

**CA-01-RR-08-20**  
**Code Highlights: Re-Roofing**

*This document is intended to serve as a quick reference guide for code tested assemblies for the re-roofing market segment. While the document does not cover all the tested assemblies, it targets a specific application associated with reroofing like recover, partial tear-off (membrane removal only), or a complete tear-off of the existing roofing assembly. Each release will focus on an application category in response to demands from the field.*

*Feedback or suggestions concerning future releases is strongly suggested.*

**Re-Roofing Assemblies for Recover Applications**

As part of Versico's commitment to providing unique roofing solutions for the re-roofing market, this publication spotlights economically viable options for recovering existing roofing systems. The assemblies are designed to offer simple, convenient, and value-based roofing solutions; allowing for quick installation with minimal disturbance or interference to the building operation. The existing substrates include asphaltic roofs, standing seam metal roofs, and single-ply membrane assemblies.

The tables below highlight various EPDM, PVC, TPO, and VersiFleece® membrane recover assemblies designed for installation over existing roofs without tearing off. The tables are grouped by the type of the new assembly (adhered or mechanically fastened), the use of insulation or cover boards (insulated or uninsulated), and the type of the existing roofing system. Two tables are also included for specialty applications for VacuSeal™ and RapidLock® options.

The following notes apply to all tables contained in this document:

- All testing has been conducted by ANSI-accredited testing laboratories.
- All wind uplift resistance values represent the highest pressure attained during testing. Safety factors have not been applied.
- The wind uplift rating of a new assembly cannot exceed the wind uplift rating of an existing roofing system when the new assembly is adhesively attached directly to the existing roof cover.
- The wind uplift resistance values of the adhesively attached assemblies document the ultimate attachment strength to the specifically listed existing roof covers. Load resistance of the roof deck must be verified to the satisfaction of the Authority Having Jurisdiction.

While the focus of this Code Alert is to bring awareness to the various available tested assemblies and ratings, it does not address specific warranty requirements. Selection of materials within each assembly may be influenced by project-specific warranty expectations. The Versico Project Review & Design Group must be consulted with questions concerning warranty requirements and any related design enhancements.

## Recover Applications – Directly Adhered Membrane

| Substrate: Existing Single-Ply     |  |   |                       |
|------------------------------------|--|---|-----------------------|
| Existing Substrate                 | Membrane   | Attachment  | Tested Pressure (psf) |
| EPDM                               | Min. 100-mil VersiFleece TPO or any VersiFleece PVC (Min. 105-mil) | Flexible DASH™ or Flexible DASH Dual Tank<br>12" o.c.   | -60                   |
| EPDM                               | Min. 100-mil VersiWeld TPO or any VersiFleece PVC (Min. 105-mil)   | Flexible DASH or Flexible DASH Dual Tank<br>6" o.c.   | -150                  |
| EPDM                               | Min. 100-mil VersiFleece TPO or any VersiFleece PVC (Min. 105-mil) | Flexible DASH @ 1 gal/square (Full Coverage) or Flexible DASH Dual Tank (Full Coverage) splatter application @ 3.7 lbs/sq | -270                  |
| TPO                                | Min. 100-mil VersiFleece TPO                                       | Flexible DASH Dual Tank (Full Coverage) splatter application @ 3.7 lbs/sq   | -540                  |
| EPDM                               | Min. 100-mil VersiFleece TPO or any VersiFleece PVC (Min. 105-mil) | Flexible DASH @ 1 gal/square (Full Coverage) or Flexible DASH Dual Tank (Full Coverage) splatter application @ 3.7 lbs/sq | -630                  |
| TPO                                | Min. 45-mil VersiWeld TPO  | CAV-GRIP® 3V Low-VOC Adhesive   | -1170                 |
| Substrate: Existing Asphaltic Roof |  |   |                       |
| Multi-Ply                          | Min. 90-mil VersiFleece AC EPDM or 120-mil VersiFleece AC TPO      | Cold Applied Adhesive   | -120                  |

