SPECIFICATION
SUPPLEMENT

G-02

VersiFleece and Insulation Attachment and Coverage Rates with Flexible DASH Adhesive

July 2025

The information contained in this supplement serves as criteria for Specifiers and Authorized Contractors regarding the design and installation of Versico 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 Versico Technical Manual. Specifiers and Authorized Contractors are advised to reference all applicable sections.

A. General

Flexible DASH Adhesive may be used to attach the following roof insulations to an approved roof deck/substrate:

1. 1” (Min.) Polyisocyanurate, 1/2” SecurShield HD, 1/2” SecurShield HD Eco, 1/2” SecurShield HD Plus, 1/2” SecurShield HD Plus Eco, 1.5” DuraFaceR, 1/2” DuraStorm VSH, 1/2" Versico Recovery Board, 1/4” Securock or minimum 1/4” DensDeck or DensDeck Prime, DensDeck StormX, DEXcell FA, DEXcell Glass Mat Roof Board, 7/16” DEXcell, or 5/8” DEXcell FA VSH. If tapered Polyisocyanurate insulation is used, 1/2” minimum thickness is acceptable.

2. Expanded Polystyrene (EPS) insulation overlaid with SecurShield HD, SecurShield HD Eco, 1/2” SecurShield HD Plus, 1/2” SecurShield HD Eco, Versico Recovery Board, Securock, DensDeck/DensDeck Prime, 1/2” EcoStorm VSH, DEXcell FA, DEXcell Glass Mat Roof Board or 7/16” DEXcell. A composite board can be used to eliminate the need for an additional layer of Flexible DASH Adhesive.

3. Extruded Polystyrene insulation overlaid with 1/2” SecurShield HD, 1/2” SecurShield HD Eco, 1/2” SecurShield HD Plus, 1/2” SecurShield HD Plus Eco, 1/2” DuraStorm VSH, Versico Recovery Board, Securock, DensDeck/DensDeck Prime or DensDeck StormX, DEXcell FA, DEXcell Glass Mat Roof Board, 7/16” DEXcell, or 5/8” DEXcell FA VSH.

4. When oriented strand board (OSB) is proposed as the membrane underlayment, a polyisocyanurate/OSB composite board may be used since attachment of individual OSB panels is not recommended due to board stiffness and potential bowing on uneven surfaces.

   Insulation board sizes up to 4' x 8' may be used providing full attachment (full spray, equipment (rig) splatter, 4” or 6” o.c. extrusions) is achieved. Trimming or slitting of boards may be required on uneven surfaces. If necessary, use maximum 4' x 4' boards so full embedment of boards may be achieved.

B. Cautions and Warnings

1. Do not apply Flexible DASH Adhesive when surface and/or ambient temperatures are below 25°F (-4°C). The temperature of Flexible DASH Adhesive must be between 70°F (21°C) and 90°F (32°C), at the time of use. Use blanket heaters and hot boxes when necessary.

2. Flexible DASH may be applied when surface and/or ambient temperatures are below 25°F (-4°C) when heated equipment is used that includes the following: heated blankets, preheater, and heated hose.

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3. When using Flexible DASH Adhesive in non-heated spray equipment, substrate and/or ambient temperatures must be between 25°F (-4°C) and 120°F (49°C).

4. **Bead Adhesive Spacing –** Beads must be applied following spacing approved for specific project conditions (i.e. height, wind zone, and warranty wind speed coverage).

   a. 12-inch on-center bead spacing is accepted in the field of the roof. Projects with higher wind speed coverage will require narrower spacing between beads.

   b. Perimeter bead spacing is typically at 6-inches on-center except for those projects with higher wind speed coverage where narrower bead spacing of 4-inches on-center may be required.

   c. Refer to **Detail A-27.7** (located in **Spec Supplement G-08**) and **Detail VF-27** in VersiFleece Specification for Membrane Attachment using Bead Adhesive approved by Versico or contact Versico prior to installation.

   d. Substrate irregularity, which is commonly associated with gravel surfaced built-up roofing, must be compensated to ensure insulation boards are fully embedded. Do not apply thin beads of adhesive (less than 1/2-inch width wet bead for Non-Dual Tank Applications and 1.5" wide wet bead for Dual Tank Applications), and if necessary increase width of the adhesive bead in uneven areas.

5. **Residual Asphalt**

   a. **Incompatibility of the Substrate (Residual Un-Weathered Asphalt) –** While urethane adhesive is compatible with existing asphaltic roofs that have been exposed and weathered, it is difficult to adhere to **slick, smooth and un-weathered asphalt**. This condition may be encountered when an existing roof is removed, exposing an asphaltic vapor barrier or leaving asphalt residue.

   b. To ensure proper adhesive attachment, one of the following options may be followed:

      1) Prime the surface with Versico's CAV-GRIP 3V, CCW-702, CCW-702LV or CCW-702WB Primer for splatter and bead application.

