

# ClassicBond Installation Guide

## CONTENTS

|   | Page    |
|---|---------|
| General Information & Precautions           | 2       |
| Tools, Equipment & Roof Surface Preparation | 3       |
| <b>Membrane Installation</b>                |         |
| Installation of ClassicBond roofing         | 4       |
| Pipes/Penetrations in membrane              | 5       |
| Curbs, skylights, chimney                   | 6       |
| Perimeter Wall & Vertical Terminations      | 7       |
| Membrane Seams                              | 8 & 9   |
| <b>Pressure Sensitive Details</b>           |         |
| T-Joint Cover Patch                         | 10      |
| Internal Corner Details                     | 11      |
| External Corner Details                     | 12 & 13 |
| Prefabricated Pipe Boot                     | 14      |
| Pipe & Penetration Flashing                 | 15      |
| <b>Roof Outlets/Drains</b>                  |         |
| Anti-Back-up 68mm Outlet                    | 16      |
| ClassicBond Top Drain Outlet                | 17      |
| Angled Roof Drain Outlet 100mm x 100mm      | 18      |
| EPDM to BUR Join                            | 19      |
| <b>Perimeter Terminations</b>               |         |
| Wrap Edge for Gutter                        | 20      |
| Metal Drip Edge for Gutter                  | 21      |
| Metal Edge Trim for Water Check Termination | 22      |
| Wall Termination                            | 23      |
| Roofing Terms                               | 24 & 25 |

# ClassicBond Installation Guide

## GENERAL INFORMATION

This Rooftop Guide has been designed to give the user a GENERAL overview of the application of a ClassicBond EPDM roof. This Guide is intended as broad reference aid and is not intended or meant to be all-inclusive.

## PRECAUTIONS

If the bonding adhesive is not allowed to properly dry, gas bubbles or blisters may form under the membrane sheet. These bubbles or blisters may subside over time.

Due to solvent flash off, condensation may form on freshly applied adhesive when the ambient temperature is near the dew point. If condensation develops, possible surface contamination may occur and the application of adhesive must be discontinued. Allow the surface to dry and when conditions allow apply a thin fresher coat at a coverage rate that is approximately half of the normal coverage rate when re adhering a previously coated surface.

Extreme care must be exercised when working on ladders, roofs, below grade or at elevations above ground. If used as an emergency repair to a roofing system, contact the roofing system manufacturer for compatibility and to ensure compliance with terms and limitations of the warranty.

Surface can be slippery when wet, damp, or frost covered.

Do not stretch the product during installation.

Do not expose product to temperatures in excess of 82° C (180°F).

This product is not intended for use where roof top traffic or activity is anticipated without a protective layer installed on its surface.

**THIS INFORMATION AS WELL AS INFORMATION CONTAINED IN THE MATERIAL SAFETY DATA SHEET AND ON PRODUCT PACKAGING MUST BE REVIEWED PRIOR TO STORAGE, HANDLING OR USE OF THESE PRODUCTS.**

Liquid adhesives, primers, and sealants, as well as their fumes, contain petroleum distillates and are EXTREMELY FLAMMABLE. Do not breathe in vapours.

Maintain proper ventilation. Store these products away from heat, flame, or sparks. Do not smoke near these materials.

Keep containers closed when not in use. Care must be exercised to ensure that open containers are not placed near fresh air intake ventilators on the roof. Avoid contact with eyes. Glasses, goggles, or a face shield are recommended for eye protection.

If contact is made with the eyes, immediately flush with plenty of water for at least 15 minutes and contact a physician. Avoid contact with the skin.

Chemically resistant gloves are required for hand protection. In case of contact with skin, thoroughly wash the affected area with soap and water.

When loading materials onto the roof, exercise care to ensure that concentrated loads do not exceed the design load limitations of the existing roof structure. If stacking products, ensure sufficient stability of the materials.

# ClassicBond Installation Guide

## TOOLS and EQUIPMENT

- 2" hand roller
- Hammer
- Hook blade knife/Scissors
- Pencils/Chalk Line
- 225mm medium nap roller on pole
- Duct tape
- Chalk line
- Safety glasses
- Tape Measure
- 50-75mm brushes
- Stirrers for adhesive and primer.
- Solvent resistant gloves
- Soft bristle broom
- Caulk gun
- Scrubbing pads for EPDM primer

## ROOF SURFACE PREPARATION

The ClassicBond fully-adhered system will adhere to wood, wood fibreboard, lightweight concrete, and polyisocyanurate. This product may NOT be applied to polystyrene insulation.

Be sure the roof surface is clean, free of dust, dirt, rust, oil, grease, and loose material. The roof surface must be dry.

This product will not adhere to wet or damp surfaces. Trapped moisture may vaporize and negatively affect the performance of this product.

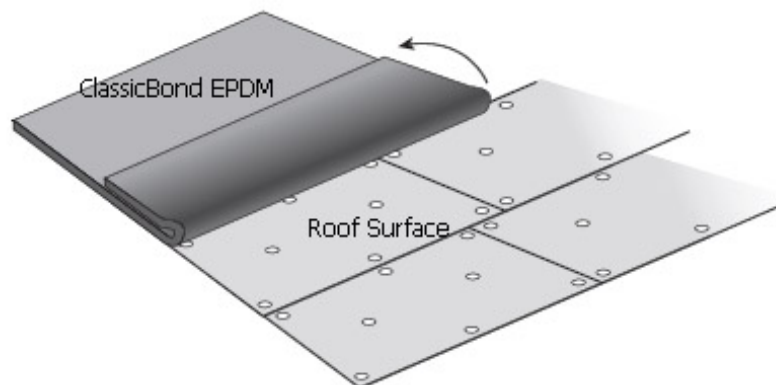
Good roofing practice dictates that ponding water be prevented. The roof surface should have a positive slope of at least 1 in 80 to prevent ponding water conditions. Ponding water is defined as the presence of standing water within 24 hours of precipitation. Before starting please consult the "Precautions" section at the beginning of this manual.

To ensure proper adhesion ClassicBond Membrane Cleaner or hot soapy water should be used on any membrane that gets dirty before installation.

# ClassicBond Installation Guide

## INSTALLATION OF CLASSICBOND ROOFING

- Unroll the ClassicBond EPDM membrane over the substrate so that the sheet is in the desired position and is wrinkle free.
- Allow the ClassicBond EPDM membrane to relax. Depending on weather conditions, this could take from fifteen to thirty minutes.
- Cut the membrane to length if required, and position the sheet to achieve an overhang off the roof of at least 75mm (3") for both the length and width.
- Fold the sheet onto itself so that one-half of the sheet is exposed; take care to avoid wrinkles.



- Open and thoroughly stir the ClassicBond WBA Adhesive. Using a medium nap paint roller apply the adhesive to the substrate.
- The adhesive must be applied to 100% of the surface in an even coat without globs or puddles. The adhesive can alternatively applied in a thin coat to the membrane and substrate.



- Roll the sheet onto the coated substrate avoiding wrinkles by rolling the middle of the sheet first. Immediately after rolling the sheet into the adhesive, broom the membrane sheet to achieve maximum contact.
- DO NOT apply excessive pressure to cause the membrane to wrinkle.
- Repeat the application of ClassicBond WBA adhesive for the other half of the ClassicBond EPDM membrane.

See the "Seams" section of this manual for seaming adjoining sections of the membrane together.

NOTE: DO NOT APPLY WBA or BONDING ADHESIVE TO ANY SEAM AREAS.

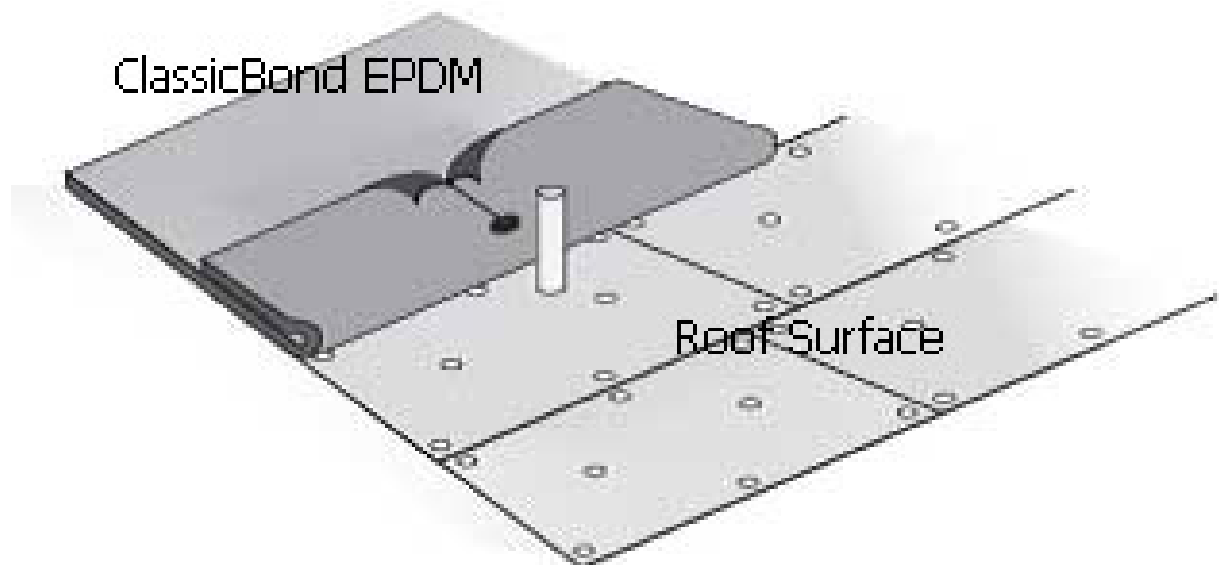
# ClassicBond Installation Guide

## PIPES/PENETRATIONS IN MEMBRANE

When laying out the field sheets and a pipe or penetration is encountered, roll the folded membrane to the pipe. Be sure to maintain the proper alignment of the sheet with the roof edge, wall, and seams.

- Make a straight cut from the pipe to the nearest edge of the field sheet. Cut a hole to match the diameter of the pipe and roll the field sheet around the pipe.
- Check the final position of the sheet. Fold the membrane back and begin the bonding procedure.
- After the field sheet has been glued and broomed into place, apply a
- ClassicBond 150mm (6") wide Cured Cover strip over the entire cut in the field sheet from the pipe to the end of the sheet.

See the "Prefabricated Pipe Boot" section of this manual for further information on finishing this detail.

