

LIQUISEAL® Liquid Flashing

LIQUISEAL Liquid Flashing is a two-component polyurethane-based system which creates a reinforced, cold-applied liquid flashing that is compatible with all Carlisle EPDM, TPO, PVC, and KEE HP membranes. LIQUISEAL Liquid flashing is ideal for flashing oddly shaped penetrations and tying together dissimilar roofing systems without building a knee wall or impeding drainage. LIQUISEAL Liquid Flashing is UV – and color-stable, solvent-free, low-VOC, virtually odorless, and pre-measured for easy use.

Step 1: Substrate Preparation

Prepare all substrates by removing any irregularities and any loose or foreign materials, such as dirt, water, grease, oil, lacquers, or release agents.

Metal substrates

Grind all metal surfaces (including new metal) with an abrasive grinding wheel, removing all dirt, rust, paint, or other coatings to expose bare metal. Ground metal surfaces should be clean and rough. **DO NOT USE A WIRE BRUSH.** Wipe clean with membrane cleaner after grinding.



Concrete/Masonry Substrates

Grind all concrete or masonry substrates using an abrasive grinding wheel to remove dirt and other contaminants. Clean surface after grinding to remove dust and allow surface to dry fully.

EPDM, TPO, and PVC

Clean surface with Weathered Membrane Cleaner or appropriate membrane cleaner. Rough up membrane surface with 60-grit sandpaper and wipe with membrane cleaner to remove any dust or dirt from sanding.

Modified Bitumen

Remove dirt and loose granules using a stiff bristle broom, then blow area clean to remove any remaining loose dirt or granules.

Other Substrates

Consult Carlisle details LF-A, B, and C for proper cleaning and preparation instructions.

Step 2: Priming

See table below for primer requirements on common substrates. Refer to Carlisle Details LF-A, B, and C to find other acceptable substrates and priming requirements.

Primer Requirements	
Substrate	Primer
EPDM Membrane and Metal Substrates	LIQUISEAL Metal Primer
Concrete and Masonry Substrates	LIQUISEAL Concrete & Masonry Primer
TPO Membrane	Carlisle TPO Primer or Low-VOC TPO Primer
PVC Membrane	No Primer
Smooth-Surface Modified Bitumen	LIQUISEAL Metal Primer
Granule-Surface Modified Bitumen	No Primer

LIQUISEAL Metal Primer

Keep primer at room temperature prior to use. Do not store in direct sunlight or in hot areas. Primer that is stored in elevated temperatures will have a significantly shorter pot-life once mixed and may not perform as intended.

Remove sachet of primer from foil pack.

Prior to removing rubber separator cord, mix the light side of the primer by kneading it with your hands until it has a uniform, cream-colored texture.

Remove the rubber separator cord and mix contents of the bag until a uniform color and consistency is achieved. Ensure that there are not dark spots or streaks. Once mixing of the two components is initiated, the pot-life begins.

Cut the corner of the bag and pour into a pail.

Apply the primer to the substrate with a brush or roller at a rate of 25 ft² (2.3 m²) per sachet. Work quickly, as the pot-life for this primer is approximately 8 to 10 minutes at 73°F (23°C). As the temperature rises, the pot-life will be reduced.

Allow primer to cure fully before moving on to the next step. This will likely take at least 2 to 3 hours. This primer can be left exposed for up to 5 days before applying resin.

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LIQUISEAL Concrete & Masonry Primer

Keep primer at room temperature prior to use. Do not store in direct sunlight or in hot areas. Primer that is stored at elevated temperatures will have a significantly shorter pot-life once mixed and may not perform as intended.

- » Remove sachet of primer from foil pack.
- » Prior to removing rubber separator cord, mix the light side of the primer until it has a uniform, cream-colored texture by kneading it with your hands.
- » Remove the rubber separator cord and mix contents of bag until a uniform color and consistency is achieved. Ensure there are no dark spots or streaks. Once mixing of the two components is initiated, the pot-life begins.
- » Cut the corner of the bag and pour into a pail.
- » Apply the primer to the substrate with a brush or roller at a rate of 76 ft² (7.06 m²) per gallon, 19 ft² (1.7 m²) per sachet. Work quickly, as the pot-life for this primer is approximately 20 minutes at 73°F (23°C). As the temperature rises, the pot-life will be reduced.
- » Immediately broadcast LIQUISEAL Concrete & Masonry Preparation Sand into wet primer. Broadcast sand into primer until refusal (approximately 100 ft² [9.3 m²] per 50 lbs [22 kg] of sand).
- » Allow primer to cure fully before moving on to the next step. This will likely take at least 3 to 4 hours. This primer can be left exposed for up to 5 days before applying resin.

