



April 20, 2023

Addendum 3

Bid No. 23-022-2023-PWI-010

Repair and Replacement of Modified Bituminous and Gravel Roof

Addendum 3 contains Alternate Material Specifications submitted via email and REVISED Bid Form #2.

This bid will be opened at the City of Fairhope's City Services and Public Utilities Building, 555 South Section Street, Fairhope, AL 36532 at 10:00 AM on Tuesday, April 25, 2023. Vendors shall acknowledge this Addendum 2 on their submitted Bid Response Form.

EQUIVALENT MATERIAL SPECIFICATIONS:

After review of a submitted pre-bid substitution, the following specified manufactured product has been deemed equivalent to:

- d. TPO
 - i. GAF EverGuard® Fleece-back TPO Ultra 60-mil Membrane (Specifications attached)
 - ii. 60 mil Membrane
 - iii. Installation (Response shall state, submittal required) - per manufacturer's specifications
 - iv. Roofing adhesive – GAF OlyBond500® Canisters, low-rise polyurethane foam roofing adhesive (Specifications attached)

- d.E. TPO
 - i. Versiweld Thermoplastic Membrane (TPO) - 60 Mil TPO Roofing System (Product Details and Specifications attached)
 - ii. Total Thickness – 60 mil, nominal
 - iii. Installation (Response shall state, submittal required) - per manufacturer's specifications
 - iv. Notes: Deemed equivalent – subject to submittals meeting minimum Fire Rating, Wind Uplift, Warranty and all other list General Conditions and Project Specifications.

**ITEM III
REVISED BID RESPONSE FORM #2**

Date: ____ / ____ / ____

Bid No: 23-022-2023-PW-010 Repair and Replacement of Modified Bituminous and Gravel Roof

Bids Due: Tuesday, April 25, 2023, 10:00 A.M.

Description	Lump Sum Bid
TPO - Repair and Replacement of Modified Bituminous and Gravel Roof Lump Sum Bid:	
Description	Lump Sum Bid
PVC - Repair and Replacement of Modified Bituminous and Gravel Roof Lump Sum Bid:	
Description	Lump Sum Bid
TPO (Versiweld) - Repair and Replacement of Modified Bituminous and Gravel Roof Lump Sum Bid:	
Description	Cost Per Square Foot
Schedule of Values Gypsum Decking Repair (Bid Cost Per Square Foot)	

TPO Membrane Installation System Proposed:

- Mechanically Attached
- RhinoBond®
- Adhered (Glued)

Bid will include all labor, materials, equipment, shipping and postage, overhead, profit, bonds, insurance and all other costs necessary to provide the complete services outlined within this CONTRACT and scope of work.

Receipt of the following Addenda to these documents is hereby acknowledged by the undersigned (CONTRACTOR to complete below):

ADDENDUM NO.	DATE ISSUED	ADDENDUM NO.	DATE ISSUED
_____	_____	_____	_____
_____	_____	_____	_____

Each bid must give the full business address of the CONTRACTOR and must be signed by him with his usual signature. Bids by partnerships must furnish the full names of all partners and must be signed with the partnership name by one of the members of the partnership, or by an authorized representative, followed by the signature and designation of the person signing. Bids by corporations must be signed with the legal name of the corporation followed by the name of the State of Incorporation and by the signature and designation of the president, secretary, or other person authorized to bind it in the matter. The name of each person shall also be typed or printed below the signature. A bid by a person who affixes to this signature the word "president," "secretary," "agent," or other designation without disclosing his principal, may be held to be the bid of the individual signing. When requested by the City of Fairhope, Baldwin County, Alabama, satisfactory evidence of the authority of the officer signing in behalf of the corporation shall be furnished.

The undersigned agrees to furnish the goods/services as requested by you for the City of Fairhope, Baldwin County, Alabama in your invitation to bid, and certifies that they will meet or exceed the specifications called for. The undersigned has read all information pertaining to this bid and has resolved all questions. It is also understood and agreed that all prices quoted are F.O.B. described in the bid documents and specifications. The undersigned also affirms he/she has not been in any CONTRACT or collusion among BIDDERS or prospective BIDDERS in restraint of freedom of competition, by CONTRACT to bid at a fixed price or to refrain from bidding or otherwise.

Witness our hands and seals this _____ day of _____, 2023.



SUBSTITUTION REQUEST (During the Bidding Phase)

Project: Repair and Replacement of Mod Bit and Gravel Roof
Fairhope, AL
To: Richard D. Johnson, P.E., Project Manager
Re: Prebid approval Thermoplastic Membrane Roofing
Substitution Request Number: 2-2023-PWI 010
From: Andy Foshee (Versico Representative)
Date: April 19th, 2023
A/E Project Number: 2023-PWI 010
Contract For: City of Fairhope

Specification Title: Versiweld Thermoplastic Membrane (TPO) Description: 60 Mil TPO Roofing System
Sections: Page: Article/Paragraph:

Proposed Substitution: Versico Roofing Systems 60 Mil TPO Mechanically Attached System
Manufacturer: Versico Roofing Systems Address: Carlisle, PA Phone: 334.329.4187
Trade Name: Versiweld Model No.: Versiweld 60 Mil TPO

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
Same warranty will be furnished for proposed substitution as for specified product.
Same maintenance service and source of replacement parts, as applicable, is available.
Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
Proposed substitution does not affect dimensions and functional clearances.
Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: Andy Foshee
Signed by:
Firm:
Address:
Telephone: 334.329.4187

A/E REVIEW AND ACTION

- Substitution approved - Make submittals in accordance with Specification Section 01330.
Substitution approved as noted - Make submittals in accordance with Specifications
Substitution rejected - Use specified materials.
Substitution Request received too late - Use specified materials.

Signed by: Date: 04/20/2023

Supporting Data Attached: Drawings Product Data Samples Tests Reports Other

Notes: Deemed equivalent – subject to submittals meeting minimum Fire Rating, Wind Uplift, Warranty and all other list General Conditions and Project Specifications.

June 13, 2022

Re: Versico Roofing Systems

To Whom It May Concern:

Versico Roofing Systems is a wholly owned division of Carlisle Construction Materials, LLC, formed after Carlisle Companies purchased the Goodyear Tire & Rubber Company's roofing business in March 1993. Versico is an organization with a successful 29-year industry track record. Carlisle Construction Materials is a division of Carlisle Companies Incorporated (CSL), a publicly traded company on the NYSE.

Versico's roofing membranes, accessories, and adhesives are manufactured by Carlisle Construction Materials and are identical in specification, value, and quality as the Carlisle SynTec Systems products.

