



Installation Guidelines

RubberGutter™ EPDM SA

v10.2021



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FIRESTONE RUBBERGUTTER™ EPDM SA

Technical manual for Firestone RubberGutter™ EPDM SA



2 Introduction

Firestone Building Products' RubberGutter EPDM SA membrane with Secure Bond technology is the next generation of self-adhered gutter membranes. The Secure Bond adhesive is factory-applied, which ensures uniform adhesion across the entire membrane, from edge to edge. This self-adhered membrane enables you to install it more easily and quickly, without the need for applying adhesive on site.

These guidelines are general instructions for the installation of the RubberGutter EPDM SA membrane in gutters with a complete gutter development between 35 and 75 cm. For additional information, such as storage or safety instructions, please visit www.firestonebpe.com and consult the Technical Information Sheets and Safety Data Sheets. For any details not described in these documents, please contact your local Firestone Building Products representative.

The application of the RubberGutter EPDM SA membrane is only technically acceptable if all conditions and requirements outlined in this guideline have been met, assuming that general codes of practice, national and international regulations and installation specifications have been complied with.

The instructions in this document are based on the latest knowledge and experiences and is done in good faith. It is meant to offer professional advice and information for the proper use of its products. However, under no circumstances shall Firestone Building Products EMEA be construed as co-designer or co-builder of the finite set in which its products or services have been used and such assistances or advice shall not be construed as a warranty of any kind. Customers also bear the responsibility to ensure the project system design and legal use of Firestone Building Products' products comply with national regulations and law in force. The selection, intermediary storage, handling and installation of Firestone Building Products' products by customers are beyond the control of Firestone Building Products and are, therefore, the sole responsibility of the customer.



3 Preparation

- Approved substrates are metal, wood and concrete.
- Make sure the gutter is in structural solid state. Make any necessary repairs and/or reinforcements.
- The substrate must be smooth, clean, dry and free of dust, foreign materials such as grease and any debris which could inhibit adhesion. This may require cleaning with a broom or blower.
- It is recommended to clean metal substrates with Firestone Cleaner C-20 using a cotton rag or scrubber.
- No primer or adhesives are necessary on non-porous substrates. Porous substrates such as brick walls need preparation with Firestone QuickPrime Plus primer
- Install the RubberGutter EPDM SA membrane only when membrane, substrate and ambient temperature are minimum at a temperature of -7°C and above. Do not install RubberGutter EPDM SA below this minimum temperature.
- Respect all national and local safety instructions when working on heights during preparation, installation and jobsite clean-up. Wear the necessary safety equipment. Refer to the product's Safety Data Sheets for more information.
- Do not install RubberGutter EPDM SA during humid weather conditions or when rainfall is expected.
- All outlets must be protected to prevent debris entering and causing blockage of down pipes.
- If the drain detail is not finished at the end of the working day, make sure it is (provisionally) left open so that rainwater can be evacuated. Verify if all connections and terminations are (temporarily) waterproof to prevent water infiltration.

3.1 Materials

- Firestone RubberGutter EPDM SA membrane, 1.3 mm thick, per roll of 0.75 m x 20 m
- Firestone EasySealant, per cartridge of 290 ml
- Firestone drain insert piece(s), diam. 75-90-110-125 mm, per piece
- Firestone Cleaner C-20, recommended cleaner, per 500 ml aerosol
- Firestone QuickPrime Plus primer, only required on porous substrate, per pail of 0.95 l
- Edge and/or termination profiles, (spare) roof tiles and slates
- Screws for termination



3.2 Tools

- Tape measure
- Scissors
- Cutter
- Release liner cutter
- Silicon rubber roller and penny roller
- White crayon marker
- Sealant gun
- Cotton rags
- Hand brush and dustpan, garbage bag
- Paint brush or roller (for applying QuickPrime™ Plus primer)



