temperature	MIL-D3134J r	No slip or flow at required temperature of 158°F
Tensile Strength	ASTM C307	2,500 - 2,600 psi
Thermal Coefficient of Expansion	ASTM C531 ASTM D696	25 x 10 <sup>-6</sup>
Water Absorption	ASTM D570	0.010%

## **NEAT RESIN TECHNICAL DATA**

Mixing Ratio	5 Parts A:1 Part B by Volume	
Solids Content	100% Solids by Volume	
Volatile Organic Conten	t VOC	<50 g/L
Compressive Strength	ASTM D-695	10,000 psi
Flexural Modulus	ASTM D790	2.3 x 10 <sup>5</sup>
Flexural Strength	ASTM D790	6,500 psi
Hardness, Shore D	ASTM D-2240	65-80
Tensile Elongation	ASTM D-638	4-8%
Ultimate Tensile Strength	ASTM D-638	3,500 psi

#### **MAINTENANCE**

After completing the application of **KEY #108 CONDUCTIVE** the installer should provide the owner with maintenance instructions. **KEY #108 CONDUCTIVE** is easily cleaned with neutral soaps or detergents and rinsed thoroughly.

## 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 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.

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