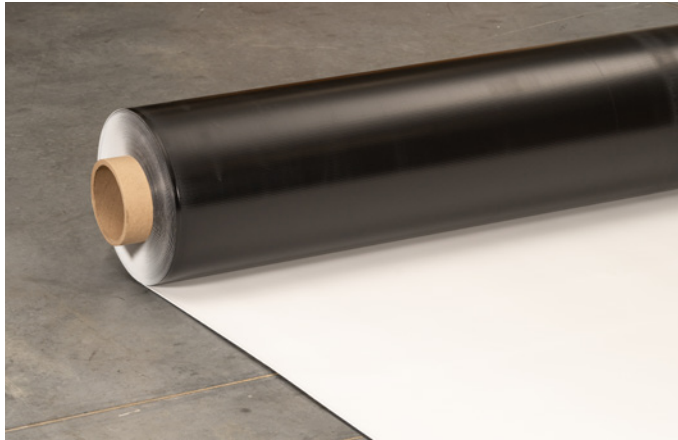
We look forward to the inclusion of our products in your next project and stand ready to provide sales and technical assistance as needed and requested. If you have any further concerns or questions regarding Versico, please feel free to contact me directly.

Sincerely,



Emma Nealy
Marketing Manager
Versico Roofing Systems

VersiWeld® TPO Reinforced Membrane



Overview

Versico's VersiWeld TPO reinforced membrane is a premium, heat-weldable, single-ply thermoplastic polyolefin (TPO) sheet designed for new roof construction and re-roofing applications. VersiWeld High Slope (HS) membrane is formulated with additional flame retardant for higher-slope fire code approvals. VersiWeld Plus is 80 mils (2.03 mm) thick for significantly higher strength and weatherability.

VersiWeld TPO membranes use advanced polymerization technology that combines the flexibility of ethylene-propylene (EP) rubber with the heat weldability of polypropylene. All VersiWeld TPO membranes include OctaGuard XT™, an industry-leading, state-of-the-art weathering package. OctaGuard XT technology enables VersiWeld TPO to withstand the extreme weatherability testing that is intended to simulate exposure to severe climates.

Physical properties of the membrane are enhanced by a strong polyester fabric that is encapsulated between the TPO-based top and bottom plies. The combination of the fabric and TPO plies provides high breaking and tearing strength, as well as excellent puncture resistance. The relatively smooth surface of the membrane produces a total surface fusion weld that results in a consistent, watertight, monolithic roof assembly. The membrane is environmentally friendly and safe to install.

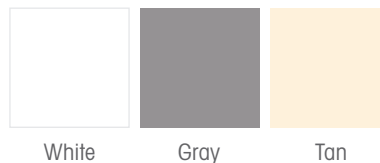
Features and Benefits

- Living Building Challenge "Red List Free" – Declare Label
- VersiWeld TPO is available in 4-, and 6-ft (121.92 cm and 182.88 cm) perimeter sheets and 8-, 10-, 12-, and 16-ft (243.84 cm, 304.80 cm, 365.76 cm, and 487.68 cm) VersiWeld field sheets*
- Outstanding puncture resistance

- Excellent fire resistant assemblies
- Environmentally friendly and stable formulation
- Excellent resistance to impact and low temperatures
- Excellent chemical resistance to acids, bases and restaurant exhaust emissions
- UL 2218 Class 4 hail rating
- Exceptional resistance to heat, solar UV, ozone and oxidation
- Manufactured using a hot-melt extrusion process for complete scrim encapsulation
- Enhanced with the OctaGuard XT weathering package



- Standard Colors:



- Special Colors:



*VersiWeld HS Special Color TPO membranes are available in limited sizes. Refer to Versico's VersiWeld HS TPO Special Color Program Sell Sheet for details.



Sustainable Attributes

Versico Roofing Systems' focus has always been innovation – Innovation to solve problems, improve performance, reduce labor, and above all, improve sustainability. Versico is committed to driving sustainable and efficient processes in the design and manufacturing of our products.

- Up to 10% pre-consumer recycled content
- Fully recyclable when used in mechanically attached systems
- 3rd-party verified Environmental Product Declaration available
- NSF P151 certification for rainwater catchment**
- California Title 24 compliant***
- Free of Living Building Challenge red list chemicals

** White only, produced in Tooele, UT

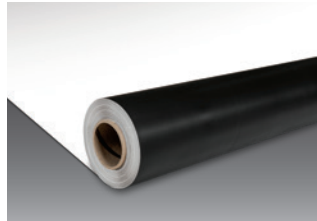
*** White and Tan only



VersiWeld TPO Reinforced Membrane

Wider is Better

Versico's 16-foot VersiWeld TPO delivers a leap in productivity on adhered and induction welded roofs by cutting down on the number of rolls needed and dramatically reducing the number of seams on the roof.



With fewer rolls to load, stage, and kick out, and fewer seams to weld, contractors can save significant time on each project, moving on to the next one sooner.

16-Foot TPO Benefits

- Fewer rolls to load and stage on a job saves crane time and labor at the beginning of each project
- Fewer rolls to position, kick-out, and align during installation saves labor
- Up to 60% fewer seams vs. 10-foot TPO
- Fewer seams to weld, probe, and inspect, saving considerable time during installation
- Fewer T-joint patches to install on each roof
- Less waste and trash from packaging
- Less time spent on each project, allowing contractors to complete more roofs and grow their business

Installation

VersiWeld TPO roofing systems are quick to install, as minimal labor and few components are required. TPO systems are installed using an Automatic Heat Welder, making sheet welding fast, clean, consistent, and easy to learn, while reducing strain on the roofing technician.

Fully-Adhered – membrane is adhered to a suitable substrate utilizing an appropriate bonding adhesive

Mechanically Attached – membrane is attached to the roof deck over a suitable substrate utilizing plates and fasteners which are overlapped with membrane

Induction-Welded – membrane is attached over a suitable substrate via an induction welding tool being placed over the membrane where

a fastened TPO induction welding plate is located to weld the two components together

REVIEW CURRENT VERSICO SPECIFICATIONS AND DETAILS FOR SPECIFIC INSTALLATION REQUIREMENTS.