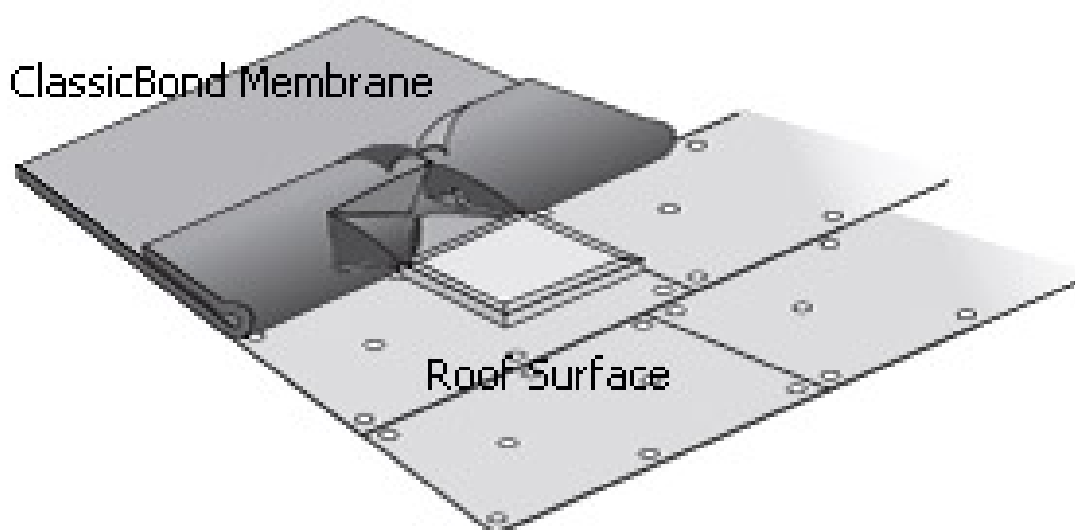


# ClassicBond Installation Guide

## CURBS (Skylights, Chimney)

When encountering an outside corner as part of a perimeter wall, refer to the Perimeter Wall details in this manual. When encountering outside corners as part of a rooftop penetration such as a skylight or chimney, follow the instructions below.

- Prior to applying the adhesive, and while maintaining proper sheet alignment with walls, perimeter edges and other protrusions, unroll the membrane up to the base of the unit.



- Measure the width and depth of the unit and transfer the corresponding dimensions onto the folded membrane. Draw an X inside the box. Cut the X mark and from one corner cut a straight line to the nearest edge of the membrane.
- Roll the membrane around the unit, leaving a triangle of membrane turning up each one of the four (4) sides.
- After all cuts are made and the membrane has been correctly positioned, fold the membrane back and begin bonding procedures.
- After the field is complete, bond the triangles up the sides of the unit (chimney, skylight, etc.). Take care to bond the membrane into the angle change so that the membrane is completely adhered.
- After the field sheet has been glued and broomed into place, apply a ClassicBond 150mm (6") Cover strip over the entire cut in the field sheet from the curb to the end of the sheet.

Refer to the "Outside Corners" section of this manual for further details on finishing the curb.

# ClassicBond Installation Guide

## PERIMETER WALLS

The membrane on the wall should be a continuation of the deck membrane, on roofs under 100 m<sup>2</sup>. If roof larger than this base tie ins must be used at the perimeter of the roof.

The membrane should extend up the wall as far as possible to prevent the possibility of moisture infiltration behind the membrane. The membrane must up the wall a minimum of 150mm.

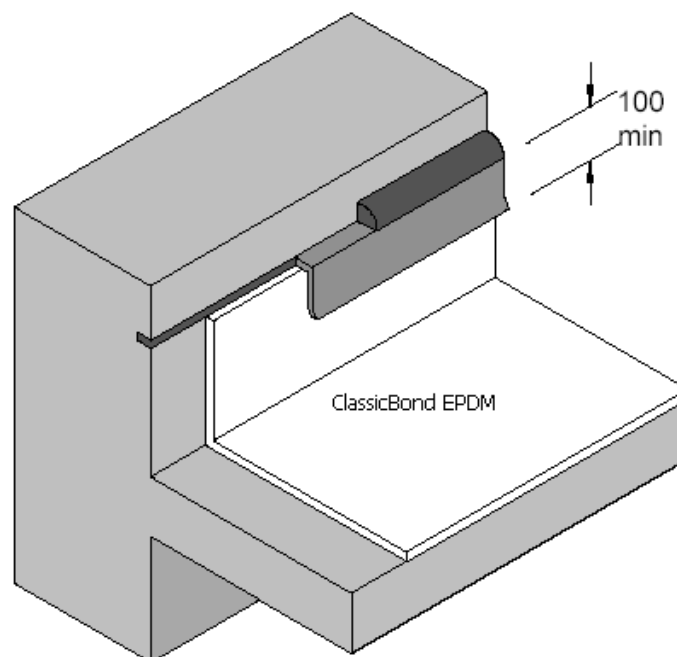
- Position the sheet in the desired location folding back the material that will be installed on the wall. Apply Bonding Adhesive to the wall, deck, and the membrane and allow to properly dry.
- Roll sheet to the base of the angle change. Firmly press or crease the sheet tightly into the angle change. Roll the sheet up the wall. Using a bristle broom to firmly adhere the membrane sheet to the wall and roof deck.

Refer to the Outside Corner or Roof Edge Details for instructions on terminating the edge of the membrane.

## Vertical Termination

After the desired flashing height is attained and the membrane has been adhered, determine the placement of the wall trim.

- Insert the trim into the wall and mechanically fix into place.
- Apply a bead of Lap Sealant Mastic along the top of the trim and wall.



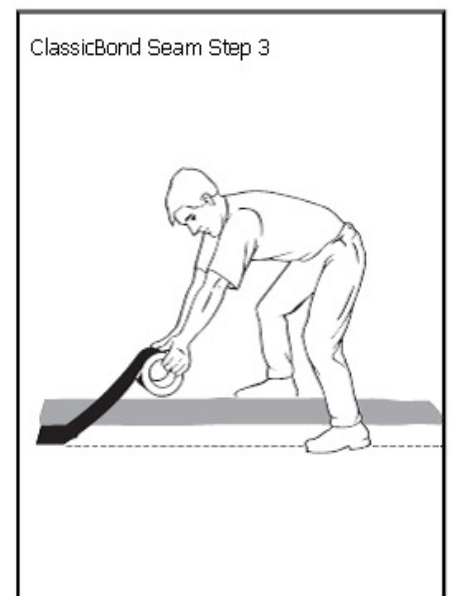
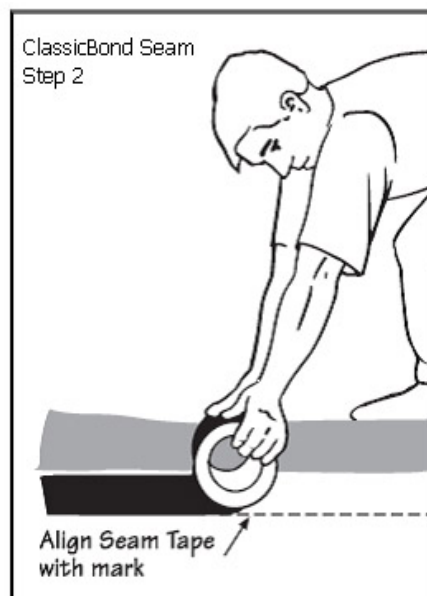
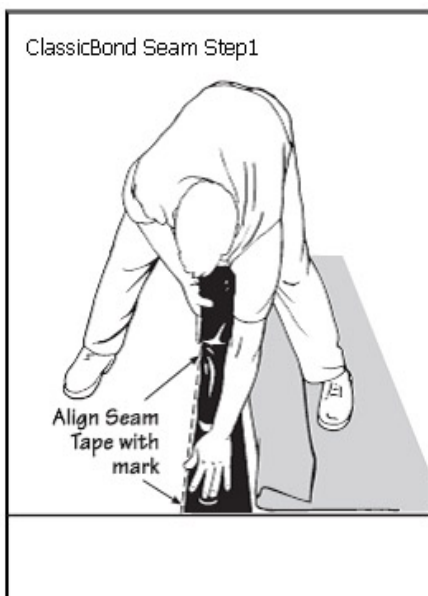
# ClassicBond Installation Guide

## SEAMS

### SEAMING USING SEAM TAPE

- The membrane should be positioned so that the width of the seam is 75mm (3"). Remove excess chalk from a chalk line by snapping the line into the air and then chalk a line approx. 5mm (1/4") from the leading seam edge.
- Fold the top sheet back to expose the seam area. Using a scrubbing pad apply the ClassicBond Primer to the seam area using back and forth strokes with moderate pressure until the seam surface attains a smooth black appearance. Apply the ClassicBond Multipurpose Primer past the seam edge to the chalk line. Allow the primer to flash off.

NOTE: If the EPDM membrane is contaminated with dirt, dust, or debris, clean the seam area with ClassicBond Membrane Cleaner or hot soapy water and allow to dry before applying ClassicBond Primer.