## Recover Applications - Insulated Adhered Membrane

| <b>Substrates: Existing granule surfaced BUR, smooth surfaced BUR, granule surfaced APP or SBS modified bitumen, smooth surfaced SBS modified bitumen or gravel surfaced BUR (loose gravel removed)</b> |  |  |                       |
|---|--|--|-----------------------|
| Insulation/Cover Board  | Attachment   | Membrane/Attachment  | Tested Pressure (psf) |
| Min. ¼" DensDeck® Prime or SECUROCK® Gypsum-Fiber or Min. ½" DuraStorm VSH™, SecurShield® HD or SecurShield HD Plus   | Flexible DASH or Flexible DASH Dual Tank<br>12" o.c.<br>(6" o.c. for gravel BUR) | Min. 45-mil VersiGard EPDM FR, VersiGard White EPDM, VersiGard Reinforced EPDM, or VersiGard Reinforced EPDM FR adhered using G200SA, CAV-GRIP 3V, or EPDM x-23 Low-VOC Bonding Adhesive   | -605                  |
|   |  | Min. 45-mil VersiWeld TPO membrane adhered using CAV-GRIP 3V, Low-VOC, or VersiWeld TPO Bonding Adhesive.<br><br>Min. 100-mil VersiFleece TPO or any VersiFleece PVC (Min. 105-mil) adhered using Flexible DASH (FULL), Flexible DASH Dual Tank (Splatter), or HydroBond Adhesive<br><br>Min. 50-mil VersiFlex PVC, VersiFlex FRS PVC, or VersiFlex KEE HP membrane adhered using Low-VOC PVC Bonding Adhesive   |                       |
| Min. ¼" DensDeck Prime or Min. ½" SecurShield HD or SecurShield HD Plus   | Flexible DASH or Flexible DASH Dual Tank<br>12" o.c.<br>(6" o.c. for gravel BUR) | Min. 50-mil VersiFlex PVC or VersiFlex FRS PVC adhered with HydroBond Adhesive   |                       |
| <b>Substrate: Gravel Surfaced BUR (loose gravel removed)</b>  |  |  |                       |
| 1" Insulfoam SP   | Flexible DASH @ 1 gal/sq (Full Coverage)   | Min. 100-mil VersiFleece TPO or VersiFleece KEE HP adhered using Flexible DASH @ 1 gal/sq (Full Coverage)  | -445                  |
| <b>Substrate: Existing Adhered EPDM Single-Ply</b>  |  |  |                       |
| Min. ½" SecurShield HD or SecurShield HD Plus   | Flexible DASH or Flexible DASH Dual Tank<br>6" o.c.                              | Min. 100-mil VersiFleece TPO or any VersiFleece PVC (Min. 105-mil) adhered using Flexible DASH or Flexible DASH Dual Tank, 12" o.c.  | -90                   |
|   |  | Min. 45-mil VersiGard EPDM FR, VersiGard White EPDM, VersiGard Reinforced EPDM, or VersiGard Reinforced EPDM FR adhered using G200SA, CAV-GRIP 3V, or EPDM x-23 Low-VOC Bonding Adhesive<br><br>Min. 45-mil VersiWeld TPO membrane adhered using CAV-GRIP 3V, Low-VOC, or VersiWeld TPO Bonding Adhesive.<br><br>Min. 100-mil VersiFleece TPO or any VersiFleece PVC (Min. 105-mil) adhered using Flexible DASH (FULL), Flexible DASH Dual Tank (Splatter), or HydroBond Adhesive<br><br>Min. 50-mil VersiFlex PVC, VersiFlex FRS PVC, or VersiFlex KEE HP membrane adhered using Low-VOC PVC Bonding Adhesive | -135                  |

## Recover Applications – Mechanically Fastened Membrane (Optional Insulation)

| Substrates: Existing granule surfaced BUR, smooth surfaced BUR, granule surfaced APP or SBS modified bitumen or smooth surfaced SBS modified bitumen |   |   |  |                                    |                       |
|--|---|---|--|------------------------------------|-----------------------|
| Deck   | Insulation  | Membrane  | Fasteners / Plates   | Attachment                         | Tested Pressure (psf) |
| Min. 22-ga. Steel  | (Optional)  | Min. 45-mil VersiWeld TPO/ VersiWeld TPO Plus                         | Versico HPVX Fasteners / HPVX Plates                           | 12' sheets fastened 12" o.c.       | -60                   |
| Min. 19/32" Plywood or Wood Plank  | (Optional)  | Min. 60-mil VersiWeld TPO/ VersiWeld TPO Plus                         | Versico HPVX Fasteners / HPVX Plates                           | 10' sheets fastened 6" o.c.        | -90                   |
| Min. 22-ga. Steel  | (Optional)  | Min. 45-mil VersiWeld TPO/ VersiWeld TPO Plus                         | Versico HPVX Fasteners / HPVX Plates                           | 10' or 12' sheets fastened 6" o.c. | -105                  |
| Min. 22-ga. Steel  | (Optional)  | Min. 45-mil VersiGard Reinforced EPDM or VersiGard Reinforced EPDM FR | Versico HPVX Fasteners / Polymer Batten or Metal Fastening Bar | 8' sheets fastened 12" o.c.        | -60                   |
| Min. 22-ga. Steel  | (Optional)  | Min. 45-mil VersiGard Reinforced EPDM or VersiGard Reinforced EPDM FR | Versico HPV Fasteners / Polymer Seam Plates                    | 10' sheets fastened 6" o.c.        | -90                   |
| Min. 22-ga. Steel  | Min. 3/8" R-Tech FanFold, 1/4" DensDeck Prime or SECUROCK Gypsum-Fiber or Min. 1/2" DuraStorm VSH, SecurShield HD | Min. 50-mil VersiFlex PVC or KEE HP                                   | Versico HPVX Fasteners / HPVX Plates                           | 81" sheets fastened 12" o.c.       | -75                   |
|  |   |   | Versico HPVX Fasteners / Oval Barbed Plates                    | 10' sheets fastened 6" o.c.        | -90                   |
|  |   |   | Versico HPVX Fasteners / HPVX Plates                           | 81" sheets fastened 6" o.c.        | -120                  |
| Min. 19/32" Plywood or Wood Plank  |   |   |  |                                    |                       |