Precautions

- Sunglasses that filter out ultraviolet light are strongly recommended, as tan and white surfaces are highly reflective. Roofing technicians should dress appropriately and wear sunscreen.
- Surfaces may become slippery due to frost and ice buildup. Exercise caution during cold conditions to prevent falls. Exercise caution when walking on wet membrane. Membranes may be slippery when wet.
- Care must be exercised when working close to a roof edge when the surrounding area is snow-covered, as the roof edge may not be clearly visible.
- Use proper stacking procedures to ensure sufficient stability of the rolls.
- Store membrane in the original undisturbed plastic wrap in a cool, shaded area and cover with light-colored, breathable, waterproof tarpaulins. Membrane that has been exposed to the weather must be prepared with Weathered Membrane Cleaner prior to hot-air welding.
- Take care not to stand or place heavy objects on the edge of folded-over membrane, as this could cause a hard crease in the membrane.
- Maximum sustained temperature not to exceed 160°F (71°C) for TPO membrane.
- Do not use razor blades or other sharp tools to cut the APEEL Protective Film while it is still adhered to the TPO membrane as damage to the underlying membrane may occur. Pull the protective film away from the membrane prior to cutting.
- Remove APEEL Protective Film by pulling towards the center of the roof. Do not remove the film by pulling towards the roof edge.
- A static electric charge may develop when removing APEEL Protective Film from the surface of the membrane sheet. To avoid the possibility of ignition, lids must be closed on any flammable products and a fire extinguisher should be readily available.
- Color membranes will 'fade' over time mainly due to the ultraviolet portion of sunlight. Since most roof surfaces are exposed to variable sunlight, some areas will be more susceptible to color changes caused by UV fading. Warranties for color membranes do not cover fading of colors.

Extreme Testing for Severe Climates

ASTM Standard D6878 is the material specification for Thermoplastic Polyolefin-Based Sheet Roofing. It covers material property requirements for TPO roof sheeting and includes initial and aged properties after heat and xenon-arc exposure. As stated in the scope of the standard, "the tests



VersiWeld TPO Reinforced Membrane

and property limits used to characterize the sheet are values intended to ensure minimum quality for the intended purpose.” Versico’s goal is to produce TPO that delivers maximum performance for the intended purpose of roofing membranes. Maximum performance requires the membrane to far exceed the requirements of ASTM D6878.

Heat Aging accelerates the oxidation rate that roughly doubles for each 18°F (10°C) increase in roof membrane temperature. Oxidation (reaction with oxygen) is one of the primary chemical degradation mechanisms of roofing materials.

Versico Testing – Heat Aging

	ASTM Requirement	VersiWeld Requirement
ASTM Test 240°F	32 weeks**	>128 weeks

** Heat exposure comparable to 3,120 weeks (60 years) at 185°F for 8 hours/day.

- Test specimen is a 2" by 6" (50.8 mm by 152.4 mm) piece of 45-mil (1.14 mm) membrane unbacked, placed in circulating hot-air oven.
- Criterion – no visible cracks after bending aged test specimen around 3" (76.2 mm)-diameter mandrel.

Q-Trac testing combines accelerated weathering with real-world conditions using an array of ten mirrors to reflect and concentrate full spectrum sunlight onto membrane test specimens. The Q-Trac device automatically tracks the sun’s path from morning to night. Also, it adjusts to compensate for seasonal changes in the sun’s altitude. Eight years in Q-Trac testing is equal to 40 years of real-world exposure. Versico requires its VersiWeld TPO membranes to pass the equivalent of 40 years of exposure in the Q-Trac.

Versico Testing – Q-TRAC

	ASTM D6878 Requirement	VersiWeld Requirements
ASTM Test N/A	N/A	Equivalent of 40 years of exposure

Environmental Cycling subjects the membrane to repeated cycles of heat aging, hot-water immersion, and xenon-arc exposure.

- ASTM requirement – none
- Versico Extreme test*:
 - 10 days heat aging at 240°F (116°C) followed by
 - 5 days water immersion at 158°F (70°C) followed by
 - 5,040 kJ/m² (2000 hours at 0.70 W/m² irradiance) xenon-arc exposure

*Test specimen is 2.75" (69.85 mm by 140 mm) by 5.5" piece of membrane with edges sealed.

*Criterion – after 3 complete cycles, test specimens shall remain flexible and not have any cracking under 10x magnification while wrapped around a 3" (76.2 mm)-diameter mandrel.

Supplemental Approvals, Statements and Characteristics:

1. VersiWeld TPO meets or exceeds the requirements of ASTM D6878 Standard Specification for Thermoplastic Polyolefin-Based Sheet Roofing.
2. VersiWeld TPO membranes conform to requirements of the US E.P.A. Toxic Leachate Test (40 CFR part 136) performed by an independent analytical laboratory.
3. VersiWeld TPO was tested for dynamic puncture resistance per ASTM D5635-04 using the most recently modified impact head. 45-mil (1.14 mm) was watertight after an impact energy of 12.5 J (9.2 ft-lbf) and 60-mil (1.52 mm) was watertight after 22.5 J (16.6 ft-lbf). 80-mil (2.03 mm) Plus was watertight after an impact energy of 30.0 J (22.1 ft-lbf).
4. All FM approved assemblies have been tested to pass FM 4470 for foot traffic resistance.

Optional APEEL™ Protective Film:

Shield Versico’s VersiWeld TPO membrane from dirt and scuffs during installation with APEEL Protective Film. Durable and easy to remove, APEEL eliminates the need for rooftop cleaning upon project completion.



- Ideal for re-roofing, re-cover, and new construction projects
- Simple and easy to remove
- Saves time and money when compared to pressure washing
- Protecting from dirt maintains maximum membrane reflectivity and long-term performance

Installation

Simply order membrane with APEEL, install, and remove the film to reveal a clean, new roof.

- APEEL Protective Film should be removed from within areas that are to be heat-welded together. In areas that do not require heat-welding, the APEEL Protective Film can be left in place for up to 90 days without degrading due to its excellent heat- and UV-resistance .
- When the installation of the entire TPO roofing system is complete, remove and discard the APEEL Protective Film.



