KEE-STONE® NF 60 FLASHING

60 Mil, Reinforced, Non-Fleeceback KEE-Stone Flashing

Application Guidelines

DESCRIPTION

KEE-Stone NF 60 Flashing is a 60-mil thick, non-fleeceback KEE (Ketone Ethylene Ester) thermoplastic flashing membrane with a lighter and more workable composition for easier installation and durability. Made with the same high-performance ELVALOY™ HP compound as Garland's KEE-Stone membrane, KEE-Stone NF 60 Flashing is designed for use as the top component in a two-ply flashing application. This membrane is used in conjunction with approved Garland modified base sheets to form a complete flashing system. KEE-Stone NF 60 Flashing membrane is adhered using either KEE-Lock™ Flashing Adhesive or KEE-Lock WB Flashing Adhesive, both of which are specifically formulated for compatibility with the KEE-Stone NF system.

APPLICATION

The following materials may be used in a cold-applied system configuration:

Green-Lock® Plus Flashing Adhesive – Used to adhere the modified bitumen base sheet.

KEE-Lock Flashing Adhesive or KEE-Lock WB Flashing Adhesive – Used to adhere the KEE-Stone NF 60 Flashing membrane in detail areas, parapets, drains, and walls.

KEE-Lock Mastic and GarMesh® – Applied to seal the leading edge of the KEE-Stone NF 60 Flashing membrane where it transitions into the roof field in modified bitumen systems.

If the field of the roof consists of KEE-Stone, the membrane tie-in shall be heat-welded to ensure a continuous, watertight bond.

APPLICATION EQUIPMENT

Recommended tools for Garland two-ply KEE-Stone NF 60 Flashing system installation for cold applications include:

- Suitable trowel for applying adhesive to flashing details
- Roofer's knife with hooked blade
- Weighted roller
- Hand-held hot air welder
- Seam probing tool to check for small voids

WEATHER CONDITIONS

Do not attempt application if ice, snow, moisture or dew is present. Bonding substrates must be clean, dry and free of dust or other inhibitors of proper adhesion. Cooler temperatures will negatively impact the properties of the system. Contact your Garland representative for proper cold weather applications.

STORAGE

Store pails, kegs and roll goods in their original packaging, indoors on pallets protected from the elements. If stored on the roof, all product needs to be under a breathable tarp at all times. Rolls and containers that are improperly stored or have been warehoused for prolonged periods of time could potentially be damaged.

Important Application Considerations

- Do not install in inappropriate weather or if chances of rain or snow are 30% or greater. If temperatures are lower than 50˚F (10˚C), refer to the cold weather guidelines applied by the NRCA or The Garland Company. Do not install if ambient temperature is below 40°F (4.4°C) or if nighttime temperatures are expected to fall below 32°F (0°C) within 48 hours after application.
- Do not apply roofing materials that have been improperly stored or exposed to moisture. IF THE MATERIAL ISN'T BONDING, STOP THE APPLICATION!
- Refer to the roof system specification for complete requirements.
- Substrates must be free of dust, dirt, oil, debris, and moisture.
- Work with manageable lengths of base and cap for the particular job. Where appropriate, cut rolls into 1/3 or 1/2 roll lengths and allow material to relax prior to installation.

FLASHING APPLICATION

Application instructions below are designed as a reference. Applicators must follow specific details contained in the approved project specifications.

For Multi-Ply Applications (Up to 24"):

Base Flashing Installation

1. Position the base flashing ply where it is ready to be installed.
2. Use preferred method to align sheet with install path.
3. Apply Green-Lock Plus Flashing Adhesive to both the substrate and a min. 6" (152.4mm) onto the field at a rate of 2-3 gal/100 sq. ft. (0.82-1.21 l/m²) (32-48 wet mils) for a total of 4-6 gal/100 sq. ft. (1.64-2.46 l/m²) (64-96 wet mils).
4. Install a 3' (1.0 m) wide Garland approved base flashing ply extending min. 6" (152.4mm) onto the field of the roof.
5. Overlap base flashing ply side laps 4" (100 mm).
6. Utilize a clean trowel to apply pressure to all T-laps to seal immediately following base ply application.

Cap Flashing Installation

1. Begin all flashing work at the low point of the roof and progress upward to ensure proper water shedding.
2. Ensure laps exposed to the upslope portion of the roof do not remain open overnight.
3. Before installing the cap sheet, all dust, dirt, or debris must be removed from the base sheet.
4. Precut the KEE-Stone NF 60 Flashing membrane to the appropriate height, allowing it to extend a minimum of 9" (22.86 cm) onto the field of the roof to tie-into the existing cap ply.
   NOTE: Perform all cutting on a sheet of plywood to avoid damaging the installed roof membrane.
5. On a separate piece of plywood or base sheet, place the precut flashing pieces bottom-side up and position KEE-Stone NF 60 Flashing membrane where the membrane is ready to be installed. (Use preferred method to align sheet with install path.)
   NOTE: "THIS SIDE DOWN" should be facing skyward for adhesive application.

