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Application Procedures for Carlisle's VapAir Seal 725TR Air and Vapor Barrier / Temporary Roof

January 2024

The information contained in this supplement serves as a criteria for Specifiers and Authorized Applicators regarding the design and installation of Carlisle Roofing Systems and related products. Additional information essential for the design and installation of the Roof Systems mentioned herein are also included in the respective Specification for each Roof System and in the Design Reference Section of the Carlisle Technical Manual. Specifiers and Authorized Applicators are advised to reference all applicable sections.

A. General

1. **Carlisle's VapAir Seal 725TR Air and Vapor Barrier** - A 40-mil thick composite consisting of 35-mil self-adhering rubberized asphalt membrane laminated to an 5-mil UV resistant poly film with an anti-skid surface which is fully compatible with FAST Adhesive. 725TR can also function as a temporary roof for up to 120 days. Available in rolls 39" wide by 100' long (325 square feet).
2. **Carlisle CAV-GRIP III Low-VOC Aerosol Contact Adhesive/Primer:** a Low-VOC, methylene chloride-free adhesive that can be used for a variety of applications including: enhancing the bond between Carlisle's VapAir Seal 725TR and various substrates. Coverage rate is approximately 2,000-2,500 sq. ft. per 40 lb cylinder and 4,000-5,000 sq. ft. per 85 lb cylinder as a primer, in a single-sided application.
3. **CCW-702 Primer and 702LV Primer (Low-VOC)** - A single component, solvent based, high-tack primer used to provide maximum adhesion between Carlisle 725TR Air and Vapor Barrier and an approved substrate. Applied by spray or long nap roller with a coverage rating ranging from approximately 300 to 350 square feet per gallon on smooth finishes (i.e., concrete) to 75 square feet per gallon on porous surfaces (i.e., Dens-Deck Prime gypsum board). Available in 5-gallon containers. CCW-702LV Primer contains less than 250g/L VOCs and meets South Coast Air Quality Management District (SCAQMD) and Leadership in Energy and Environmental Design (LEED) Requirements for Volatile Organic Compounds.
4. **CCW-702WB** - a high-tack, water-based contact adhesive for promoting adhesion of Carlisle air/vapor barrier membranes and an approved substrate (i.e., concrete, Dens-Deck Prime and Securock). Applied by roller, brush or spray with an application rate of approximately 200 sq. ft. per gallon. Available in 5-gallon containers. CCW-702WB Primer contains 57g/L VOCs and meets South Coast Air Quality Management District (SCAQMD) and Leadership in Energy and Environmental Design (LEED) Requirements for Volatile Organic Compounds.

B. Approved Substrates

Carlisle's VapAir Seal 725TR Air and Vapor Barrier, in conjunction with either Carlisle's CAV-GRIP III, CCW-702, CCW-702LV or CCW-702WB Primers, can be used over structural concrete, gypsum and wood decks. In addition, Securock/Dens-Deck Prime (typically used over steel deck construction) is a suitable substrate providing it is mechanically fastened to the deck at the minimum rate of 1 per 2 per square foot or adhered to the deck with Flexible FAST Adhesive per Carlisle Specifications.

CAUTION: Use of standard Dens-Deck is not recommended due to excessive primer absorption. When the use of standard Dens-Deck is specified, two coats of Carlisle/CCW Primer will be required along with a trial test to verify adequate adhesion of the Carlisle's VapAir Seal 725TR Air and Vapor Barrier.

C. Limitations

1. Do not apply primer or vapor barrier to frozen substrates. Best results are obtained when temperatures are above 40°F (4°C).
2. Do not apply primer or vapor barrier to damp or contaminated surfaces.
3. Carlisle's VapAir Seal 725TR Air and Vapor Barrier is not recommended for use over sealants containing coal tar or polysulfides. If these materials are present, they must be removed and the surfaces thoroughly cleaned.

D. Installation

1. **Surface Preparation:** The surface shall be dry, have a smooth finish and be free of voids, spalled areas, sharp protrusions, loose aggregate, laitance and form release agents. In the event of rain, concrete must be allowed to dry before primer is applied.
2. **Primer:** Surfaces to receive Carlisle's VapAir Seal 725TR Air and Vapor Barrier must be clean and dry. Prime with Carlisle's CAV-GRIP III, CCW-702, 702LV or 702WB Primer. Apply Primer by spray, brush or with a long nap roller at the applicable coverage rate noted above. At 75°F allow CCW-702, CCW-702LV or CCW-702WB primer to dry 75 minutes minimum or allow CAV-GRIP III to dry for approximately 5 minutes. Primer has a satisfactory cure when it will not transfer when touched. Prime only areas to be waterproofed the same day. Re-prime if area becomes dirty.
3. **Application:** Apply Carlisle's VapAir Seal 725TR Air and Vapor Barrier from low to high point, in a shingle fashion, so that laps will shed water. Overlap all edges at least 2". End laps shall be staggered. Seams and end laps must be rolled with a 2" seam roller. Place membrane carefully to avoid wrinkles and fishmouths. Immediately after installation, roll with a 30" wide, 150 pound weighted segmented steel roller.
4. **Repairs:** Following application, inspect 725TR membrane for tears, punctures, fishmouths, air bubbles and voids due to misalignment at seams. Remove damaged membrane. Prime exposed substrate and allow primer to dry. Apply a new section of Carlisle's VapAir Seal 725TR Air and Vapor Barrier to primed substrate, extending onto adhered membrane 6" on all sides. Firmly press air and vapor barrier repair section to ensure a good seal. Slit fishmouths and overlap the edges. Place a section of Carlisle's VapAir Seal 725TR over the repair and extend 6" in all directions. Firmly press repair section to ensure a good seal.
5. **Insulation and FleeceBACK Membrane Installation:** Ensure surface of Carlisle's VapAir Seal 725TR Air and Vapor Barrier is dry prior to installing insulation. Place insulation over

the surface and mechanically fasten to the roof deck or adhere to the vapor barrier with Flexible FAST Adhesive in accordance with this Carlisle Specification. Complete the installation by adhering FleeceBACK membrane over the insulation.

6. **Installation at angle changes:** For FleeceBACK Systems where insulation is adhered to the vapor retarder and adhered roofing systems with vertical base wall securement and adhered insulation, one of the following options must be incorporated to ensure continuous seal is provided during climatic changes, especially in northern regions:

- a. Option One: Mechanically secure the first course of insulation (bottom layer) with insulation fasteners and plates. A row of fasteners shall be installed within 6" of the angle change spaced 12" O.C.
- b. Option Two: In lieu of fastening, install a 3" diameter backer rod along the angle change to accommodate for movement and prevent the effect of the vapor retarder pulling away from angle change.

Note: Maintain mylar backing at the sponge tubing to prevent the 725TR from adhering to the tubing. As shown in the applicable Carlisle Detail.

- c. Option Three: In lieu of fastening and when the use of backer rod is not possible, the 725TR can be installed with a double fold, allowing extra material to accommodate for structural movement.

Note: Maintain mylar backing within the fold to allow for material expansion in the event of movement. Refer to applicable Carlisle Detail.

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