



# E-FLEX

## PRODUCT DESCRIPTION

**SIMIRON E-FLEX** is a 100% solids, two-component flexible epoxy. The product was designed for wood applications, but it can also be used to add a flexible layer over primed concrete.

## FEATURES & BENEFITS

- Adds flexibility to rigid systems
- Excellent Adhesion to Wood
- High Elongation / Hardness
- Low VOC / Odor
- Low Viscosity

## RECOMMENDED USES

- Use over wood
- Apply over concrete primed with a Simiron epoxy.

## PRODUCT INFORMATION

PRODUCT NAME	SIZE	COLOR/FINISH	ITEM NUMBER
E-Flex	2-Gallon Kit	Clear	40011154

*2 gallons of E-FLEX clear can be pigmented with 1 pint Simiron U-Tint in colors including: Haze Gray, Light Gray, Deck Gray, Sandstone, White, Black, & Tile Red.*

## TECHNICAL DATA

PHYSICAL DATA	
Components	2 (Base & Activator)
Color	Clear
Finish	Gloss
Mix Ratio (by volume)	1 Base: 1 Activator
Curing Mechanism	Chemical reaction between components
Solids by Volume	100%
Solids by Weight	100%
Mixed Viscosity	1500 cP
VOC (EPA Method 24)	0 g/L
Work Time	20 – 25 minutes (@73°F, 45% RH) *

*\*Higher temperatures will shorten pot-life and working time.*

THEORETICAL COVERAGE		
Wet Mil (microns)	20 (508) – min.	30 (762) – max.
Coverage sq. ft./gal. (m <sup>2</sup> /L)	53 (13) – min.	80 (20) – max.

CURE TIMES	
Drying Schedule	72°F (25°C) 50% RH
Tack Free	4 hours
Light Foot Traffic	10 hours
Full Cure	5 days
Minimum Recoat	10 hours
Maximum Recoat	24 hours **

*\*\*Apply basecoat within 24 hours of the coat of E-FLEX. If the re-coat window is missed, the coating system will need to be sanded.*

## PHYSICAL PERFORMANCE PROPERTIES

PHYSICAL PROPERTIES	TEST METHOD	RESULTS
Elongation	ASTM D412	60%
Flammability	—	Self-extinguishing over concrete
Gloss @ 60° Angle	ASTM D523	> 90
Hardness, Shore D (24 hours)	ASTM D2240	65
Tensile Strength	ASTM D412	2,200 psi

## SURFACE PREPARATION

Wood and primed/coated concrete surfaces must be sound, clean, dry and free of contaminants such as dirt, dust, grease, oil, silicones and other contaminants that may negatively affect adhesion.

### **MOISTURE VAPOR BARRIER:**

A suitable moisture barrier must be in place for concrete slabs on-grade. If a moisture barrier is not in place, seasonal variations in ground moisture can cause excessive moisture vapor transmission (MVT) regardless of results measured prior to coating application. 16 mils MVB is resistant to MVT up to 20 lbs. per 1000 sq. ft. in 24 hours per ASTM F1869 or 95% RH per ASTM F2170.

### **PREVIOUSLY COATED SURFACES:**

Clean surface to prevent any contaminants from being spread/redistributed to a greater area being prepared. Thoroughly sand the surface until it is deglossed.

## TEMPERATURE

Air	60° – 85°F	16° – 29°C
Surface	60° – 85°F	16° – 29°C
Material	60° – 85°F	16° – 29°C

Higher temperatures will shorten pot-life and working time. Floor temperature must be at least 5 degrees over the current dew point.

## SAFETY AND TECHNICAL

Refer to the SDS sheet before use. Safety precautions must be strictly followed during storage, handling, and use. Personal Protective Equipment (PPE) should be worn at all times. PPE will include (but is not limited to): Safety glasses with side shields and high-quality nitrile gloves. To acquire additional information or technical and safety data, please visit: [www.simiron.com](http://www.simiron.com).

