KEY #780-M EPOXY MEMBRANE

Product Data Sheet



DESCRIPTION

KEY #780-M EPOXY MEMBRANE is a 100% solids flexible epoxy used as a crack isolation membrane for interior use under various **Key Resin Flooring Systems**. **KEY #780-M** 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 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
- 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 propertly 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, White.

CURE/DRY TIME

Working Life	30 minutes @ 75°F
Dry to Touch	8 hours @ 75°F
Recoat	16 hours @ 75°F
Sanding Time	24-48 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-M 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.

Pour mixed **KEY #780-M** onto working area and spread with a notched squeegee or trowel. For crack isolation membrane installation instructions, contact **Key Resin Technical Service**.

CLEAN UP

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

COMPOSITION

100% solids flexible epoxy resin with aliphatic amines.

COVERAGE

KEY #780-M will yield approximately 40-50 ft² per gallon to achieve 32-40 mils.

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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 Bond Cohesion after Water Immersion Bond Strength to Concrete Service Temperature Tear Resistance ASTM D7243 ASTM D7243 Solution Solution ASTM D7243 Solution ASTM D7243 Concrete failure, varies by concrete strength Tear Resistance ASTM D624-73 ASTM D624-73 Old psi Ultimate Elongation This property provided only for comparison with other membranes. Elongation does not directly correlate to lateral expansion capability. Hardness ASTM D2240 B0-85 Shore A 30-40 Shore D			
Water Immersion TT-S-00227E total movement Bond Strength to Concrete Service Temperature Tear Resistance ASTM D7243 300-400+ psi Concrete failure, varies by concrete strength 30-180°F Tear Resistance ASTM D624-73 30 lb/in Tensile Strength ASTM D412 600 psi Ultimate Elongation This property provided only for comparison with other membranes. Elongation does not directly correlate to lateral expansion capability. Hardness ASTM D2240 80-85 Shore A	Artificial Weathering		property change
Concrete Concrete Service Temperature Service Temperature Tear Resistance ASTM D624-73 30 lb/in Tensile Strength ASTM D412 600 psi Ultimate Elongation This property provided only for comparison with other membranes. Elongation does not directly correlate to lateral expansion capability. Hardness ASTM D2240 80-85 Shore A		•	
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Tensile Strength ASTM D412 600 psi Ultimate Elongation This property provided only for comparison with other membranes. Elongation does not directly correlate to lateral expansion capability. Hardness ASTM D2240 80-85 Shore A	Service Temperature		30-180°F
Ultimate Elongation This property provided only for comparison with other membranes. Elongation does not directly correlate to lateral expansion capability. Hardness ASTM D412 130-150% 130-150% 80-85 Shore A	Tear Resistance	ASTM D624-73	30 lb/in
This property provided only for comparison with other membranes. Elongation does not directly correlate to lateral expansion capability. Hardness ASTM D2240 80-85 Shore A	Tensile Strength	ASTM D412	600 psi
7.0	This property provided only for comparison with other membranes. Elongation does not directly correlate to lateral	ASTM D412	130-150%
	Hardness	ASTM D2240	00 00 0

MAINTENANCE

KEY #780-M is installed as a membrane for **Key Resin Flooring Systems**. However, if needed **KEY #780-M** 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.

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 replacement and in lieu of replacement in 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 MERCHANT-ABILITY 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 v2.1