



KEY IWS SYSTEM

Industrial Wear Surface

DESCRIPTION

KEY IWS (Industrial Wear Surface) SYSTEM is a high build coating system 18-20 mils thick designed to protect floors from various degrees of chemical attack and abrasion. **KEY IWS SYSTEM** is typically comprised of a 100% solids pigmented epoxy primer, pigmented epoxy top coat, and optional polyurethane or polyaspartic sealer, depending on desired performance properties. Review the requirements of your facility with the product component data sheets to select the finish that best meets the needs of the application. **KEY IWS SYSTEM** can be incorporated into seamless floor cove base systems.

KEY ADVANTAGES

- Improves Wear, Abrasion, & Chemical Resistance of Concrete Floors
- Stain Resistant
- Seamless Surface Inhibits Bacteria Growth
- Skid Resistant Finishes Available
- High Gloss Finish Brightens Environment
- Low Odor Formulations Available

KEY CONSIDERATIONS

- Substrate temperature must be a minimum of 50°F, optimum temperature 70°-75°F.
- Substrate must be properly prepared and free of moisture transmission, paint, curing agents, waxes, and other foreign materials.
- Substrate irregularities will transmit through the coating system.

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 Technical Bulletin #1**. Work must be performed by trained or experienced contractors or maintenance personnel. Contact **Key Resin Technical Service** to answer any questions.

INSTALLATION

KEY IWS SYSTEM is installed as a multiple step coating system. For complete mixing and application instructions, consult with **Key Resin Technical Service**.

CLEAN UP

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

COMPOSITION

KEY #502 100% solids epoxy primer, **KEY #520** 100% solids epoxy top coat. Other epoxy primers, top coats, and urethane or polyaspartic sealers are available depending on project requirements. Refer to the appropriate product data sheets for additional information.

TECHNICAL DATA

Coating System and Resin Performance Properties

Flammability	ASTM D-635	Self-Extinguishing over Concrete
Gloss		Full Gloss
Fungus, Mildew & Bacteria Growth	MIL-F-52505 §4.4.2.11	Will not support growth of fungus or bacteria when subjected to mildew and bacteria tests.
Hardness	ASTM D-2240	75-85 Shore D, varies by top coat used
Abrasion Resistance	ASTM C-501	65 mg (Key 520)
Coefficient of Friction	ASTM C-1028(M)	>0.6 (Key 520)
Water Absorption	ASTM D-570	Nil
Bond Strength to Concrete	ACI COMM #503, ASTM D7234	300-400+ psi (concrete failure)
VOC, Volume Solids		Key 502: 0 g/L, 100% Solids Key 520: 0 g/L, 100% Solids
System Thickness		Varies by Project Requirements. Typical thickness 18-20 mils.
Service Temperature, Dry Heat Resistance		140°F continuous (Key 520)
Chemical Resistance		Refer to Key Resin Chemical Resistance Guide
Tensile Strength	ASTM D-638	6500 psi (neat resin)
Compressive Strength	ASTM D-695	10,000 psi (neat resin)
Percent Elongation	ASTM D-638	4.0%
Thermal Shock Resistance	ASTM C-884	Passes at 140°F
Impact Resistance	MIL-D-3134F §.4.7.3	Withstands 16ft/lbs no cracking, delamination or chipping.
Light Exposure (light foot traffic)		24 hours at 75°F (Key 520)
Heavy Exposure (wheeled traffic)		72 hours at 75°F (Key 520)
Full Cure & Maximum Resistance		5 days at 75°F (Key 520)

TECHNICAL SERVICE

Key Resin Company provides 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** are available to assist you. Telephone 888.943.4532 or visit www.keyresin.com.

AVAILABILITY

Key Resin Systems are available throughout the United States, Canada, Mexico and a number of other countries. Contact the **Key Representative** in your area. Telephone 888.943.4532 or visit www.keyresin.com.

MAINTENANCE

After completing the application of **KEY IWS SYSTEM**, the installer should provide the owner with maintenance/cleaning instructions. **KEY IWS SYSTEM** is easily cleaned with neutral soaps or detergents.

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.