      2) Switch to Full Spray of Flexible DASH Adhesive applied from heated spray rig to increase surface contact. 100% coverage is required. Splatter applications are not accepted.

      3) Install Versico's VapAir Seal 725TR Air & Vapor Barrier with CAV-GRIP 3V, CCW-702, CCW-702LV or CCW-702WB Primer over the existing asphalt.

      4) Use mechanical securement to attach the first layer of insulation in lieu of adhesive.

6. **Air Infiltration**

   a. On structural concrete decks, gaps between the structural deck and walls and those around penetrations, allows hot humid air from within the building to infiltrate the roofing assembly and possibly condense during the cold season. Lower membrane temperature, especially those associated with white membranes, increase the probability of condensation and promote freezing during low temperatures. Collected frozen moisture trapped above the structural deck when thawed, will eventually lead to weakening of the bottom insulation facer. Weakening of the bottom of the insulation facer can subsequently lead to separation of the foam during a wind event.

      It is important to seal gaps around the perimeter and around penetrations, refer to **Design Reference DR-01 "Construction Generated Moisture"**, to eliminate moisture infiltration.

   b. The same phenomenon with migrating moisture could occur on steel decks, where gaps are not sealed or vapor retarders are not used. In such a case, condensed moisture could result in insulation gapping, rusting of metal fasteners or steel decks and cause insulation to become wet. Refer to **Design Reference DR-01 "Construction Generated Moisture"**.

C. **Roof Deck/Substrate Criteria**

Flexible DASH Adhesive can be used to attach insulation to new or tear-off construction over structural concrete, fibrous cement (i.e., Tectum), gypsum, cellular or perlite lightweight insulating concrete (min. 225 psi compressive strength), wood and steel decks.

Flexible DASH Adhesive may also be used to attach insulation to an existing asphalt or coal tar pitch, modified bitumen or mineral surfaced cap sheets as follows:

1. On tear off projects, the existing roof deck must be investigated and all wet and deteriorated material must be replaced. All loose base sheet material or asphalt must be removed prior to Flexible DASH Adhesive application.

2. The deck surface must be cleaned using compressed air, vacuum equipment or hand/power brooms to remove dust, loose dirt or debris. If excessive dust or dirt is present, a primer may be required prior to application of the adhesive. Contact Versico for specific primer requirements.

3. For new galvanized steel decks, power washing is required to remove finishing oils, if present.

4. For projects with existing Type III or IV asphalt, coal tar pitch, modified bitumen or mineral surface cap sheets, the existing roof must be inspected to determine if moisture is present within the existing assembly. Wet insulation and membrane shall be removed and replaced with compatible materials.

    a. Blisters, buckles, wrinkles and fishmouths shall be cut out or mechanically fastened.

    b. Remove loose gravel, dust and residue from a gravel surfaced BUR by using a Hydro-Vac (wet vacuum equipment). Power vacuum equipment or a power sweeper followed by air blowing or another suitable means are also acceptable. Care shall be exercised in areas where evidence of ponding is obvious (remove residue from low areas prior to proceeding).

    CAUTION: On coal tar pitch, when using white membrane, minimum 1” thick polyisocyanurate is the required membrane underlayment. If gray or tan membrane is used, minimum 1.4" thick polyisocyanurate is required.

D. **Adhesive Coverage Rates**

1. The overall coverage rate for Flexible DASH Adhesive will vary depending on jobsite conditions, product container size, and the substrate as follows:

Flexible DASH Adhesive Coverage Rates					
Approximate Coverage Rate (Sq. Ft.)					
Package Type	**Full Spray**	**Splatter**	**4" o.c.**	**6" o.c.**	**12" o.c.**
Dual Cartridges	N/A	N/A	100-200	200 -300	400 - 600
Dual Tanks	N/A	2,600-2,800	1,100-1,300	1,700-1,900	3,500-3,700
5-Gallon Jugs	1,000	1,800-2,000	670 - 900	1,000 - 1,250	2,000 - 2,500
15-Gallon Drums	1,800-3,000	5,400-6,000	2,110-2,700	3,000-3,750	6,000-7,500
50-Gallon Drums	5,000-10,000	18,000-20,000	6,700 - 9,000	10,000 - 12,500	20,000 - 25,000

Fig 1. Full Spray Application

2. **Full Spray Application and Coverage Rates** (See Figure 1 above)

   a. Flexible DASH is to be dispensed by the appropriate spray rig and gun to achieve 100% coverage of the substrate at a rate of 1 gallon per 100 square feet. Substrate irregularity, which is commonly associated with gravel surface, built-up roofing, may take up to 2 gallons per square to compensate so the insulation boards are fully embedded in tot the Flexible DASH.

   b. To achieve proper coverage, spray in a horizontal, sweeping motion, overlapping each new pass with the previous pass by 50%.