VersiWeld TPO Reinforced Membrane

Typical Properties and Characteristics

Physical Property	ASTM D6878 Requirement	45-mil (1.14 mm)	60-mil (1.52 mm)	80-mil Plus (2.03 mm)
Tolerance on Nominal Thickness, % ASTM D751 test method	+15, -10	± 10	± 10	± 10
Thickness Over Scrim, in. (mm) ASTM D7635 optical method, average of 3 areas	0.015 min (0.380)	0.018 typical (0.457)	0.024 typical (0.610)	0.034 typical (0.864)
Breaking Strength, lbf (kN) ASTM D751 grab	220 (976 N) min	225 (1.0) min 320 (1.4) typical	250 (1.1) min 360 (1.6) typical	350 (1.6) min 425 (1.9) typical
Elongation Break of Reinforcement, % ASTM D751 grab method	15 min	15 min 25 typical	15 min 25 typical	15 min 25 typical
Tearing Strength, lbf (N) ASTM D751 proc. B 8 in. x 8 in.	55 (245) min	55 (245) min 130 (578) typical	55 (245) min 130 (578) typical	55 (245) min 130 (578) typical
Brittleness Point, °F (°C) ASTM D2137	-40 (-40) max	-40 (-40) max -50 (-46) typical	-40 (-40) max -50 (-46) typical	-40 (-40) max -50 (-46) typical
Linear Dimensional Change, % ASTM D1204, 6 hours at 158°F	± 1 max	± 1 max -0.2 typical	± 1 max -0.2 typical	± 1 max -0.2 typical
Ozone Resistance, no cracks 7X ASTM D1149, 100 pphm, 168 hrs	PASS	PASS	PASS	PASS
UV Exposure (Xenon Arc), no cracks 7X ASTM G155, min. exposure 10,080 kJ/m ² (4,000 hrs - 0.70 W/m ²)	PASS	PASS	PASS	PASS
Water Absorption Resistance, mass % ASTM D471 top surface only 166 hours at 158°F water	± 3.0 max	± 3.0 max 0.90 typical	± 3.0 max 0.90 typical	± 3.0 max 0.90 typical
Factory Seam Strength, lbf (N) ASTM D751 grab method	66 (290) min	66 (290) min	66 (290) min	66 (290) min
Field Seam Strength, lbf/in (kN/m) ASTM D1876 tested in peel	No requirement	25 (4.4) min 50 (8.8) typical	25 (4.4) min 60 (10.5) typical	40 (7.0) min 70 (12.3) typical
Water Vapor Permeance, Perms ASTM E96 proc. B	No requirement	0.10 max 0.05 typical	0.10 max 0.05 typical	0.10 max 0.05 typical
Puncture Resistance, lbf (kN) FTM 101C, method 2031 (see supplemental section)	No requirement	250 (1.1) min 325 (1.4) typical	300 (1.3) min 350 (1.6) typical	400 (1.8) min 450 (2.0) typical
Properties After Heat Aging ASTM D573, 32 weeks @ 240°F or 8 weeks @ 275°F No cracking when bent around 3" diameter mandrel Weight Change, %	PASS No cracking ± 1.5 max	PASS No cracking 1.0 max	PASS No cracking 1.0 max	PASS No cracking 1.0 max
Typical Weights lb/ft ² (kg/m ²)		0.25	0.33	0.45

Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.



VersiWeld TPO Reinforced Membrane

LEED® Information

Pre-consumer Recycled Content	10%
Post-consumer Recycled Content	0%
Manufacturing Location	Senatobia, MS Tooele, UT Carlisle, PA
Solar Reflective Index (SRI)	99 (white) 86 (tan)

Radiative Properties for Cool Roof Rating Council (CRRC) and LEED

	Test Method	White TPO	Tan TPO	Gray TPO
CRRC – Initial solar reflectance	ASTM C1549	0.79	0.71	0.46
CRRC – Solar reflectance after 3 years	ASTM C1549 (uncleaned)	0.70	0.64	0.43
CRRC – Initial thermal emittance	ASTM C1371	0.90	0.86	0.89
CRRC – Thermal emittance after 3 years	ASTM C1371 (uncleaned)	0.86	0.87	0.88
LEED – Thermal emittance	ASTM E408	0.9	0.86	0.85
SRI – Initial (Solar Reflectance Index)	ASTM E1980	99	86	53
SRI – 3 year aged (Solar Reflectance Index)		85	77	48

Radiative Properties (Initial) for Special Colors

	Reflectance	Emittance	SRI
Medium Bronze	0.28	0.86	29
Rock Brown	0.25	0.87	26
Slate Gray	0.38	0.87	42
Terra Cotta	0.25	0.86	25
Patina Green	0.25	0.88	25

Solar Reflectance Index (SRI) is calculated per ASTM E1980. The SRI is a measure of the roof's ability to reject solar heat, as shown by a small temperature rise. It is defined so that a standard black (reflectance 0.05, emittance 0.90) is 0 and a standard white (reflectance 0.80, emittance 0.90) is 100. Materials with the highest SRI values are the coolest choices for roofing. Due to the way SRI is defined, particularly hot materials can even take slightly negative values and particularly cool materials can even exceed 100.



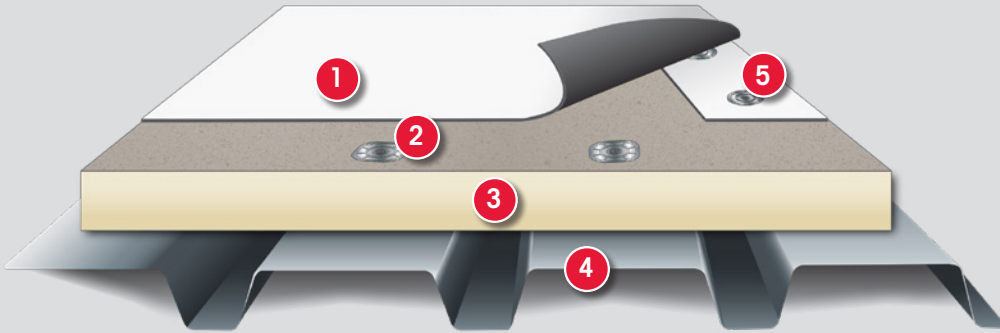
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VERSIWELD TPO

Mechanically Attached Roofing System



Typical Application

- 1 VersiWeld® Reinforced TPO Membrane
- 2 Versico Insulation Fasteners and Plates
- 3 Acceptable Insulation
- 4 Approved Roof Deck
- 5 Membrane Fasteners and Plates

Colors

Standard Colors: White, Gray, and Tan
 Special Colors: Medium Bronze, Rock Brown, Slate Gray, Patina Green, and Terra Cotta

Standard Thicknesses 45-, 60- and 80-mil

Standard Widths 4', 6', 8', 10' and 12'

Standard Lengths 100'

System Features and Benefits

- Heat-weldable membranes
- High wind uplift performance
- Resistance to hail and accidental punctures
- Top ply membrane thickness adds improved long-term weatherability and durability
- OctaGuard XT™ weathering package provides superior long-term performance

Installation

Versico's VersiWeld TPO Mechanically Attached Roofing System utilizes White, Gray, Tan, Medium Bronze, Rock Brown, Slate Gray, Patina Green, or Terra Cotta membranes in standard reinforced 45- or 60-mil thickness or 80-mil thick reinforced VersiWeld Plus membranes.