4 Membrane installation

4.1 Membrane dimensions

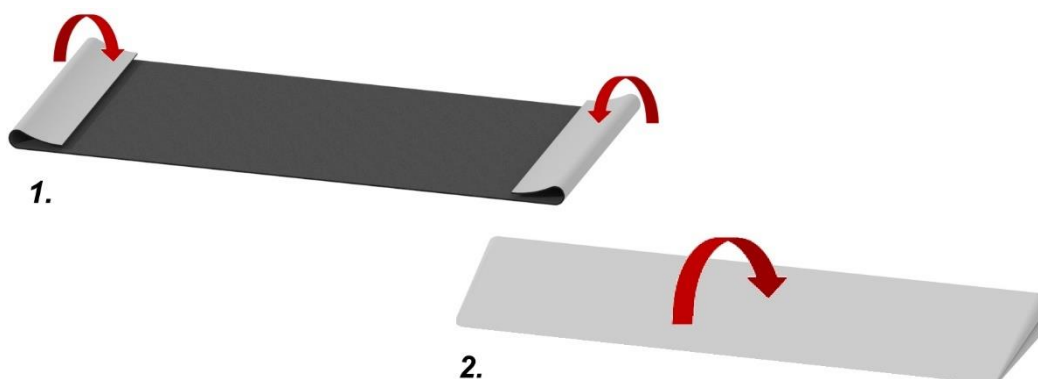
- RubberGutter EPDM SA needs to be installed above the highest possible water level in the gutter.



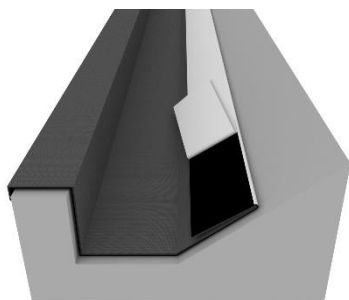
- Prepare a strip of RubberGutter EPDM SA that is wide and long enough to cover the gutter in one piece. Foresee an additional 50 mm at all sides for proper aligning and adjustment during installation. Excess of membrane must be cut away after installation.
- If installation in one piece of membrane is not possible, foresee an overlap between membranes of minimum 50 mm.

4.2 First contact with upstand

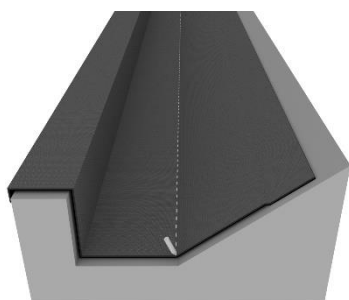
- Place the RubberGutter EPDM SA membrane cut to size in the gutter. Position it to its final position and check if all upstands and overlaps, if any, are covered.
- Make sure the membrane is positioned high enough under the tiles.
- Fold the membrane back at both gutter ends. Short sides will be adhered later, while creating plied inside corners (see further).



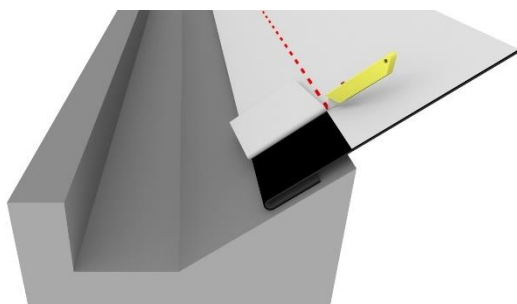
- Once the membrane is in position, flap back the edge from the inner or outer side of the gutter and cut the plastic release liner approx. 50 mm from the edge without damaging the membrane.



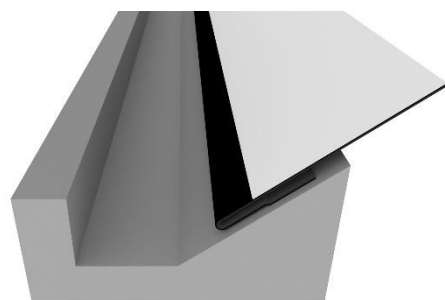
- Remove the release liner and stick the membrane to the substrate.



- Flap back the membrane to the other side with ply at first angle-change. Cut the release liner also here without damaging the membrane.



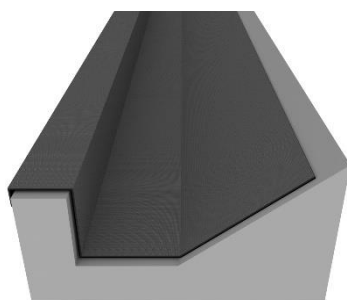
- Fold the membrane back in position, remove the second part of the release liner and adhere the membrane till the angle change.



