

DensDeck Prime Storm X VSH Code Alert

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This Code Alert is a monthly online release that addresses issues pertaining to FM and UL, including raising awareness of industry updates and new approvals and elaborating on existing approved assemblies that may require additional clarification. The contents of each release will be altered or customized to address specific field inquiries or to respond to unique market trends. Feedback concerning future topics is strongly encouraged.

Very Severe Hail (VSH) – FM Approvals

As part of Versico’s continual search for high-performance and unique roofing system assemblies, extensive Very Severe Hail (VSH) testing has been completed at FM. The main VSH hail belt, as determined by FM, is in the Midwestern United States. However, other areas of the country have also shown interest in these robust assemblies.

The following tables highlight VSH testing conducted on various TPO and VersiFleece® membrane assemblies and feature the use of DensDeck® Prime StormX™. The assemblies can be used on new construction projects as well as for re-roofing/recover applications. The tables are categorized by deck/substrate type and include the associated FM wind uplift rating.

New Construction / Tear-Off Applications – Steel Deck / DensDeck Prime StormX

Steel Deck / DensDeck Prime StormX					
Base Insulation Layer	Attachment Per 4x8 Board ¹	Top Insulation Layer	Attachment Per 4x8 Board ¹	Membrane / Attachment	FM Rating
Min. 1-1/2" VersiCore®	Loose Laid	5/8" DensDeck Prime StormX	8 Fasteners	145-mil VersiFleece® White EPDM or Min. 135-mil VersiFleece TPO Min., or 145-mil VersiFleece EPDM Min adhered using Flexible DASH Adhesive - 4" o.c.	VSH – 1-90
			18 Fasteners		VSH – 1-135
			32 Fasteners		VSH – 1-255
Min. 1-1/2" VersiCore	10 Fasteners	5/8" DensDeck Prime StormX	Flexible DASH Adhesive 12" o.c.	Min. 60-mil VersiWeld or VersiWeld Plus adhered using CAV-GRIP® 3V, Low-VOC, or VersiWeld Bonding Adhesives	VSH – 1-90
Min. 2" VersiCore	8 Fasteners				VSH – 1-90
Min. 2" VersiCore	20 Fasteners				Flexible DASH Adhesive 6" o.c.

Min. 2" VersiCore	32 Fasteners		Flexible DASH Adhesive 4" o.c.		VSH – 1-225
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Note 1: Refer to the published Versico Design Supplement document for fastening pattern layouts.

New Construction / Tear-Off Applications – Concrete Deck

Structural Concrete Deck					
Base Insulation Layer	Attachment	Top Insulation Layer	Attachment	Membrane / Attachment	FM Rating
Min. 1-1/2" VersiCore	Flexible DASH Adhesive 12" o.c.	5/8" DensDeck Prime StormX	Flexible DASH Adhesive 12" o.c.	Min. 60-mil VersiWeld or VersiWeld Plus adhered using CAV-GRIP 3V, Low-VOC, or VersiWeld Bonding Adhesives	VSH – 1-315
Min. 3/4" OPTIM-R®	Flexible DASH Adhesive 6" o.c.		Flexible DASH Adhesive 6" o.c.	Min. 115-mil VersiFleece EPDM, Min. 115 VersiFleece White EPDM, or Min. 115-mil VersiFleece TPO adhered using Flexible DASH Adhesive - 4" o.c.	VSH – 1-120

Recover Applications – Steel Deck

Steel Deck Recover					
Base Insulation Layer	Attachment	Top Insulation Layer	Attachment Per 4x8 Board	Membrane / Attachment	FM Rating
None	None	5/8" DensDeck Prime StormX	8 Fasteners	Min. 145-mil VersiFleece EPDM, Min. 145-mil VersiFleece White EPDM, or Min. 135-mil VersiFleece TPO adhered using Flexible DASH Adhesive - 4" o.c.	VSH – 1-90

			Flexible DASH Adhesive 6" o.c.	Min. 60-mil Sure-Weld or Sure-Weld EXTRA adhered using CAV-GRIP III, Low-VOC, or Sure-Weld Bonding Adhesives Min. 115-mil VersiFleece EPDM, Min. 115-mil VersiFleece White EPDM, or Min. 115-mil VersiFleece TPO adhered using Flexible DASH Adhesive - 4" o.c.	VSH – 1-150
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Recover Applications – Concrete Deck

Structural Concrete Recover					
Base Insulation Layer	Attachment	Top Insulation Layer	Attachment	Membrane / Attachment	FM Rating
(Optional) Min. 1-1/2" VersiCore or SecurShield®	Flexible DASH Adhesive 6" o.c.	5/8" DensDeck Prime StormX	Flexible DASH Adhesive 6" o.c.	Min. 60-mil VersiWeld or VersiWeld Plus adhered using CAV-GRIP 3V, Low-VOC, or VersiWeld Bonding Adhesives Min. 115-mil VersiFleece EPDM, Min. 115-mil VersiFleece White EPDM, or Min. 115-mil VersiFleece TPO adhered using Flexible DASH Adhesive - 4" o.c.	VSH – 1-150

These assemblies can be viewed on the FM Approvals [RoofNAV website](#).

Please consult the Versico Project Review Team with questions concerning specific project warranty requirements or reference the [Versico VSH Code Approval Guide](#).