Insulation is mechanically attached to an acceptable roof deck. VersiWeld membrane sheets are mechanically attached to the deck with appropriate Versico fasteners and plates. Adjoining sheets are overlapped and joined together with a minimum 1½"-wide hot-air weld.

The above information represents a typical Versico VersiWeld TPO Mechanically Attached Roofing System. Refer to Versico's published specifications and details for more complete information.

VersiWeld TPO Membrane

Versico's VersiWeld TPO is a premium, heat-weldable, single-ply thermoplastic polyolefin membrane, engineered to provide outstanding long-term performance in new roof construction and re-roofing applications. All VersiWeld TPO membranes utilize the patented OctaGuard XT weathering package technology, which is able to withstand extreme durability testing intended to simulate exposure to several climates.





Optional APEEL™ Protective Film

- APEEL Protective Film guards the TPO membrane's surface from scuffs and dirt accumulation during installation, improving the roof system's appearance and long-term performance.
- APEEL Protective Film can be left in place for up to 90 days without degrading due to its excellent heat-and UV-resistance.



VersiWeld TPO Accessories

Versico also offers over a dozen prefabricated, in-stock, standard-order accessories, and countless custom-order accessories. All carry a CFA (Certified Fabricated Accessory) stamp of approval, so you know they are manufactured to the highest standards. Every Versico CFA-approved accessory saves time and money during installation.

System Codes

- UL Class A, B and Universal Slope ratings are available over any deck type
- FM Uplift values up to 135 psf can be achieved

For code specifics, refer to Versico's Code Approval Guide.

Warranty

Consult your Authorized Contractor, Versico Independent Sales Representative or Distributor for associated warranty charges.

Versico's VersiWeld TPO systems are backed by our industry leading Total System Warranty. Five to thirty year total system warranties are available with optional hail, puncture and reflectivity warranties available upon request.



Existing or New Deck Type	New Construction						Re-roofing		
	Steel	Plywood or OSB	Lt. Wt. Concrete	Structural Concrete	Wood Planks	Gypsum & Fibrous Cement	Smooth-Surface BUR	Gravel-Surfaced BUR	Existing Single-Ply
Insulation Required	Yes	No	Refer to Specs**	No	Yes	Yes	No	Yes	Refer to Specs**
Recommended Insulations	Approved Versico insulation or cover board								
Insulation Attached By	Versico fasteners and plates								
Membrane Attached By	HPVX Fasteners; HPV-XL Fasteners	HPVX Fasteners; HPV-XL Fasteners	Gyptec Fasteners/Plates	CD-10; MP 14-10 Fasteners	HPVX Fasteners	Gyptec Fasteners/Plates			

FOR TEAR-OFF OPTIONS REFER TO NEW CONSTRUCTION ABOVE.
 For current code approvals and warranties, visit Versico's website or contact a design analyst.
 ** Refer to Versico's VersiWeld Design Criteria Portion of the Current Specification.



A SINGLE SOURCE FOR SINGLE-PLY ROOFING

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INVESTING IN SOLUTIONS FOR OVER 100 YEARS

For more than half a century, Carlisle Construction Materials Incorporated (CCM) has been creating solutions for the construction industry. Beginning with single-ply roofing membranes, Carlisle Construction Materials has expanded its strong and progressive manufacturing practices into all aspects of commercial and residential roofing, waterproofing, HVAC and insulation, covering buildings inside and out with quality materials. Carlisle Construction Materials offers manufacturing and distribution nationwide, creating a network of reliable construction material resources across the country.



U.S. Locations

- 1. Insulfoam Division Headquarters†
CCM EPS Insulation
CCM Polyiso Insulation
- 2. Ultimate RB
- 3. Ultimate RB
- 4. CCM EPS Insulation
- 5. CCM EPS Insulation
- 6. Carlisle Polyurethane Systems
- 7. CCM EPS Insulation
Carlisle Architectural Metals

- 8. CCM TPO Membrane
CCM Polyiso Insulation
CCM EPS Insulation
- 9. Carlisle Architectural Metals
- 10. CCM EPS Insulation
- 11. Carlisle Coatings & Waterproofing
Division Headquarters†
Carlisle Coatings & Waterproofing
Carlisle HVAC Brands Division Headquarters†
Carlisle HVAC Brands
- 12. Carlisle Coatings & Waterproofing
Carlisle Polyiso Insulation
- 13. CCM TPO Membrane

- 14. CCM Polyiso Insulation
- 15. CCM EPS Insulation
- 16. Carlisle Architectural Metals
- 17. Carlisle Polyurethane Systems
- 18. Carlisle Polyurethane Systems
- 19. Drexel Metals Division Headquarters†
Carlisle Architectural Metals
- 20. Carlisle Polyurethane Systems
- 21. CCM PVC Membrane
CCM EPDM Membrane
- 22. CCM EPS Insulation
- 23. CCM Polyiso Insulation

- 24. Carlisle Polyurethane Systems
- 25. Ultimate RB
- 26. Carlisle Architectural Metals
- 27. Carlisle Construction Materials Corporate
Headquarters†
CCM EPDM Membrane
CCM TPO Membrane
Carlisle Coatings & Waterproofing
- 28. CCM Polyiso Insulation
- 29. Carlisle Architectural Metals
- 30. CCM Polyiso Insulation
- 31. Hunter Panels Division Headquarters†
CCM Polyiso Insulation
- 32. CCM EPS Insulation
- 33. Carlisle Architectural Metals
- 34. PAC-CLAD Petersen Division Headquarters†
Carlisle Architectural Metals
- 35. Carlisle Architectural Metals
- 36. Carlisle Architectural Metals
- 37. Carlisle Architectural Metals
- 38. CCM EPS Insulation
- 39. Carlisle Architectural Metals
- 40. Carlisle Architectural Metals
- 41. Carlisle Architectural Metals
- 42. Henry® Company
- 43. Henry Company
- 44. Henry Company
- 45. Henry Company
- 46. Henry Company
- 47. Henry Company
- 48. Henry Company
- 49. Henry Company
- 50. Henry Company
- 51. Henry Company
- 52. Henry Company Division Headquarters†
- 53. Henry Company
- 54. Carlisle Architectural Metals
- 55. Carlisle Architectural Metals
- 56. Carlisle Architectural Metals