- Install RubberGutter EPDM SA without any tension and avoid entrapment of air.

4.3 Flash-in gutter base and other upstands

- Flap back the membrane at the next angle-change and cut the release liner without damaging the membrane. Fold the membrane back in position, remove the next part of the release liner and adhere the membrane to the gutter base. Install RubberGutter EPDM SA without any tension and avoid entrapment of air.
- Remove the last part of the release liner, adhere the membrane well in the angle-change and onto the other gutter upstand. Install RubberGutter EPDM SA without any tension and avoid entrapment of air.
- Cut away excess of membrane at outside edge.



- Roll the adhered membrane firmly to the substrate using a silicon rubber roller. Use a penny roller to roll the membrane well in the angle-changes.

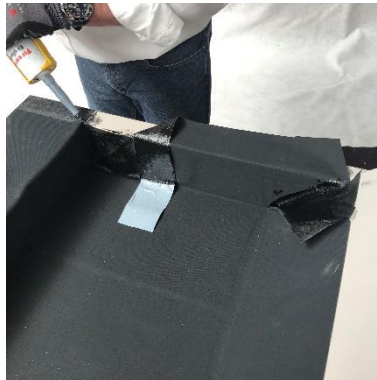
4.4 Flash-in gutter ends, fold inside corner

- Cut, fold and adhere the RubberGutter EPDM SA membrane as per following installation steps, creating a pig ear at the inside corners.



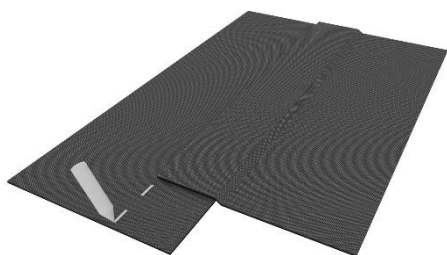


- To keep the created pig ears in place, you can adhere these onto the membrane using QuickPrime Plus primer.
- Remove the release liner and fold the pig ear at the inside corner.
- Apply QuickPrime Plus primer with a brush onto the membrane, at the pig ear side that will make contact with the membrane. Allow it to dry.
- Stick the pig ear onto the membrane and gently roll over with a silicon rubber roller.

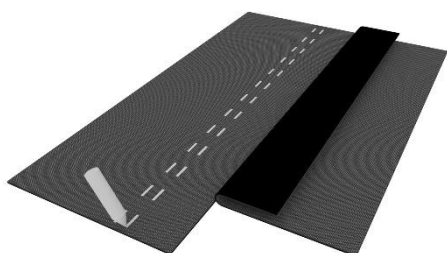


5 Seams

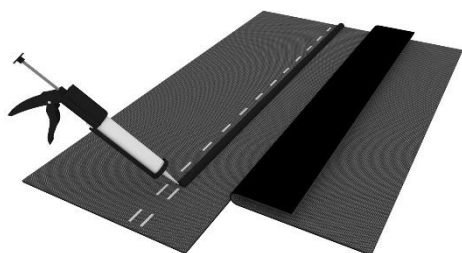
- Layout membrane overlap so that seams are installed to shed water.
- Make an overlap with the adjoining panel by 50 mm minimum.
- Both RubberGutter SA membranes should already be adhered to the substrate before continuing the realization of the seam.
- Mark the outside edge of the overlap on the bottom sheet with a white crayon marker.



- Fold back the top membrane and mark the bottom sheet every +/- 10 cm at 10 mm from the marked edge (at the side of the overlap).



- Clean the seaming area with a damp rag and apply a continuous line of EasySealant over the marks (10 mm from the seam edge) at a speed of +/- 6 sec/10 cm (min. 6 mm bead width) while the membrane is still damp (not wet).



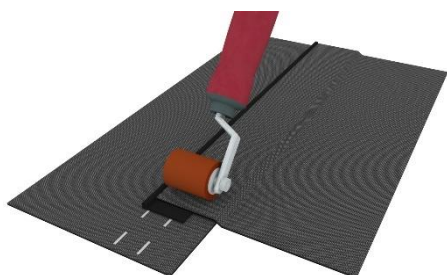
IMPORTANT: the line of sealant must be homogeneous. In case of thinning, apply additional sealant. Close the sealant cap after each application.



