

KEY RESIN COMPANY

## DESCRIPTION

**KEY MORTAR SL & SLT** consist of 100% solids epoxy and graded aggregates producing a fluid, self-leveling mixture that can be spread with a V-notched squeegee or trowel. These systems are the answer for both new and renovated areas and can be installed over most sound floors.

**KEY MORTAR SL** is a <sup>1</sup>/16" seamless, low maintenance, slurry system that produces a dense, non-porous floor that is chemical and dirt resistant. Ideal for light to medium traffic areas, **KEY MORTAR SL** may be sealed to meet your facility's needs to enhance abrasion resistance, gloss retention, and non-skid properties.

**KEY MORTAR SLT** is a <sup>1</sup>/8" seamless, low maintenance, slurrybroadcast system that provides high wear, durability, and impact resistance ideal for medium traffic areas. **KEY MORTAR SLT**'s chemical and dirt resistant finish is textured to improve nonskid and abrasion resistant properties.

**KEY MORTAR SL & SLT** can be installed with an integral cove base for areas requiring seamless wall to floor coatings. A waterproof crack-resistant system can be achieved with <sup>1</sup>/8" applications of **KEY MORTAR SLT** using a **KEY CRACK ISOLATION AND WATERPROOFING MEMBRANE**. Contact your **KEY REPRESENTATIVE** for assistance.

# **KEY ADVANTAGES**

- High Wear, Impact, and Abrasion Resistance
- Low Maintenance
- Safe (non-skid)
- 100% Solids Provides Low Odor Application
- Chemical Resistant Finishes are Available

# **KEY CONSIDERATIONS**

- 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.
- All control joints and expansion joints in the substrate must be revealed with the appropriate divider strips in the topping.

# SELECTION GUIDE

**KEY MORTAR SL(T)** 

| 仓                 | Activity Centers               |                       |
|-------------------|--------------------------------|-----------------------|
| ⇔                 | Aircraft Hangars               |                       |
| Û                 | Airports                       | Baggage/Service       |
|                   |                                | Terminals             |
| ⇔                 | Animal Areas                   | Housing               |
| ⇔                 |                                | Cage Washing          |
|                   | Beverage                       | Processing            |
| 企                 |                                | Packaging/Warehousing |
|                   |                                | Bottling              |
| 企                 | Cafeterias                     |                       |
| $\Leftrightarrow$ | Chemical Processing            |                       |
| Û                 | Clean Rooms                    |                       |
|                   | Coolers                        |                       |
| ⇔                 | Computer Assembly              |                       |
|                   | Commercial Kitchens            |                       |
|                   | Containment Areas              |                       |
| 仓                 | Convention Centers             |                       |
| 仓                 | Correctional Facilities        |                       |
| $\Leftrightarrow$ | Corridors                      |                       |
|                   | Docks/Ramps                    |                       |
| $\Leftrightarrow$ | Dairies                        |                       |
| Û                 | Distilleries                   | Packaging             |
|                   |                                | Bottling              |
| $\Leftrightarrow$ | Food                           | Processing            |
| Û                 |                                | Preparation Service   |
| Û                 | Garages                        |                       |
|                   | Hospitals                      | Corridors & Lobbies   |
|                   |                                | Patient Rooms         |
|                   |                                | Operating Rooms       |
| Û                 |                                | Services              |
| Û                 | Laboratories                   |                       |
| Û                 | Laundries                      |                       |
| Û                 | Locker Rooms                   |                       |
| Û                 | Machine Shops                  |                       |
| Û                 | Manufacturing                  | Light Duty            |
|                   |                                | Heavy Duty            |
| ⇔                 | Meat, Fish, Poultry Processing |                       |
| ⇔                 | Mechanical Equipment Rooms     |                       |
|                   | Munitions Facilities           |                       |
|                   | Parking Garages                | Interior Decks        |
|                   |                                | Exterior Decks        |
| ⇔                 | Pharmaceutical Plants          |                       |
|                   | Pulp and Paper Process         | Ing Facilities        |
| ⇔                 | Schools                        |                       |
|                   | Shopping Malls                 |                       |
| Û                 | Showers                        |                       |
| Û                 | Utilities                      |                       |
| Û                 | Warehouses                     |                       |
| ⇔                 | Waste Water Treatment          | Facilities            |
|                   |                                |                       |