Step 3: Fleece and Flashing Area Preparation

It is important to prepare the area and pre-cut your reinforcing fleece prior to mixing LIQUISEAL Liquid Flashing Resin. Never use any reinforcement other than LIQUISEAL Liquid Flashing Fleece, as it will affect performance and void any warranty coverage.

Unroll fleece and cut all the pieces necessary to create the flashing. Wrap the fleece around penetrations and cut to get proper measurements. This is especially important when flashing oddly shaped penetrations.

When measuring fleece, ensure that there is a minimum of 1½" to 2" (3.8 cm to 5 cm) of overlap between pieces. At the base of a penetration, cut "fingers" to allow fleece to fit snugly around penetration and tightly into corners.

Always cut fleece to ensure a finished detail will have a minimum of 6" (15 cm) of flashing height and 6" (15 cm) in all directions on the roof's surface. If covering plates and fasteners around a penetration, ensure the fleece will extend a minimum of 2" (5 cm) beyond the edge of any plate or fastener.

Use a marker to indicate where each piece of fleece should go and which side should face up. This will make it easier when applying resin.

Tape off work area using painter's tape so that resin will extend no more than ¼" to ½" (.6 cm to 1.2 cm) beyond the edge of the fleece.

Step 4: Resin Application

When applying LIQUISEAL Liquid Flashing Resin, start with vertical surfaces. Once a layer of resin has been applied, fleece is set into the wet layer of resin and then covered and saturated with a second layer of resin. Once vertical surfaces are complete, use the same process on the horizontal surface, overlapping any pieces of fleece 1½" to 2" (3.8 cm to 5 cm). All steps must be done in one process while the resin is still wet.

» 1-Gallon Pail

- Open pail and remove the jug of activator and plastic separator. Mix resin in the bottom of the pail with a clean spiral agitator until the liquid is a uniform white color.
- Add the entire jug of activator and mix with a spiral agitator until both liquids are thoroughly blended. ALWAYS USE ENTIRE JUG OF ACTIVATOR. NEVER DIVIDE MATERIAL PRIOR TO MIXING BOTH COMPONENTS TOGETHER.
- Once mixed, divide into separate pails if more than one person will be using the material.

» 0.5-Gallon Sachet

- Remove bag from the foil packaging. Knead white resin thoroughly until a uniform color is achieved.
- Pull away the rubber separator cord and mix the two components together by kneading the bag quickly and thoroughly to form a homogeneous mixture with no oily streaks.
- After the resin is mixed, cut off one corner of the bag and pour the entire sachet of resin into a clean, new mixing pail.

» 1-Gallon Pail and 0.5-Gallon Sachet

- Working quickly, apply at a rate of approximately 13.6 ft² (1.2 m²) per gallon or 6.8 ft² (.63 m²) per sachet of finished surface with a brush or medium nap roller.
- Apply a thick coating of resin to the flashing area or penetration.
- Set fleece into wet resin. The resin should begin to saturate the fleece from the underside if a proper amount of resin was applied.
- Use hands, brush, or roller to press fleece into resin and work into tight corners.
- Apply a second coat of resin until fleece is fully saturated. Continue to "touch up", adding resin to spots where fleece is not totally saturated.
- Use a brush or roller to remove any air pockets or fish-mouths in the fleece.
- Repeat this process for subsequent pieces or layers of fleece. Ensure that each layer of fleece is fully saturated before overlapping any additional pieces or layers of fleece.

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- Once complete, remove painter's tape immediately, while resin is still wet. Touch up any areas where resin does not extend at least ¼" to ½" (.6 cm to 1.2 cm) from edge of fleece. Remove any resin that extends more than ½" (1.2 cm) from the edge of fleece and use a brush to create a bead of resin along the edge of the fleece.

General Tips, Tricks, and Precautions

- » Carefully review all product data sheets, installation videos, and details (available on the Carlisle SynTec website) for proper installation techniques prior to use.
- » Always wear gloves when mixing or applying LIQUISEAL Primers and Resin.
- » The pot-life of LIQUISEAL products is short and will vary based on ambient temperatures. As the temperature rises, pot-life or workable time will get shorter. Always make sure area and materials are properly prepared before mixing.
- » Fleece should be installed with the "fuzzy" side down. This is the natural direction that the product will unroll. If fleece is installed with the smooth side down, it will still perform. However, the finished surface will appear rough and may hold more dirt over time. Use a marker to mark which side should be up or down when dry-fitting fleece.
- » To dispose of resin or primer, simply allow it to cure in mixing bucket before disposing in the trash.
- » Never apply any LIQUISEAL products in temperatures lower than 40°F (4°C) and rising.
- » Finished LIQUISEAL Liquid Flashing details will be rainproof within 2 to 4 hours of completion. Don't walk on these areas for at least 24 hours.
- » Repairs and touch-ups can be made by applying additional resin and fleece within 24 hours of application.
- » Resin will be fully cured after 48 to 72 hours.