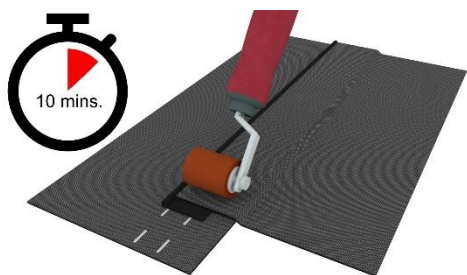
- Remove the release liner and reposition the top membrane over the fresh sealant, respecting the marked edge.



- Softly roll the top membrane using a silicon rubber roller, in order to have the sealant coming out slightly from the edge.



- Softly push with your finger where the sealant doesn't come out from the edge (e.g. at angle-change of the seam). Apply additional EasySealant if needed.
- Smoothen the EasySealant using a piece of (release) liner, plied in V-shape, over the entire seam.
- Wait 10 minutes, then roll again the top layer applying moderate pressure.



- It takes few days (longer in cold temperatures) before the seam has full strength.

6 Corners

6.1 Finish folded inside corner

See §4.4 for folding and adhering the RubberGutter EPDM SA membrane, creating a pig ear at the inside corners.

6.2 Outside corner

- Cut two circular pieces of RubberGutter EPDM SA membrane with a diameter of approx. 120 mm. Cut out a finger shape almost reaching until the center of the piece.



- Position the first piece centered over the outside corner base point, with the finger shape cut-out on the base of the gutter.
- Mark the shape of the corner piece using a white crayon marker.





- Apply a continuous line of EasySealant at 10 mm inwards from the white marking. Apply EasySealant on the angle changes and along potential capillaries.



IMPORTANT: the line of sealant must be homogeneous. In case of thinning, apply additional sealant. Close the sealant cap after each application.

- Gently flatten the outer lines of EasySealant using a flexible steel putty knife or a scrap piece of release liner. Excess of EasySealant can be disposed of in the areas without EasySealant.

NOTE: it is not recommended to make a full adhesion of the detail with EasySealant. Without air, the EasySealant could take a very long time to cure.

- Remove the release liner of the first corner piece and install it making gentle contact.
- To avoid air bubbles, mating should be done softly by hand, from inside to outside.
NOTE: in case of an important air bubble, it is recommended to push it out and roll the EasySealant at the place the air came out.
- Softly push the EasySealant with your finger and a roller to bring it out slightly from the edge.



- Repeat the installation steps to install the second circular prepared piece of RubberGutter EPDM SA over the first piece, but with the finger shape cut-out at the upstand.
- Smoothen the EasySealant using a piece of (release) liner, plied in V-shape, over the entire seam.



- After 10 minutes, when finished installing the second piece, roll again the top layer applying moderate pressure.

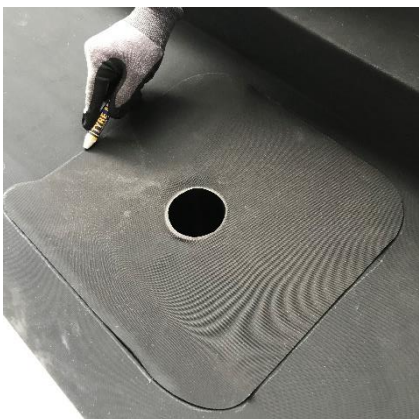


7 Drains

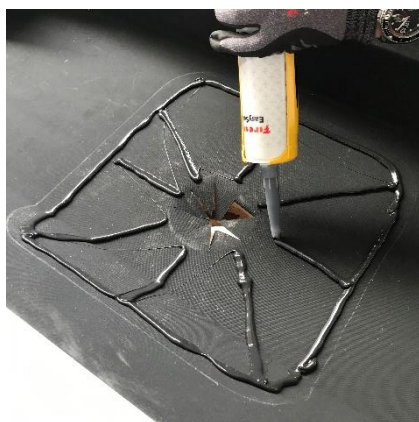
- Cut away the RubberGutter EPDM SA membrane at the drain opening using a cutter.



- Measure the needed length of the insert piece pipe and cut off pipe on required length.
- Insert the drain insert piece and mark the outside edges of the drain flange using a white crayon marker. If the drain flange has contact on the gutter base for a min. of 50 mm (in all directions from the drain opening), it is recommended to remove the excess of flange when this would make an angle change.



