

TECHNICAL BULLETIN

TARGET MARKET ROOFING

BUILDING TRUST



Subject: Sikalastic®-641 Lo-VOC Flashing Details with Sika PVC Roofing Systems

23-02

Sika Sarnafil now accepts the use of Sikalastic-641 Lo-VOC liquid applied membrane (LAM) for flashing details in Sarnafil® and Sikaplan® roofing systems.

LAM flashing is used to detail walls, curbs, pipes, drains and unusually shaped penetrations where sheet membranes are difficult to install such as I-beams, angle irons, close multiple conduits, etc., and will provide an effective alternative to high maintenance pourable sealer pockets.

Sikalastic-641 Lo-VOC and the ancillary products listed below are eligible for inclusion under Sika's roofing warranty issued for the project up to twenty (20) years.

PRODUCTS

Sikalastic Liquid Applied Membrane (LAM) flashing consists of Sikalastic EP Primer/Sealer, Sika® Joint Tape SA, Sikalastic 641 Lo-VOC moisture triggered aliphatic polyurethane resin with either Sika Fleece 140 or Sika Reemat Premium reinforcement.

Primer: Sikalastic EP Primer/Sealer is required on Sarnafil and Sikaplan membranes, metal, Sarnaclad metal, wood and concrete surfaces. The primer must be cured before any subsequent application can begin. Lower temperatures will slow the curing process.

Sika Joint Tape SA: Self-adhering polymeric rubberized tape with plastic release liner on the underside and woven polyester facer on top. Sika Joint Tape SA is used to smooth and locally reinforce transitions of LAM such as over termination bars.

Sikalastic 641 Lo-VOC: The resin is supplied in 5-gallon (18.9 L) pails. Use Sikalastic 641 Lo-VOC in ambient temperatures between 41°F - 95°F (5°C - 35°C) and substrate temperatures between 41°F - 140°F (5°C - 60°C). Ambient and substrate temperatures must be 5°F above the dew point and within the application temperature ranges for the material to cure properly. Sikalastic 641 Lo-VOC will cure much slower or simply become dormant when temperatures fall below the minimum.

Sika Fleece 140: Non-woven, needle-punched polyester fleece reinforcement to enhance the strength and durability of Sikalastic RoofPro LAM.

Sika Reemat Premium: Surface treated, randomly oriented glass fiber reinforcement to enhance the strength and durability of Sikalastic RoofPro LAM.

Consult Product Data Sheets and Safety Data Sheets for additional information.

APPLICATION GUIDELINES

Although LAM components have a very low VOC content there is an odor. Precautions should be taken to prevent odors and/or vapors from entering the building/structure, including but not limited to turning off and sealing air intake vents and other means of ingress for odors and/or vapors into the building/structure during product application and cure.

Surface Preparation

- Grind concrete and masonry surfaces with diamond cup or Zek wheel to remove laitance and/or contaminants.
- Clean and prepare metal surfaces to near white metal with an appropriate power tool. If power tools are not available, use abrasive paper with a grain grit size of 20 to 40 to remove all loose particles including paint flakes, rust, and contaminants.
- Use abrasive paper with grain grit size of 80 to 100 to sand/degloss Sarnaclad metal surfaces.
- Wipe metal and rigid plastic surfaces with acetone and allow to dry. Rigid plastics require Sika 449 Primer.
- After proper preparation, all surfaces shall be clean, dry, free of dirt, dust, debris, loose particles, loose paint, rust and other contaminants.
- Use acetone to clean the roof membrane within the area to receive LAM. Thoroughly scrub the roof membrane surface with rags or scrub pads to remove the laquer finish only in the area to receive LAM.
- After membrane cleaning and removal of all loose particles and dust, prime the prepared surfaces with Sikalastic EP Primer/Sealer. Allow Sikalastic EP Primer/Sealer to cure completely before applying LAM. It is considered cured when it is dry to touch and you can no longer leave a finger print in the primer when you press down hard.
- The roof membrane around the penetrations shall be secured per LAM Standard Details and job specific requirements.
- If a gap of more than 1/16" exists between the edge of the horizontal roof membrane and the vertical penetration, fill the gap with either Sikaflex 11FC or 1A. Cove beads of Sikaflex 11FC or 1A should be used at all 90° transitions before applying Sika Joint Tape SA and LAM. Allow Sikaflex 11FC to skin over and allow Sikaflex 1A to cure overnight before applying Sika Joint Tape SA.

Sika Fleece 140/Sika Reemat Premium

Fleece: Pre-cut vertical and horizontal pieces to fit around the penetration allowing for a 3" (76 mm) overlap with adjoining pieces. Horizontal flashing pieces must extend a minimum of 4" (102 mm) onto the roof membrane and the verticals should be a minimum of 8" (203 mm) above the roof membrane where possible. Refer to the Standard LAM Details.

Reemat: Pre-cut Reemat Premium flashing pieces for each detail. Tear or cut Reemat Premium to fit around the penetration/flashing allowing for a minimum 2" (51 mm) overlap with adjoining pieces. Horizontal flashing pieces must extend a minimum of 4" (102 mm) onto the roof membrane and verticals should be a minimum of 8" (203 mm) above the roof membrane where possible. Refer to the Standard LAM details.

