VAPROSHIELD®
Breathable Membrane Systems for Roofs & Walls

VaproLiqui-Flash™

a vapor permeable, waterproof liquid-applied flashing material for rough opening interfaces: Product No.: 38609801

Product Description

VaproLiqui-Flash is a vapor permeable, waterproof liquid-applied flashing material for rough opening interfaces designed for use in both Air Barrier and Water Resistive Barrier applications. Its single component, proprietary formulation bonds to VaproShield membranes and most common wall substrates **without primers**, forming a monolithic, waterproof surface while remaining permeable to water vapor.

BASIC USE

VaproLiqui-Flash is applied in vertical and horizontal above-grade rough opening applications and transitions to all VaproShield WRB and Air Barrier membranes.

MATERIALS

VaproLiqui-Flash is a waterproofing and detailing compound that combines the best of silicone and polyurethane properties. This single-component, 99% solids, Silyl-Terminated-Poly-Ether (STPE) is easy to gun, spread and tool to produce a highly durable, seamless, elastomeric flashing material.

BENEFITS

Airtight and breathable – allows damp surfaces to dry, does not support mold growth.

Bonds and cures – in wet weather and on damp substrates without primer producing a durable, structural, weather-tight seal which is not subject to tearing or displacement even when wind loads are present during construction.

Advanced Properties: No shrinkage. No staining. No yellowing.

Phase Construction Ready – will not tear or lose effectiveness when exposed to weather during construction, sustains up to 6 months UV exposure.

Same day installation – of windows, doors, wall assemblies (by others).

Simple installation: single component, requires no mixing, easily applied with professional caulking gun. Spreadable with brush, roller, or trowel.

Simplified inspection and QA: produces an opaque membrane when installed at the recommended minimum thickness of 12–15 wet mil (0.30 – 0.38 mm).

Silane functional polymer provides superior long-term adhesion, crack bridging and weathering characteristics.

COMPATIBILITY

- Concrete
- Masonry
- Natural stone
- Structural sheathing
- Painted Metals
- Glass
- PVC
- FRP
- EPDM
- Architectural Metal Panels
- Most building materials, urethane, and acrylic sealants and coatings

Sealant Compatibility – view comprehensive ASTM C794 Standard Test Method for Adhesion-in-Peel-Elastomeric Joint Sealants at VaproShield.com

Contact VaproShield Technical – if you have additional compatibility questions.

Technical Data

PHYSICAL PROPERTIES	
PROPERTY	RESULT
Density	1378 - 1402 g/l (11.5 – 11.7 lbs/gal)
Composition	Silyl Terminated Polyether (STPE) Silyl, ethenyltrimethoxy
Phthalet Composition	Dipropylheptyl phthalate (DPHP)
Minimum Application Temperature	35° (2°C)
Service Temperature	minus 40°F (-40°C) – 183°F (84°C)
UV Exposure	6 months
Specific Gravity	1.3 - 1.6
Sausage Weight	20 fluid ounces (0.59 L) [approximate weight 0.8 kg (1.8 lb)]
VOC Content	<30 g/L
Storage and Handling	Store in cool (<80°F [<27°C]) dry area.
Application	Apply at minimum 12–15 wet mil (0.30 - 0.38 mm)
Curing and Drying	At 70°F (21°C)/50% RH, skins in 50 minutes; dries in 4 hours. Low temperatures/ relative humidity slow dry time; high temperatures/relative humidity accelerate dry time.
Warranty	20 year material

Typical VaproLiqui-Flash Applications

Commercial Window

WrapFlashing SA Self-Adhered properly shingled; applied directly to sheathing

VaproLiqui-Flash inside rough opening and 1" (25 mm) on face

Commercial window and head flashing (by others)