## APPLICATION EQUIPMENT

Assemble all equipment. Equipment will include (but is not limited to):

- Drill and Jiffy® type mixing blade
- Spiked Shoes
- Notched EPDM squeegee
- 3/8" shed-resistant woven roller covers with phenolic core.
- Edge rollers, chip brushes
- Painter's tape, duct tape, measuring and mixing containers



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## APPLICATION PROCEDURE

**E-FLEX** mix ratio is 1 Part Base to 1 Part Activator by volume.

1. Pre-mix Base at low speed for 1 minute. If pigmenting, add **U-Tint** into the Base. Add Part B and mix for three minutes until uniform. Do not mix more material than can be applied in 20 minutes (material will stiffen or tackup.)
2. Immediately pour all mixed epoxy on the floor in a long bead approximately 8 – 12 inches wide. Do not scrape sides or leave pail overturned to drain. Do not attempt to roll material out of a bucket or roller pan.
3. Wearing spiked shoes, spread evenly at 20 - 30 mils by pushing a notched squeegee along the bead. Overlap previous passes in order to ensure consistent coverage.
4. Push the squeegee with a slight angle to plow extra material to the side, moving it down the floor.
5. Using a non-shed 3/8" roller, back-roll the epoxy evenly across the squeegee passes to minimize application lines and leave a consistent film thickness. Do not back-roll material after it begins to get sticky. The epoxy will not level and colored epoxy may turn a different shade.

## CLEAN UP & DISPOSAL

Clean up mixing and application equipment immediately after use. Use toluene, acetone or xylene; do not use alcohol. Follow solvent manufacturer's safety instructions. Be sure to follow all local, state and federal regulations when disposing of materials.

## MAINTENANCE

To maintain the appearance and extend the life of the newly sealed surface, it is imperative to have a routine maintenance program. Dirt and debris that is tracked over a finished floor will quickly scratch and dull the surface. Place walk-off mats at entrances. Sweep and mop/scrub floors regularly using soft bristles/pads and a mild cleaner. Some cleaning products and equipment or improper use of these can damage a surface. Remove spills quickly to minimize damage and/or stains. For systems that support parked vehicles or other heavy items on rubber wheels, place a small piece of nonporous material, such as sheet metal or plexiglass between the tires and floor to prevent tire marks. Reapplication may be necessary in heavy traffic areas.

## LIMITATIONS

- ⚠ **E-FLEX** is not designed to be used as a stand-alone product. **E-FLEX** must be over-coated with a more durable Simiron coating system.
- ⚠ Do not use **E-FLEX** as a joint filler alternate.
- ⚠ Concrete must have a minimum compressive strength of 3,500 psi and a tensile strength of 300 psi.
- ⚠ Do not apply at a temperature or thickness not recommended.
- ⚠ Do not delay in pouring mixed material onto the floor.
- ⚠ Do not apply over loose or unsound concrete, asphalt or bitumen substrates, glazed tile or nonporous brick and tile, magnesite, copper, metal, polyesters, or elastomeric membranes.

## SHELF LIFE AND STORAGE

24 months from date of manufacture when stored indoors in the original unopened container at 60°F – 85°F (16°C – 29°C) in a dry location with humidity below 65%.

- ⚠ Do not allow materials to freeze.

## TECHNICAL ASSISTANCE

Information is available by calling SIMIRON  
Toll Free: 1.866.515.8775 / +1.248.686.3600

## LIMITED WARRANTY

SIMIRON warrants this product to be free from defect in the material that affects its performance for a period of one year (from date of purchase). To obtain MVB warranty related to function on applied material, MVT data must have been collected prior to coating in accordance with ASTM F1869 or ASTM F2170. In addition the current state of MVT after failure must also be determined using the same ASTM test. Surface preparation, patching, and joint filling procedures noted in the MVB PDS must be followed; 16 total mils of MVB must be applied. SIMIRON will replace at no charge the quantity of the Coating that SIMIRON determines has failed to perform, as the sole and exclusive remedy for any breach of this warranty and/or any other defect or failure of the coating. Proof of purchase is required. Cost of labor for application of any product specifically is excluded. Warranty is void if Simiron products are mixed with or used in conjunction with materials that are substituted for Simiron products. Warranty is nontransferable.



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PRODUCT DATA SHEET: 11/15/2024

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