Once the edges of the fleece/Reemat are determined, mark a line on the roof membrane $\frac{1}{4}$ - $\frac{1}{2}$ " (6 mm - 13 mm) beyond the edge of the fleece/Reemat and apply painter's tape. This will accommodate the $\frac{1}{4}$ - $\frac{1}{2}$ " (6 mm - 13 mm) of non-reinforced LAM needed to terminate to the roof membrane primed with Sikalastic EP Primer/Sealer. With the tape in place, clean the roof membrane within the flashing area using acetone and wipe the penetration clean of any residual surface preparation dust.

Sikalastic EP Primer/Sealer Mixing

Mix ratio is 3:1 (A:B) by weight and volume. **PREMIX PART A BEFORE MIXING PARTS A & B TOGETHER.**

Add Part B into Part A and mix with a mechanical mixer (Jiffy) at low speed for 3 minutes. Avoid adding air into the primer during mixing. When fully mixed, the primer should be free from streaks and a uniform red color. Always use graded measure cups to batch down if breaking kits down from full package size.

Application

Apply the mixed product within pot life by brush or phenolic resin core roller at the recommended rate. The correct amount of primer will saturate the substrate and leave a slight film on the top surface of the substrate. Apply the primer evenly with a uniform red finish without streaking or puddling.

Pull the painter's tape while the Sikalastic EP Primer/Sealer is wet to achieve a clean edge.

The open window to install LAM over the cured Sikalastic EP Primer/Sealer is 72 hours. If the window is missed, scuff sand and solvent wipe the primed area with acetone and re-apply Sikalastic EP Primer/Sealer.

LAM Application

Re-mask the flashing with painter's tape keeping the tape even with or slightly onto the cured Sikalastic EP Primer/Sealer. **Sikalastic 641 Lo-VOC should not come in contact with the roof membrane.**

Do not mix the Sikalastic 641 Lo-VOC prior to application.

Fleece: Using a small $\frac{1}{2}$ " (13 mm) nap roller with rounded edges or 2" (51 mm) disposable paint brush apply 50 mils of Sikalastic 641 Lo-VOC resin onto the primed roof membrane extending slightly onto the painter's tape. Embed the pre-cut Sika Fleece 140 into the wet LAM. Use the roller or brush to eliminate wrinkles and air bubbles while completely saturating the fleece with an additional 30 mils of Sikalastic 641 Lo-VOC resin applied to the top side of the fleece. Always apply additional LAM at the 3" (76 mm) overlap between each fleece layer. There should never be dry fleece touching dry fleece.

Reemat: Using a small $\frac{1}{2}$ " (13 mm) nap roller with rounded edges or 2" (51 mm) disposable paint brush apply 50 mils of Sikalastic 641 Lo-VOC resin onto the primed roof membrane extending slightly onto the painter's tape. While the resin is still wet embed pre-cut pieces of Sika Reemat Premium working to full saturation and conformation to the substrate. Allow the resin to cure, typically overnight, then apply a top coat of the Sikalastic 641 Lo-VOC resin at 30 mils. Always pull painter's tape while coatings are wet and reapply tape before additional coats are applied for clean, sharp terminations.

Complex and/or irregular shapes including nuts, bolts, etc. may require pre-treatment with Sikaflex 11FC or 1A before LAM application. Wait for Sikaflex 11FC to skin over and Sikaflex 1A to cure overnight before applying LAM.

For repairs or touch-up past the 7-day open window for Sikalastic 641 Lo-VOC, solvent wipe the cured LAM with acetone and prime with Sika Concrete Primer Lo-VOC. Allow the primer to dry to touch before applying LAM.

Coverage

80-100 ft² (7.4 – 9.3 m²) per 5 gallon pail (18.9 L) at 80 mils total wet film thickness.

Inspection & Quality Control

Inspection of the completed detail should be done by visual means only. Touch Sikalastic EP Primer/Sealer if exposed to verify cure. Uncured EP Primer/Sealer will be soft/tacky and may transfer to the glove. If the primer is uncured, remove LAM and clean off completely. Re-apply Sikalastic EP Primer/Sealer and new LAM flashing.

All fishmouths, trapped air, gaps, voids, openings, pinholes, proud fibers, tenting of Reemat, or exposed/unsaturated fleece/Reemat found after LAM is cured must be cut out back to tight, well adhered area. Solvent clean and re-flash over these areas with new LAM flashing maintaining minimum overlap requirements for fleece/Reemat.

If adhesion testing is required, follow the “Sikalastic RoofPro Adhesion Testing Guidelines” posted on the Sika Liquid Applied Roofing website under How To Videos & Guides. [Click here](#) to view the document.

Standard LAM Details

- Base Flashing
- Cut-in Reglet
- Low Flashing Height
- Parapet Wall with Sarnastop and Liquid Flashing
- Thru Wall Duct Flashing
- Wall Flashing with Stone Cap
- Wall Shroud Flashing
- Equipment Pad
- Sikalastic RoofPro Tie-in Sika PVC Membrane
- Drain Flashing
- Curb Flashing
- Irregular Penetration Flashing
- Overflow Drain Flashing
- Threshold Flashing
- Thru-Wall Scupper
- Wall Flashing
- Internal Gutter at Wall
- Internal Gutter
- Sikalastic RoofPro Flashing Tie-in Sika PVC Membrane

[Click here](#) to download the Standard LAM Details.

Product Links

Click on the product links below for additional information including Product Data Sheets, Safety Data Sheets and other related documents.

- [Sikalastic-641 Lo-VOC](#)

- [Sika Reemat Premium](#)

- [Sikalastic EP Primer/Sealer](#)

- [Sika Joint Tape SA](#)

- [Sika Fleece 140](#)