6. Apply Flashing Adhesive:

   a. **KEE-Lock Flashing Adhesive** - Using a heavy-duty nap roller, apply KEE-Lock Flashing Adhesive at a rate of 3 gallons per 100 sq. ft. (1.21 L/m²) (48 wet mils). Ensure full and uniform coverage over the entire bottom surface of the flashing membrane.

   b. **KEE-Lock WB Flashing Adhesive** - Using a foam roller, apply adhesive to the exposed side of the already installed base flashing ply at 0.5 gal/100 sq. ft. (0.21 L/m²) (8 wet mils) and to the backside of the KEE-Stone NF 60 Flashing membrane at 0.5 gal/100 sq. ft. (0.21 L/m²) (8 wet mils) for a total combined rate of 1.0 gal/100 sq. f t. (0.41 L/m²).
   NOTE: Leave the bottom 3" and 3" along one side free of adhesive to allow for heat-welding the cap flashing membrane to both the field membrane and adjacent flashing membrane.

7. Install KEE-Stone NF 60 Flashing ply extending min. 9" (228.6mm) onto the field of the roof and at the desired width depending on the size of the crew handling the membrane. Typical lengths are 15'-18' for easy handling.

8. Carefully place the adhesive-coated membrane into position. Use a roofing roller to apply firm, even pressure across the entire surface to eliminate air pockets and ensure 100% adhesion to the substrate.

9. KEE-Stone NF 60 Flashing membranes should overlap at each end a min. of 3" and be heat welded to the adjacent sheet at the seams.

For Single-Ply Applications Above the Multi-Ply Flashing (24"-72"):

1. Begin by ensuring the approved cover board is properly installed according to project specifications.

2. Precut the KEE-Stone NF 60 Flashing membrane to the required height. Pin the membrane to the top of the wall and terminate it on the interior face of the wall.
   NOTE: Perform all cutting on a sheet of plywood to avoid damaging the installed roof membrane.

3. On a separate piece of plywood or base sheet, place the precut flashing pieces bottom-side up and position KEE-Stone NF 60 Flashing membrane where the membrane is ready to be installed. (Use preferred method to align sheet with install path.)
   NOTE: "THIS SIDE DOWN" should be facing skyward for adhesive application.

4. Apply Flashing Adhesive:

   a. **KEE-Lock Flashing Adhesive** - Using a heavy-duty nap roller, apply KEE-Lock Flashing Adhesive at a rate of 3 gallons per 100 sq. ft. (1.21 L/m²) (48 wet mils). Ensure full and uniform coverage over the entire bottom surface of the flashing membrane.

   b. **KEE-Lock WB Flashing Adhesive** - Using a foam roller, apply adhesive to the approved, prepped substrate at 0.5 gal/100 sq. ft. (0.21 L/m²) (8 wet mils) and to the backside of the KEE-Stone NF 60 Flashing membrane at 0.5 gal/100 sq. ft. (0.21 L/m²) (8 wet mils) for a total combined rate of 1.0 gal/100 sq. f t. (0.41 L/m²).
   NOTE: Leave the bottom 3" and 3" along one side free of adhesive to allow for heat-welding the cap flashing membrane to both the counter flashing and adjacent flashing membrane.

5. Carefully place the adhesive-coated membrane into position. Use a roofing roller to apply firm, even pressure across the entire surface to eliminate air pockets and ensure 100% adhesion to the substrate.

6. Wrap the top of the wall with R-Mer Shield high-temp underlayment, overlapping the KEE-Stone NF 60 Flashing membrane to ensure continuous protection.

7. KEE-Stone NF 60 Flashing membranes will should overlap at each end a min. of 3" and be heat welded to the adjacent sheet at the seams.

Once the KEE-Stone NF 60 Flashing Is Installed;

1. Broom in the KEE-Stone NF 60 Flashing membrane immediately after install to ensure even, continuous contact between the cap and base sheet or cover board.

2. Heat weld all vertical seams. Ensure test welds are performed at the beginning of each working day, and when ambient conditions drastically change throughout the day, to ensure a proper weld is achieved.

3. Complete all inside and outside corner flashing details by fully heat-welding properly formed KEE-Stone Utility Roll.
   NOTE: Once heat welded areas have had a chance to bond, utilize a seam probe to check all laps and joints for full adhesion. Check for small voids at laps; if the membrane can be lifted at any area, it is not properly adhered. Any areas not properly bonded require welding or, if necessary, the application of a patch to seal any un-bonded areas that exist.

4. After flashing adhesive has set up and vertical seams have been sealed:

   a. If tying into KEE-Stone roofing system, heat weld unadhered edge of the cap flashing ply to KEE-Stone field membrane.

   b. If tying into a modified bitumen roofing system, apply a three-course application of KEE-Lock Mastic and GarMesh at a min. 8" (203.2mm) wide onto the horizontal seam at the base of the wall flashing at a rate of 1/8" (3 mm) thick with GarMesh reinforcement followed by a top coat of 1/8" (3 mm) thick of KEE-Lock Mastic.

5. All vertical flashings shall be terminated a min. 8" (203mm) above the top layer of insulation with an approved termination bar and counter-flashing system.