VersaProof™ Primer E

Technical Data Sheet

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Selection & Specification Data

Description

VersaProof Primer E is a 100% solids, zero VOC, two component, epoxy sealer and primer. **VersaProof Primer E** is a penetrating primer/sealer, uniquely formulated to reduce outgassing and improve adhesion. **VersaProof Primer E** is ideal for damp concrete substrates, or substrates where trapped moisture and/or high moisture vapor drive is expected, such as split slab construction, or with stay in place forms.

VersaProof Primer E is typically thinned by 50% with Acetone, and may be applied at temperatures greater than 40˚F by airless or air assisted spraying, brush, roller, or squeegee. **VersaProof Primer E** may be used with all **VersaProof** rapid curing sealants and coatings for interior and exterior application.

Features

- Improves adhesion
- Easy, pre-measured kits
- Excellent reduction in vapor drive and pin-holing
- Designed to be used over damp concrete
- Proven reduction in Moisture Vapor Emission

Colors

VersaProof™ Primer E is sold un-pigmented. **VersaProof™ Primer E** is typically an off-white tint. When mixed properly the product is a milky color which dries to a transparent/slightly opaque film.

Technical Properties

Description	Method	Result
VOC (Undiluted)	Theoretical	**0 g/l**
Solids Content (Undiluted)	Theoretical	**0%**
Pot Life @ 77F	Internal	**30 min.**
Working Time @ 77F	Internal	**45 min.**
Adhesion to Concrete[3]	ASTM D7234	**> 200 psi**

The value ranges stated in this Technical Data Sheet are based on system processing under controlled laboratory conditions. Equipment configuration and/or field application conditions pay produce variances in the final system values.

Footnotes

1. 1000 g, 1000 revs.
2. Steel prepared in accordance with SSPC-SP 6/NACE N° 3. 2+ mil profile
3. Concrete prepared in accordance with SSPC-SP 13/NACE N° 6

Coverage Rate

VersaProof Primer E is designed for a concrete and cementitous substrates. Application method, and substrate roughness, profile, and porosity will effect coverage rates. Consult VersaFlex Technical Services for substrate limitations. Coverage Rate is based on two coats.

- Concrete and Masonry: 80-160 ft^2 per gallon
- Cement Board: 80-160 ft^2 per gallon

Coverage rate is dependent on thinning rate.

- DFT = WFT x [(1 - Thinning Rate) x 100]
- Coverage Rate = 1600 / WFT

A maximum 8 mils WFT is recommended per coat to prevent sagging.

VersaProof™ Primer E

Technical Data Sheet

Substrate and Surface Preparation

General

Prior to coating, the substrate must be prepared in a manner that provides a uniform, clean, sound, neutralized surface suitable for the specified coating. The substrate shall be free of all contaminants, such as oil, grease, rust, scale or deposits. The substrate shall be free of all dirt, dust, debris, and deleterious material. Coating performance is dependent on the degree of surface preparation.

Maximum Moisture Content Concrete

VersaRoof Primer E may be applied to Saturated Surface Dry (SSD) concrete but is not a substitute for proper moisture mitigation practices. Continual exposure to substrate moisture may damage other components of the roofing assembly, and can compromise the long term performance of both the roofing membrane. Coating moisture laden substrates will always pose a risk. Whenever possible, achieve a 5% maximum moisture content as per ASTM F2160 or ASTM F2420

Concrete & Masonry

Reference SSPC-SP 13/NACE No. 6 Surface Preparation of Concrete. Minimum surface profile equivalent to ICRI CSP3 to CSP5 in accordance with ICRI Technical Guideline No. 03732.

Cement Cover Board

Ensure substrate is clean, sound, and free of any dirt, dust, debris, or deleterious material.

Other Substrates

Contact VersaFlex Technical Services for more information. Do not apply to non-porous substrates or substrates susceptible to damage from solvents such.

Mixing, Thinning, Pre-Warming

Components & Mix Ratio

Mix ratio is 1.54A:1B

VersaRoof Primer E is sold in pre-measured containers. Mix the entire kit. Do not mix partial kits.

Combine B into the 5-gallon pail of A prior to diluting with acetone and mix for at least 2 minutes at low speed. Reduce with acetone and continue mixing for at least 1 minute more. Transfer contents into a new, clean pail, and continuing mixing, scraping the sides.

Properly mixed material will be uniform in color without any dark spots.

Mixing

A & B Side must be mixed prior to use. See Material Processing & Handling Information for further details.

