

Installation Instructions

Key Lastic SWS Pedestrian Decking

I. GENERAL INFORMATION

Key Lastic SWS Pedestrian Decking is a fluid applied, seamless waterproofing system for concrete floors, decks, overhead walkways, and other exterior surfaces that must remain watertight to moisture intrusion and protect occupied areas beneath. The surface characteristics of **KEY LASTIC SWS Pedestrian Decking** can be varied to accommodate the degree of skid resistance, appearance, and chemical resistance.

II. SURFACE PREPARATION

Surface Preparation is the most critical portion of any successful resinous flooring system application. All substrates must be properly prepared to a minimum surface profile of CSP-3 as outlined in **KEY RESIN COMPANY'S TECHNICAL BULLETIN #1.** Specific attention should be paid to the following:

- A. Curing and Finishing Techniques of the Concrete Substrate
- B. Age of Concrete
- C. Previous Contamination of the Substrate
- D. Present Condition of the Substrate

Also, the temperature and humidity conditions of the area to receive the flooring system should be checked. An optimum air temperature of 75°F with a minimum slab temperature of 50°F is required for proper cure of the resin flooring system.

III. MATERIAL QUANTITIES

A. Guideline System Requirements for 1000 ft²

	Key Lastic SWS — 50-60 Mil Decking System	Qty./ 1000 ft ²	Coverage
1.	Key #502 Primer/Low Modulus Binder	4 gallons	250 ft²/gallon
2.	Key #400 Urethane Elastomer	20 gallons	50 ft2/gallon
3.	Key #400 Urethane Elastomer	10 gallons	100 ft²/gallon
4.	Key Filler/Broadcast Sand (30 mesh sand)	450 pounds	
5.	Key #401 Aliphatic Urethane Topcoat	10-12 gallons	80-100 ft²/gallon
6.4	Key #401 Aliphatic Urethane Topcoat (optional)	6-10 gallons 1	00-160 ft²/gallon

Note: For ramps and other areas subject to severe abrasion and wear, consider installing a double broadcast and/or substituting aluminum oxide aggregate for silica sand.

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 reduce outgassing and air bubbling in the finished system.

1. Mixing Key #502 Primer/Low Modulus Binder

- a. Thoroughly mix each component prior to combining.
- b. 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.
- 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 250 ft² per gallon.
- c. Back roll with a short nap roller. Do not allow the primer to puddle. Primer need only wet the concrete surface.
- 3. Allow primer to cure 10-12 hours (at 75 degrees F) prior to topcoating. A fast cure formulation is available to reduce re-coat window to 4-8 hours. If primer is to be allowed to sit for longer than 24 hours, broadcast lightly with dry silica sand.

B. Urethane Elastomer Crack Bridging Membrane

1. Key #400 Urethane Elastomer

- a. Mix 6.6 parts by volume of Part A with one (1) part by volume of Part B using a low speed drill for 3-5 minutes. It is recommended to mix full units due to unusual mix ratio.
- b. Mix only that amount of material that can be used in 30 minutes.
 If desired, a small amount of xylene may be added to thin the material to increase fluidity.

2. Application

- a. Spread **Key #400** at a rate of approximately 50 ft² per gallon.
- b. Gently back roll using a short nap roller.
- c. Allow to cure a minimum of 8-12 hours before applying next coat. If **Key #400** sits longer than 24-48 hours before applying topping system, solvent wiping or priming the membrane before application of the topping system may be necessary.

C. Urethane Elastomer Broadcast Coat

1. Key #400 Urethane Elastomer

- a. Mix 6.6 parts by volume of Part A with one(1) part by volume of Part B using a low speed drill for 3-5 minutes. It is recommended to mix full units due to unusual mix ratio.
- b. Mix only that amount of material that can be used in 30 minutes.
- If desired, a small amount of xylene may be added to thin the material to increase fluidity.

2. Application

- a. Spread **Key #400** at a rate of approximately 100 ft² per gallon.
- b. Gently back roll using a short nap roller.
- c. Allow the material to level for approximately 10 minutes.

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.

d. Broadcast 30-mesh silica sand or 24 mesh aluminum oxide 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 4 to 5 pounds of sand will be needed for 10 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 material to cure overnight. 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 with Aliphatic Topcoat

Important: Monitor weather conditions and humidity/dewpoint, it is critical that Key #401 be applied to a dry substrate and not be rained on for a minimum of 24 hours after application, at 75 degrees F. Adjust this time accordingly for cooler or warmer temperatures.

The sealing of a floor should be performed over the entire area receiving the system. The applicator should complete the entire broadcast portion of the application prior to sealing.

 Stir each container of Key #401 Aliphatic Topcoat before use to insure uniformity.

2. Application

- a. Pour material onto floor in a line and spread with a roller or flat squeegee to a coverage of 80-100 ft²/gallon depending on desired finish texture. A second topcoat is optional depending on desired finish texture.
- b. Back roll with a short nap roller to even the surface texture of the coating.
- Do not open to light foot traffic for 24 hours, vehicle traffic for 72 hours at 75 degrees F. Full chemical cure and maximum resistance are achieved in five (5) days.