## Recover Applications - Induction Welded Assemblies

| Substrates: Existing granule surfaced BUR, smooth surfaced BUR, granule surfaced APP or SBS modified bitumen or smooth surfaced SBS modified bitumen |   |   |  |   |                       |
|--|---|---|--|---|-----------------------|
| Deck   | Insulation  | Membrane                                      | Fasteners                                  | Fastening Density   | Tested Pressure (psf) |
| Min. 22-ga. Steel  | (Optional)  | Min. 45-mil VersiWeld TPO/ VersiWeld TPO Plus | Versico HPVX Fasteners / RhinoBond Plates  | 1 per 5.3 ft <sup>2</sup><br>(6 parts per 4x8 area/board)   | -90                   |
| Min. 19/32" Plywood or Wood Plank  | (Optional)  | Min. 45-mil VersiWeld TPO/ VersiWeld TPO Plus | Versico HPVX Fasteners and RhinoBond Plate | 1 per 4 ft <sup>2</sup><br>(2 x 2 ft grid pattern)          | -90                   |
| Min. 22-ga. Steel  | Min. 3/8" R-Tech FanFold, 1/4" DensDeck Prime or SECUROCK Gypsum-Fiber or Min. 1/2" DuraStorm VSH, SecurShield HD | Min. 50-mil VersiFlex PVC or KEE HP           | Versico HPVX Fasteners / RhinoBond Plates  | 1 per 5.3 ft <sup>2</sup><br>(6 parts per 4 x 8 area/board) | -90                   |
| Min. 19/32" Plywood or Wood Plank  |   |   | Versico HPVX Fasteners and RhinoBond Plate | 1 per 4 ft <sup>2</sup><br>(2 x 2 ft grid pattern)          | -90                   |

## Recover Applications – Metal Retrofit Assemblies

| Substrate: Existing Standing Seam Metal Roof       |   |  |  |                       |
|--|---|--|--|-----------------------|
| Insulation   | Membrane                                      | Fasteners / Plates   | Attachment   | Tested Pressure (psf) |
| One or more layers, any combination, any thickness | Min. 45-mil VersiGard Reinforced EPDM         | HP Purlin or Retrodriller Fasteners / 2" Polymer Seam Plates | Max. 78" Purlins fastened 12" o.c.                           | -60                   |
|  |   |  | 60" Purlins fastened 12" o.c. with 9" PS R.U.S.S.            |                       |
| One or more layers, any combination, any thickness | Min. 50-mil VersiFlex PVC or VersiFlex KEE HP | HP Purlin or Retrodriller Fasteners / HPVX Plates            | Max. 75" Purlins fastened 18" o.c.                           | -60                   |
|  |   |  | 120" Purlins fastened 12" o.c.                               |                       |
| One or more layers, any combination, any thickness | Min. 60-mil VersiWeld TPO                     | HP Purlin or Retrodriller Fasteners / RhinoBond Plates       | 120" Purlins fastened 12" o.c.                               | -60                   |
| One or more layers, any combination, any thickness | Min. 45-mil VersiWeld TPO                     | HP Purlin or Retrodriller Fasteners / HPVX Plates            | Max. 138" Purlins fastened 12" o.c.                          | -60                   |
|  |   |  | Max. 138" Purlins fastened 12" o.c. with 10" TPO PS R.U.S.S. | -75                   |

## Recover Applications - RapidLock Assemblies

| Substrates: Existing granule surfaced BUR, smooth surfaced BUR, granule surfaced APP or SBS modified bitumen or smooth surfaced SBS modified bitumen |  |  |                       |
|--|--|--|-----------------------|
| RapidLock Cover Board  | Attachment   | Attachment                                       | Tested Pressure (psf) |
| ½" SecurShield HD RL   | Flexible DASH or Flexible DASH Dual Tank 6" o.c.         | Any Versico EPDM, TPO, or PVC RapidLock Membrane | -150                  |
| ½" SecurShield HD RL   | Flexible DASH or Flexible DASH Dual Tank (Full Coverage) | Any Versico EPDM, TPO, or PVC RapidLock Membrane | -285                  |

## Recover Applications - VacuSeal V2T Vent

| Substrates: Any Existing Roofing Assembly  |  |   |  |                       |
|--|--|---|--|-----------------------|
| Insulation   | Underlayment   | Membrane  | Attachment   | Tested Pressure (psf) |
| (Optional) Any insulation and/or cover board, any combination, any thickness- loose-laid | 12"-wide strips of VacuSeal Air Distribution Strip, loose-laid in a crossing pattern, linking the V2T vents and distributing air underneath the membrane and V2T roof vent | Minimum 45-mil VersiWeld TPO or Min. 50-mil VersiFlex PVC or VersiFlex KEE HP | VacuSeal Vent installed in accordance with Versico instructions, spaced maximum 50' o.c. | -195*                 |

\* Note: This listing not for use in HVHZ Areas