



KEY ESD QUARTZ

DESCRIPTION

KEY ESD QUARTZ is a 65-80 mil Decorative Epoxy Quartz Floor System showing excellent static control properties. The durable **KEY ESD QUARTZ** has a textured finish for sound footing. The decorative quartz aggregates are available in a series of pre-blended patterns combined with conductive elements.

KEY ESD QUARTZ SYSTEMS provide a decorative surface for areas such as electronic parts assembly, server assembly, pharmaceutical processing, and static control applications which require excellent abrasion and stain resistance.

KEY ESD QUARTZ is comprised of Key #502 Epoxy Primer, Key #520 ESD/Conductive Body Coat, Decorative Quartz granules with conductive elements and clear UV resistant epoxy and urethane finish coats.

KEY ADVANTAGES

- Good Chemical and Stain Resistance
- 100% Solids—Low Odor Application and Cure (0-VOC)
- High Gloss
- Easy to Clean
- Good Abrasion Resistance
- Consistent Electrical Resistance Readings When Tested at 10-500 Volts
- Tests in the Static Dissipative Range of 1×10^6 to 1×10^9 ohms per EOS/EDS Standards when applied over Non-Conductive Primer or Basecoat
- Dissipates a 5000 Volt Charge to Zero in Less than 0.1 Seconds @ 72° and 12% RH

KEY CONSIDERATIONS

- Substrate temperature must be a minimum of 55-60°F and maximum of 85°F.
- Relative Humidity should be 30-85% and substrate temperature must be 5°F above the measured dew point.
- Substrate must be free of dirt, waxes, curing agents and other foreign materials.
- Refer to Key Resin Technical Bulletin #1 regarding substrate requirements and surface preparation.
- On or below grade installation must have an efficient vapor barrier under the slab.
- Special treatments are necessary where hydrostatic pressure or moisture vapor transmission may be present.
- Substrate temperature must be a minimum of 55°F (Low temperature cure system available on request).
- Substrate must be free of dirt, waxes, curing agents, and other foreign materials.

COMPOSITION

100% Solids, Bis-A Epoxy Resin and Fillers

CLEAN-UP

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

COLOR

KEY ESD QUARTZ is available in a limited selection of Key Standard Quartz Color Blends and Custom Colors as approved. Standard Blends will vary in color slightly from Key Standard Color Blends.

TECHNICAL DATA

Tensile Str. ASTM D-638		2100 psi
Flexural Str. ASTM D-790		3500 psi
Flammability ASTM E-648		Class 1
Resistance to Elevated Temperature MIL-D-3134F §4.7.4		No slip or flow at required temperature of 158°F
Coefficient of Friction ASTM D-2047		0.80
Water Absorption ASTM D-570		0.1
Thermal Shock Resistance ASTM C-884		Passes
Hardness, ASTM D-2240		70-80 Shore D
Abrasion Resistance ASTM D-6040		60-70 mgs
Bond Strength to Concrete ASTM D-4541		>300 psi (100% concrete failure) Varies by concrete strength
Impact Resistance ASTM D-2794		>160 in-lbs. direct

STATIC CONTROL

Surface Resistance ASTM F-150 (ESD – S7.1)		10^6 - 10^9 ohms
Body Voltage Generation (ESD-STM 97.2)		<100 volts

CHEMICAL RESISTANCE

Contact **KEY RESIN TECHNICAL SERVICE** for information concerning Chemical Resistant Properties.

AVAILABILITY

KEY RESIN products are available throughout the United States, Canada and a number of other countries. Contact the **KEY RESIN Sales/Technical Representative** in your area for details or visit www.keyresin.com.

MAINTENANCE

After completing the application of **KEY ESD QUARTZ**, the installer should provide the owner with maintenance instructions.

KEY ESD QUARTZ is easily cleaned with neutral soaps or detergents. Refer to Key Resin Technical Bulletins #3 and #3-A for additional details.

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/Technical Representatives** and **KEY RESIN Technical Service** are available to assist you. 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.