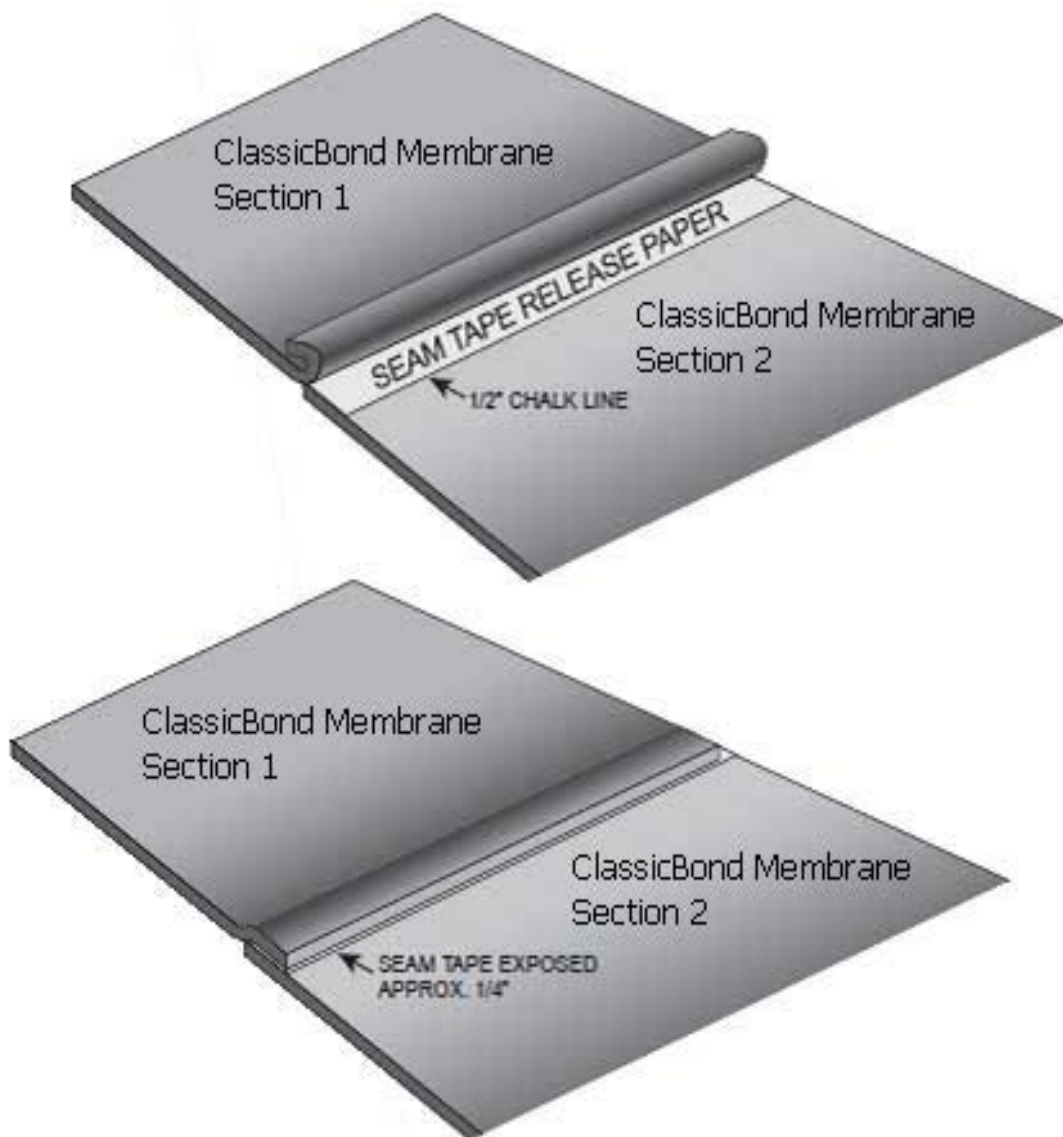


- Unroll the 75mm (3") wide Seam Tape along the length of the seam, tape side down, aligning the Seam Tape (not the clear backing) along the chalk line.
- Using moderate pressure set the Seam Tape into place to keep air from being trapped under the tape.
- Fold the top membrane onto the Seam Tape release paper. (If the Seam Tape does not visibly extend beyond the leading seam edge, the membrane edge should be cut back to expose 5mm (1/4") of Seam Tape.
- Reaching under the top ply of membrane, pull the release paper away from the Seam Tape at a 45-degree angle to the seam. While removing the paper, draw your hand across the seam, from the back to the leading edge. This will prevent wrinkles and fish mouths from forming in the seam.

# ClassicBond Installation Guide

- After the paper is removed, roll the entire length of the seam with a steel or silicone hand roller, first, across the seam, and then the length of the seam.

Seaming using seam tape cont.



NOTE: When splicing Seam Tape, overlap each piece a minimum of 25mm (1") and firmly roll with a steel or silicone hand roller. Apply lap sealant along the seam's leading edge 75mm in each direction from where the seam tape is spliced together or apply a cover patch with uncured tape.

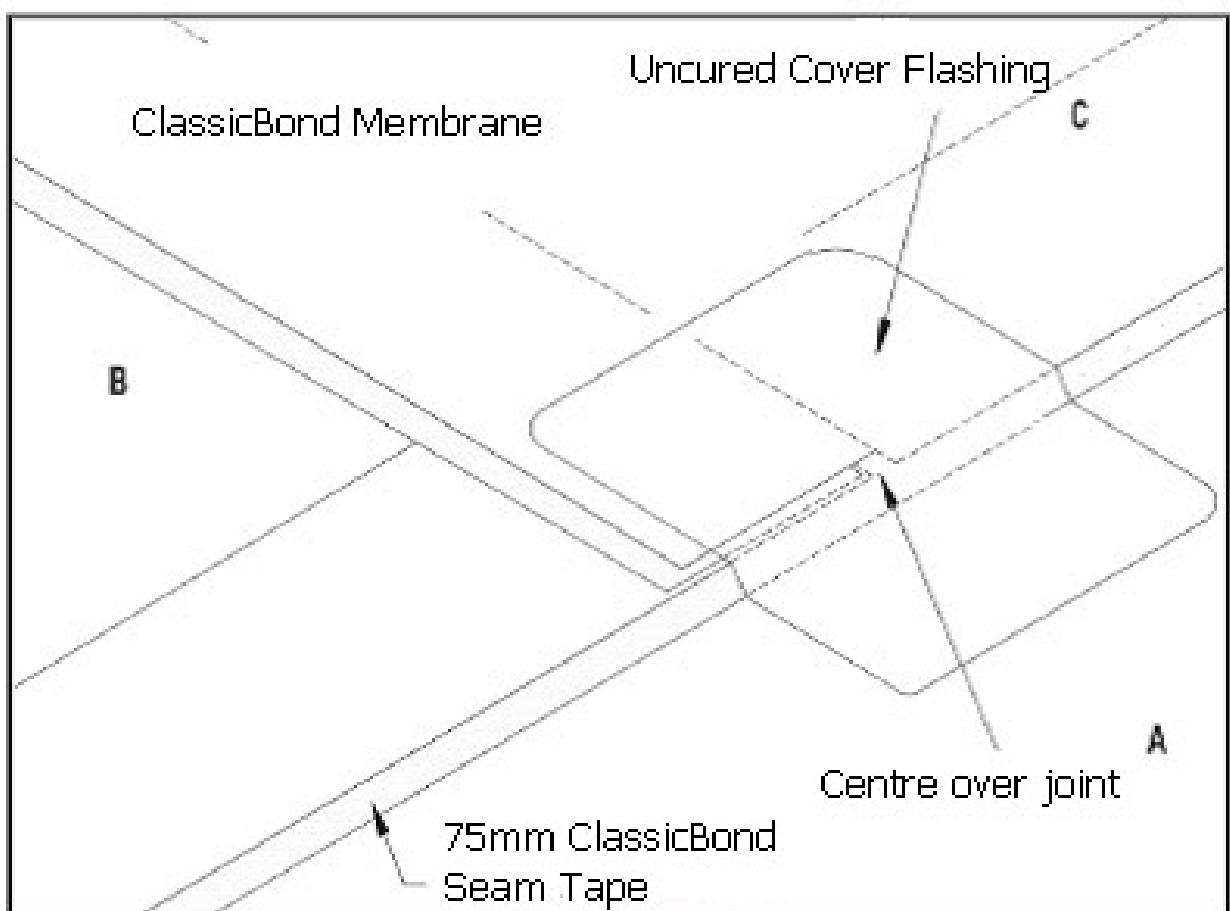
# ClassicBond Installation Guide

## T-JOINTS

A T-Joint is formed when two sheets of membrane form a seam that travels under, or over, a third section. The centre of the "T" is where the middle sheet ends and the top sheet bridges over the middle sheet.

- Use ClassicBond Uncured Flashing to form T-Joint patches. T-Joint patches should be at least 150mm (6") X150mm (6").
- Apply primer to membrane surface before applying T-Joint patches.

NOTE: All T-Joint Patches should be thoroughly rolled with a steel or silicone hand roller.



# ClassicBond Installation Guide

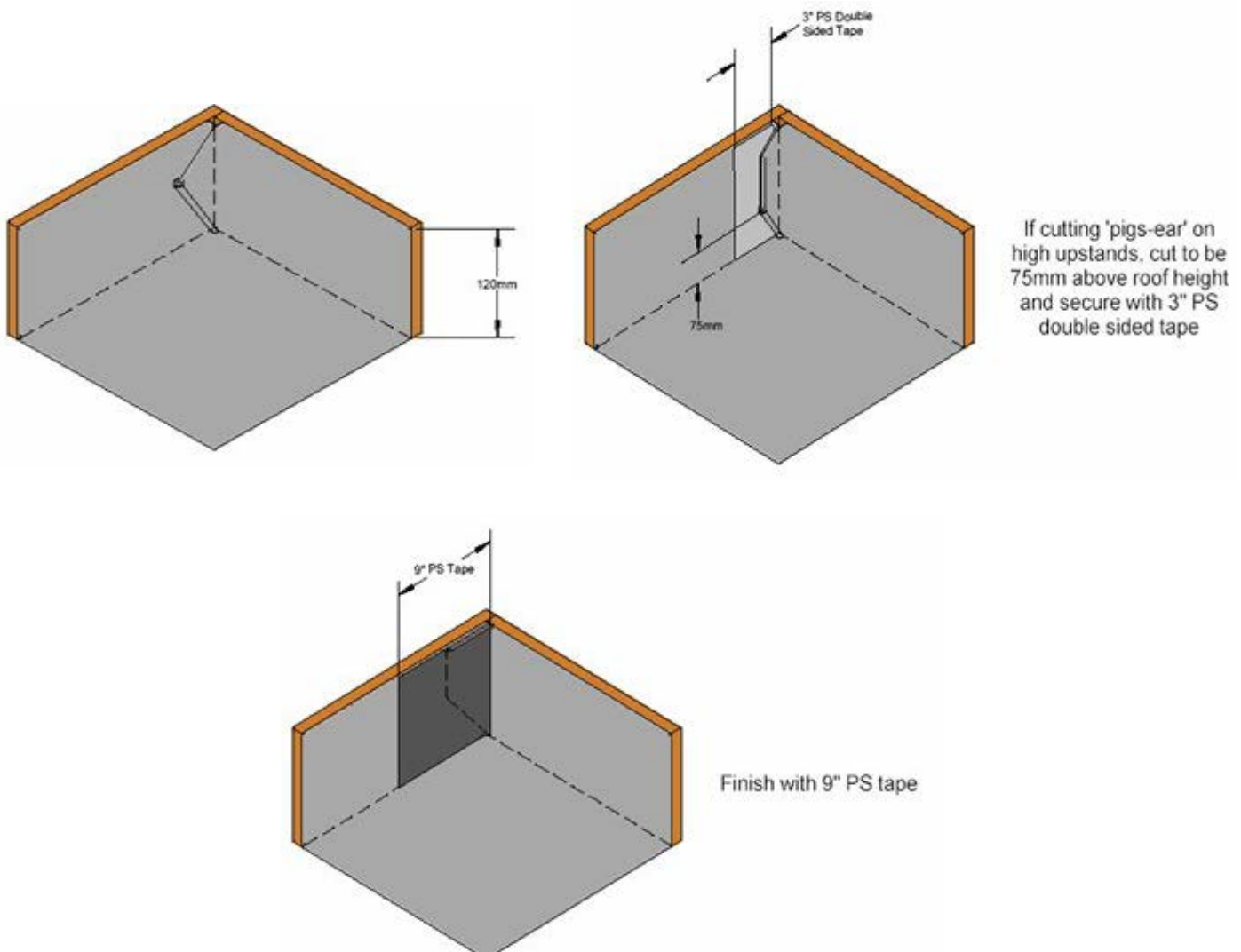
## CORNERS

### INTERNAL CORNERS

The membrane should extend up the wall as far as possible (150mm min.).

