



Installation Instructions

Key Lastic ME

I. GENERAL INFORMATION

KEY LASTIC ME is a fluid applied, 100-125 mil resilient flooring system for concrete floors in mechanical equipment rooms, mezzanines and other applications requiring a waterproofing membrane or crack isolation membrane. The resiliency of **KEY LASTIC ME** provides sound-deadening qualities and cushioning under-foot. **KEY LASTIC ME's** elastomeric properties will allow for horizontal movement of up to $\frac{1}{8}$ of an inch without fracturing the waterproofing membrane.

II. 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**. If moisture testing confirms excessive levels of moisture, apply moisture control system Key Epocon SL. Specific attention should be paid to the following:

- A. Concrete Placement--An efficient vapor barrier should be under slabs on or below grade to prevent moisture migration.
- B. Curing and Finishing Techniques of the Concrete Substrate
- C. Age of Concrete
- D. Previous Contamination of the Substrate
- E. Present Condition of the Substrate
- F. Moisture Content or Moisture Vapor Emissions of the Concrete

Also, the temperature and humidity conditions of the area to receive the flooring system should be checked. An optimum room temperature of 75°F with a minimum slab temperature of 60°F is required for proper cure of the resin flooring system.

III. MATERIAL QUANTITIES

A. Guideline System Requirements for 1000 ft²

<i>Key Lastic ME</i>	<i>Qty./ 1000 ft²</i>
1. Key #502 Primer/Low Modulus Binder	4 gallons
2. Key #580 Flexible Epoxy	20 gallons
3. Key #580 Flexible Epoxy	14-20 gallons
4. Key Filler/Broadcast Sand (30 mesh sand)	450-750 pounds
5. Key #520 100% Solids Epoxy Coating	10-12 gallons
6. Key #520 100% Solids Epoxy Coating (step #6 is optional depending on specified finish texture)	6-10 gallons

IV. INSTALLATION

A. Priming

Key Resin Company recommends that every flooring system be installed with a primer to insure maximum adhesion to the prepared substrate. Priming will also help to seal air in the concrete and prevent outgassing and air bubbling in the finished system. Use **Key Epocon SL** if moisture vapor emission rate or moisture content exceeds recommended maximums.

1. Mixing **Key #502 Primer/Low Modulus Binder**
 - a. Stir each component prior to mixing.
 - b. Mix two (2) parts by volume of Part A (Base) with one (1) part by volume of Part B (Hardener) for three minutes with a low speed electric drill mixing paddle.
 - c. If thinning is desired, add no more than one pint of xylene per gallon of epoxy at time of mixing.
 - d. ***Do not mix more material than can be immediately poured out in ribbons and spread/backrolled within 40 minutes. Do not leave mixed material in the pail for longer than 5-10 minutes or working time will be significantly reduced!***
2. Application
 - a. Pour primer onto the prepared concrete.
 - b. Spread with either a flat trowel or squeegee to a coverage of to 250 ft² per gallon.
 - c. Back roll with a short nap roller.
3. Allow Primer to sit for 8 to 12 hours. If primer is to be allowed to sit overnight or prolonged periods, broadcast lightly with dry silica sand.

B. Flexible Epoxy Waterproof Membrane Basecoat

1. Mixing **Key #580 Flexible Epoxy**
 - a. Stir each component prior to mixing.
 - b. Mix one (1) part by volume of Part A (Base) with one (1) part by volume of Part B (Hardener) for three minutes with a low speed electric drill mixing paddle.
2. Application
 - a. Place mixture on primed surface and spread at a rate of approximately 50 ft² per gallon.
 - b. Gently back roll using short nap roller.
 - c. Allow to cure overnight. May require minimum of 16-18 hours cure at 75 F degrees.

C. Broadcast Into Flexible Epoxy Membrane

1. Mixing **Key #580 Flexible Epoxy**
 - a. Stir each component prior to mixing.
 - b. Mix one (1) part by volume of Part A (Base) with one (1) part by volume of Part B (Hardener) for three minutes with a low speed electric drill mixing paddle.
2. Application
 - a. Place mixture on previous application of Key #580 and spread at a rate of approximately 50-75 ft² per gallon.
 - b. Gently back roll using short nap roller.

Termination points at the end of the day should be made at doorways, expansion joints, etc. If it is not possible to terminate at these points, 2" masking tape should be placed in a straight line at the ending point. Carefully trowel the material up to and slightly over the inside edge of the tape. Allow material to cure for about thirty (30) minutes and remove the tape.

- c. Broadcast 30-mesh silica sand into the wet floor system until the surface of the system appears dry. Be careful not to clump the material or produce high spots. Approximately 40 to 75 pounds of sand will be needed for 100 ft² of flooring. If terminating the system with tape as described in note above, broadcast sand up to the tape and remove after material cures thirty (30) minutes. **Remember to only walk on the wet surface while wearing "spiked" shoes!!! Do not walk on floor after broadcasting.**
3. Allow the floor to cure overnight. May require minimum of 16-18 hours cure at 75 F degrees. Sweep excess sand with a stiff bristled broom or power vacuum. A light sanding or rubbing with a stone will aid in achieving a uniform "sanded" surface.

D. Sealing

The number of seal coats applied affects the finished texture of Key Lastic ME. A smoother, less textured surface can be achieved by repeated seal coat applications as outlined below.

1. **Key #520 100% Solids Epoxy Coating**
 - a. Mixing
 - i. Thoroughly mix each component prior to combining.
 - ii. Mix two (2) parts by volume of Part A (Resin) with one (1) part by volume of Part B (Hardener) for three minutes with a low speed electric drill mixing paddle.
 - iii. **Do not mix more material than can be immediately poured out and spread/backrolled in 30-35 minutes. Do not leave mixed material in the pail for longer than 5-10 minutes or working time will be significantly reduced!**
 - b. Application
 - i. Pour material onto floor in a line and spread with a trowel or flat squeegee to a coverage of 80-100 ft²/gallon, depending on desired texture.
 - ii. Back roll with a short nap roller to even the surface texture of the coating.
 - iii. Allow material to cure a minimum of 12 hours at 75 F degrees before applying a second coat (if required to match specified finish texture).
 - iv. Do not open to light foot traffic for 24 hours at 75 F degrees. Full chemical cure and maximum resistance are achieved in five (5) days.