Nail Flange Window

WrapFlashing SA Self-Adhered properly shingled; applied directly to sheathing

VaproLiqui-Flash inside rough opening and 1" (25 mm) on face

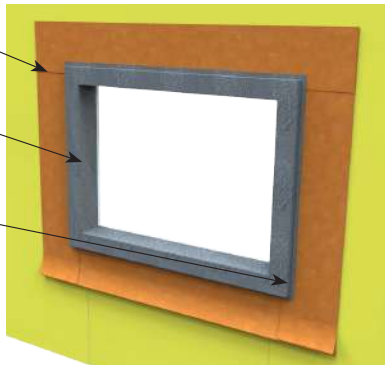
Nail flange window and head flashing (by others)

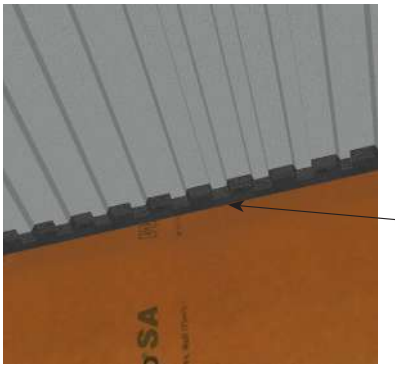
Buck Window

WrapFlashing SA Self-Adhered properly shingled; applied directly to sheathing

VaproLiqui-Flash full-coverage inside rough opening and completely covering the window buck frame

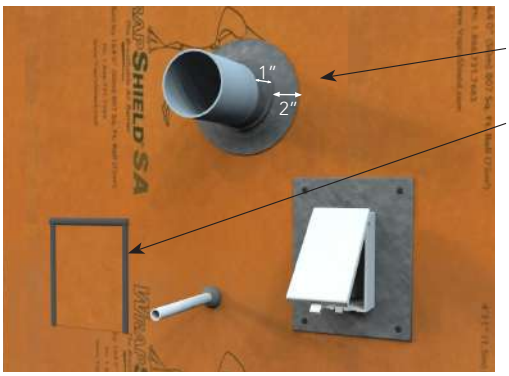
VaproLiqui-Flash extends 1" (25 mm) onto face of the wall





Fluted Deck Transition

Install 2" (51 mm) of VaproLiqui-Flash onto metal deck and 2" (51 mm) onto wall



Wall Penetrations

Apply VaproLiqui-Flash min. 2" (51 mm) onto face and min. 1" (25 mm) out along all side of the penetration.

Membrane patched from misplaced penetration. VaproLiqui-Flash is applied to penetrations and sides of the membrane

Roof Penetrations

Minimum of 1" (25 mm) VaproLiqui-Flash onto flange or pipe penetration.

Flanges and fasteners should be completely covered in VaproLiqui-Flash

ACCESSORIES		
Product	Part No.	Roll Sizes
WrapFlashing SA Self-Adhered Roll	46105590 46108090	Roll Size: 11 3/4" x 164' (298mm x 50m) 161 S/F (15 S/M) Roll Size: 19 2/3" x 164' (500mm x 50m) 269 S/F (25 S/M)
RevealFlashing SA Self-Adhered Roll	44305500	Roll Size: 11 3/4" x 102' (298mm x 31.1m) 100 S/F (9.3 S/M)

Installation

STORAGE AND HANDLING

Store VaproLiqui-Flash in a cool, dry place. Keep container tightly closed when not dispensing. Do not open container until preparation work has been completed. Do not alter or mix with other chemicals. When stored at or below 80°F (27°C) VaproLiqui-Flash has a shelf life of 18 months after the date of manufacture. This shelf life assumes upright storage of factory-sealed containers. Do not double stack pallets. Dispose of unused product and container in accordance with local, state and federal regulations.

SAFETY

Read the full label and SDS for precautionary instructions before use. VaproLiqui-Flash contains calcium carbonate and may cause eye and skin irritation. Use with adequate ventilation, safety equipment and jobsite controls during application and handling.

PREPARATION

Best Practice: always test a small area of each surface to confirm suitability and desired results before starting overall application. Test with the same equipment, recommended surface preparation, and applications procedures planned for general application.

To ensure best results, apply to clean surfaces free of contaminants. Chemical residues, surface coatings or films may adversely affect adhesion.