- Remove the drain insert piece.
- Apply a continuous line of EasySealant at 10 mm inwards from the marked flange edges. Apply EasySealant at the drain opening and create some lines in between.



IMPORTANT: the lines of sealant must be homogeneous. In case of thinning, apply additional sealant. Close the sealant cap after each application.



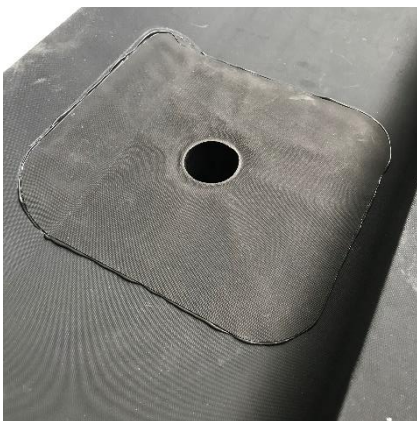
- Gently flatten the outer lines of EasySealant using a flexible steel putty knife or a scrap piece of release liner. Excess of EasySealant can be disposed of in the areas without EasySealant.

NOTE: it is not recommended to make a full adhesion of the detail with EasySealant. Without air, the EasySealant could take a very long time to cure.

- Install the drain insert piece in its final position. Softly push the EasySealant with your finger and a roller to bring it out slightly from the edge.



- Smoothen the EasySealant using a piece of (release) liner, plied in V-shape, over the entire seam.
- After 10 minutes, roll again the top layer applying moderate pressure.

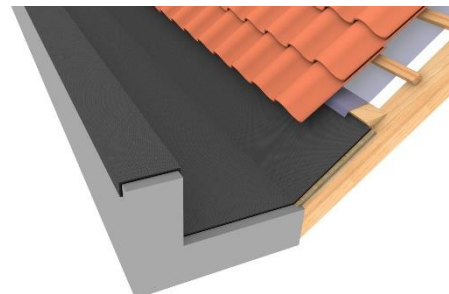


8 Gutter edge termination

The RubberGutter EPDM SA membrane shall be waterproof finished at all gutter edges, as per one of the following details.

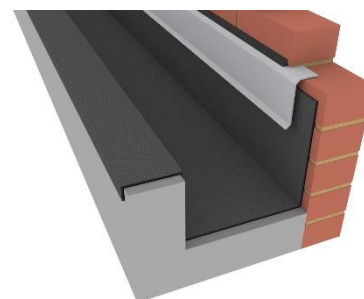
8.1 Under roof tiles

The RubberGutter EPDM SA membrane is installed high enough and will be sufficiently covered by roof tiles.



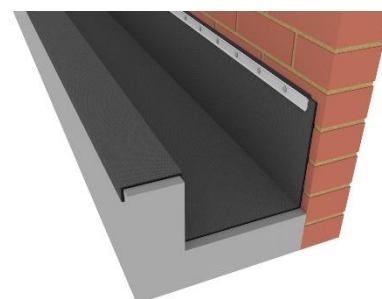
8.2 Counter flashing

The RubberGutter EPDM SA membrane will be terminated against a wall by a counter flashing detail, installed according to general roofing practice.



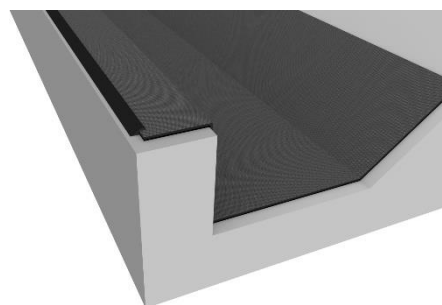
8.3 Termination Bar

The RubberGutter EPDM SA membrane will be terminated against a wall by using a rigid profiled bar, sealed on top using EasySealant.



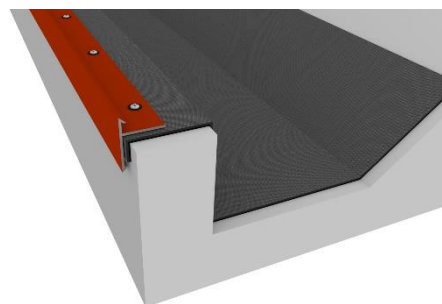
8.4 Trim at gutter outside edge

The RubberGutter EPDM SA membrane will be trimmed at the outside edge of the gutter. The membrane edge will be sealed off using EasySealant.



