



# KEY #580 FLEXIBLE EPOXY

## DESCRIPTION

**KEY RESIN #580** is a 100% solids, flexible epoxy used as a crack isolation and waterproofing membrane for interior use under **KEY FLOORING SYSTEMS** or as a component of **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 FLOORING SYSTEMS**, **KEY #580** offers stress-relieving properties for floor slabs that show movement or vibration. **KEY #580** is also used to treat individual cracks and buried contraction joints (sawcuts).

## KEY ADVANTAGES

- Crack Resistant – Flexibility Allows Horizontal Substrate Movement up to 1/8"
- Optional Scrim Cloth Reinforcement
- Zero VOC, Meets USGBC LEED Criteria
- Low Odor for Use in Occupied Areas
- Ultimate Elongation of 145%-155%
- Reduces Noise Created by Mechanical Vibrations
- USDA Approved

## KEY CONSIDERATIONS

- Slabs on grade must have an efficient vapor/moisture barrier.
- 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 mix Key #580 Part B with Key #108 Part A to create joint filler resin.
- 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 COMPANY'S TECHNICAL BULLETIN #1**. Work must be performed by trained or experienced contractors or maintenance personnel. The **KEY RESIN COMPANY Technical Service** department is pleased 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 ft<sup>2</sup> per gallon to achieve 32-40 mils. For complete installation instructions, contact your **Key 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

100% Solids flexible epoxy resin and amines.

## COLOR SELECTION

**KEY #580** is available in Gray. 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 ft<sup>2</sup> per gallon.

## PERFORMANCE PROPERTIES

<b>Tensile Strength</b>	ASTM D-412	1200-1300 psi
<b>Ultimate Elongation</b>	ASTM D-412	145-155%
<b>Adhesion (unprimed)</b>	ACI 503R	>300% Concrete Failure
<b>Adhesion (unprimed)</b>	ASTM D-904	30 pli
<b>Hardness Shore A</b>	ASTM D-2240	70-80
<b>Hardness Shore D</b>	ASTM D-2240	25-35
<b>Impact Resistance</b>	ASTM D-2794	16 ft. lbs.
<b>Thermal Cycling</b>	ASTM C-884	No Cracking
<b>Flammability</b>	ASTM D-635	Self-extinguishing

## CURE/DRY TIME

<b>Working Life (spread on substrate)</b>	40 minutes
<b>Cure Time, Tack Free</b>	16-18 hours @ 75° F
<b>Recoat Time</b>	16-48 hours @ 75° F
<b>Full Set Time</b>	48-72 hours
<b>Full Cure &amp; Maximum Performance</b>	5-10 days

## AVAILABILITY

**Key Resins** are available throughout the United States, Canada, and a number of other countries. Contact the **Key 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** 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 Resin Sales/Technical Representatives** are available to assist you. Telephone (888)943-4532 or visit [www.keyresin.com](http://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.**