Thinning

Reduce by up to 50% with Acetone. (2.5 gallons per pre-measured kit of **VersaRoof Primer E)**

Pre-warming

A and B components should be warmed to a minimum of 50°F prior to mixing.

VersaProof™ Primer E

Technical Data Sheet

Application and Equipment Guidelines

General

VersaProof Primer E can be installed by airless sprayer, roller, brush, broom or squeegee. Install at temperatures greater than 40F. Application methods should be adjusted based on surface profile and roughness. Apply in two 5-10 mil coats. Wait 15-30 minutes between lifts, or until the primer penetrates. Avoid pooling or puddling.

Hand Mix

Follow all mixing and thinning instructions. Detail work should be done with a roller or brush. Use a ¼" nap roller. Remove excess fibers by rolling across duct tape. Only brush areas where a roller cannot reach. Use a dabbing application rather than a brushing movement.

Larger areas are more easily covered using a broom or soft silicone or foam squeegee.

Apply 5-10 mils per coat. Allow for penetration before applying a second coat. (15-30 minutes)

Equipment (minimum)

23:1 Ratio, 1.0 GMP, 2000 psi output

¼" x 20' or similar whip hose 40' maximum hose length

Flex Plus with RACV 417 or 517 tip or similar Airless Gun

Airless Sprayer

Follow all mixing and thinning instructions. Monitor batch temperature and viscosity. Longer dwell time in mass with reduce pot life and working times. Do not spray for more than 30 minutes without flushing the pump.

Apply evenly at 5-10 mils per coat. Allow for penetration before applying a second coat. (15-30 minutes)

Flush pump with Acetone or MEK.

Application & Service Conditions

Environmental & Substrate Conditions

Material and equipment temperatures must be kept at 60°F to 80°F . Lower substrate and ambient temperatures will reduce cure time.

Substrate temperatures must be between 40°F—140°F and humidity below 85%.

The substrate must be 5°F above dew point and rising before application of coating materials.

Refer to the Installation Guide for more information.

During curing maintain a minimum substrate and ambient temperature of 40°F during the entire cure. If the **VersaProof Primer E** drops below 40°F the cure may stall and never recover.

Service Temperatures (Temperature Resistance):

Dry temperature resistance is -40°F to 160°F.

Limitations:

VersaProof Primer E is not designed as an exposed finished coating system. Prolonged exposure to UV will degrade the primer.

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VersaProof™ Primer E

Technical Data Sheet

Curing Schedule, Re-Coat Windows, and Top Coats

Cure Time

Full cure is achieved in 14 days @ 72°F.

Top Coating

VersaProof Primer E can be top-coated after curing for approximately 8 hours at 77F. Primer should be dried through, tack free, and hard to touch. Colder ambient and substrate temperatures can lengthen cure times. Consult VersaFlex Technical Service for product and application recommendations.

Re-coat Time

VersaProof Primer E can be re-coated up to 48 hrs. after application at 72°F. Warmer temperatures will reduce the re-coat window. If the re-coat window is exceeded, additional preparation is required. Prior to coating, primed substrate shall be clean, dry, and free of all dirt, dust, debris, contamination, or deleterious material. Consult VersaFlex Technical Service for product and application recommendations.

Cleanup & Safety

Cleanup

Cured product may be disposed of without restriction. Excess material should be mixed together and allowed to cure and disposed of in a normal manner. Product containers that are "drip free" may be disposed of according to local, state, and federal laws.

Safety

Read, understand, and follow all recommendations on the SDS. Review SDS at www.versaflex.com

Wash thoroughly after handling, and before eating, drinking, or smoking. Have proper First Aid and PPE on site prior to opening or processing the material. Use chemical safety glasses, or goggles with splash shields. Use impervious body coverings including long sleeve clothing and boots. Use neoprene or nitrile chemical resistant gloves. Use a combination particulate filter and organic vapor respirator.

Packaging, Handling, & Storage

Packaging

Available in 2.54 gallon kits.

Shelf Life and Storage

One year from date of shipment, in original, unopened factory containers, stored in a sheltered area between 60°F - 80°F.

Warranty

During a period of one (1) year from date of shipping, VersaFlex Incorporated will refund the price of or replace, at its election, a product it finds to be defectively manufactured, provided the product has been stored and used properly. Except as expressly stated herein, the company makes no warranty of merchantability and no warranty of fitness for any particular purpose, nor does it make any warranty , expressed or implied, of any nature whatsoever with respect to the product or its use. In no event shall the company be liable for delay caused by defects, for loss of use, for indirect, special or consequential damages, or for any charges or expenses of any nature incurred without its written consent.