

SwiftSeal P 100 | Two Component Epoxy Primer

(Formerly known as SwiftSeal Prime EP11)

Product Description

SwiftSeal P 100 is a two-component, solvent-free epoxy primer designed to improve adhesion of resin overlays and coatings to concrete and cementitious substrates. This 100% solids, low-viscosity formulation ensures easy, uniform application. It penetrates the concrete to enhance bond strength and reduce pinholes, resulting in a smooth, durable finish.

Features

- Solvent-free
- Low viscosity
- Impact resistant
- 100% solids
- Excellent bond strength
- Moisture-tolerant
- Can be used to create an epoxy putty

Application Method

These application instructions are to be used as a guide. Adjustments to the application instructions may be required based on specific site conditions. A test patch should be used to confirm the product performance and application techniques for each project.

Substrate Conditions

New Concrete: New concrete must be cured for a minimum of 7 to 10 days before applying the primer, provided the substrate's bond strength exceeds 1.5 MPa (218 psi). The substrate and ambient temperature should be above 10°C to ensure proper adhesion and curing. The substrate temperature must be at least 3°C above the dew point prior to membrane application. The surface must be clean, free of dirt and contamination. Any laitance or efflorescence must be thoroughly removed. The substrate moisture shall be less than 5%.

Old Concrete: Remove all existing coatings down to bare concrete. Eliminate spalling, chipping, or any unsound areas, and repair these sections prior to applying the epoxy primer. Fill large holes and cracks with suitable, compatible repair material to ensure a solid, even surface.

Mixing

The epoxy primer is a two-component system mixed at a volume ratio of 1:1 (Part A to Part B).

- Use an electric drill with a spiral (Jiffy) mixing paddle at a slow speed of 300 - 400 RPM for thorough mixing.
- Mix continuously for a minimum of 3 minutes, ensuring the components are fully blended.
- Frequently scrape down the sides of the container during mixing to achieve a uniform mixture.

Technical Data

Attribute	Test	Results
Hardness, Shore	ASTM D2240	80D
Elongation	ASTM D638	4.5%
Water Absorption	ASTM D570	0.2%
Adhesion To Concrete	ASTM D4541	> 1.5 MPa (> 217 psi)
Appearance	Clear liquid	
Mix Ratio	1:1 by volume	
Pot Life	40 minutes @ 21°C (70°F) 15 minutes @ 32°C (90°F)	
Re-Coat Window @ 21°C (70°F)	Min. 12 hours Max. 72 hours	

* Note: This data is based on laboratory tests, application conditions and methods may affect these values.

- The mixed epoxy is ready for use immediately; no induction time is required.
- When pouring, avoid scraping sides of container to prevent any unmixed material from being applied to substrate
- Do not reuse the mixing container for additional batches.

Note: Do not mix new material with old, uncured material, as this can significantly reduce work times. Use fresh pails frequently for mixing.

Applying Primer

SwiftSeal P 100 is applied using a brush or short nap roller, ensuring it is worked thoroughly into the surface for optimal adhesion. Apply the primer according to the specified coverage rates. Pooling of primer more than 30 mils shall be avoided. If broadcast sand is to be used, broadcast oven-dried sand into the wet primer.

Maintain the application area within the recommended environmental conditions during curing to ensure proper setting and performance.

After application, the material should be protected from direct contact with water for approximately 24 hours at 20°C (68°F). During this period, water contact may cause surface bloom and/or surface tackiness, both of which must be removed.

Reapplication of Primer

If the re-coat time has been missed, the surface must be abraded, wiped clean with acetone or MEK, and thoroughly dried before applying a fresh coat of material.

Curing and Environmental Conditions

The curing time is influenced by ambient, material, and substrate temperatures. Lower temperatures slow chemical reactions, extending pot life, open time, and cure times. Higher temperatures accelerate reactions, shortening these time frames. To ensure proper curing, the temperature of the material, substrate, and application surface should not fall below the minimum recommended levels.

Repair Mortars

An epoxy mortar can be created to repair cracks and for filling voids or bug holes in concrete. To make epoxy repair mortar, gradually add clean, dry 20-40 mesh silica sand to previously mixed epoxy primer and mix thoroughly for 3 to 5 minutes. The mix ratio of sand to mixed epoxy is approximately 3 to 1 by volume. This ratio can be modified depending on the desired consistency.

Coverage

Coverage rates of **SwiftSeal P 100** will vary depending upon the porosity of the substrate. One gallon typically covers an area of **100 - 150 ft²** at a thickness of 10 - 15 mils (0.25 - 0.4 mm), this translates to approximately 0.25 - 0.4 L/m².

A second coat of **SwiftSeal P 100** is recommended for particularly porous substrates.

Packaging

SwiftSeal P 100 is available in sets of 10 gallons, comprising:

Part A: 5 gallon (18.9 L) pail

Part B: 5 gallon (18.9 L) pail

Storage & Shelf Life

12 months if stored in original containers under dry conditions at a temperature between 10°C - 32°C. Keep away from extreme cold, heat, and moisture. Protect from direct sunlight and fire hazards.

Health and Safety

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling this product. Before working with this product, you must read Safety Data Sheets and become familiar with the available information on its risks, proper use, and handling. Information is available in several forms, e.g., safety data sheets and product labels. For further information contact your Elastochem representative.

Conditions and Limitations

Proper application is the responsibility of the user. Field visits by Elastochem representatives are intended for technical recommendations only and do not include supervision or quality control on the job site.

Avoid application during inclement weather or when rain is present or imminent. Do not apply **SwiftSeal P 100** on wet or contaminated surfaces. **SwiftSeal P 100** is not intended for use as an exposed surface.

SwiftSeal P 100 must be covered with a compatible coating or flashing material. Contact the manufacturer for recommendations on approved finished materials. Patching materials used to fill voids in the substrate wall system must be compatible with both the substrate and the membrane.

Disclaimer

The information provided, particularly regarding the application and end use of Elastochem products, is given in good faith based on the company's current knowledge and experience when the products are properly stored, handled, and applied under normal conditions in accordance with Elastochem's recommendations.

Due to the variability in materials, substrates, and actual site conditions, no warranty regarding merchantability or fitness for a particular purpose, nor any liability arising from any legal relationship, can be inferred from this information, recommendations, or any other advice provided.

Users are not relieved of the responsibility to conduct their own testing of the products for the intended application and purpose. Proprietary rights of third parties must be respected. All orders are accepted subject to our current terms of sale and delivery.

Users should always refer to the most recent version of the product data sheet for the specific product, which can be obtained upon request or downloaded from our website at - www.elastochem.com



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