



VersaProof™ Primer S

Technical Data Sheet

686 S. Adams St. | Kansas City, KS 66105 | (913) 321-9000 | www.versaflex.com

Selection & Specification Data

Description

VersaProof™ Primer S is the most adaptable and user friendly multi-purpose primer. **VersaProof™ Primer S** is a versatile two-component urethane based primer designed for a variety of substrates. It's unique formulation allows for dilution with acetone by 33-50% for improved penetration, coverage, and adhesion.

VersaProof™ Primer S may be applied at temperatures greater than 0° F by airless sprayer, roller, squeegee, or broom. **VersaProof™ Primer S** may be used with all **VersaRoof™** rapid curing sealants and coatings for interior and exterior application.

Features

- 100% Solids, Zero VOC's
- Excellent penetration and absorption into porous substrates which seals the surface and reduces out-gassing
- Reduces Pinholes and improves adhesion
- Easy to use, multi-purpose primer
- Improves adhesion on a variety of substrates

Colors

VersaProof™ Primer S is sold un-pigmented and does not require pigment. At the applicators discretion the **VersaProof™ Primer S** may be pigment to help monitor coverage. **VersaProof™ Primer S** can be made in a variety of colors on the **ColorFlex Standard Colors** Chart. Some color selections may require additional lead time.. **VersaProof™ Primer S** will dry to an opaque pale yellow when applied in thicker layers.

Technical Properties

Description	Method	
Solids Content		100%
Mix Ratio by Volume		1:1
Adhesion to Concrete ¹	ASTM D7234	>200 psi
Adhesion to Steel ²	ASTM D4541	>500 psi
Working Time ³		45 min.
Recoat Window ³		72 hr.

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 may produce variances in the final system values.

Footnotes

1. Concrete prepared in accordance with SSPC-SP 13/NACE N° 6
2. Steel prepared in accordance with SSPC-SP 6/NACE N° 3. 3+ mil profile
3. Tested at 77F

Coverage Rate

VersaProof™ Primer S is designed for a variety of substrates. Application method, substrate roughness, profile, and porosity will effect coverage rates. Contact VersaFlex for recommended coverage rate.

- Concrete: 150-200 ft² per gallon
- Masonry & CMU: 150-200 ft² per gallon
- Cement Cover Board: 150-200 ft² per gallon
- Steel: 400-600 ft² per gallon
- Galvanized & Painted Metal: 600-800 ft² per gallon
- Spray Foam: 150-300 ft² per gallon
- Foam Board: 200-300 ft² per gallon
- Built-Up and Granulated Sheet: Concrete: 150-300 ft² per gallon
- TPO, PVC, VersaRoof Membrane, etc.: 600-800 ft² per gallon
- Wood: 150-300 ft² per gallon



VersaProof™ Primer S

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.

Refer to the Installation Guide or contact VersaFlex Technical Services for more information or detail.

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.

Maximum Moisture Content Concrete:

Calcium Chloride Test – 3 lb/24 hr./1,000 ft²

5% maximum as per ASTM F2160 or ASTM F2420

Cement Cover Board

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

Wood and Lumber

Ensure substrate is clean, sound, dry, and free of any dirt, dust, debris, contamination or deleterious material. Particular care should be taken when coating over treated wood products. Only install over kiln dried, or air dried wood.

Polyurethane Foam and Extruded Foam Board

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

Steel (Atmospheric/Non-Immersion Service)

Visible deposits of oil, grease, or other contaminants shall be removed according to SSPC-SP 1. Prepare in accordance with SSPC-SP6/NACE No. 3 Commercial Blast Cleaning. Provide a sharp angular anchor profile of 3.0 or greater.

Non-Ferrous Metals

Reference SSPC SP-16 Brush-Off Blast Cleaning of Coated and Uncoated Galvanized Steel, Stainless Steels, and Non-Ferrous Metals. Only use non-metallic blast media.

Fiberglass, Rigid PVC, and Modified Bitumen/Built-Up Roofing

Use a low-pressure washer to remove dirt, biologic growth, loose granules and other contaminants. Apply a de-greaser and wash clean. Clean contamination with a silicone and wax remover such as DuPont Prep-Sol™ 3919S. Sand with 40-grit paper or abrade to a dull finish. Wipe with Acetone or MEK. Ensure substrate is dry prior to proceeding.

VersaProof Membranes and other Elastomers

Ensure substrate is clean, sound, dry, and free of any dirt, dust, debris, contamination or deleterious material. Sand with 40-grit paper or abrade to a dull finish. Wipe with Acetone or MEK.

Adhesion may vary based on the age, level of oxidation, and type of system. VersaProof may not adhere to all existing roofing systems. Adhesion testing may be required to determine the optimal surface preparation method. Consult VersaFlex Technical Service for additional recommendations prior to beginning application.