† Division Headquarters

Commercial Roofing

 <p>CARLISLE SYNTEC SYSTEMS www.carlislesyntec.com</p>	<p>Carlisle SynTec Systems has been the leader in the commercial single-ply roofing industry for more than 50 years. Carlisle SynTec's product offering includes EPDM, TPO, PVC, and FleeceBACK® membranes, as well as a full line of accessories. The company also manufactures insulation, adhesives, primers, and membrane cleaners. Additionally, Carlisle SynTec provides the building industry with metal roofing, coatings, sealants, vegetated roof components, skylights, pavers, and edge metal.</p>	<p>P.O. Box 7000 Carlisle, PA 17013 (800) 479-6832</p>
 <p>VERSICO ROOFING SYSTEMS www.versico.com</p>	<p>Versico Roofing Systems was formed in 1993 and has focused its efforts on quality products and exceptional service. Versico's product offerings include EPDM, TPO, PVC, and fleece-backed membranes; in addition to roof garden systems and a complete line of insulation and accessory products. Versico is one of the top three single-ply roofing system manufacturers in the United States.</p>	<p>P.O. Box 1289 Carlisle, PA 17013 (800) 992-7663</p>
 <p>WEATHERBOND ROOFING SYSTEMS www.weatherbondroofing.com</p>	<p>WeatherBond offers easy-to install, competitively priced, and nationally distributed single-ply roofing systems. WeatherBond's product offering includes EPDM, TPO, and PVC membranes as well as a full line of accessories for each system.</p>	<p>P.O. Box 251 Plainfield, PA 17013 (866) 471-5125</p>
 <p>HUNTER XCI HUNTER www.hpanels.com</p>	<p>Hunter Panels and Hunter Xci are industry leaders in discretionary thermal efficient Polyiso insulation for roof and wall applications. Answering the call for over 20 years Hunter Panels provides the best in customer service and technical support while focusing on creating sustainable products and reducing a buildings carbon footprint.</p>	<p>15 Franklin Street Portland, ME 04101 (888) 746-1114</p>
 <p>CARLISLE CCM EUROPE www.ccm-europe.com/gb</p>	<p>CCM Europe is the leading manufacturer of EPDM roof sealing sheets with market-leading brands that offer all architects, contractors, roofers, and distributors the right solution for virtually every sealing project be it flat roof, façade, or building.</p>	

Architectural Metals

 <p>Drexel Metals Roofing Systems + Custom Fabrication A CARLISLE COMPANY www.drexmet.com</p>	<p>Drexel Metals provides a full range of superior-quality engineered metal roofing systems, equipment, perimeter edge metals, and custom fabrication services. In addition to our own manufacturing, we extend our fabrication capacities to our local DM-ARM members, who are authorized fabricators, certified installers, and distributors that further market Drexel Metals' proven-brand products; all site-certified by Drexel Metals' industry-leading warranty programs.</p>	<p>1234 Gardiner Lane Louisville, KY 40213 (888) 321-9630</p>
 <p>PAC-CLAD PETERSEN A CARLISLE COMPANY www.pac-clad.com</p>	<p>Petersen manufactures PAC-CLAD architectural metal cladding products in multiple gauges of steel and aluminum. PAC-CLAD products include standing seam roof panels, hidden- and exposed-fastener wall panels, flush- and reveal-joint panels, vented or solid soffit panels, perforated metal, coil and flat sheet, composite panels, column covers, plus fascia and coping. All are available in Kynar 70% PVDF finish in 45 standard colors that include a 30-year finish warranty. Most colors meet LEED requirement, and are rated by the Cool Roof Rating Council.</p>	<p>1005 Tonne Road Elk Grove Village, IL 60007 (800) PAC-CLAD</p>

Diversified Products

 <p>INSULFOAM A CARLISLE COMPANY www.insulfoam.com</p>	<p>Insulfoam is the nation's largest manufacturer of block-molded expanded polystyrene (EPS). Insulfoam offers a wide range of faced, laminated, and standard high performance EPS insulation products.</p>	<p>6004 N. Westgate Blvd. Suite 120 Tacoma, WA 98406 (800) 248-5995</p>
 <p>ULTIMATE RB A CARLISLE COMPANY www.ultimaterb.com</p>	<p>Ultimate RB is a manufacturer of premium rubber products, including a variety of surfacing products that provide excellent durability and superior comfort, safety, sound absorption, and more. Applications include fitness clubs, commercial buildings, industrial facilities, residences, farms, and numerous other uses. Ultimate RB products are innovative and eco-friendly. It is one of the largest tire recyclers in the USA and keeps an estimated 80 million pounds of waste out of landfills every year.</p>	<p>904 NE 10th Avenue McMinnville, OR 97128 (800) 525-5530</p>
 <p>CARLISLE HVAC BRANDS www.carlislehvac.com</p>	<p>Carlisle HVAC Brands encompasses Hardcast Duct Sealants and Adhesives, DynAir Airflow Hardware, and the Nexus 4 Bolt Flange Closure System. As an industry leader, Carlisle HVAC Brands supplies superior products and engineered solutions to ensure the sustainability of your HVAC system.</p>	<p>900 Hensley Lane Wylie, TX 75098 (877) 495-4822</p>
 <p>CARLISLE ROOF FOAM AND COATINGS www.carlislerfc.com</p>	<p>Carlisle Roof Foam and Coatings offers a broad range of coatings and spray polyurethane foam (SPF) insulations used in commercial roofing applications. SPF roofing systems are designed to provide a long-term, sustainable roofing solution that is seamless, watertight, and virtually maintenance-free. Acrylic, silicone, and urethane coatings are used as a component of SPF systems and can also be used as standalone products to restore existing aged roofs.</p>	<p>100 Enterprise Drive Cartersville, GA 30120 (844) 922-2355</p>

Polyurethane Systems



Carlisle Spray Foam Insulation (CSFI) is a leading manufacturer of spray polyurethane foam systems. CSFI is focused on ease of use at the point of application and ease of doing business throughout the customer experience. CSFI is proud to offer market-leading product availability through the SealTite™ PRO line of spray foam insulation products, which are formulated to provide the highest level of thermal protection in both residential and commercial applications.

100 Enterprise Drive
Cartersville, GA 30120
(844) 922-2355



Carlisle Polyurethane Systems offers innovative high-performance polyurethane products that include binders, flexible and rigid foams, elastomers, casting resins, surface and specialty coatings, and adhesives. These systems span a wide variety of industrial, commercial, and consumer product applications.