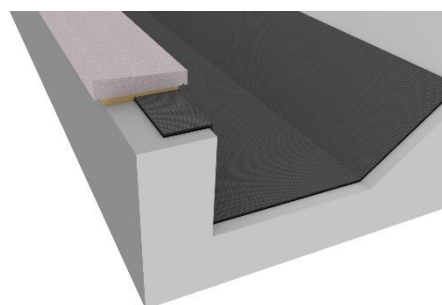
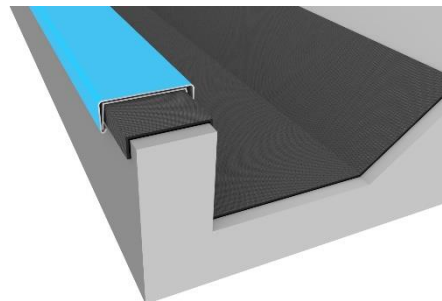
8.5 Metal profile

The RubberGutter EPDM SA membrane will be fixed by a metal profile using stainless steel fasteners with rubber washer.



8.6 Metal coping or coping stone

The outside gutter edge is extension of brick façade and shall be termination by coping stone or metal coping.





9 Care and maintenance

The RubberGutter EPDM SA membrane does not require additional protection against weathering, UV light or ozone.

All components of the RubberGutter EPDM SA system should be protected from discharges such as petroleum products, greases, oils, organic-based solvents, animal fats and fresh bitumen. Any direct contact with heat sources of more than 82°C should be avoided.

Protect the RubberGutter EPDM SA membrane from mechanical damage by others. Remove sharp or rough-edged foreign materials from the gutter that can cause damage to the membrane.

Rainwater outlets, scuppers and gutters can become blocked and should be inspected annually to ensure that roof drainage is able to perform as designed.

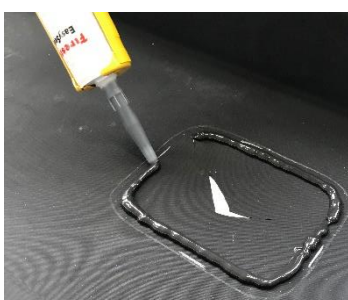
In case of roof works or inspections, use a suitable plank of wood or insulation board whenever ladders are used on top of the RubberGutter EPDM SA membrane, to avoid damage. Respect all national and local safety instructions when working on heights. Wear the necessary safety equipment.

The addition or change of details to the gutter such as drains, edge termination etc. will require an adjustment of the existing roofing system. Contact your installer or distributor to perform these works in accordance with Firestone Building Products' recommendations.

10 Repairs

If the membrane is mechanically damaged, it can be easily repaired with a new piece of RubberGutter EPDM SA membrane and EasySealant. Please follow the procedure below:

- Cut away loose piece of membrane.
- Clean the membrane gutter over the damaged area, exceeding min. 100 mm at the extends.
- Prepare a piece of RubberGutter EPDM SA membrane big enough to cover the damaged area, exceeding min. 50 mm in all directions.
- Mark the edges of the repair patch onto the membrane using a white crayon marker.
- Remove the repair patch.
- Apply a continuous line of EasySealant at 10 mm inwards from the marked edges of the repair patch. Create some lines of EasySealant in between.



IMPORTANT: the line of sealant must be homogeneous. In case of thinning, apply additional sealant. Close the sealant cap after each application.

- Gently flatten the outer lines of EasySealant using a flexible steel putty knife or a scrap piece of release liner. Excess of EasySealant can be disposed of in the areas without EasySealant.

NOTE: it is not recommended to make a full adhesion of the repair patch with EasySealant. Without air, the EasySealant could take a very long time to cure.

- Remove the release liner and install the repair patch in its final position.
- Softly push the EasySealant with your finger and a roller to bring it out slightly from the edge.



- Smoothen the EasySealant using a piece of (release) liner, plied in V-shape, over the entire seam.



- After 10 minutes, when finished installing the second piece, roll again the top layer applying moderate pressure.

