

G-03

Fully Adhered Applications Over Lightweight Insulating Concrete For EPDM, TPO and VersiFleece Membranes

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This supplement is to serve as criteria for Specifiers and Authorized Contractors regarding Direct Application Over Lightweight Insulating Concrete. For installation details Specifiers and Authorized Contractors are advised to reference all applicable technical manuals/details or the Versico website.

When specified, the EPDM and TPO membranes or VersiFleece (TPO, PVC or KEE HP) membrane may be fully adhered directly to an approved **cellular or perlite lightweight insulating concrete** with a minimum compressive strength of 225 psi.

- A. EPDM membrane can be fully adhered with Versico's EPDM Bonding Adhesive. Versico's TPO Bonding Adhesive shall be used when using TPO membrane. Maximum warranty available (Non-VersiFleece membrane) for direct application is 20 year with peak gust wind speed of 55 mph.
- B. Flexible DASH Adhesive must be used when VersiFleece (TPO, PVC or KEE HP) membrane is specified. Maximum warranty available with VersiFleece 115-mil membranes for direct application is 20 year with peak gust wind speed of 80 mph.
- C. For direct application over cellular lightweight insulating concrete, Aqua Base120 can be used as a two-sided contact adhesive with Non-VersiFleece (EPDM, TPO or PVC) membrane. When Aqua Base 120 Bonding adhesive is specified refer to Spec Supplement G-09 "Aqua Base 120 Bonding Adhesive" for Warranty information.

Note: Use of VersiFleece membranes in conjunction with Water Based adhesives over lightweight insulating concrete is not permitted.

Non-VersiFleece membranes are not to be fully adhered directly to **vermiculite lightweight insulating concrete.** When a VersiFleece membrane is to be fully adhered directly to **vermiculite lightweight insulating concrete,** Versico must be contacted to determine applicable requirements pertaining to priming, venting, warranty duration and wind speed coverage.

Projects where the VersiFleece membrane has been approved will be limited to a wind speed coverage of 55 mph peak gust wind speed unless otherwise approved by Versico.

The Authorized Contractor must provide Versico with a copy of a certification letter from the lightweight insulating concrete manufacturer (on new construction projects), which references the project name and location and contains the manufacturer's brand name, minimum compressive strength, average wet and air dry densities.

Application Cautions

1. The substrate must be dry, free of debris, fins, frost, loose and foreign materials. Fill any gaps in the substrate greater than 1/4" with Flexible DASH Adhesive or VapAir Seal 725TR or VapAir Seal MD (when VersiFleece membrane is to be used or other appropriate material).



- 2. Do not proceed with membrane installation until the lightweight insulating concrete has cured a minimum of 48 hours. If necessary, consult with the lightweight insulating concrete manufacturer concerning additional drying time.
- 3. After rain or other precipitation, follow the manufacturer's requirements concerning proper visual inspection and additional drying time prior to adhering the membrane.
- 4. Prior to membrane installation, darker areas, especially along hairline cracks in the concrete, may serve as an indication of moisture entrapment and possible standing water beneath the surface. If this condition is found, consult with the lightweight insulating concrete manufacturer for proper corrective measures.
- 5. Except when lightweight insulating concrete is poured over slotted steel decks, the authorized roofing contractor must conduct core cuts at the minimum rate of 1 every 2,000 square feet. The core cuts should be located around hairline cracks (if present) where darker areas are visible. After core cuts have been taken, the substrate must be examined for evidence of moisture above the structural deck and, if found, a wet/dry vacuum system, as recommended by the lightweight insulating concrete manufacturer, must be utilized to remove standing water from beneath the surface of the concrete.
 - a. To ensure the efficient operation of the vacuum system, a tight seal must be provided between the nozzle of the vacuum and the lightweight concrete substrate.
 - b. Versico's Non-Weldable or Weldable, One-Way Pressure Relief Breather vents, must be installed over each core cut in accordance with Versico Detail. See Spec Supplement P-01 "Related Products" for more information.

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Review the appropriate Versico Warranty for specific warranty coverage, terms, conditions and limitations.