2500 Adie Road
Maryland Heights, MO 63043
(314) 432-3200



Carlisle TyrFil is the world's first polyurethane tire fill material intended to flatproof tires. Today, Carlisle TyrFil is the leading global supplier of polyurethane tire fill and productivity technologies for Off-the-Road (OTR) equipment tires, OEM, and aftermarket – and can be found in over 65 countries. All of our product brands – TyrFil, TLC Tire & Rim Protection™, and ReSeal™ Tire Protection – are formulated to improve safety and increase productivity in demanding OTR applications, where operating equipment reliability is critical.

140 Sheldon Road
Berea, OH 44017
(800) 821-4147

Weatherproofing Technologies



Carlisle Coatings & Waterproofing (CCW) offers high performance waterproofing and moisture protection products engineered for the demands of the 21st century building envelope. CCW offers technical services, research & development, and manufacturing capabilities from its headquarters in Wylie, Texas and two additional manufacturing facilities in Terrell, TX and Carlisle, PA.

900 Hensley Lane
Wylie, TX 75098
(800) 527-7092



Carlisle WIP Products manufactures premium construction products for steep-slope and low-slope residential and commercial applications. Water and Ice Protection (WIP) self-adhering roofing underlayments and EZFlash products offer ideal solutions for protection against water and ice damming while withstanding some of nature's most unfavorable weather conditions.

1285 Ritner Highway
Carlisle, PA 17013
(888) 717-1440



Henry Company is a leading innovator of Building Envelope Systems and develops integrated air/vapor barrier, roofing and waterproofing systems to ensure superior building performance. For more than 80 years, Henry has been the trusted source for proven Building Envelope Systems.

336 Cold Stream Road
Kimberton, PA 19442
(800) 486-1278



P.O. Box 7000 | Carlisle, PA 17013 | Phone: 800.453.2554 | Fax: 717.245.7053
www.CarlisleConstructionMaterials.com

WARRANTY NO.:
BUILDING OWNER:
NAME OF BUILDING:
BUILDING ADDRESS:
DATE OF COMPLETION OF THE VERSICO TOTAL ROOFING SYSTEM:
DATE OF ISSUE:

Versico, a division of Carlisle Construction Materials Incorporated (Versico), warrants to the Building Owner (Owner) of the above described building, that; subject to the terms, conditions, and limitations stated in this warranty, Versico will repair any leak in the Versico Roofing System (Versico Total Roofing System) installed by a Versico Authorized Roofing Contractor for a period of -- years, commencing with the date of Versico's acceptance of the Versico Total Roofing System installation. However, in no event shall Versico's obligations extend beyond -- years, subsequent to the date of substantial completion of the Versico Total Roofing System. See below for exact date of warranty expiration.

The Versico Total Roofing System is defined as the following Versico brand materials: Membrane, Flashings, Adhesives and Sealants, Insulation, Cover Boards, Fasteners, Fastener Plates, Fastening Bars, Insulation Adhesives and any other Versico brand products utilized in this installation.

TERMS, CONDITIONS, LIMITATIONS

1. Owner shall provide Versico with written notice via letter, fax or email within thirty (30) days of any leak in the Versico Total Roofing System. Owner should send written notice of a leak to Versico's Warranty Services Department at the address set forth at the bottom of this warranty. By so notifying Versico, the Owner authorizes Versico or its designee to investigate the cause of the leak. Should the investigation reveal the cause of the leak to be outside the scope of this Warranty, investigation and repair costs for this service shall be paid by the Owner.
2. If, upon inspection, Versico determines that the leak is caused by a defect in the Versico Total Roofing System's materials, or workmanship of the Versico Authorized Roofing Contractor in installing the same, Owner's remedies and Versico's liability shall be limited to Versico's repair of the leak. Versico shall have sole responsibility in determining the method of repair of the area.
3. This warranty shall not be applicable if, upon Versico's inspection, Versico determines that any of the following has occurred:
 - (a) The Versico Total Roofing System is damaged by: natural disasters, lightning, fire, insects, animals, windblown debris or objects, earthquakes, tornados, hail, hurricanes, and winds of (3 second) peak gust speeds of -- mph or higher measured at 10 meters above ground; or
 - (b) Loss of integrity of the building envelope and/or structure, including, but not limited to, partial or complete loss of roof decking, wall siding, windows, roof top units, doors or other envelope components; or
 - (c) All associated building components, including but not limited to the deck substrate, joists, columns and foundation, must also meet wind speed design requirements.
 - (d) The Versico Total Roofing System is damaged by any acts, accidents, misuse, abuse, vandalism, civil disobedience or the like; or
 - (e) Deterioration or failure of building components, including, but not limited to, the roof substrate, walls, mortar, HVAC units, non Versico brand metal work, etc., occurs and causes a leak, or otherwise damages the Versico Total Roofing System; or
 - (f) Deterioration of metal materials and accessories caused by marine salt water, atmosphere, or by regular spray of either salt or fresh water; or

- (g) Acids, oils, harmful chemicals and the like come in contact with the Versico Total Roofing System and cause a leak, or otherwise damage the Versico Total Roofing System; or
- (h) The Versico Total Roofing System encounters leaks or is otherwise damaged by condensation resulting from any condition within the building that may generate moisture; or
- (i) The Versico Authorized Contractor or any additional contractor or subcontractor failed to follow Versico's published specifications and details for the approved system assembly or failure to correct all installation deficiencies listed in any Versico inspection report.

4. This Warranty shall be null and void if any of the following shall occur:

- (a) If, after installation of the Versico Total Roofing System by a Versico Authorized Roofing Contractor, there are any alterations or repairs made on or through the roof or objects such as, but not limited to, structures, fixtures, solar arrays, wind turbines, roof gardens or utilities are placed upon or attached to the roof without first obtaining written authorization from Versico; or
- (b) Failure by the Owner to use reasonable care in maintaining the roof, said maintenance to include, but not be limited to, those items listed on Versico's Care & Maintenance Guide which accompanies this Warranty.

5. In addition, it shall be Owner's sole responsibility to remove and re-install at Owner's expense, all obstructions, including, but not limited to, structures, fixtures, solar arrays, wind turbines, roof gardens, utilities or other overburden from the affected area as determined by Versico that would hinder or impede repairs being made in the most expedient and least expensive manner possible. Owner shall be responsible for all costs associated with any loss of power generation in the event that removal of a solar array is required to repair the roofing system.

