

Tech News

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EPDM x-23 Low-VOC Bonding Adhesive

Fall is a great time to try Versico's EPDM x-23 Low-VOC Bonding Adhesive, as it offers a number of advantages over other low-VOC adhesives, including:

- **Flash-off time** – EPDM x-23 Low-VOC Bonding Adhesive features a solvent blend that is designed to flash off at a faster rate, decreasing the potential for trapped solvents which can lead to blisters beneath the membrane.
- **Extended open time** – EPDM x-23 Low-VOC Bonding Adhesive features an extended open time, which increases productivity, allows installers to keep sheets open longer, and permits more solvents to escape prior to setting the sheet.



Fall ROOFING Tips

In cool weather, when the temperature and dew point are similar, condensation can sometimes form on freshly applied adhesive. If this occurs, the adhesive must be allowed to dry completely and fresh adhesive must be applied when weather conditions are more favorable.

Experienced applicators know that weather conditions, ambient temperatures, and humidity levels often determine which storage and application techniques are necessary. The arrival of fall and lower temperatures is a good opportunity to review Versico's tips for working in cooler weather.

Low-VOC Bonding Adhesive and EPDM x-23 Bonding Adhesive

- Store Versico's Low-VOC Bonding Adhesive and EPDM x-23 Low-VOC Bonding Adhesive between 60°F-80°F for best results.
- Thorough mixing once per day is essential: Dark streaks (unmixed solvent) in the adhesive should not be visible.
- Allow EPDM and TPO membranes to relax for 30 minutes or longer, especially when using folded sheets of EPDM. This technique results in less stress on the freshly formed bond.
- Observe the proper coverage rate of 60 square feet per gallon finished surface. Not using enough adhesive can result in a weak bond, while using too much adhesive can cause membrane blisters due to trapped solvents. If puddles, globs, or heavy areas are observed, re-roll those areas to break the skin and allow solvents to flash off.
- Use the "tack test" to ensure that solvents have flashed off and the adhesive is still tacky. Adhesive applied to shaded roof areas will take longer to flash off than areas exposed to the sun.

- Continually monitor the adhesive for flash-off: Install the membrane shortly after adhesive passes the tack test.
Membrane must be installed as soon as the adhesive has passed the tack test to avoid over-drying. The tack test is performed by placing a clean, dry finger on the adhesive. The adhesive must not transfer to the finger, and it must still be tacky.
- Broom or roll the membrane immediately after setting the sheet.

The tack test is performed by placing a clean, dry finger on the adhesive. The adhesive must not transfer to the finger, and it must still be tacky.

- If solvent blisters occur, allow the solvent to dissipate naturally for 4-5 days and then re-broom or re-roll the membrane to lay flat.

Storage of Adhesives, Primers, and Quick-Applied (QA) Accessories

- Store adhesives, primers, and QA accessories between 60°F-80°F at all times. Adhesives and primers can be stored at temperatures below 60°F, but must be warmed up to between 60°F-80°F prior to application.

On the jobsite, a heated enclosure or hot box is essential to ensure that adhesives, primers, and QA products maintain their intended properties and ease of application. Visit powerblanket.com for information regarding jobsite heating equipment.

Water-Based Adhesives

- The exposure of water-based adhesives (HydroBond™, Aqua Base 120) to temperatures below 32°F will cause the adhesive to freeze, rendering the material unusable even when it has returned to room temperature.
- Water-based adhesives can only be used when the outside temperature is 40°F and rising.

Flash-Off Times

- Flash-off times must be closely monitored, as they are often longer in cold weather.
- It is very important that the solvents in adhesives are properly flashed off before membranes are installed to avoid the formation of small blisters.
- Do not allow the adhesive to over-dry; if over-drying should occur, re-apply adhesive to those areas at half the coverage rate and allow it to flash off properly.

Q & A From the Field

What is the difference between HydroBond Water-Based Adhesive and Aqua Base 120 Bonding Adhesive?

HydroBond can be used as a wet lay-in adhesive in conjunction with both bare-back PVC and VersiFleece PVC membranes. Aqua Base 120 can only be used as a wet lay-in adhesive with VersiFleece TPO membranes and as a contact adhesive on bare-back EPDM and TPO membranes. Versico no longer recommends the use of Aqua Base 120 in PVC systems because HydroBond provides better performance.

