

GUIDE-SPEC Retrofitting Aged Single-Ply VersiFleece® Adhered Roofing System

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This **GUIDE-SPEC** describes Retrofitting Aged Single-Ply with a VersiFleece Adhered Roofing System and is intended for use as a submittal with a bid package. For specific installation instructions, Specifiers and the Versico Authorized Roofing Contractor must comply with the applicable Sections of Versico's Technical Manual.

PART I GENERAL

1.01 DESCRIPTION

This **Aged Single-Ply Retrofitting Option** incorporates a VersiFleece membrane (VersiWeld TPO or VersiFlex PVC / KEE HP PVC) laminated to a non-woven polyester fleece-backing. The membrane is adhered to an acceptable, aged single-ply (Adhered or Mechanically Fastened) roof membrane with Flexible DASH Adhesive applied in extrusions or full spray.

Sheets of VersiFleece TPO and VersiFleece PVC / KEE HP PVC membrane are joined together with a minimum 1-1/2" wide hot air weld.

1.02 QUALITY ASSURANCE

- A. This roofing system must be installed by a Versico Authorized Roofing Contractor in compliance with drawings and specifications as approved by Versico.
- B. Upon request, an inspection shall be conducted by a Field Service Representative of Versico to ascertain that the membrane roofing system has been installed according to Versico's published specifications and details applicable at the time of bid. This inspection is to determine whether a warranty shall be issued. It is not intended as a final inspection for the benefit of the owner.
- C. Existing code ratings (FM and UL) will remain the same as the existing roofing system. Consult with local FM or UL representative for further information.

1.03 SUBMITTALS

- A. Shop drawings must be submitted to Versico by the Versico Authorized Roofing Contractor along with a completely executed Copy A – Job Approval Request for approval. Approved shop drawings are required for inspection of the roof and on projects where onsite technical assistance is requested.
- B. Project with unusual conditions or those with prior wind uplift occurrence may be submitted for prior review by Versico.

1.04 GENERAL DESIGN CONSIDERATIONS

- A. It is the responsibility of the building owner or his/her designated representative to verify structural load limitation. In addition, a core cut may be taken to verify the composition of the existing roofing system.
- B. Recovering of existing membranes should be of similar material (i.e. TPO over TPO). This will allow the two membranes to expand and contract at similar rates.
- C. To reduce the probability of condensation, black roof membranes should not be overlaid with a white roof membrane. White membranes, due to their lower surface temperature, falls frequently below the dew point and increasing the level of condensing moisture during wintertime. During summertime due to their lower surface temperature, the white membrane does not have the same drying cycle as the black membrane resulting in increased moisture gain.
- D. To avoid accelerated heat aging and premature deterioration of existing membranes, existing roof membranes must be covered with similar colored material. Covering existing white membranes with darker membrane can lead to deterioration of the substrate to which the new membrane is adhered to.



Existing Roof Manufacturer	Duration of New Warranty	New Membrane Min. Membrane Thickness	Additional Warranty Coverage	
			Accidental Puncture (4)	Hail
				1" Dia.
Versico	Up to 15 YR	100-mil VersiFleece TPO or 115-mil VersiFleece PVC or 105-mil VersiFleece KEE HP	N/A	\checkmark
	Up to 20 YR (1)(2)	115-mil VersiFleece TPO or 115-mil VersiFleece PVC or 105-mil VersiFleece KEE HP	16 Hrs (3)	\checkmark
By Others	Up to 10 YR	100-mil VersiFleece TPO or 115-mil VersiFleece PVC or 105-mil VersiFleece KEE HP	N/A	٨
	Up to 15 YR (1)	115-mil VersiFleece TPO or 115-mil VersiFleece PVC or 105-mil VersiFleece KEE HP	16 Hrs (3)	\checkmark

VersiFleece Adhered Systems Recover Warranty Options

Notes: N/A= Not Acceptable $\sqrt{-}$ Acceptable

- Field Assessment by Versico local Representative or SRWA (Sustainable Roofing and Waterproofing Alliance) Consultant required, Contact Versico.
- (2) In lieu of standard wind speed this assembly can qualify for 72 mph.
- (3) Use of 135-mil VersiFleece TPO/ VersiFlex PVC can qualify for 32 hrs.
- (4) Versico's Accidental Puncture Warranty covers labor hours and material used during the repair. Maximum labor and material hours are dependent upon system design. Refer to the Warranty Availability Quick Reference Guide for coverage.