- Apply Bonding Adhesive to the wall, roof deck, and membrane. Roll sheet to the base of the angle change. Firmly press or crease the sheet tightly into the angle change. Roll the sheet up the wall. Using a roller or brush to firmly adhere the membrane sheet to the wall and roof deck.
- Apply ClassicBond primer to the back of the flap and the membrane and secure the flap to the wall.
- Cut an appropriate size piece of 225mm uncured flashing, apply primer and secure the fold back with to the upstand

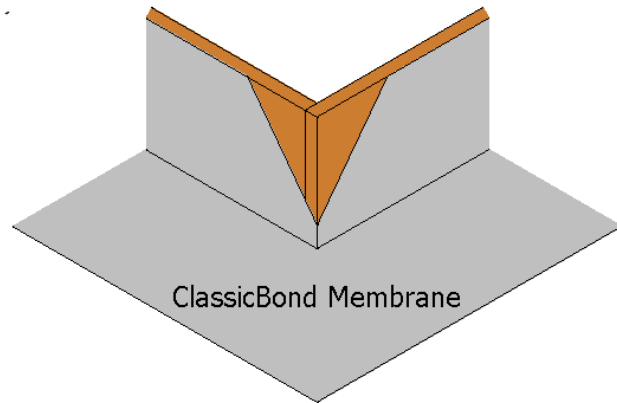
Refer to the Vertical Termination Section at Perimeter Walls for instructions on terminating the edge of the vertical membrane.



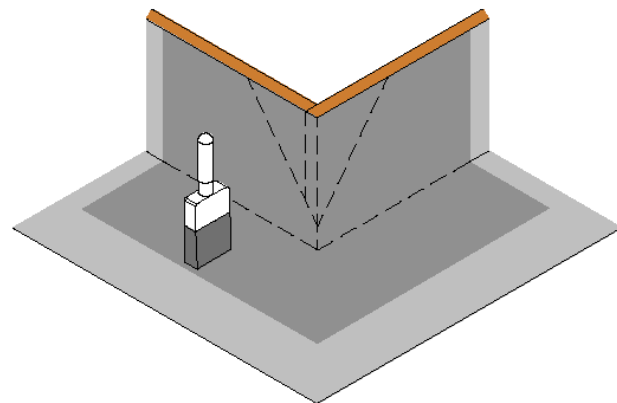
# ClassicBond Installation Guide

## OUTSIDE CORNERS

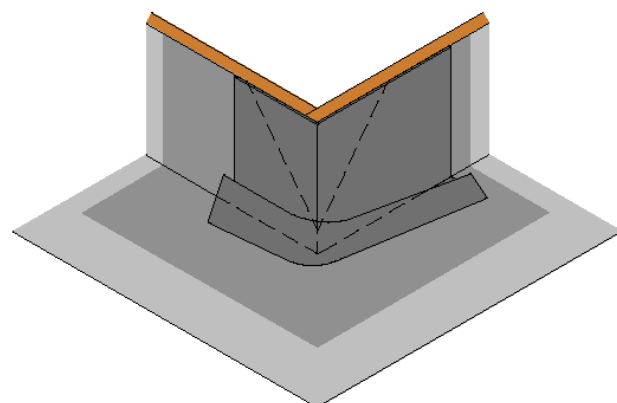
- 1 Cut the ClassicBond membrane to fold around the corner and fully bond to the upstand



- 2 Apply ClassicBond primer to the area to be flashed

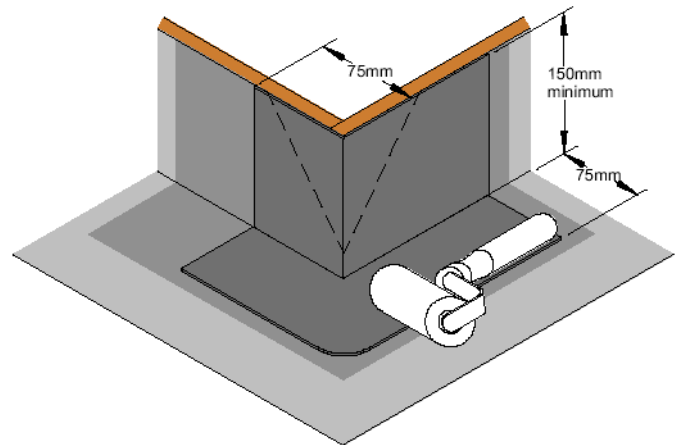


- 3 Once the ClassicBond primer has cured, remove cellophane backing and start fitting from the top point. Work the tape down releasing any air and working tight into the angle change and fold the bottom flap onto the deck.

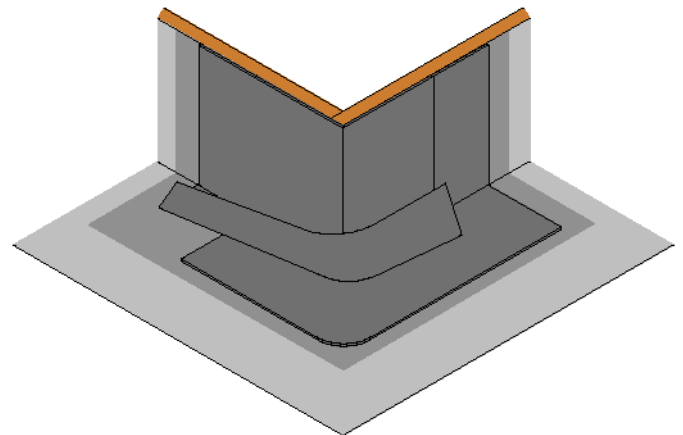


# ClassicBond Installation Guide

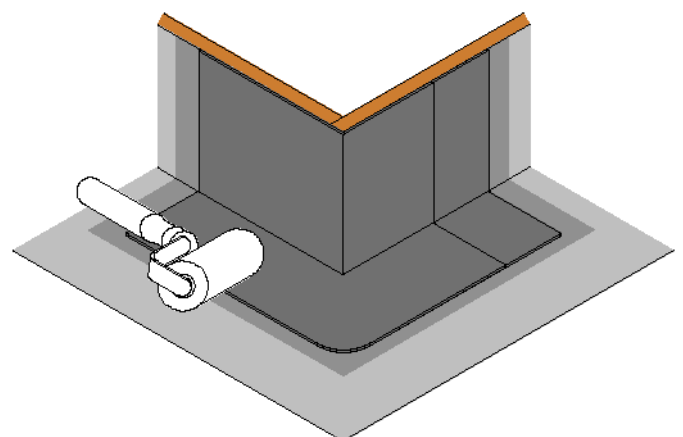
- 4 Roll out the flashing with steel hand roller



- 5 Repeat the process from the opposite direction. Fit the second tape in the same manner as the first



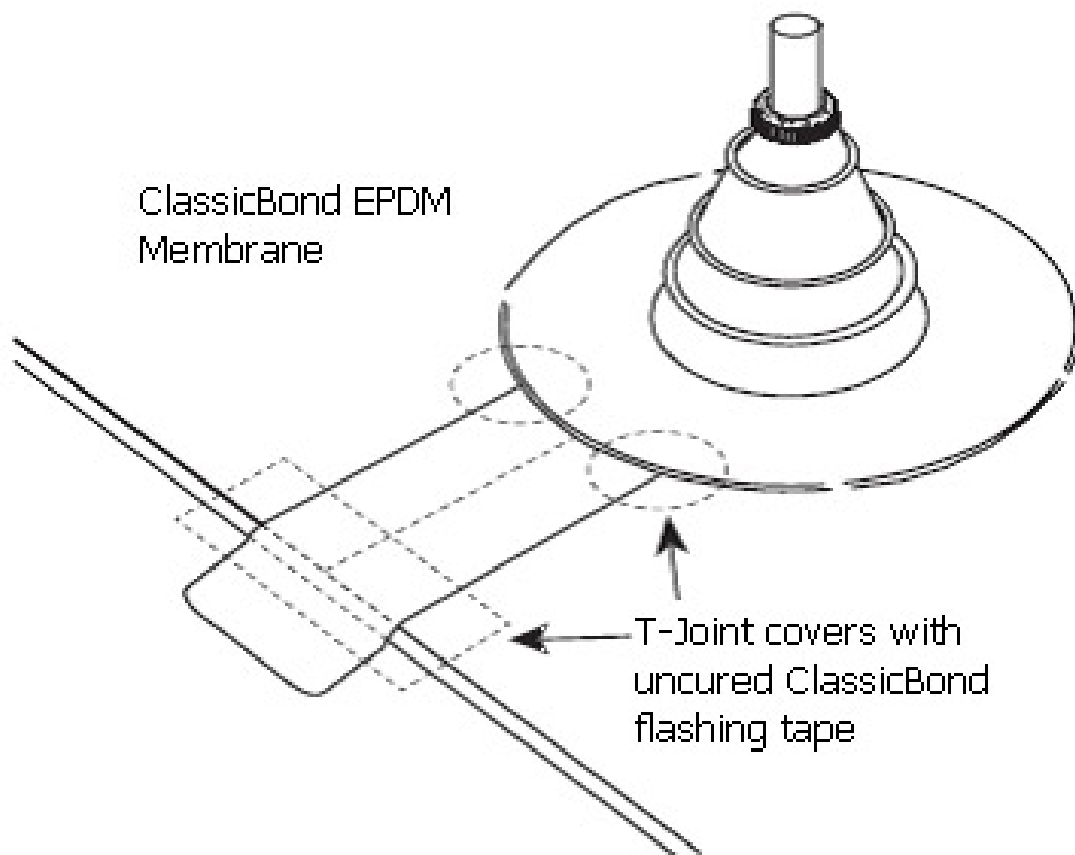
- 6 Roll out the entire flashing to finish



# ClassicBond Installation Guide

## PREFABRICATED PIPE BOOT

1. Cut the pipe seal adjacent to the raised "ring" one size smaller than the pipe diameter. DO NOT CUT DIAGONALLY THROUGH THE INDEX RING.
2. Pull pipe seal over pipe until base flange is in contact with the membrane.
3. Mark pipe around the top of the pipe seal.
4. Pull pipe seal upwards on pipe until mark on the pipe is visible.
5. Install Water Cut-Off Mastic (by others) below the mark, which indicates the top of the installed pipe seal.
6. Apply ClassicBond primer to the EPDM deck membrane in the area where the base flange will be bonded. Allow to dry.
7. Pull pipe seal back down over pipe and into position.
8. Remove release paper from the tape and with hand pressure press tape onto primed area. Roll splice area with a hand roller.
9. Install a stainless steel universal clamping ring to the top of the pipe seal to provide constant compression of the Water Cut-Off Mastic.
10. Apply ClassicBond uncured T-Joint Patches where pipe seal intersects a field splice.