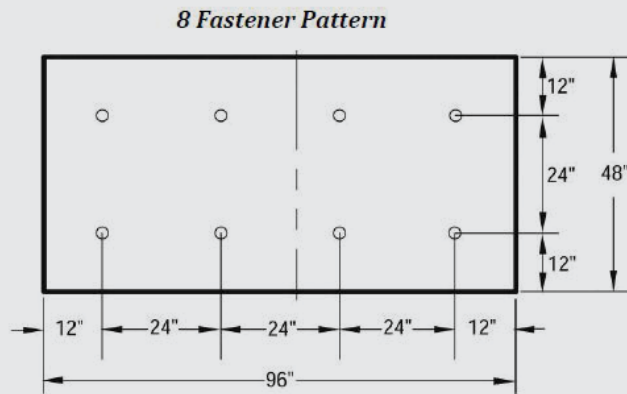
What is the difference between an intensive and extensive Roof Garden?

"Extensive" and "intensive" are descriptive terms regarding the depth of the growth media. Versico defines an extensive system as one that uses less than 6" of growth media. Systems that use more than 6" of growth media are considered intensive.



What fastening pattern must be used to achieve FM 1-90 with 1/2" SECUROCK® Gypsum-Fiber Roof Board?

Eight InsulTite fasteners are needed to achieve the FM 1-90 rating with 1/2" SECUROCK Gypsum-Fiber Roof Board. Versico's SecurFast™ Fastening Plates must also be used to qualify for this rating.



Are perimeter zone enhancements required with the FM 1-90, 6.5' sheet rating?

Yes, additional membrane securement is required on FM-insured projects at perimeter and corner zone locations.

Does the IECC air barrier requirement apply to roof replacements?

Under Section C402.4: Air Leakage, the code states that compliance is currently only for new construction projects in ASHRAE Zones 4 and higher.

What is the minimum preferred thickness of sheet metal used for end laps under VapAir Seal™ MD?

24-gauge is sufficient.

If installed on a Versico roof, would an NRCA-certified contractor detail be considered ES-1 certified under Versico's current policy?

It would be considered ES-1 compliant, but Versico could not certify it. Versico has no control over the certification process employed by NRCA.

Is it necessary to remove the APEEL™ Protective Film prior to installing Versico's Rib Profile? If so, does this negate the purpose of the protective film?

The film must be removed before Rib Profile sections are installed. However, any tear-off should already be complete by the time Rib Profile sections are installed.

REMINDERS!

Lap Sealant Requirements:

From Spec Supplement (E-02-11) – A continuous application of Lap Sealant shall be used at all T-joint intersection edges, along splice overlays, and along edges of formed flashing.

Continuous Cleats are Required!

Per DR-12-11, All cleats shall be continuous with lengths not to exceed 12 feet.

Projects Ready Completion and Inspection Processing: FAQ

Fall is here, and many contractors have questions about projects ready for completion and inspection processing. Below are the answers to some of your most frequently asked questions.

When do I submit my Copy-B (Job Completion Date)? A Copy-B should be submitted when the Approved Contractor has completed the roofing installation. Please note: Dates later than "today's date" cannot be entered on a Copy-B.

What if the customer requires a substantial completion date on their warranty? The substantial completion date can be requested by posting a correction to the warranty application. Please note that the "completion" and "substantial completion" dates are listed separately on a warranty document. The Copy-B must contain the date that the Versico Approved Contractor completed the roofing installation; the substantial completion date will be used for the warranty start date.

How do I receive a '10' rating on an inspection?

- First inspection approved → 10 rating.
- First inspection rejected → Repair for warranty (RFW) items corrected → Inspection report signed and returned within 30 days of inspection → Re-inspection approved → 10 rating.

When does my two-year obligation begin?

Early Release Contractors:

- First inspection approved → Two-year obligation begins on the date of project completion.
- First inspection rejected and re-inspection is needed → Two-year obligation begins on the date of the approved re-inspection.

- First inspection rejected and re-inspection is not needed → Two-year obligation begins on the date of repairs listed on the signed RFW.

Non-Early Release Contractors:

- First inspection approved → Two-year obligation begins on the date of the approved inspection.
- First inspection rejected → Two-year obligation begins on the date of the approved re-inspection.

How do I view my outstanding repair for warranty (RFW) projects?

- Log on to Versico's website.
- Under the 'Warranty' section, click 'All Jobs'.
- The first box listed on your screen contains all open jobs that may need:
 - » Approval by Project Review
 - » Copy-B
 - » Inspection
 - » Warranty issuance
 - » Signed RFW

Click 'Inspection Report/RFW' to print a copy of your RFW. Once repairs have been completed, send the signed report to Versico for processing at repairforwarranty@carlisleccm.com or (717) 245-7121.