6. During the term of this Warranty, Versico shall have free access to the roof during regular business hours.

7. Versico shall have no obligation under this Warranty while any bills for installation, supplies, service, and/or warranty charges have not been paid in full to the Versico Authorized Roofing Contractor, Versico, or material suppliers.

8. Versico's failure at any time to enforce any of the terms or conditions stated herein shall not be construed to be a waiver of such provision.

9. Versico shall not be responsible for the cleanliness or discoloration of the Versico Total Roofing System caused by environmental conditions including, but not limited to, dirt, pollutants or biological agents.

10. Versico shall have no liability under any theory of law for any claims, repairs, restoration, or other damages including, but not limited to, consequential or incidental damages relating, directly or indirectly, to the presence of any irritants, contaminants, vapors, fumes, molds, fungi, bacteria, spores, mycotoxins, or the like in the building or in the air, land, or water serving the building.

11. This warranty shall be transferable upon a change in ownership of the building when the Owner has completed certain procedures, including a transfer fee and an inspection of the Roofing System by a Versico representative.

12. Any dispute, controversy or claim between the Owner and Versico concerning this Limited Warranty shall be settled by mediation. In the event that the Owner and Versico do not resolve the dispute, controversy or claim in mediation, the Owner and Versico agree that any and all suits, proceedings, or claims shall be filed in either the state courts of Cumberland County, Pennsylvania or in the United States District Court for the Middle District of Pennsylvania. Each party irrevocably consents to the jurisdiction and venue of the above-identified courts.

13. Roof System Design Assembly: Versico, as manufacturer of commercial roofing products with the sole purpose of offering products for an Owner, design professional, architect, consultant, or engineer when designing/choosing a roof system assembly, assumes no liability nor implies to the suitability of the products for any particular assembly or specific building operation or structure. The Owner, design professional, architect, consultant, or engineer is solely responsible for the assembly chosen for a particular building structure to include the responsibility to properly calculate wind uplift values, design dead loads and live loads, and suitability and condition of building envelope substrate, decking, parapets, drainage, slope, and other attributes pertaining to the performance of the roof system assembly.

14. The Versico Authorized Contractor or any additional contractor or subcontractor are not agents of Versico.

VERSICO DOES NOT WARRANT PRODUCTS UTILIZED IN THIS INSTALLATION WHICH IT HAS NOT FURNISHED AND SPECIFICALLY DISCLAIMS LIABILITY, UNDER ANY THEORY OF LAW, ARISING OUT OF THE INSTALLATION AND PERFORMANCE OF, OR DAMAGES SUSTAINED BY OR CAUSED BY, PRODUCTS NOT FURNISHED BY VERSICO OR THE PRIOR EXISTING ROOFING MATERIAL OVER WHICH THE VERSICO ROOFING SYSTEM HAS BEEN INSTALLED.

THE REMEDIES STATED HEREIN ARE THE SOLE AND EXCLUSIVE REMEDIES FOR FAILURE OF THE VERSICO TOTAL ROOFING SYSTEM OR ITS COMPONENTS. THERE ARE NO WARRANTIES EITHER EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY, WHICH EXTEND BEYOND THE FACE HEREOF. VERSICO SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR OTHER DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR DAMAGE TO THE BUILDING OR ITS CONTENTS UNDER ANY THEORY OF LAW.

BY: James Heisey

AUTHORIZED SIGNATURE:

TITLE: Director of Sales

This Warranty Expires:

Versico Care and Maintenance Guide

In order to ensure the long-term performance of your Roofing System and continued warranty service and coverage, regular rooftop maintenance inspections are necessary. While normal aging will occur on all roofs, if not detected early, problems stemming from abuse, contamination, accidents and severe weather can result in extensive and costly repairs or premature failure of the roofing system. Single-ply Roofing Systems are typically low-slope and easy to inspect, but caution must be taken to ensure safety. Versico disclaims and assumes no liability for any rooftop activity.

- Owner must retain records related to the Roofing System. Such records include, but are not limited to: the warranty document and serial number, maintenance inspection logs, rooftop traffic logs, service logs, and invoices for work performed on the roofing system.
- Inspect the roof at least every six months (preferably spring and fall) and immediately following any weather event that includes excessive rainfall, high winds and/or hail warnings. Increased number of rooftop maintenance inspections may be required on some roofs as the location may dictate, such as higher trees near the building which will accumulate leaves and debris on the roof and have adverse effects on drainage. In addition, rooftop maintenance inspections should occur after regular maintenance of any rooftop unit.

When inspecting the Roofing System, pay special attention to the following:

- Walls/Parapets/Roof Edge – Wind damage often begins at the perimeter of the roof. Ensure all membrane terminations and edge metal and copings are secure.
- Roof Deck Membrane – Inspect the field of the roof, scanning for damage caused by wind-blown debris or traffic.
- Penetrations/Rooftop Units – Inspect the membrane, flashings and terminations around penetrations and rooftop units for possible damage from service work. Ensure the units and terminations are secure.
- Remove debris (leaves, dirt, trash, etc.) – Good roofing practice dictates that water should drain from the roof and that ponded water should evaporate within 48 to 72 hours after a rainfall. Debris can inhibit drainage.

Additional Maintenance Items:

- Foot Traffic – Walkways must be provided if regular traffic is required or if rooftop equipment has a regular thirty (30) day or less maintenance schedule.
- Petroleum Products & Chemicals - Keep all liquids containing petroleum products or chemicals off the membrane to avoid product degradation.
- Animal Fats/Vegetable Oils: EPDM Membranes - Do not exhaust animal fats/vegetable oils directly onto EPDM roof surfaces. TPO & PVC Membranes – Animal fats/vegetable oils must be regularly removed and the rooftop surface cleaned with a mixture of soap and water.

What to do if a leak occurs:

- After verifying the leak is through the roofing system, contact Versico at 1-800-233-0551 or at www.versico.com.
- If minor, emergency temporary repairs are made to a suspected leak area, use Versico's Lap Sealant or a good-grade rubber caulk to address the repair area (do not use asphaltic roof cement). Please note, Versico is not responsible for the cost associated with any emergency temporary repairs.

Alterations to the Roofing System:

- Alterations to the Roofing System must be completed by a Versico Authorized Contractor. The Versico Authorized Contractor must notify Versico when the revision work is complete. The necessary form can be found on the Versico website via the Authorized Contractors login.

Warranty Transfer:

- Warranties shall be transferable upon a change in ownership of the building when the Owner has completed certain procedures. This form can be found on the Versico website for additional guidelines.