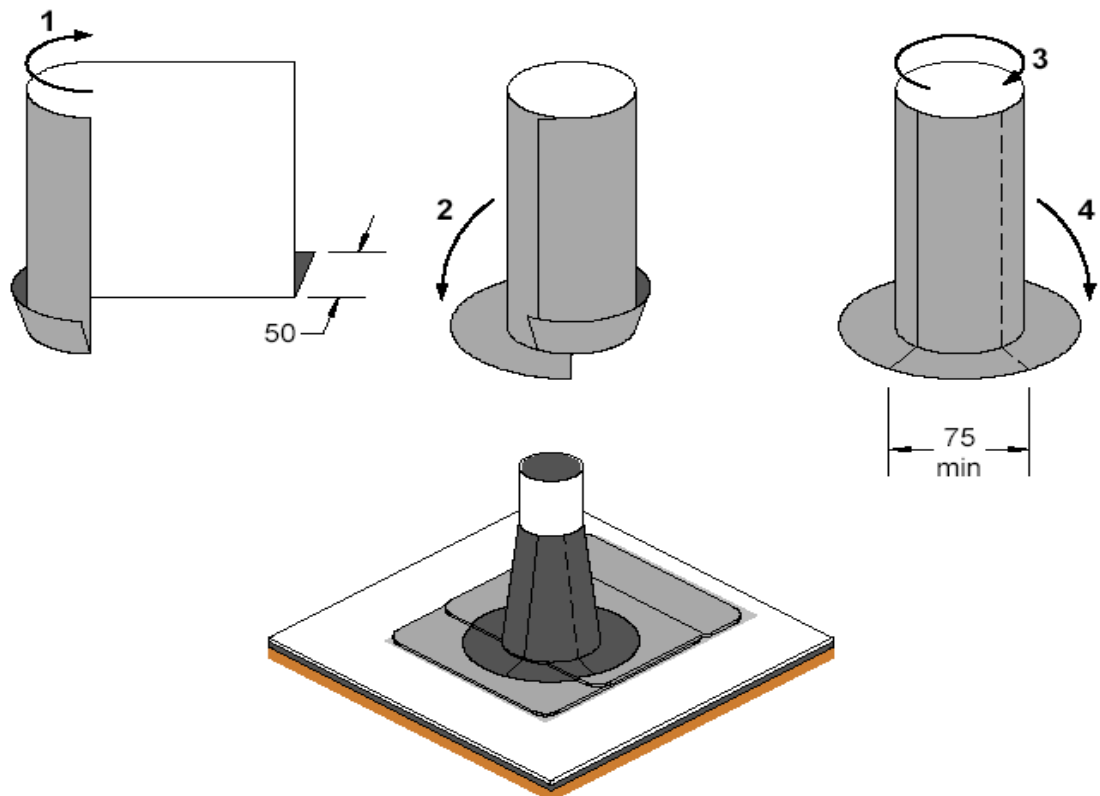
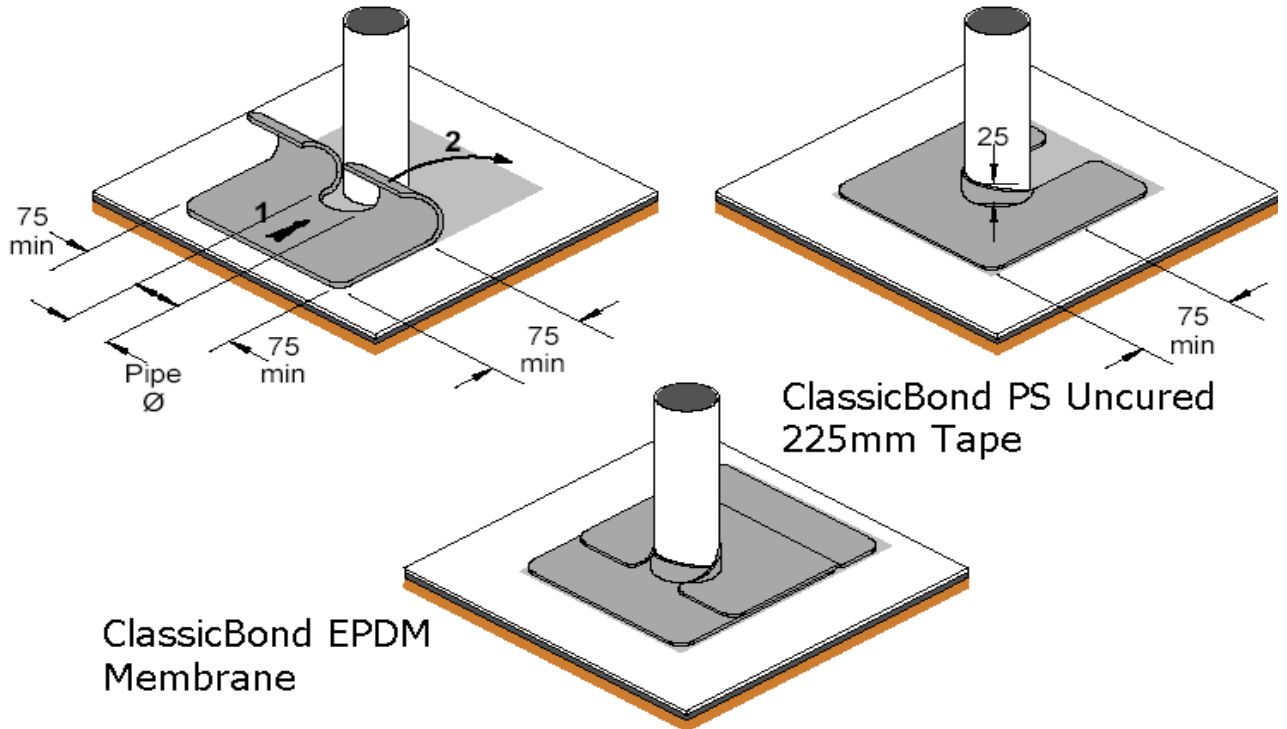


NOTE: Temperature of the pipe must not exceed 82° C (180° F)

# ClassicBond Installation Guide

## PIPE AND PENETRATION FLASHINGS

To fabricate a pipe boot or flashing for other penetrations follow the procedures on the following pages using ClassicBond Uncured Flashing.



# ClassicBond Installation Guide

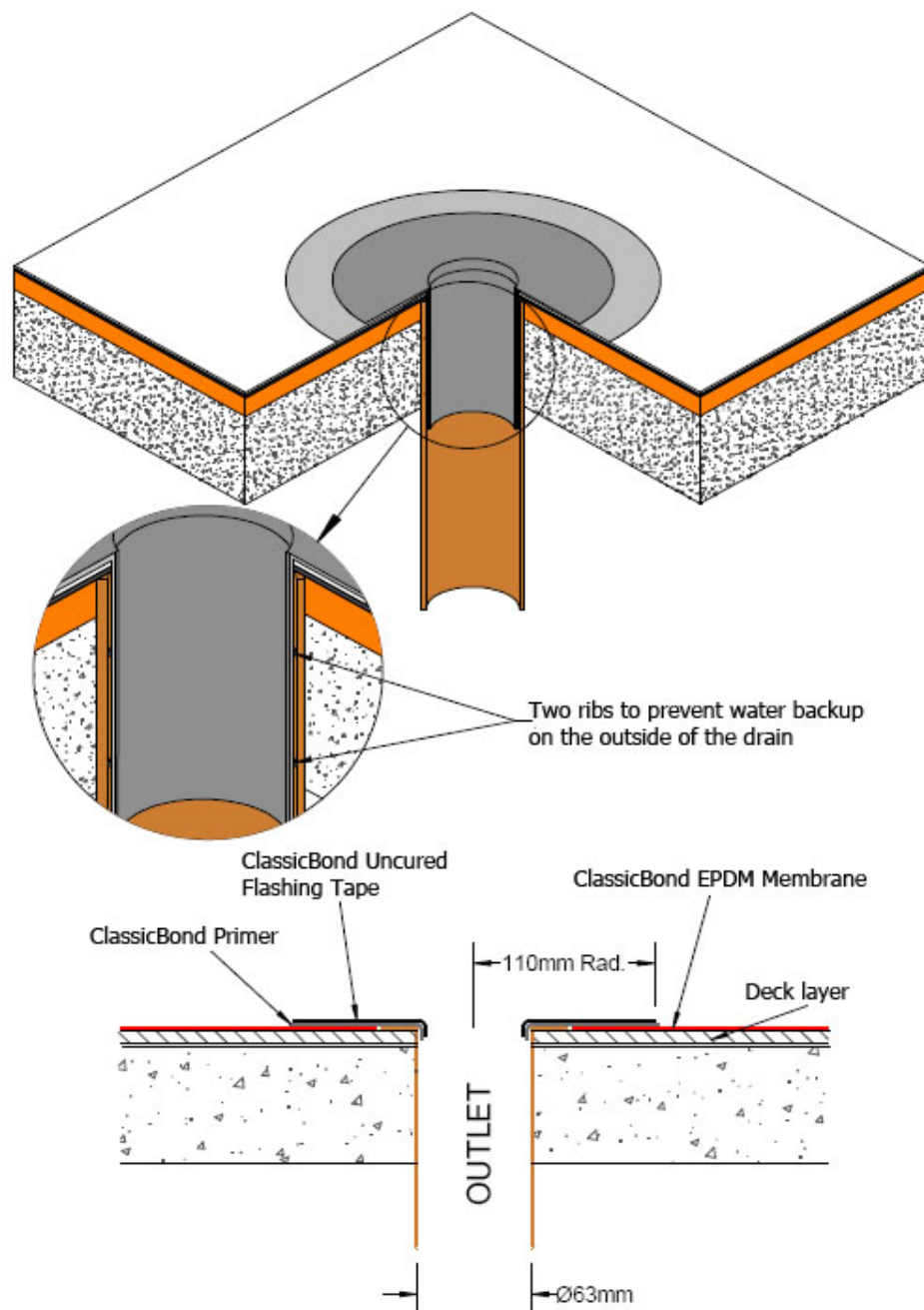
## Internal Drain

There are two basic methods for sealing to an internal drain. Pre-made outlets of various types can be used for standard outlets or an on-site method may be used for non-standard outlets.

### Anti-backup drain for 68mm outlet

These are made to be inserted into the existing 68mm external diameter down pipe. The outlet is fitted with an anti-backup seal to achieve a watertight join. The outlet is attached to the membrane using 225mm PS uncured flashing tape.

