KEY RESIN COMPANY

KEY MARBLE

DESCRIPTION

KEY MARBLE is a highly decorative, trowelled resin flooring system incorporating the natural beauty of marble with the durability and ease of maintenance found with seamless epoxy flooring systems. Consisting of a trowelled blend of washed marble chips and a water-clear 100% solids epoxy binder, **KEY MARBLE** presents the natural beauty of marble while enhancing its strength and durability.

An integral cove base can be included with **KEY MARBLE** where specified. For crack resistant, waterproof applications, **KEY MARBLE** can also be installed in conjunction with a **Key Waterproofing Membrane**.

KEY MARBLE has good chemical resistance and is designed for high impact and heavy duty use. Maximum chemical resistance can be achieved through utilizing **KEY RESIN #615 CHEMICAL RESISTANT BINDER**.

KEY ADVANTAGES

- Enhances the Natural Beauty of Marble with the Strength of Seamless Flooring
- High Impact and Wear Resistant
- Chemical Resistant
- Thermal Shock Resistant
- Will Not Support Growth of Fungus or Bacteria
- Conforms to **MIL-D-24613 Type I, Class 3**
- **KEY MARBLE ONE-STEP** Conforms to **MIL-D-24613 Type III**

KEY CONSIDERATIONS

- Substrate must be above 55ºF during application.
- Substrate must be free from excessive moisture vapor transmission, curing agents, and other foreign material.
- UV light resistant epoxy and urethane seal coats are recommended for areas exposed to intense sunlight.

COMPOSITION

KEY MARBLE uses a 100% solids epoxy mortar with graded marble aggregates to form a decorative, impact resistant base. Urethane and Epoxy finish coats provide specific performance characteristics as applicable.

KEY MARBLE SELECTION GUIDE

Activity Centers	↑
Aircraft Hangars	↓
Airports - Baggage/Service	↔
Terminals	
Animal Areas - Housing	↑
Cage Washing	↑
Beverage - Processing	↔
Packaging/Warehousing	
Bottling	↑
Cafeterias	↔
Chemical Processing	↑
Clean Rooms	↑
Coolers	↔
Computer Assembly	
Commercial Kitchens	↑
Containment Areas	
Convention Centers	
Correctional Facilities	↑
Corridors	↑
Decks/Ramps	↔
Dairies	↑
Distilleries - Packaging	↑
Bottling	↑
Food Processing	↑
Food Preparation and Service	↑
Garages - Service	
Hospitals - Patient Rooms	
Services	↑
Operating Rooms	↔
Laboratories	↑
Laundries	↑
Locker Rooms	↔
Machine Shops	↔
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 Processing Facilities	↑
Plating Rooms	
Shopping Malls	↔
Showers	↑
Utilities	↔
Warehouses	↔
Waste Water Treatment Facilities	↑

↑- Excellent Choice ↔- Alternate Choice

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 the **KEY RESIN COMPANY'S TECHNICAL BULLETIN #1.** Work must be performed by trained or experienced contractors or maintenance personnel. The **KEY RESIN COMPANY** service department is pleased to answer any questions.

INSTALLATION

Prime prepared substrate with **Key #502 Primer/Low Modulus Binder** according to instructions. Mix epoxy mortar and spread to desired thickness. Finish trowel surface to compact mortar. Lightly sand before applying grout and finish coats. Apply desired grout and finish coat according to desired chemical resistance and finish.

CURING TIME

The curing time is 16 hours for initial set of mortar. Length of cure time necessary for seal coat will tend to vary.

COLOR SELECTION

KEY MARBLE is available in a variety of natural marble colors. **KEY PERSONNEL** are ready to assist.

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.

Technical Data
Physical Properties

Weight at 1/4" thick	2.0-2.5 #/sq.ft.
Flammability ASTM D-635	Self Extinguishing
Fungus & Bacteria Resistance MIL-F-52505 §4.4.2.11	Will not support growth of fungus or bacteria when subjected to mildew and bacteria tests specified in TT-P-34.
Bond Strength to Concrete, psi ACI COMM # 403, Bulletin 59-43	300 psi (100% concrete failure)
Adhesive Strength MIL-D-24613	420 psi
Hardness ASTM-D-2240 Shore D	80-84
Water Absorption MIL-D-24613	Nil
Thermal Shock Resistance ASTM-C-884	Passes
Abrasion Resistance ASTM-C-501	50 mg
Impact Resistance MIL-D-3134F §4.7.3	Withstands 16 ft/lbs without cracking, delamination, or chipping.
Compressive Strength ASTM-C-579, 7 days, psi	14,000
Tensile Strength ASTM-C-307, psi	2,400
Flexural Strength ASTM-C-580, psi	4,200
Coefficient of Friction ASTM-D-2047	0.70
Thermal Coefficient of Expansion ASTM-C-531, in/in/° F	26×10^{-6}

Technical Data	**Neat Resin (no aggregate)**
Compressive Strength ASTM-D-695, psi	13,000
Ultimate Tensile Strength ASTM-D-638, psi	4,200
Tensile Elongation ASTM-D-638, %	6-8
Flexural Strength ASTM-D-790, psi	7,800
Flexural Modulus ASTM-D-790, psi	2.5×10^{5}

Chemical Resistance: For specific information, consult KEY PERSONNEL for best choice.