1.06 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to the job site in the original, unopened containers labeled with the manufacturer's name, brand name and installation instructions.
- B. Job site storage temperatures in excess of 90°F may affect shelf life of curable materials (i.e., Flexible DASH Adhesive Parts A & B, adhesives, sealants, cleaners, primers, Seam Tape, Pourable Sealer, Pressure-Sensitive Flashing and uncured flashing).
- C. When liquid adhesives and sealants are exposed to lower temperatures, restore to a minimum of 60°F before use. Do not store containers with opened lids due to loss of solvent which will occur from flash off.
- D. VersiFleece Membrane should be stored in its original plastic wrap and be covered to protect from moisture. Any moisture absorbed by the fleece-backing must be removed by using a wet-vac system, prior to membrane adhesion.

1.07 JOB CONDITIONS

A. Refer to Versico Technical Manual for applicable project specific Job Conditions.

PART II PRODUCTS

2.01 GENERAL

The components of this roofing system are to be products of Versico or accepted by Versico as compatible. The installation, performance or integrity of products by others, when selected by the specifier and accepted as compatible by Versico, is not the responsibility of Versico and is expressly disclaimed by the Versico Warranty.

2.02 MEMBRANE

VersiFleece 100, 115 and 135 Membrane incorporates 45-, 60- or 80-mil thick, VersiWeld (white, gray or tan) reinforced TPO or 60- or 80- mil thick reinforced VersiFlex KEE HP PVC membrane laminated to a 55-mil thick non-woven polyester fleece-backing resulting in a total finished sheet thickness of 100, 115, or 135 mils (TPO) and 105, 115 or 135

mils (PVC/ KEE HP).

For available membrane widths and lengths refer to applicable VersiFleece Specification or Product Data Sheets.

2.03 RELATED MATERIALS

A. Flexible DASH Adhesive, Cleaners, Adhesives, Sealants, Primers, Seam Tape, Flashing, Pressure-Sensitive Flashing, Termination Bars, Versico Insulation, Insulation Fasteners and Water Cut-Off Mastic are required for use with this roofing system. Other Versico products, such as metal edgings and copings are also required when a System Warranty is specified.

Other Products: Walkway Pads, Pre-Molded Pipe Flashings, Corners, LIQUISEAL Liquid Flashing and Pourable/Molded Sealant Pockets.

PART III EXECUTION

3.01 GENERAL

A. When feasible, begin the application at the highest point of the highest roof level and work to the lowest point to prevent moisture infiltration and minimize construction traffic on completed sections. This will include completion of all flashings and terminations.

3.02 ROOF DECK CRITERIA

A. A proper substrate shall be provided by the building owner. The structure shall be sufficient to withstand normal construction loads and live loads.

3.03 SUBSTRATE PREPARATION

A. The VersiFleece membrane may be adhered with Flexible DASH Adhesive directly over existing aged single-ply roofing membranes. These membranes include EPDM, Hypalon, TPO and PIB.

Note: PVC membranes are not an approved existing membrane.

- B. The substrate must be dry, relatively even, free of protrusions, debris, sharp edges or foreign materials and must be free of accumulated water, ice and snow.
- C. To ensure adequate adhesion to PIB (Polyisobutylene) or TPO Membranes less than 5 years old, use a floor sander with 100 grit screens to sand the existing surface.
- D. Wash existing membranes using as power washer at a maximum of 2200 psi with a fan-spray tip/nozzle.

