



G U I D E - S P E C

VersiGard® EPDM Adhered Roofing System

January 2012

This **GUIDE-SPEC** is a brief outline of Versico's VersiGard/VersiGard White EPDM Adhered Roofing System requirements and is intended for use as a submittal with a bid package. Specifiers and the Versico Authorized Roofing Contractor must comply with the Versico Technical Manual prior to design or bid. The "Products" Section included in the Versico technical manual and Versico's Technical Data Bulletins contain information on proper usage of Versico products as well as applicable cautions and warnings. Prior to the installation of this roofing system, this information must be thoroughly reviewed.

PART I GENERAL

1.01 DESCRIPTION

The Design "A" Adhered Roofing System incorporates VersiGard (black) 60 or 90- mil thick non-reinforced or VersiGard White (white-on-black) 60 or 90-mil thick non-reinforced or 45, 60 or 75-mil VersiGard reinforced EPDM membrane. An acceptable insulation is mechanically fastened to the roof deck or adhered with Versico supplied urethane-based insulation adhesive or hot asphalt and the EPDM membrane is fully adhered to the insulation with Versico EPDM Bonding Adhesive (Versico Standard Bonding Adhesive, Low-Voc Bonding Adhesive, Solvent-Free Bonding Adhesive or Water Based Adhesive). Adjoining sheets of EPDM membrane are spliced together using 3" or 6" wide QA Seam Tape and Primer OR Factory-Applied Quick Applied Seam Tape (VersiGard QAT) and Primer. There are no maximum slope restrictions for the application of this roofing system.

1.02 QUALITY ASSURANCE

- A. This roofing system must be installed by a Versico Authorized Roofing Contractor in compliance with shop drawings 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. For specific code approvals achieved with this system, refer to Versico's EPDM Code Approval Guide, FM Approvals or UL Fire Resistance Directory for Roofing Materials and Systems.

1.03 SUBMITTALS

- A. To ensure compliance with Versico's minimum warranty requirements, the following projects should be forwarded to Versico for review prior to installation, preferably prior to bid.
 - 1. Air pressurized buildings, canopies, and buildings with large openings, cold storage buildings or freezer facilities, adhered roofing system projects over 100' in height or projects where the EPDM is expected to come in direct contact with petroleum-based products, waste products (i.e., grease, oil, animal fats, etc) and other chemicals.
- B. 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 on-site technical assistance is requested.

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 weight of existing components when the roofing system is to be specified on an existing facility.
- B. On new construction projects, especially in cold climate regions, moisture generated due to the construction process could adversely impact various components within the roofing assembly if not addressed. Refer to Spec Supplement G-01-11 "Construction Generated Moisture" included in the Versico Technical Manual.
- C. On structural concrete decks, when a vapor retarder is not used, gaps in the deck along the perimeter and around penetrations must be sealed along with vertical joints between tilt-up panels, if present, to prevent infiltration of hot humid air and possible moisture contamination resulting from condensation. This is specifically important when adhesive is used to attach the roof insulation.



CAUTION: If left unaddressed, collected moisture could weaken insulation boards and facers resulting in a blow-off or increase the probability of mold growth.

D. Vapor Retarders

1. VersiGard does not require a vapor retarder for the protection of the membrane; however, it should be considered by the specifier for the protection of the roofing assembly (i.e. primarily insulation, underlayment and adhesives). The following criteria should be considered by the specifier:

- a. Use of a vapor retarder to protect insulation and reduce moisture accumulation within an insulated roofing assembly, should be investigated by the specifier.

In the generally temperate climate of the United States, during the winter months, water vapor flows upward from a heated, more humid interior toward a colder, drier exterior. Vapor retarders are more commonly required in northern climates than in southern regions, where downward vapor pressure may be expected and the roofing membrane itself becomes the vapor retarder.

1.05 WARRANTY

Table I Non-Reinforced EPDM Membrane Systems Warranty Options

Years	VersiGard Black or VersiGard White Non-Reinforced Membranes				
	55, 72 or 80 mph	90 to 100 mph	110 to 120 mph	Minimum Membrane Thickness	Additional Coverage Hail/Puncture (1)
	Adhered	Adhered	Adhered		
5,10, or 15 year	√ (2)	√	√	VersiGard 60-mil	90-mil Hail/Puncture Coverage Available
20 year	√	√	√	VersiGard Black/White 60-mil	90-mil Hail/Puncture Coverage Available
25 year	√	√	N/A	VersiGard Black/White 90-mil	90-mil Hail/Puncture Coverage Available
30 year	√	√	N/A	VersiGard Black/White 90-mil	90-mil Hail/Puncture Coverage Available

Notes: N/A = Not Acceptable √ = Acceptable
 (1) Limits of Hail/Puncture Coverage to be defined by other Tables.
 (2) Water based adhesive may be used for projects with 15 year maximum warranty and wind speed coverage up to 72 mph.

Table II Reinforced EPDM Membrane Systems Warranty Options

Years	VersiGard Reinforced Membranes				
	55, 72 or 80 mph	90 mph	100 to 120 mph	Minimum Membrane Thickness	Additional Puncture Coverage (1)
	Adhered	Adhered	Adhered		
5,10, or 15 year	√ (2)	√	√	VersiGard Reinforced 45-mil	Available
20 year	√	√	√	VersiGard Reinforced 60-mil	Available
25 year	√	√	√	VersiGard Reinforced 75-mil	Available
30 year	N/A	N/A	N/A	N/A	N/A

Notes: N/A = Not Acceptable √ = Acceptable
 (1) Limits of Hail/Puncture Coverage to be defined by other Tables.
 (2) Water based adhesive may be used for projects with 15 year maximum warranty and wind speed coverage up to 72 mph.