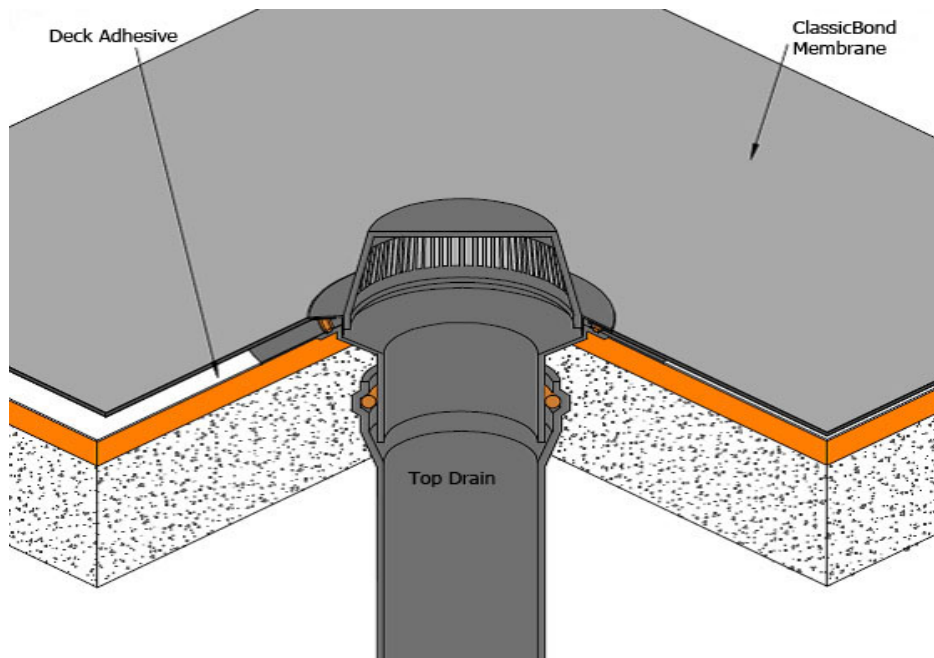
Leaf grate for this outlet is also available.



# ClassicBond Installation Guide

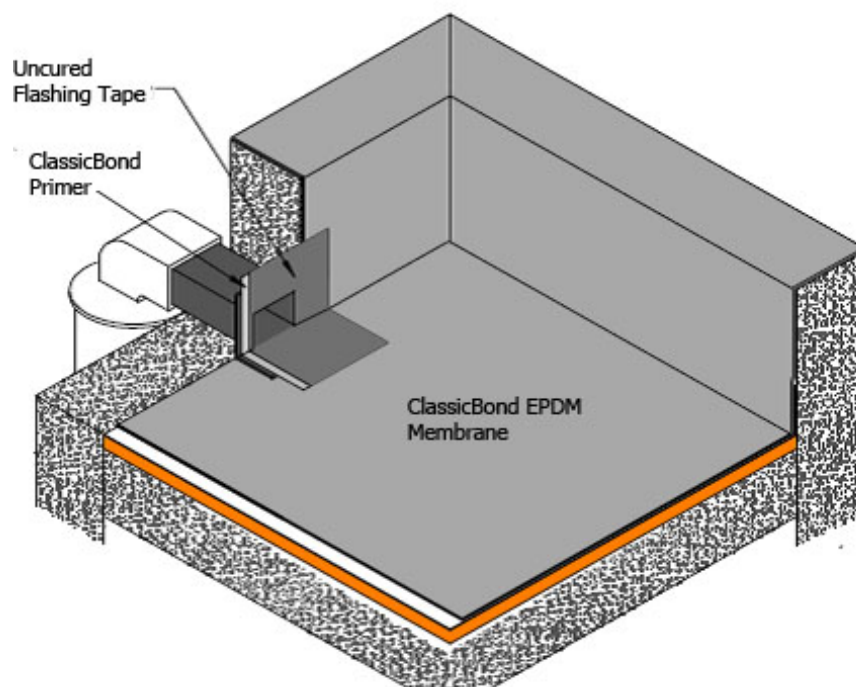
## ClassicBond Top Drain

These are designed for 110mm down pipes to allow high water flow on larger roofs. They are fitted to the deck and sealed to the membrane by means of a clamping ring. Includes clamping ring and leaf grate as standard.



## Angled Roof Drain

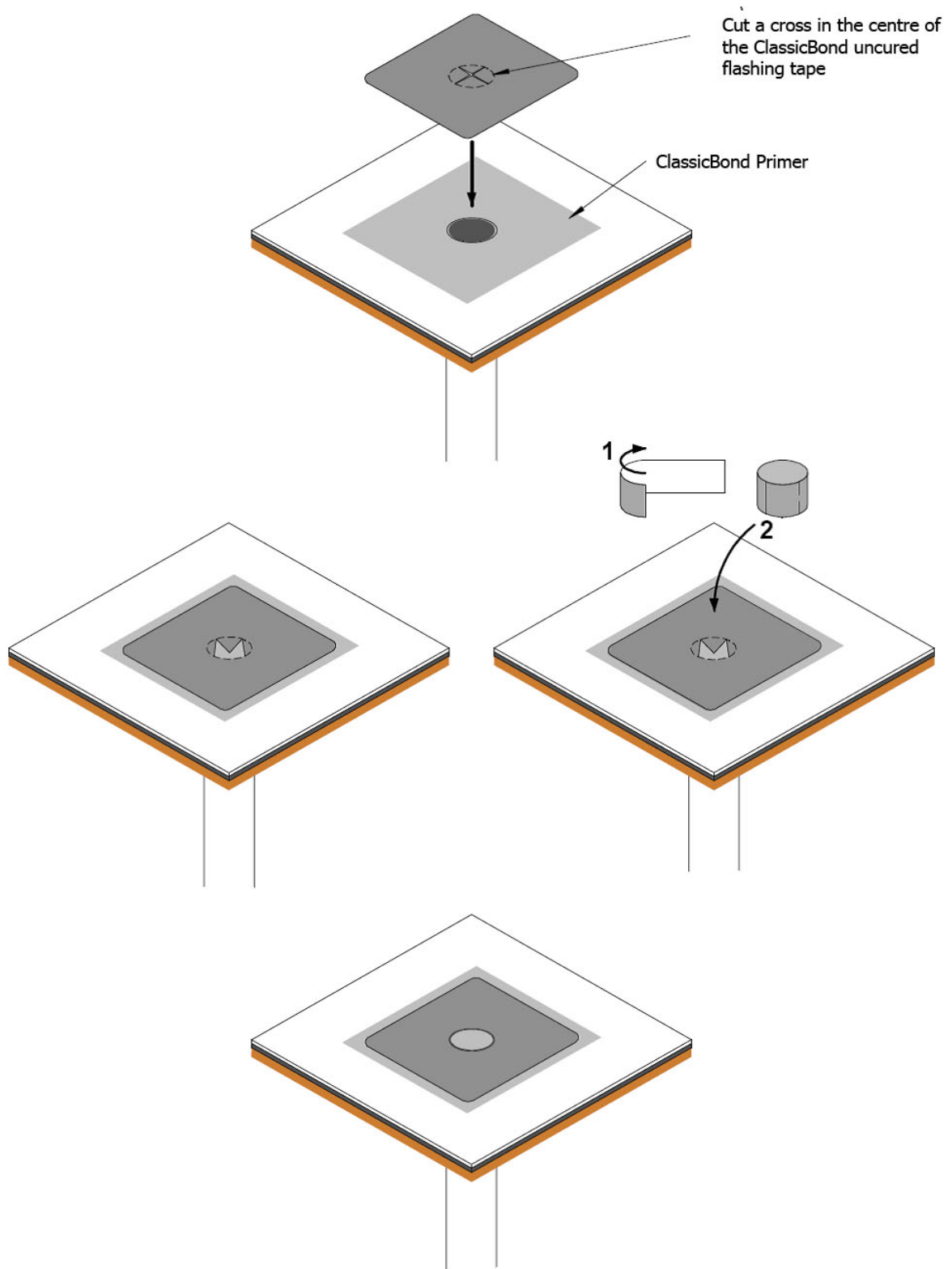
For roofs designed with horizontal drains to go through walls and pitched roofs, we have an outlet that is fitted to the deck and sealed to the membrane using 225mm PS Uncured flashing tape.



# ClassicBond Installation Guide

## For non-standard outlet design

This method uses just the 225mm PS uncured flashing tape to seal the membrane to the outlet pipe.