VersaProof™ Primer S

Technical Data Sheet

Mixing, Thinning, Pre-Warming

Components & Mix Ratio

- Mix ratio is 1:1 by volume
- Combine and mix part A and B prior to diluting
- Measure each component using metered buckets.
- Drill mix at low speed for 3 minutes
- Ensure the mixed system is a uniform homogeneous
- Always mix Part A and Part B prior to dilution
- Always use clean, dry, virgin acetone

Mixing

If pigmented, B Side must be mixed prior to use.

Refer to the VersaRoof Installation Guide for more information

Pre-warming

A and B components should be warmed to a minimum of 60°F prior to mixing.

Thinning

Concrete, Masonry, & CMU	0-33%
Cement Cover Board	0-33%
Steel	50%
Galvanized & Painted Metal	50%
Spray Foam	0%
Foam Board	0%
Built-Up & Granulated Sheet	0%
TPO, PVC, VersaRoof Membrane, etc.	50%
Plywood	0-33%

0% - 1 Part A to 1 Part B

33% - 1 Part A to 1 Part B to 1 Part Acetone

50% - 1 Part A to 1 Part B to 2 Part Acetone

Application and Equipment Guidelines

General

VersaProof™ Primer S can be installed by airless sprayer, roller, brush, broom or squeegee. Install at temperatures greater than 0°F. Application methods should be adjusted based on surface profile and roughness. Additional coats may be needed based on material absorption and substrate porosity. Avoid pooling or puddling.

When working on horizontal surfaces pouring the batch out onto the substrate will extend the working time and improve penetration into porous substrates.

Avoid puddling or ponding of the primer.

Moisture will effect the performance of the primer.

If the primer foams, remove the foamed area and re-apply the primer in the questionable areas.

Airless Sprayer

Use a pump capable of producing 0.33 gpm. Use a FTX or Contractor Gun with a ¼” hose. Depending on pump capacity use a tip size of 0.013-0.019”

Always thin the **VersaProof™ Primer S** is spraying

Follow all mixing and thinning instructions. Monitor batch temperature and viscosity. Longer dwell time in mass with reduce pot life and working times. Apply evenly at recommended coverage rate based on substrate. A back roll or broom is still required to ensure proper coverage, and absorption.

Hand Mix

Follow all mixing and thinning instructions. Detail work should be done with a roller or brush. Larger areas are more easily covered using a broom or soft silicone or foam squeegee.



VersaProof™ Primer S

Technical Data Sheet

Application & Service Conditions	
<p>Environmental & Substrate Conditions</p> <p>Material and equipment temperatures must be kept at 60°F or above. Lower substrate and ambient temperatures will reduce cure time.</p> <p>Do not install over damp, wet, or saturated substrates. Concrete and masonry substrate moisture shall be less than 5% when measured with a Tramex CME meter. If the substrate is below freezing, tradition methods of determining moisture content are not effective. Additional steps should be taken to validate moisture readings.</p> <p>The substrate must be 5°F above dew point and rising before application of coating materials.</p>	<p>Service Temperatures (Temperature Resistance)</p> <p>Dry temperature resistance is -40°F to 250°F.</p> <p>Limitations</p> <p>VersaProof™ Primer S is not designed as an exposed finished coating system. Prolonged exposure to UV will degrade the primer. VersaProof™ Primer S is hygroscopic. Exposure to moisture during storage or after installation while the material is still curing will negatively effect the material performance.</p>
Curing Schedule, Re-Coat Windows, and Top Coats	
<p>Cure Time:</p> <p>Full cure is achieved in 14 days @ 72°F.</p> <p>Top Coating</p> <p>VersaProof™ Primer S can be top-coated after curing for 120 minutes at 77F. Primer may still have a slight tacky feel but should not pull up, or adhere. Colder ambient and substrate temperatures can lengthen cure times. Consult VersaFlex Technical Service for product and application recommendations.</p>	<p>Re-coat Time</p> <p>VersaProof™ Primer S 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.</p>
Cleanup & Safety	
<p>Cleanup</p> <p>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.</p> <p>Caution: VersaProof™ Primer S contains isocyanate. All safety precautions must be followed including proper skin protection and breathing protection. Consult SDS for proper safety suggestions.</p>	<p>Safety</p> <p>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.</p>



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Technical Data Sheet

Packaging, Handling, & Storage

Packaging

One Hundred Ten Gallon Kit:

55 gallons of 'A' side and 55 gallons of 'B' side. Drums filled by weight.

Ten Gallon Kit:

5 gallons of 'A' side and 5 gallons of 'B' Side

Two Gallon Kit:

1 gallon of 'A' Side and 1 gallon of 'B' Side

Shelf Life and Storage

One year from date of shipment, in original, unopened factory containers, stored in a sheltered area between 60°F - 95°F. Seal tightly after use to prevent introduction of moisture laden air. Store open 'A' side with a nitrogen cap after each use.

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.