1.06 PRODUCT DELIVERY, STORAGE AND HANDLING

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

1.07 JOB CONDITIONS

- A. Refer to Versico's 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 by Versico**, is not the responsibility of Versico and is expressly disclaimed by the Versico Warranty.

2.02 MEMBRANE

- A. **VersiGard Black/VersiGard White Non-Reinforced EPDM Membranes:** Cured non-reinforced EPDM (Ethylene, Propylene, Diene Terpolymer) compounded elastomer. 60, or 90 mil thick Non-Reinforced EPDM membrane is available in VersiGard Black or VersiGard White (white-on-black). VersiGard White membranes are installed with the white surface facing up. VersiGard membrane with thickness up to 60-mil can be available in widths up to 50' and lengths up to 150' (200' for 45-mil membrane only). VersiGard White membrane with thickness of 60-mil is available up to 30' widths and lengths up to 150' long. VersiGard Black /VersiGard White 90-mil membranes are available in widths up to 10' and lengths up to 100'. VersiGard Clean (no dust) black EPDM Membrane (mica dust has been removed during manufacturing) is available for sheets maximum 10' wide.
- B. **VersiGard Reinforced EPDM Membranes:** Cured reinforced EPDM (Ethylene, Propylene, Diene Terpolymer) compounded elastomer. VersiGard Reinforced EPDM Membrane is available only in black. 45, 60, or 75-mil thick VersiGard Reinforced EPDM membrane is available in sizes referenced in Table below. Reinforced membrane with polyester fabric conforms to ASTM D4637, Type II (reinforced). All sheets referenced in table are available with 3" or 6" Factory Applied QA Seam Tape (QAT).

2.03 RELATED MATERIALS

- A. G200SA Yellow Substrate Adhesive, Low-VOC or Solvent Free EPDM Bonding Adhesive, Aqua Base Bonding Adhesive, EPDM or Low VOC EPDM Primer, QA Seam Tape, Lap Sealant, Cured EPDM Flashing, Quick-Applied Flashing, uncured EPDM Flashing, Seam Fastening Plates and Quick-Applied RTS (with the corresponding fasteners) are required for use with this roofing system. Other Versico products, such as, insulation, insulation fasteners, edgings and termination bars are also required when a Total System Warranty is specified.
- B. Other Products: Walkway Pads, Pre-Molded Pipe Flashings, Cured EPDM Flashing, Quick-Applied Inside/Outside Corners, Pipe Flashings and Pourable Sealer 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 to 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.
- B. Defects in the roof deck must be reported and documented to the specifier, general contractor and building owner for assessment. The Versico Authorized Roofing contractor shall not proceed unless the defects are corrected.
- C. Refer to Versico Technical Manual for acceptable decks and the applicable Versico Fasteners (when mechanical attachment of insulation is specified).

3.03 SUBSTRATE PREPARATION

- A. On retrofit-recover projects, cut and remove wet insulation, as identified by the specifier, and fill all voids with new insulation so that it is relatively flush.

- B. For all projects, the substrate must be even without noticeable high spots or depressions, and must be free of accumulated water, ice or snow.
- C. Clear the substrate of debris and foreign material. Fresh bitumen based roof cement must be removed or concealed.

3.04 INSTALLATION

Refer to the applicable Material Safety Data Sheets and Technical Data Bulletins for cautions and warnings.

A. Insulation Attachment

- 1. Versico DASH or FAST Adhesive may be specified for insulation securement as outlined in the Versico Technical Manual.
- 2. Versico Fasteners may be used, when specified, to secure Versico Insulation at the specified density outlined in the Versico Technical Manual

B. Membrane Installation

- 1. Fully adhere the EPDM membrane to the acceptable substrate with G200SA Yellow Substrate Adhesive, Low-VOC or Solvent Free EPDM Bonding Adhesive or Aqua Base Bonding Adhesive at the rate specified on the container label. Overlap adjacent EPDM membrane sheets a minimum of 3".
- 2. **Membrane Splicing With QA Seam Tape (membrane is available with Factory-Applied Tape).**
 - a. Apply Versico EPDM Primer to the splice area. When tape is not factory-applied, position QA Seam Tape onto bottom membrane sheet with the edge of the release film along a line marked 1/2" out from the top sheet. Press tape onto sheet using hand pressure, overlapping tape roll ends a minimum of 1". Remove the release film and press top sheet onto tape using hand pressure. Roll the splice with a 2" wide steel roller.
 - b. Install a Quick Applied T-Joint Cover or a 6" wide section of Quick-Applied Uncured EPDM Flashing over all field splice intersections. The use of Lap Sealant with tape splices is optional except at tape overlaps and cut edges of reinforced membrane.

C. Additional Membrane Securement

EPDM membrane must be secured at the perimeter of each roof level, roof section, expansion joint, curb, skylight, interior wall, penthouse, etc., at any angle change which exceeds 2" in one horizontal foot, and at other penetrations in accordance with Versico's details. Additional membrane securement may be provided by Quick Applied RTS (Reinforced Termination Strip) or Seam Fastening Plates.

D. Membrane Flashing

- 1. Refer to Versico Technical Manual for membrane flashing.

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