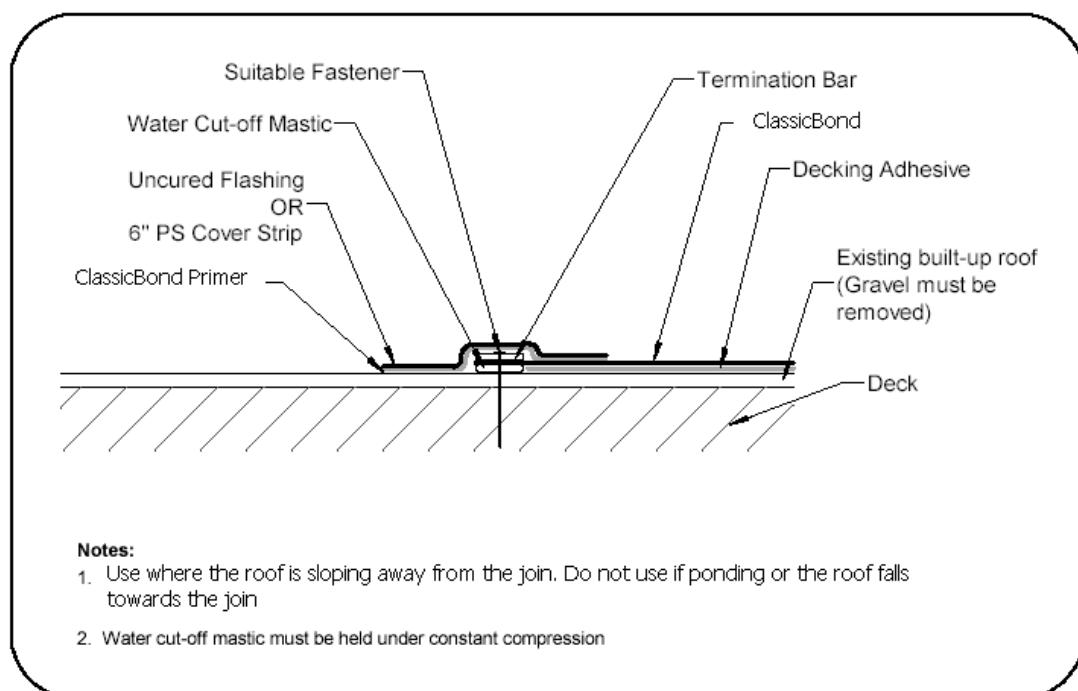
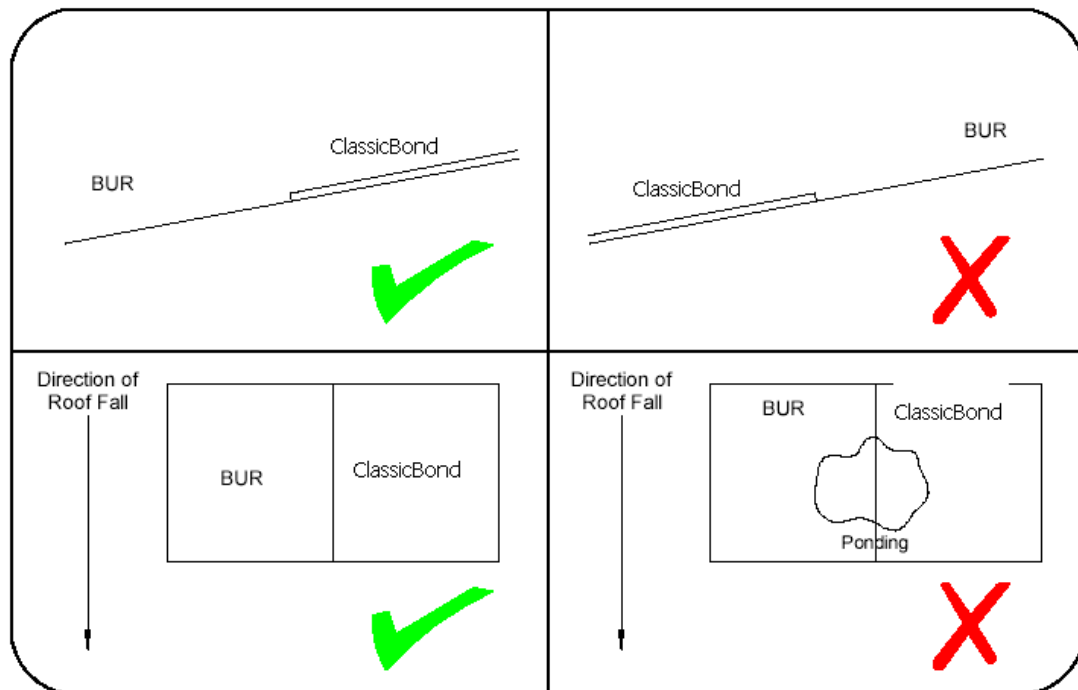


# ClassicBond Installation Guide

## EPDM to BUR join

There are four alternate methods to be used when the new ClassicBond roof joins directly onto a neighbouring flat roof.

The diagram below shows simple guide lines to follow in the planning stage of the roof.



# ClassicBond Installation Guide

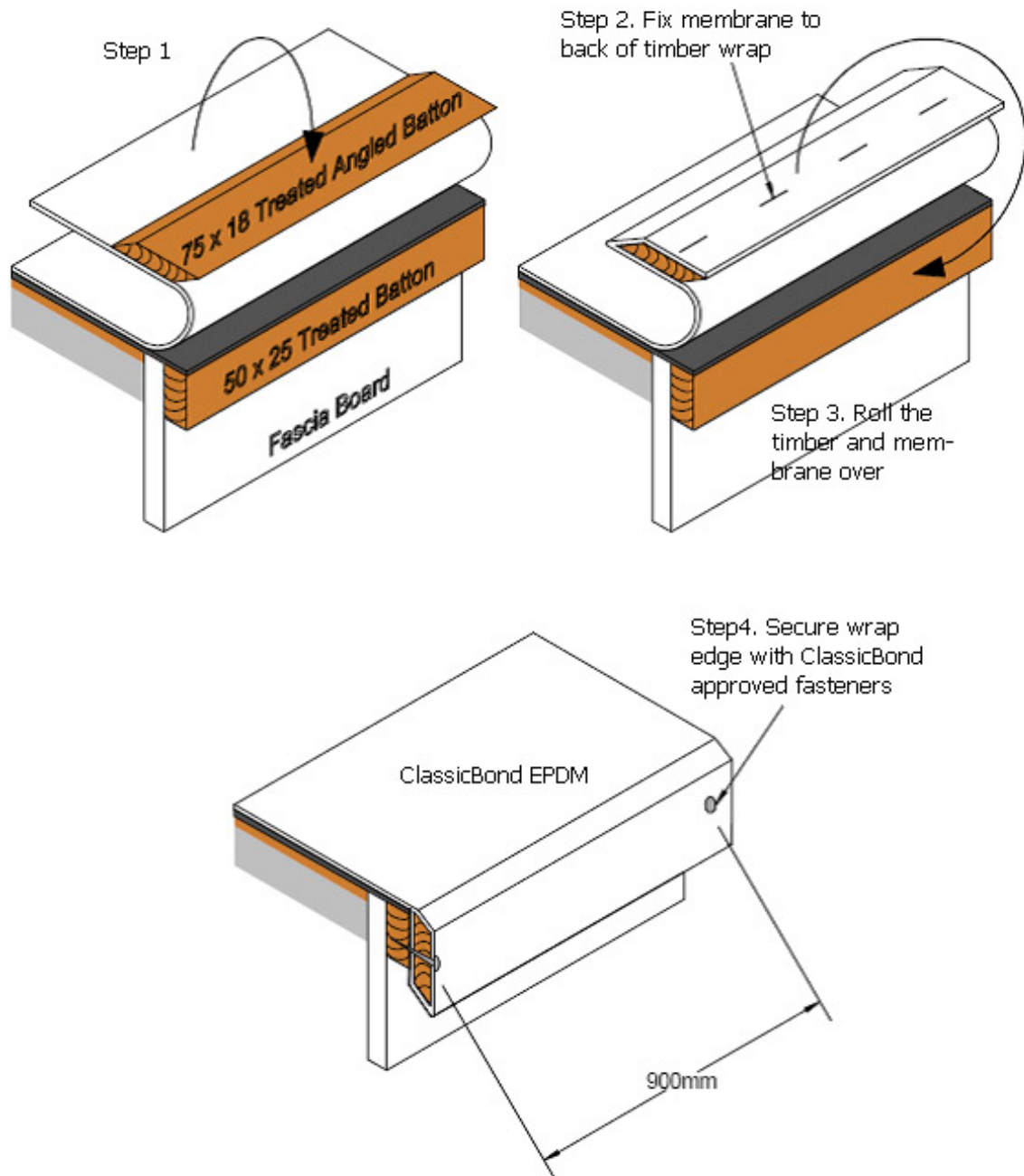
## Edge Terminations

### Gutter Drip Edge

This can be done in two ways either by using a metal drip edge, or by using a wooden wrap edge.

### Wrap edge for gutter

The fillet used must be cut with a 45 degree angle top and bottom, to form a parallelogram. The height from top point to bottom point is a minimum of 75mm.



# ClassicBond Installation Guide

## Edge Terminations cont.

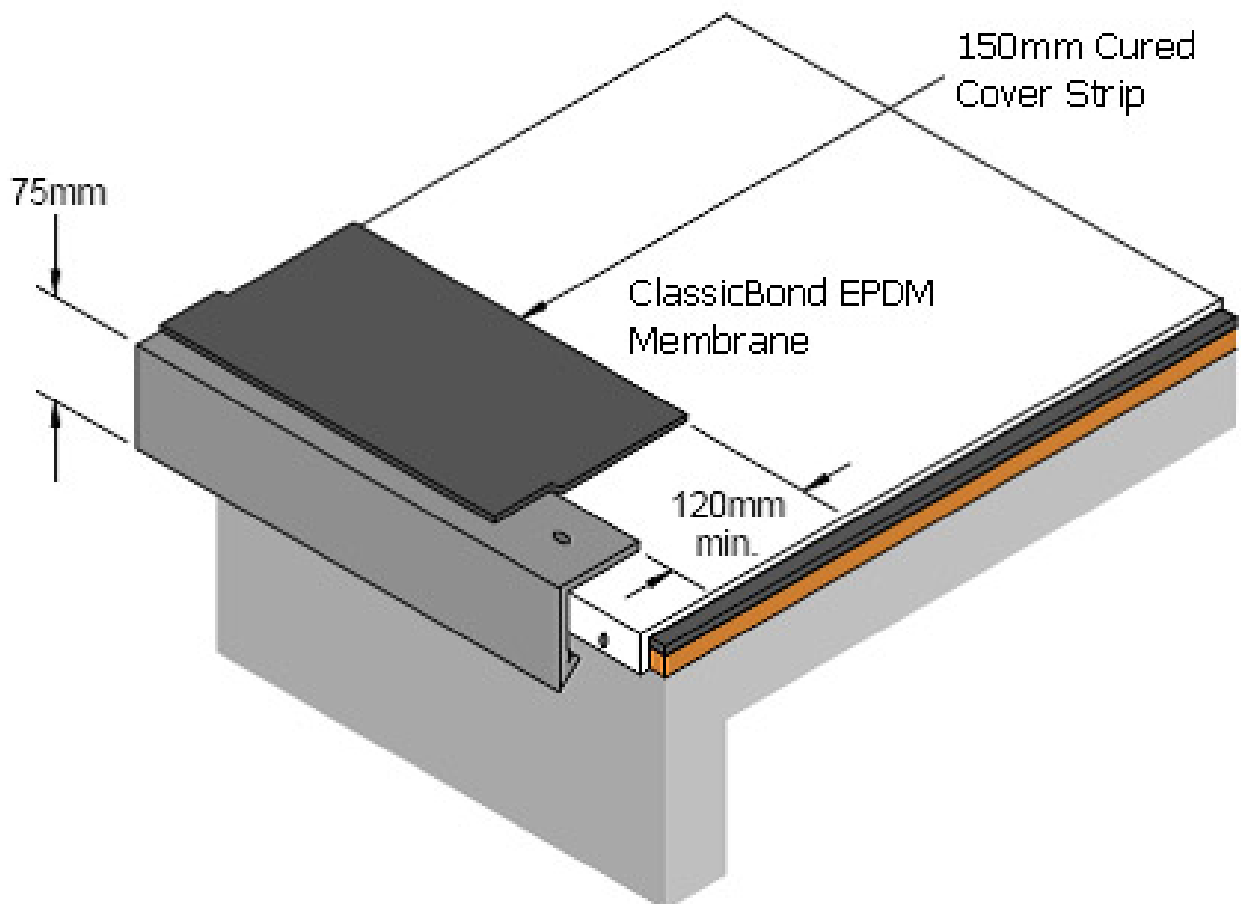
### Metal Drip Edge for gutter

The depth of the gutter metal edge trim needs to be aligned to the check curbs metal edge trim.

Typically this means having a fascia depth that is 25mm shorter than the check curb edge.