Fig 2. Bead Application

3. **Bead Application and Coverage Rates** (See Figure 2 above)

   a. Flexible DASH is to be dispensed in ribbons or beads to achieve spacing approved for specific project conditions (i.e. height, wind zone and warranty wind speed coverage).

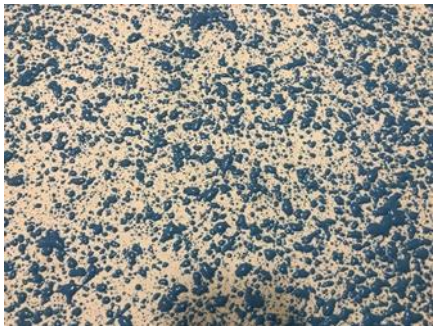

Fig 3. Correct Coverage – Splatter Application

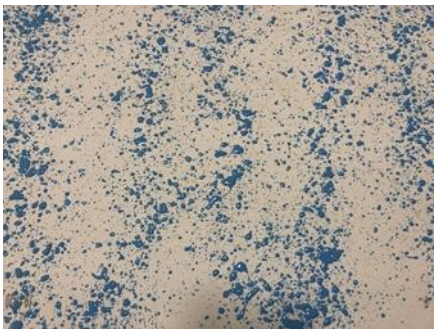

Fig 4. Light Coverage – Splatter Application

4. **Splatter Application and Coverage Rates** (See Figures 3 and 4 above)

   a. Spray Rig and Gun

      1) Flexible DASH is to be dispensed by the appropriate spray rig and gun to achieve 50% coverage of the substrate at a rate of 1/2 gallon per 100 square feet.
      2) To achieve proper coverage, spray in a horizontal, sweeping motion, from a minimum 24” height, overlapping each new pass with the previous pass by 50%.
      3) Adhesive should be applied in large droplets, not a fine mist. Air pressure is too high if the adhesive is in a fine mist.

   b. Dual Tanks

      1) Flexible DASH is to be dispensed using Dual Tanks to achieve 50% coverage of the substrate at a rate of 3.75 lbs per 100 square feet.
      2) To achieve proper coverage, spray in a horizontal, sweeping motion, from a minimum of 24” height, overlapping each new pass with the previous pass.
      3) When applying, the 14” extension nozzle should NOT be used.

E. **Installation Criteria**

1. Check to ensure the substrate is dry. Flexible DASH Adhesive cannot be applied to a wet or damp surface.

2. Dispense Flexible DASH Adhesive over the dry substrate area at the coverage rate indicated previously to allow for full coverage, splatter or proper bead spacing.

3. Allow the adhesive to rise up approximately 1/4" to 3/4", depending on dispensing method, and develop strings prior to setting insulation boards into adhesive.

Note: String-time is measured by touching the adhesive with a splice wipe and looking for development of "strings" of adhesive as you pull the splice wipe out of the adhesive. With Flexible DASH Adhesive, string time is generally around 1-1/2 – 2 minutes after application at room temperature.

4. Walk the boards into the adhesive and roll using the 30" wide, 150 lb weighted segmented steel roller to ensure full embedment. The proper roller can be purchased from Rooftop Equipment or one of their distribution partners. Optimal set up time should be approximately 5 to 7 minutes.

CAUTION: Walking on the boards immediately after placement in adhesive can cause slippage/movement until the adhesive has started to set up. On roofs with a slope greater than 1/2" in 12", begin adhering insulation at the low point and work upward to avoid slippage. One person should be designated to walk/roll in all boards and trim/slit or apply weight as needed to ensure adequate securement.

CAUTION: If boards easily slide, string time has not been achieved.

5. Position all edges of the boards on the top flutes of steel decks for adequate support.

6. If multiple layers of insulation are specified or required, spray, equipment (rig) splatter or bead-apply Flexible DASH Adhesive over the base layer once fully secured and follow procedures noted above for attachment of each insulation layer.

This Spec Supplement represents the applicable information available at the time of its publication. Owners, Specifiers and Versico authorized roofing contractors should consult Versico or their Versico Independent Sales Representative for any information that has subsequently been made available.

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