

# KEY #780 JOINT FILLER/MEMBRANE

Product Data Sheet



## DESCRIPTION

**KEY #780 JOINT FILLER/MEMBRANE** is a 100% solids flexible epoxy used as a joint filler to protect contraction joints (saw cuts) in concrete slabs or as a crack isolation membrane for interior use under various **Key Resin Flooring Systems**. **KEY #780** absorbs the impact and shock of heavy loads and steel wheeled traffic, preventing erosion of control joint edges. **KEY #780** resists cracking caused by horizontal movement or vibration and is used to treat the surface of individual cracks and properly filled and covered contraction joints (saw cuts). **KEY #780** is available in Regular Cure (RC), Fast Cure (FC), and Super Fast Cure (SFC) formulations.

## KEY ADVANTAGES

- Crack resistant—flexibility allows horizontal substrate movement, aids in suppression of reflective cracking from substrate
- Optional scrim reinforcement for crack isolation use
- Ultimate elongation 130-150%
- Low odor for use in occupied areas
- Meets USGBC LEED criteria for IEQ 4.2 for low VOC
- Protects edges of exposed contraction joints (saw cuts)
- USDA approved

## KEY CONSIDERATIONS

- Slab on grade must have an efficient vapor/moisture retarder
- Excessive moisture in concrete requires moisture mitigation system
- Substrate must be properly prepared and free of dirt, waxes, curing agents and other foreign materials
- Substrate temperature must be a minimum of 50°F
- Do not apply to wet or damp surfaces
- When not applying over moisture mitigation system, apply over recommended primer

## COLOR SELECTION

Gray. Custom colors available subject to lab approval, additional lead time and cost.

## COMPOSITION

100% solids flexible epoxy resin with aliphatic amines.

## CURE/DRY TIME

Working Life	RC	40-45 minutes @ 75°F
	FC	20-25 minutes @ 75°F
	SFC	15-20 minutes @ 75°F
Dry to Touch	RC	8 hours @ 75°F
	FC	3 hours @ 75°F
	SFC	2.5 hours @ 75°F
Recoat	RC	8-10 hours @ 75°F
	FC	3-4 hours @ 75°F
	SFC	2-3 hours @ 75°F
Sanding Time, Wheeled Traffic	RC	24-48 hours @ 75°F
	FC	12-24 hours @ 75°F
	SFC	10-20 hours @ 75°F
Full Cure & Maximum Resistance		7 days

## 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 and INSTALLATION

**KEY #780** is mixed by combining equal parts by volume of Part A and Part B. Pre-mix each component prior to combining. Mix combination with a medium speed drill and jiffy mixer for a minimum of three minutes.

**KEY #780** can be poured from a suitable container or applied with a caulking gun. Two passes may be required as pourable materials have a tendency to “dish out”. The filled joint **MUST** be flush with the floor. For crack isolation membrane installation instructions, contact **Key Resin Technical Service**.

## JOINT FILLER COVERAGE

Linear Feet / Gallon

Width→							
Depth↓	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	1"
1/4"	616.0	308.0	205.3	154.0	123.2	102.7	77.0
1/2"	308.0	154.0	102.7	77.0	61.6	51.3	38.5
3/4"	205.3	102.7	68.4	51.3	41.1	34.2	25.7
1"	154.0	77.0	51.3	38.5	30.8	25.8	19.3
1 1/4"	123.2	61.6	41.1	30.8	24.6	20.5	15.4
1 1/2"	102.7	51.3	34.2	25.7	20.5	17.1	12.8
1 3/4"	88.0	44.0	29.3	22.0	17.6	14.7	11.0
2"	77.0	38.5	25.7	19.3	15.4	12.8	9.6
1 1/2"	61.6	30.8	10.5	14.7	12.3	10.3	7.7
2 3/4"	51.3	25.7	17.6	12.8	10.3	8.6	6.4

## CLEAN UP

Clean skin with soap and water. Tools and equipment should be cleaned with xylene or lacquer thinner before **KEY #780** gels. Consult Safety Data Sheet (SDS) for safety and health precautions.

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## TECHNICAL DATA

Mixing Ratio	1 Part A to 1 Part B by Volume
Volatile Organic Content (VOC) (EPA Method 24)	<50 g/L, compliant to low VOC Rule 1113 in all 50 states
Solids Content	100% Solids by Volume
Weight	10.50 lbs/gal, mixed
Viscosity	2,200 cps

## PHYSICAL PROPERTIES

Artificial Weathering	ASTM G23-75 Type D	10-15% elastomer property change after 1,000 hrs
Bond Cohesion after Water Immersion	Fed Spec TT-S-00227E	No failure after 25% total movement
Bond Strength to Concrete	ASTM D7243	300-400+ psi Concrete failure, varies by concrete strength
Service Temperature		30-180°F
Tear Resistance	ASTM D624-73	30 lb/in
Tensile Strength	ASTM D412	600 psi
Ultimate Elongation <small>This property provided only for comparison with other joint fillers and membranes. Elongation does not directly correlate to lateral expansion capability.</small>	ASTM D412	130-150%
Hardness	ASTM D2240	RC: 80-85 Shore A 30-40 Shore D FC: 95-100 Shore A 45-55 Shore D SFC: 90-95 Shore A 40-50 Shore D

## MAINTENANCE

**KEY #780** is typically installed as a joint filler or membrane for **Key Resin Flooring Systems**. However, if needed **KEY #780** can be cleaned with neutral soaps and detergents.

## AVAILABILITY

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

## 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](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.

Rev 6/7/2021 v2.0

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