

KEY RESIN COMPANY

# **KEY CHIP-100 FLOORING**

# DESCRIPTION

**KEY CHIP-100 FLOORING** is a 100% solids, decorative, seamless, low maintenance, floor coating system specially formulated to produce a dense, non-porous, decorative, chemical and dirt resistant floor ideal for light to medium traffic areas. **KEY CHIP-100 FLOORING** can be sealed to meet your chemical and abrasion resistance performance needs.

## **KEY ADVANTAGES**

- Excellent Wear & Abrasion Resistance
- Low Maintenance
- · Safe (non-skid)
- · Low-Odor Installation can be installed in occupied facilities
- 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.
- 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.

# TYPICAL USES

**KEY CHIP-100 FLOORING** is the ideal choice for use in light to medium traffic areas such as classrooms, corridors, hotel/ motel bathrooms and lobbies, and stock room floors.

# SELECTION GUIDE

企	Activity Centers		
	Aircraft Hangars		
	Airports	Baggage/Service	
		Terminals	
	Animal Areas	Housing	
		Cage Washing	
	Beverage	Processing	
		Packaging/Warehousing	
		Bottling	
仓	Cafeterias		
	Chemical Processing		
$\Leftrightarrow$	Clean Rooms		
	Coolers		
$\Leftrightarrow$	Computer Assembly		
	Commercial Kitchens		
	Containment Areas		
	Convention Centers		
$\Leftrightarrow$	Correctional Facilities		
仓	Corridors		
	Docks/Ramps		
	Dairies		
	Distilleries	Packaging	
		Bottling	
	Food	Processing	
		Preparation Service	
企	Garages	•	
企	Hospitals	Corridors & Lobbies	
Û		Patient Rooms	
		Operating Rooms	
Û		Services	
Û	Laboratories		
Û	Laundries		
Û	Locker Rooms		
$\Leftrightarrow$	Machine Shops		
	Manufacturing	Light Duty	
		Heavy Duty	
	Meat, Fish, Poultry Processing		
	Mechanical Equipment F	Rooms	
	Munitions Facilities		
	Parking Garages	Interior Decks	
		Exterior Decks	
$\Leftrightarrow$	Pharmaceutical Plants		
	Pulp and Paper Processing Facilities		
☆ Schools			
	Shopping Malls		
Û	Showers		
	Utilities		
⇔	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	70-75 Shore D
Bond Strength to Concrete	
ACI COMM #403, Bulletin 59-43	300 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 (with non-skid aggregate)
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	10,000 psi
Tensile Strength	
ASTM C-307	2,400 psi
Thermal Coefficient of Expansion	
ASTM C-531	22 x 10 <sup>-6</sup>

### 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 CHIP-100 FLOORING** involves several steps including priming, applying base coats, broadcasting decorative color chips, and sealing. For specific installation guidelines consult **Key Resin Company's Installation Instruction Manual**.

### MAINTENANCE

After completing the application of **KEY CHIP-100 FLOORING**, 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 CHIP-100 FLOORING** is 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 ASTM D-695	13,000 psi
Ultimate Tensile Strength ASTM D-638	4,200 psi
Tensile Elongation ASTM D-638	6-8%
Flexural Strength ASTM D-790	7,800 psi
Flexural Modulus ASTM D-790	2.5 x 10⁵
Hardness ASTM D-2240	65-85 Shore D

#### COMPOSITION

**KEY CHIP-100 FLOORING** is composed of pigmented, 100% solids base coats with a variety of graded colored broadcast chips 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 CHIP-100 FLOORING** is 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.



KEY RESIN COMPANY

4061 Clough Woods Drive Batavia, Ohio 45103, 888.943.4532



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