



KEY #580 FLEXIBLE MEMBRANE

DESCRIPTION

KEY #580 is an ultra-high solids, flexible urethane-modified epoxy used as a crack isolation membrane for interior use under various **Key Resin Flooring Systems** or as a component of various **Key Lastic Systems**. **KEY #580** resists cracking caused by horizontal substrate movement, providing a crack-resistant, resilient, sound absorbent, waterproof, durable floor. When used in conjunction with most **Key Resin Flooring Systems**, **KEY #580** offers stress-relieving properties for floor slabs that show movement or vibration. **KEY #580** is also used to treat the surface of individual cracks and properly filled and covered contraction joints (sawcuts). **KEY #580** is available in a wall grade formulation.

KEY ADVANTAGES

- Crack Resistant – Flexibility Allows Horizontal Substrate Movement, Aids in Suppression of Reflective Cracking From Substrate
- Advanced Technology Maintains Flexibility in Cold Temperatures
- Increased Tensile and Bonding Strength Versus Epoxy-Only Membranes
- Higher Compressive Modulus Provides Greater Support for Heavy Point Loads Versus Softer Membranes
- Optional Scrim Cloth Reinforcement
- VOC <25 g/L, Meets USGBC LEED Criteria and All VOC Regulations Including Los Angeles SCAQMD
- Low Odor for Use in Occupied Areas
- Ultimate Elongation of 140-150%
- Reduces Noise Created by Mechanical Vibrations
- Meets USDA Requirements

KEY CONSIDERATIONS

- Slabs on grade must have an efficient moisture vapor retarder.
- Excessive moisture in concrete requires moisture mitigation system.
- Substrate temperature must be a minimum of 50°F.
- Substrate must be free of dirt, waxes, curing agents, and other foreign materials.
- Do not apply to wet or damp surfaces.
- Do not use for filling isolation/expansion joints.

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. The **Key Resin Technical Service** department is available to answer any questions.

MIXING & INSTALLATION

Mix one (1) part of **Part A** by volume with one (1) part of **Part B** by volume with a slow speed drill until liquids are completely blended. Pour mixed **KEY #580** onto working area and spread with notched squeegee or trowel at a rate of 40 to 50 ft² per gallon to achieve 32-40 mils. For complete installation instructions, contact your **Key Resin Representative** or **Key Resin Technical Service**.

CLEAN UP

Clean skin with soap and water. Tools and equipment should be cleaned with xylene or lacquer thinner. Consult Material Safety Data for safety and health precautions.

COMPOSITION

Ultra-high solids flexible urethane-modified epoxy resin and amines.

COLOR SELECTION

KEY #580 is available in White. Custom colors may be available with lab approval and additional lead time.

COVERAGE

KEY #580 will yield approximately 32-40 mils when spread at 40-50 ft² per gallon. **KEY #580 Wall Grade** will yield approximately 8-10 mils per coat when spread at 160-200 ft² per gallon.

PERFORMANCE PROPERTIES

Tensile Strength	ASTM D412	1650 psi
Ultimate Elongation	ASTM D412	140-150%
Adhesion (unprimed)	ACI 503R, ASTM D7234	300+% Concrete Failure, varies by concrete strength
Viscosity (mixed)		4800 cps
VOC Content	ASTM D2369 (EPA Method 24)	<25 g/L
Hardness Shore A	ASTM D2240	70-80
Hardness Shore D	ASTM D2240	60-65
Impact Resistance	ASTM D2794	16 ft. lbs.
Thermal Cycling	ASTM C884	No Cracking
Flammability	ASTM D635	Self-extinguishing

CURE/DRY TIME

Working Life (spread on substrate)	25-30 minutes
Cure Time, Tack Free	10-12 hours @ 75° F
Recoat Time	12-48 hours @ 75° F
Full Set Time	48-72 hours
Full Cure & Maximum Performance	5-10 days

AVAILABILITY

Key Resin materials are available throughout the United States, Canada, and a number of other countries. Contact the **Key Resin Representative** in your area for details.

MAINTENANCE

After completing the application of **KEY #580** and the flooring system, 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.

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.

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.