

# KEY #635-MVT MOISTURE VAPOR TREATMENT

## Product Information Sheet



## DESCRIPTION

**KEY #635-MVT** is a two component, modified epoxy system designed to seal concrete and reduce moisture vapor transmission prior to applying finished flooring. **KEY #635-MVT** has proven to reduce moisture vapor emissions and be resistant to damage from high alkalinity, it is an environmentally friendly material containing no hydrocarbons or other solvents making it zero (0) VOC. **KEY #635-MVT** meets USGBC LEED certification requirements.

## KEY ADVANTAGES

- Reduces moisture vapor emission rate through concrete
- Resistance up to 10 lbs MVER on the Calcium Chloride Test (ASTM F1869-11)
- Resistance up to 90% RH on the RH Probe Test (ASTM F2170-11)
- Provides excellent resistance to highly alkaline conditions
- Low odor for use in occupied areas
- Meets USGBC LEED criteria for low VOC
- High physical properties
- Can be rapidly surfaced with a variety of finished flooring materials

## KEY CONSIDERATIONS

- Substrate temperature must be a minimum of 55°F before, during and 72 hours after installation
- Must have effective vapor barrier directly under substrate
- For use only on properly prepared shot blasted surfaces with a minimum surface profile of CSP-3; substrate must be free of dirt, waxes, curing agents, densifiers, hardeners, fiber reinforcement, ASR byproducts, and other foreign materials
- Prepared substrate must pass water absorption test, contact Key Resin for details
- Do not use on lightweight concrete slabs unless approved by Key Resin Technical Service
- Does not function as a crack reflective membrane
- Does not prevent damage or disbondment caused by ASR (Alkali Silica Reaction), high levels of unreacted silicates (metasilicates), metallic shake-on hardener treated concrete, or hydrocarbon contamination

## TYPICAL USES

**KEY #635-MVT** is designed as a negative side moisture vapor retarder to reduce moisture vapor transmission through concrete as required by moisture vapor sensitive floor coverings. **KEY #635-MVT** can also be an effective primer for fast recoat under **KEY RESIN FLOORING SYSTEMS**.

## COMPOSITION

**KEY #635-MVT** is a highly cross-linked, alkaline resistant epoxy composition.

## CURE/DRY TIME

Pot Life	25-35 minutes @ 75°F
Recoat (1 coat only)	4-6 hrs @ 75°F Minimum 24 hrs @ 75°F Maximum

## APPLICATION

### SURFACE PREPARATION

Surface Preparation is the most critical portion to 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.

### INSTALLATION

**KEY #635-MVT** requires mechanical mixing and spreading with a squeegee and short/medium nap roller. For complete 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. Consult Safety Data Sheet (SDS) for safety and health precautions.

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### TECHNICAL DATA

Mixing Ratio	2 Parts A to 1 Part B by Volume
Solids Content	100% Solids
Volatile Organic Content (VOC) (EPA Method 24)	0 g/L, compliant to low VOC Rule 1113 in all 50 states

### 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.

### 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).

### PHYSICAL PROPERTIES

Flammability	ASTM D635	Self-Extinguishing
Fungus and 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, Shore D	ASTM D2240	85
Adhesion to Concrete	ASTM D7294	300-400+ psi (Concrete Failure, varies by concrete strength)
Modulus of Elasticity	ASTM D638	2,500 psi
Permeability	ASTM E96	1 coat @ 10-12 mils WFT - 0.09 Perms 2 coats @ 20 mils Total WFT - 0.04 Perms
Water Absorption	ASTM D570	Nil
Water Vapor Transmission Grams / hrs / sq. meter	ASTM E96	1 coat - 0.023 2 coats - 0.012
Tensile Strength	ASTM D638	10,400 psi
Tensile Elongation	ASTM D638	2 - 4%
Alkaline Resistance	ASTM D1308	10% Sodium Hydroxide - unaffected 50% Sodium Hydroxide - unaffected 7 day and 14 day immersion

### 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.