Note: For TPO Membranes less than 2 years old, use X-Tenda Coat Membrane Cleaner. Dilute the product per instruction label. Spray the surface and let stand for 15 minutes, prior to power washing.

- E. Cut and remove all existing flashing materials.
- F. Examine existing membrane. Cut and remove any crushed or damaged insulation.
- G. For Adhered Systems, remove and replace any protruding Fasteners, ensure existing insulation is Fastened at Versico established insulation densities. Areas where deck membrane is loose should be re-secured with Fasteners or re-adhered with bonding adhesive. When mechanically securing the membrane, picture frame the area with a Fastener 1 every 4 square feet. When adhering the membrane, re-adhere to a compatible substrate by cutting loose area in an 'X or 'U' pattern.
- H. For existing Mechanically Fastened Systems with open seams or protruding Fasteners, where open seams are found, install Fasteners and plate on either side of the seam through both layers of the seam. For protruding Fasteners, remove existing Fastener and replace with new Versico Fastener and plate at Versico established insulation or seam densities.
- I. A field assessment by Versico Representative or SRWA (Sustainable Roofing and Waterproofing Alliance) Consultant may necessitate additional enhancements beyond those listed herein.

3.04 INSTALLATION

Refer to the applicable Safety Data Sheets and Product Data Sheets for cautions and warnings.

Caution: Ensure adequate attachment of the existing roofing system (membrane and insulation) in order to not jeopardize the wind uplift performance of the newly installed membrane. Delaminated areas of existing adhered membranes must be re-secured and seams of an existing mechanically Fastened system must be adequately secured (no open seams or protruding Fasteners).

- A. When damaged insulation is present, replace with Versico Insulation of equal thickness. Insulation may be mechanically fastened or adhered with Flexible DASH Adhesive, refer to Versico's Technical Manual for fastening density and/or bead spacing.
- B. When loose areas are found in the membrane, re-secure as outlined above.
- C. Ensure surface is prepped, cleaned, and ready for adhesive application.

D. Membrane Adhesion

- VersiFleece Membrane shall be adhered to an aged existing single-ply roof membrane or approved insulation with a two component, extrusion or spray applied, low-rise adhesive supplied by Versico. Flexible DASH Adhesive is applied to the substrate only and the membrane is rolled into the wet adhesive, once it has foamed up approximately 1/8" and begins to "string" when touched with a Splice Wipe. Roll the membrane with a 20" wide, 150 pound weighted segmented steel roller to set the membrane into the adhesive.
- 2. Apply beads at 6" O.C. for field and perimeter when standard wind speed warranty is specified.

E. Membrane Splicing of VersiFleece Systems

1. Refer to appropriate splicing procedures published in the VersiFleece Specifications.

F. Additional Membrane Securement

- 1. Similar to traditional adhered membranes (Non-Fleece), the existing membrane must be secured with HPV or HPVX fasteners and 2" diameter plates at 12" O.C. Fastening is required at all deck to wall junctions, angle changes greater than 2:12, around curbs and skylights regardless of warranty duration or wind speed.
 - a. Option 1: Fasten directly through the VersiFleece membrane and the existing membrane.
 - b. Option 2: Fasten existing membrane before applying new VersiFleece.
- 2. Additional Fastening may be utilized to enhance the wind uplift resistance of the existing roofing system prior to installing the new VersiFleece membrane.

D. Flashing

- 1. Flashing of standard penetrations and edge conditions shall conform to the details in Versico's VersiFleece or TPO and PVC Roofing System specifications as applicable.
- 2. Details not depicted in these publications shall be submitted to Versico for review prior to installation.

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Physical properties of VersiFleece Membrane can be referenced in Part II, "Products" of the VersiFleece Specification. Attach copies of the applicable Versico Details that pertain to the individual project to complete a bid package submittal.