û-Excellent Choice ⇔-Alternate Choice

## TECHNICAL DATA

#### System Performance Properties

| Flammability                       |  |
|------------------------------------|--|
| ASTM D-635                         | Self Extinguishing                               |
| Fungus & Bacteria Growth           | Will not support growth of fungus or bacteria    |
| MIL-F-52505 §4.4.2.11              | when subjected to mildew and bacteria tests.     |
| Hardness                           |  |
| ASTM D-2240                        | 80-84 Shore D                                    |
| Bond Strength to Concrete          |  |
| ACI COMM #403, Bulletin 59-43      | 250 psi (100% concrete failure)                  |
| 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                         | Nil  |
| Thermal Shock Resistance           |  |
| ASTM C-884                         | Passes   |
| Abrasion Resistance                |  |
| ASTM C-501                         | 32 MG  |
| Impact Resistance                  | Withstands 16 ft./lbs. without cracking,         |
| MIL-D-3134F §4.7.3                 | delamination, or chipping.                       |
| Compressive Strength               |  |
| ASTM C-579, 7 days                 | 11,000 psi                                       |
| Tensile Strength                   |  |
| ASTM C-307                         | 2,400 psi  |
| Thermal Coefficient of Expansion   |  |
| ASTM C-531                         | 26 x 10 <sup>-6</sup>                            |

### TYPICAL USES

The **KEY MORTAR SL** <sup>1</sup>/16" system is used in light traffic areas such as powder rooms, hotel/motel bathrooms, warehouse floors, and stock rooms. The **KEY MORTAR SLT** <sup>1</sup>/8" system is the preferred heavy duty system for toilet rooms, cafeterias, laboratories light production areas, corridors, classrooms, and shower rooms.

#### APPLICATION

Concrete surfaces must be in sound condition and properly prepared prior to any **KEY RESIN COMPANY** flooring system installation. Refer to **Key Resin Company Technical Bulletin #1** for specific preparation guidelines.

Installation of **KEY MORTAR SL** or **SLT** involves several steps including priming, applying successive base coats, broadcasting quartz aggregates, grouting, and sealing. For specific installation guidelines consult **Key Resin Company's Installation Instruction Manual**.

#### MAINTENANCE

After completing the application of **KEY MORTAR SL & SLT**, 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 MORTAR SL & SLT** are easily cleaned with neutral soaps or detergents. Routine mechanical scrubbing is recommended for all surfaces having a non-skid texture. Waxing is optional. Long periods of heavy traffic may cause wear patterns necessitating a maintenance application of a finish coat.

#### Neat Resin Performance Properties

| Compressive Strength<br>ASTM D-695      | 13,000 psi    |
|---|---------------|
| Ultimate Tensile Strength<br>ASTM D-638 | 4,200 psi     |
| Tensile Elongation<br>ASTM D-638        | 6-8%          |
| Flexural Strength<br>ASTM D-790         | 7,800 psi     |
| Flexural Modulus<br>ASTM D-790          | 2.5 x 10⁵     |
| Hardness<br>ASTM D-2240                 | 65-85 Shore D |

### COMPOSITION

**KEY MORTAR SL & SLT** are composed of 100% solids epoxy resin filled with a variety of graded quartz, silica, or ceramic fillers that can be modified to create the best design mix for ideal performance. A wide selection of finish coats is available to meet various exposure requirements.

### COLOR & AVAILABILITY

**KEY MORTAR SL & SLT** are available in a variety of standard colors. Custom colors are available subject to laboratory approvals, minimum quantities, lead time for production and increased cost. Colors will not fade or wear thin.

**Key Flooring Systems** are available throughout the United States, Canada, and a number of other countries. Contact the **KEY REPRESENTATIVE** in your area for 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 REPRESENTATIVES are available to assist you at any time. CALL (888)943-4532.

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.

KE

KEY RESIN COMPANY

4061 Clough Woods Drive Batavia, Ohio 45103, 888.943.4532



Key Mortar SL(T)-2