For example, if a 100mm fascia check curb edge is raised on a 25mm x 50mm batten, the gutter metal trim wants to be 75mm to give a continuous bottom edge around the roof perimeter.

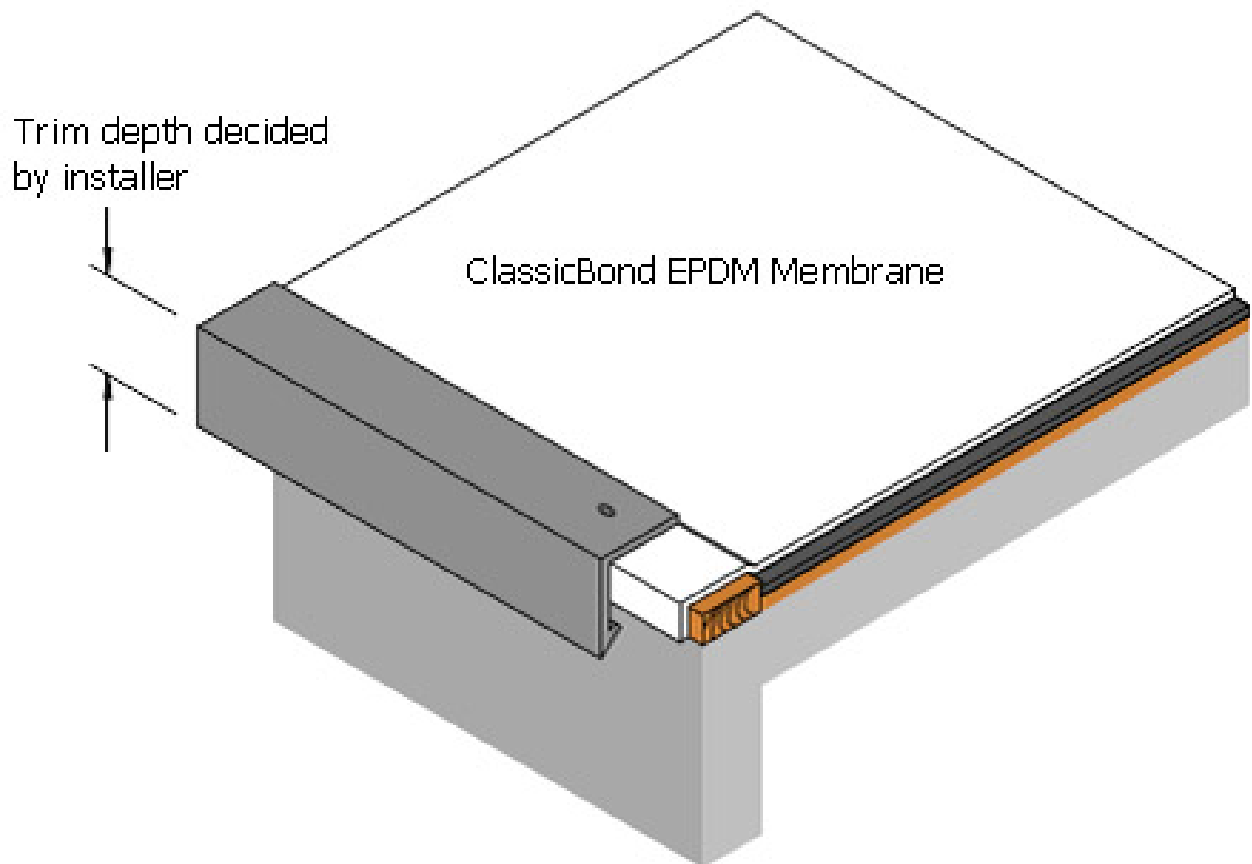
- Allow enough sheet material to hang over the edge by 50mm.
- Position the 75 mm edge trim onto the decking, sitting over the top of the rubber, and fix downwards into the decking. Then join the trim onto the ClassicBond sheet using the 150mm tape and EPDM primer.



# ClassicBond Installation Guide

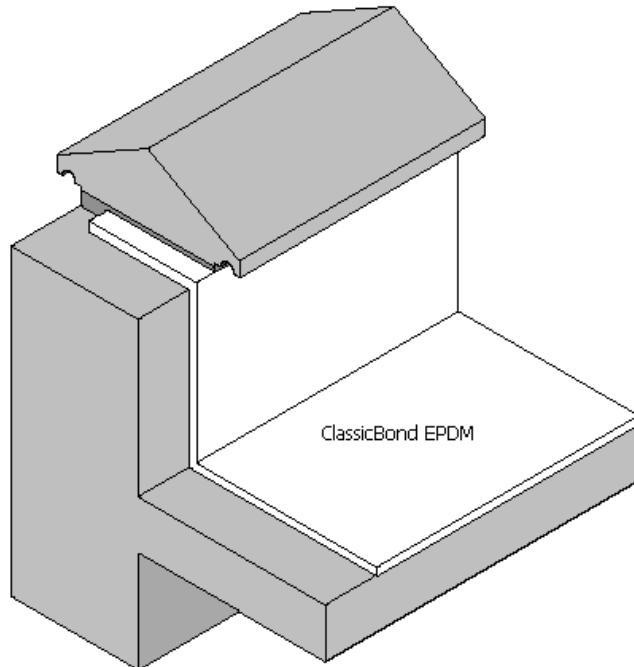
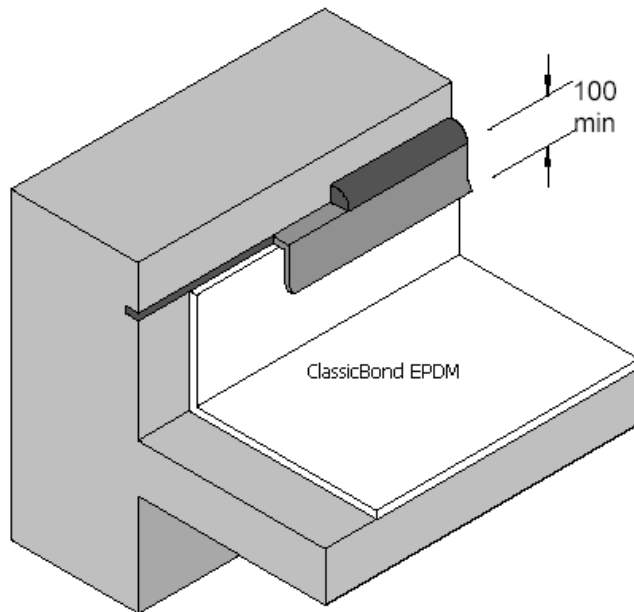
## Metal Edge Trim for Water Check Termination

- This is to be fitted to any termination where there is no wall termination or gutter finish.
- Fixings to be 35mm fixings, positioned at a maximum of 500mm apart.
- The use of butt straps to join trims together is recommended.
- Available as standard 75mm, 100mm, 125mm & 150mm in depth.



# ClassicBond Installation Guide

## Wall Termination



- Cut chase into wall a minimum of 25mm.
- Insert wall trim into chase.
- Face fix using mechanical fixing, at a maximum of 500mm spacings.
- Finish with an appropriate grade mastic or mortar along the top edge of the trim.
- Lay ClassicBond EPDM 2/3rds across the wall, using contact adhesive.
- Lay the mortar bed from the rubber across to the outer brick wall to form a solid bed.
- Lay coping stones ensuring that they give suitable coverage over the wall.

# ClassicBond Installation Guide

## ROOFING TERMS

**BONDING ADHESIVE:** Adhesive used to adhere the field sheet to substrate, walls, and curbs. It should be thoroughly stirred before using.

**WBA ADHESIVE:** Adhesive for bonding field sheet to flat areas

**CURED COVERSTRIP:** 150mm (6") wide cured EPDM membrane with Butyl Tape laminated to one side. Used when stripping in metal drip edge, repairing cuts in the field membrane, or flashings, which require cured membrane.

**UNCURED FLASHING:** Uncured 225mm (9") EPDM membrane with Butyl Tape laminated to one side. Used whenever regular and field seams make angle changes.

After Uncured Flashing is applied, it will cure in the position in which it was applied.

**EPDM MEMBRANE:** Cured field sheet membrane applied to roof decks, walls, and flashings.

Available in a variety of widths and lengths.

**FISH MOUTH:** A wrinkle is formed when an increasing amount of membrane is forced onto an area too small to accommodate the material. When the wrinkle ends at the edge of the material, a conical opening is formed called a Fish Mouth. Wrinkles and Fish Mouths in seams are not acceptable. They must be removed and covered with a T-Joint patch.

**FLASH OFF:** Allowing the solvents in the adhesives or primer to evaporate, leaving the material in a tacky, not wet or stringy condition, before mating the two surfaces together. If the proper Flash Off time is not allowed, blisters will form in the membrane. Blisters will not harm the membrane and over time, will usually disappear.

**LAP SEALANT:** Applied to exposed edges of field seams and uncured flashings, where required.

**MEMBRANE CLEANER:** Whenever mating two surfaces of membrane, both surfaces should be cleaned. Used for cleaning metal drip edge after it has been sanded, prior to applying Cover Strip. Also used to clean seam edges prior to applying or when repairing aged membrane

**METAL DRIP EDGE:** Used to create a finished appearance and prevent water from running down the surface of fascias and walls.

**PIPE BOOT:** Pre-molded EPDM boot. The best and most cost effective way to flash pipes.

[ROOFING TERMS cont.](#)

# ClassicBond Installation Guide

**PIPE BOOT CLAMP:** Stainless steel clamp used to secure the top of the Pipe Boot to the Pipe.

**SEAM TAPE:** Butyl Tape used to splice two layers of membrane into a watertight seam.

**ClassicBond PRIMER:** Solvent based primer used to clean and prime EPDM membrane before applying Seam Tape or any Cured or Uncured Tape Backed membrane, applied using a scratch pad.

**DO NOT APPLY PRIMER DIRECTLY TO TAPE.**

Primer is only applied to surface being prepared to accept Tape products.

**SUBSTRATE:** The surface on which the membrane is applied (insulation, walls, etc.).

**TERMINATION BAR:** Extruded aluminium bar which can be used to terminate the membrane at parapet walls, chimneys, skylights, and AC curbs. Can also used to terminate membrane fascia when no metal drip edge is used. The proper fastener should be installed per the manufacturers' recommendation.

**WATER CUT-OFF MASTIC:** Used to create a waterproof compression gasket whenever the membrane is mechanically fastened using a Termination Bar, or Pipe Boot Clamp,

Water Cut-Off Mastic is applied between the membrane and the pipe, or wall. The mechanical termination is installed over the membrane, compressing the mastic and creating the gasket.

**BASE TIE INS:** Must be installed on any roof over 100 sq m. This is where the roof is mechanically fixed to the deck before changing through an angle.