



KEY CONDUCTIVE MORTAR

DESCRIPTION

KEY CONDUCTIVE MORTAR is a nominal ¼" thick conductive epoxy surfacing consisting of 100% solids epoxy and graded non-sparking graphite aggregates. It is finished with a conductive epoxy grout for excellent chemical resistance, wear and abrasion resistance. **KEY CONDUCTIVE MORTAR** provides a conductive surface testing between 25,000 and 1,000,000 ohms. Ideal for military/aerospace, pharmaceutical plants, hazardous industries (dust or explosion hazards). For use in any areas where the build-up of static electricity is a concern or a spark-proof floor is required. **KEY CONDUCTIVE MORTAR** is available with **KEY CONDUCTIVE NOVOLAC EPOXY** topcoat.

KEY ADVANTAGES

- High wear, impact, abrasion resistance
- Low odor during application and cure, can be applied in occupied buildings.
- Low maintenance, sanitary, integral cove base.
- Chemical resistant finish, novolac epoxy available for added chemical resistance.
- Conductive, spark-proof surface and spark-proof aggregate.

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.

COMPOSITION

100% Solids Epoxy Resin, Conductive Fillers, Graded Spark-Proof Conductive Graphite 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.

INSTALLATION

Refer to **Key Resin Company Installation Instruction Manual**.

CLEAN UP

Clean skin with soap and water. Tools and equipment should be cleaned with xylene or lacquer thinner.

COLOR SELECTION

Black epoxy matrix and aggregate is standard color for **KEY CONDUCTIVE MORTAR**. **KEY CONDUCTIVE EPOXY** topcoat is available in standard colors and the color tone will not be affected by a black mortar color.

PHYSICAL PROPERTIES

Tensile Strength	ASTM C-307	2400 psi
Bond Strength to Concrete	ACI Comm 503R	350 psi (100% concrete failure)
Hardness	ASTM D-2240	80-84 (Shore D)
Impact Resistance	MIL-D-3134F, 4.7.3	Withstands 16 ft./lbs., no delamination
Compressive Strength	ASTM C-579	10,000 psi min.
Flammability	ASTM D-635	Self Extinguishing
Critical Radiant Flux	ASTM D-648	1.0
Electrical Conductivity	NFPA 99	25,000-1,000,000 ohms
Resistance to Elevated Temperature	MIL-D-313F §4.7.4	No slip or flow at required temperature of 158°F
Water Absorption	ASTM D-570	0.010%
Abrasion Resistance	ASTM D-4060	.035gm weight loss
Flexural Strength	ASTM C-580	3,000 psi
Thermal Coefficient of Expansion	ASTM C-531	2.1×10^{-5}
Flexural Modulus	ASTM C-580	5.0×10^5

CHEMICAL RESISTANCE:

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

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

TECHNICAL DATA – Neat Binder Resin

Compressive Strength (D-695)	15,000 psi
Mixing Ratio	5 parts A to 1 Part B by volume
Solids Content	100% by volume
Volatile Organic Content (VOC)	-0-
Flexural Strength (D-790)	6500 psi
Weight per Gallon	9.00-9.50 pounds per gallon, mixed

AVAILABILITY

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

MAINTENANCE

After completing the application of **KEY CONDUCTIVE MORTAR**, the installer should provide the owner with maintenance instructions. If floors become slippery due to animal fats, oil, grease, or soap film, clean and rinse thoroughly.

KEY CONDUCTIVE MORTAR is easily cleaned with neutral soaps or detergents. Routine mechanical scrubbing is recommended for all surfaces having a non-skid texture. If waxing, use only UL certified conductive wax. Long periods of heavy traffic may cause wear patterns necessitating a maintenance application of a finish coat.

TECHNICAL SERVICE

Key Resin Company and **KRC Associates, Inc.** provide services and consultations on material selection, specification, troubleshooting, and other information on the proper repair and protection of concrete surfaces. **Key Resin Sales Representatives** and the **Key Resin Technical Services Department** are available to assist you. CALL (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.**