Remove dust/debris from intended application area. Protect adjacent surfaces not intended to receive VaproLiqui-Flash.

Ensure positive drainage at all rough openings.

DILUTION

Apply as packaged. Do not dilute or alter, or use for applications other than specified. No mixing required.

SIZES/COVERAGE

Coverage will vary based on surface texture and irregularities.

COVERAGE ESTIMATOR
(Based on smooth surface)

Packaging Unit	Coverage Area	Recommended Thickness
20 oz (.59 L) Sausage	10–12 ft² (0.9-1.1 m²)	12 – 15 mil (0.30 – 0.38 mm)

SURFACE AND AIR TEMPERATURES

Surface and ambient temperatures should be 35°F (1.7°C) and rising and below 110°F (43°C) during application and drying. Wind and high temperatures will accelerate drying of VaproLiqui-Flash. If air or surface temperatures exceed 95°F (35°C), apply VaproLiqui-Flash to shady side of structure. Misting hot surfaces with fresh water can cool surface temperature and accelerate curing.

Though VaproLiqui-Flash tolerates rain immediately after installation, do not apply to surfaces with standing water or frost.

EQUIPMENT

Sausage: Apply using a professional sausage gun. Use a DRY joint knife, trowel, spatula, roller, or brush to spread the product.

CURING AND DRYING

At 70°F (21°C) and 50% relative humidity, product skins within 50 minutes and dries in 4 hours.

VaproLiqui-Flash is moisture curing; low temperatures and low relative humidity slow dry time, high temperatures and high relative humidity accelerate dry time.

BEST PRACTICE INSTALLATION

Review in-depth, step-by-step installation instructions at VaproShield.com

Apply according to installation instructions. Visit VaproShield.com for details, coverage and comprehensive application information.

CLEAN-UP

Clean tools and equipment with mineral spirits immediately after use. Follow all safety precautions. Mechanically remove cured VaproLiqui-Flash using a sharp-edged tool.

LIMITATIONS

Not for use in place of appropriate through-wall flashing, below grade, or in locations designed to be continuously immersed in water.

Safety Information

FIRST AID

Ingestion: DO NOT induce vomiting. DO NOT give anything by mouth to an unconscious or convulsing person. Get immediate medical attention.

Eye Contact: In case of contact with eyes, lips or mouth, flush thoroughly with water. If irritation develops, consult a physician.

Skin Contact: Wash with fresh water. Get medical attention if irritation persists.

Inhalation: Remove to fresh air. If victim is having trouble breathing, remove to medical care.

24-Hour Emergency Information: CHEMTREC 1-800-424-9300

Availability

VaproShield products are available throughout North America, Central and South America, and New Zealand.

Warranty

A 20-year material warranty is available

TESTING DATA		
PROPERTY	STANDARD	RESULT
Durometer Hardness, Shore A	ASTM C661 Standard Test Method for Evaluating Degree of Cracking of Exterior Paints	20 – 30 points
Tensile Strength	ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension	0.69 – 1.03 MPa (100–150 psi)
Elongation at Break	ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension	150 – 200%
Water Vapor Transmission Water Method 24.4°C (76.0°F) 50 %RH	ASTM E96 Standard Test Methods for Water Vapor Transmission of Materials	9 Perm (grains/hr•ft²•inchHg) at 0.30 mm (12 mil) 515 ng/Pa•s•m² at 0.30 mm (12 mil)
Water Vapor Transmission Dynamic Relative Humidity Measurement (23°C 50 %RH)	ASTM E398 Standard Test Method for Water Vapor Transmission Rate of Sheet Materials Using Dynamic Relative Humidity Measurement	8 Perm (grain/h•ft²•inchHg) at 0.30 mm (12 mil) 458 ng/Pa•s•m² at 0.30 mm (12 mil)
Peel Strength	ASTM C794 Standard Test Method for Adhesion-in-Peel of Elastomeric Joint Sealants	3.5 – 5.3 N/mm (20-30 pli)
Flame Spread Smoke Developed	ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials	Flame Spread = 0 Smoke Developed = 15