AC Warranties

AC systems are among the most cost-effective re-cover solutions on the market. These systems are quick and simple to install, and the AC fleece acts as a separator between the new membrane and the old roof. In addition, AC systems are eligible for a variety of Versico's industry-leading warranty options, as detailed to the right.

Please consult Versico's specifications and details for comprehensive AC warranty information.

VERSIFLEECE® AC TPO			
	120-mil	135-mil	155-mil
TOTAL SYSTEM WARRANTY			
5-Year			
10-Year			
15-Year			
20-Year			
25-Year			*
ACCIDENTAL PUNCTURES			
8 hours			
16 hours			
32 hours			
HAIL DAMAGE			
1" hail			
2" hail		**	**

* 25-year AC warranties are limited to applications over base sheets, HP Recovery Board, and SECUROCK. Other enhancements may be required, please contact Versico's project review department for wind speed warranty details.

** 2" hail coverage requires the use of modified asphalt or Cold-Applied Adhesive.

PRODUCT SPOTLIGHT

Rib Profile

Versico's Rib Profile combines the advantages of a single-ply system with the aesthetic appeal of a standing seam metal roof. Available in TPO and PVC versions, Versico's Rib Profile is durable and simple to install.

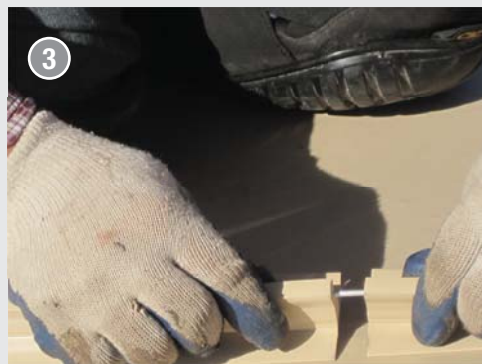
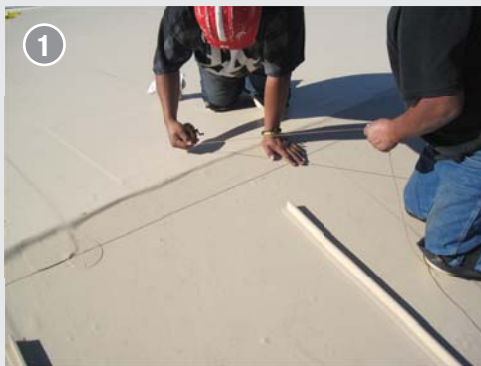
VERSICO'S RIB PROFILE – QUICK SUMMARY

Available in	White, Gray, and Tan VersiFlex™ PVC and VersiWeld® TPO
Recommended for	VersiFleece® TPO and VersiFleece PVC
Size	10' long, 3/8" thick, 1 1/4" tall, and 2 1/8" wide (including the welding flanges)
Packaging	20 lengths per carton (each carton contains 25 connecting pins)
Installation	Hot-air welded to the membrane's surface in a parallel pattern

Installation Summary:

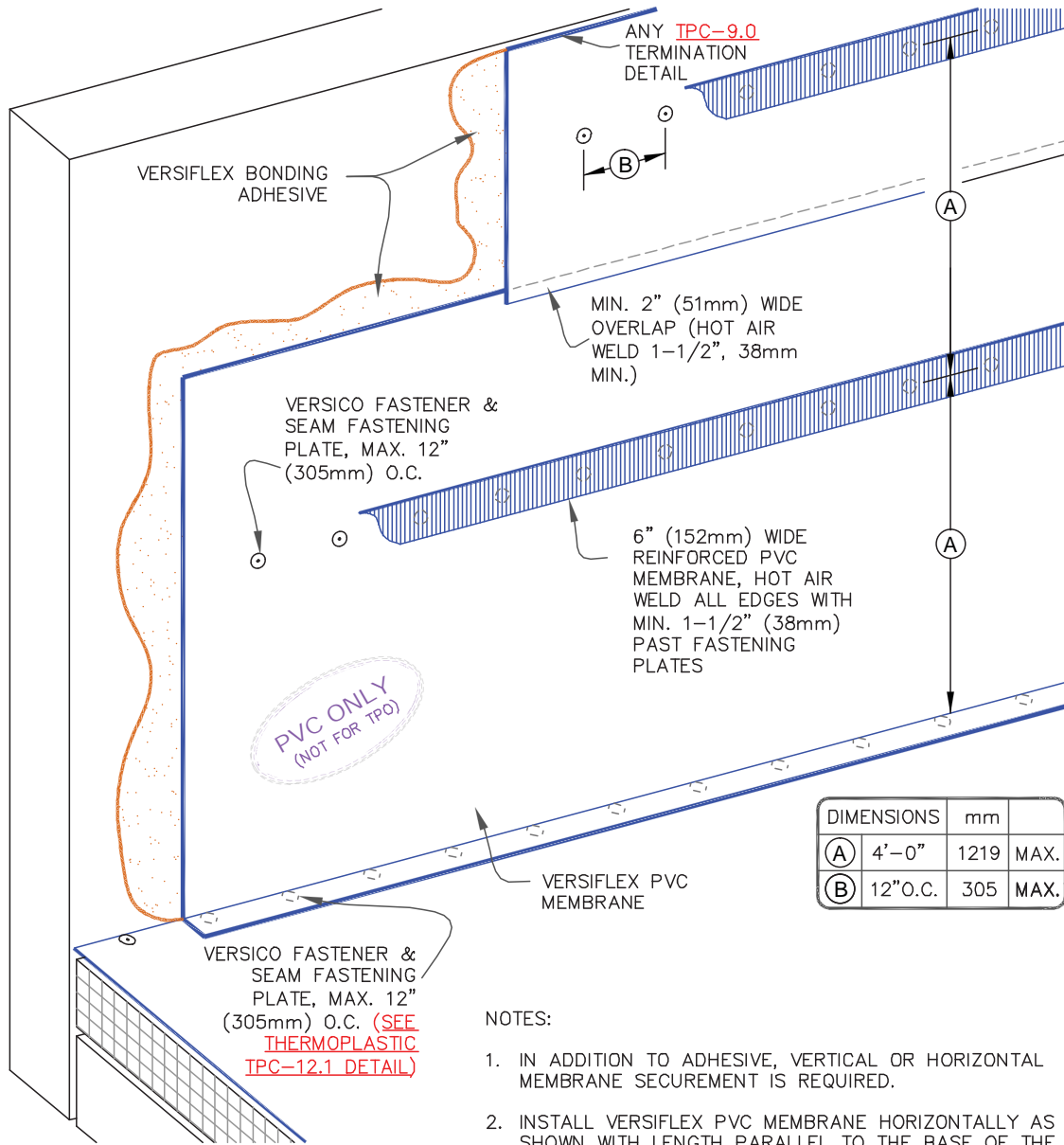
Please review Versico specifications and details for complete installation instructions.

- 1 Once the rib spacing has been determined, chalk lines on the membrane to indicate each rib location. This will help ensure the ribs are welded on straight.
- 2 Position the edge of the rib flange on the chalk line. Tack-weld only the center of the rib every 6"; be careful not to overheat the area or weld the flange to the membrane.
- 3 Connect the rib lengths.
- 4 Once the entire run of rib profiles have been tack-welded every 6" on center, position the automatic welder so it straddles the rib.
- 5 Manually engage the drive system of the welder while inserting the nozzle under the rib flange. As the rib is hot air-welded to the membrane, a second person will provide pressure on the flange using a hand roller. At the end of the run, turn the automatic welder around and complete the welding process by welding the opposite flange.



Featured Detail – TPC-12.5

THERMOPLASTIC MEMBRANE PVC

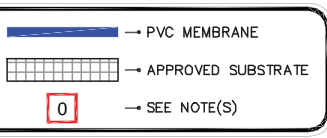


NOTES:

1. IN ADDITION TO ADHESIVE, VERTICAL OR HORIZONTAL MEMBRANE SECUREMENT IS REQUIRED.
2. INSTALL VERSIFLEX PVC MEMBRANE HORIZONTALLY AS SHOWN WITH LENGTH PARALLEL TO THE BASE OF THE WALL.
3. ADDITIONAL SECUREMENT IS NOT REQUIRED WHEN FLASHING TERMINATION IS 48" (1219mm) OR LESS.



PARAPET FLASHING > 48" (1200mm) - HORIZONTAL SECUREMENT



THERMOPLASTIC ROOFING SYSTEM
TPC-12.5



A SINGLE SOURCE FOR SINGLE-PLY ROOFING

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