

Epdm Flat Roofing Systems

EDPM can be fully bonded, loose laid and ballasted or mechanically attached depending on the existing roof and its proposed usage. This applies to roofs to **be refurbished** and new **installations**.

The Fully Bonded System

Rubber membrane is simply adhered to the deck with contact adhesive or water based adhesive - no ballast is required. For this method the decking must in good, dry, level condition. Perfect for a new flat roof installation.



The Mechanically Attached System

Rubber strips are laid over the underlay forming a grid. These strips are secured by metal plates and woodscrews. The Rubber is bonded directly to this grid with our seam adhesive and adhered to the substrate with bonding adhesive. Can be use on a new flat roof, or over a felted flat roof with no water damage.



The Ballasted System

EPDM is covered directly over pre-laid geotextile underlay and is secured with ballast. Perfect for old felt roofs where the base is not water damaged/rotten.

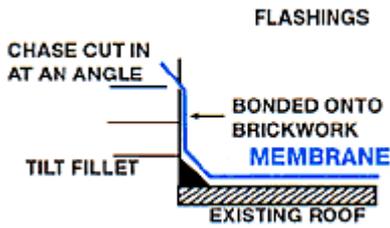


Fully Bonded/Mechanically Attached – bonding to main roof area

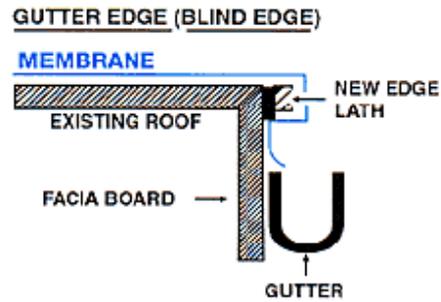
The epdm cut to size sheet is laid over the entire roof area making sure there is equal overhang on all non-gutter sides. On the gutter edge 0.25 metre is needed to do the internal foldover. The sheet is then pulled back over itself to halfway. Proceed to fully bond/bond to grid system at managable portions say ¼ then next ¼. Pull other side of epdm over itself and adhere the half of the roof in the same method. Once the main area of the roof has been bonded, proceed to do detailed work as mentioned in the pages below.

Fixings and Detailed Work

The EPDM can be flashed directly into the wall as shown or bar clamped directly onto the wall and conventional lead/metal flashing used.

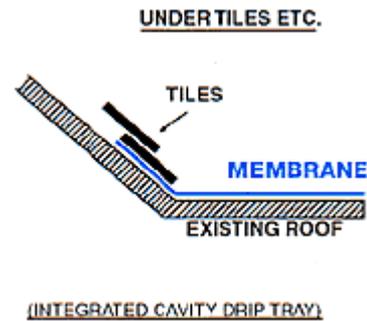
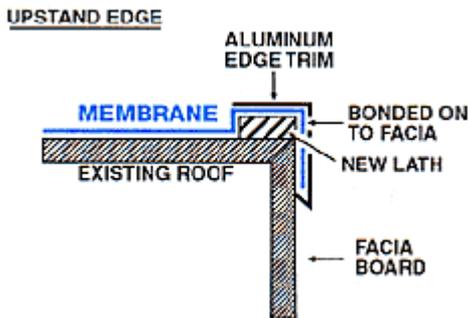


Internal foldover is used at the gutter edge/gutter apron to ensure all water ends up in the gutter



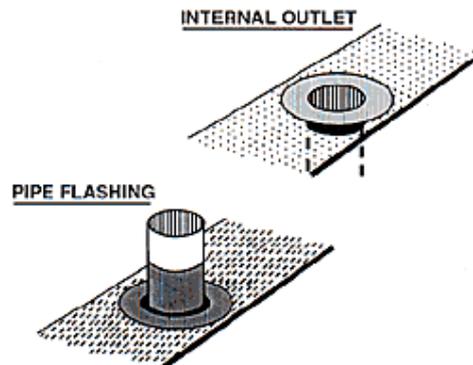
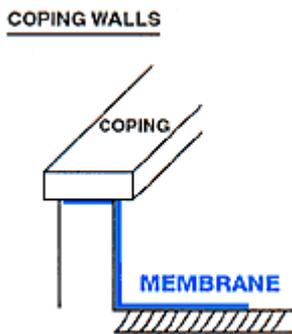
Upstand edges are created on all non-gutter edges so all the water on the roof is channeled into the gutter. The epdm is clamped secure over the upstand edge by an aluminium edge trim (or plastic/metal soffit)

When flat roof is adjacent a pitched roof the epdm must be tucked up underneath the tiles. Normally, two courses of tiles are removed.



If possible, surrounding coping should be removed and re-mortared over the epdm as shown

A protruding pipe fits through a hole in the epdm on third the size of its diameter. Raw rubber to finish. A cross is cut into the epdm over the outlet pipe and adhered down onto internal sided. Finised with raw rubber.

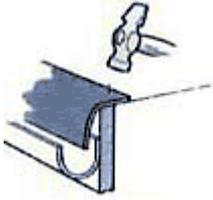


Detailed Work

Occasionally, a roof will have details on it which will require you to cut the rubber membrane. For example: skylights, pipes, outside corners etc. The advice on how to deal with these or any other part of the installation can be acquired from our complementary DVD supplied with the EPDM products.

Internal foldover/gutter apron/wall flashing/edge finish

The flat roof area has been completed. For the fully bonded system and new plwood deck has been installed. For the mechanically attached system, underlay+ grid system has been installed. For the ballasted system the underlay has been installed the cleaned felt. If flat roof is adjacent to a upstand wall, a chase has already been grinded into the wall. In all instances, all debris has ben removed.



Gutter Apron

At the gutter edge, a strip of epdm is attached to the front face (not top end as shown) along the entrie edge of the gutter edge.



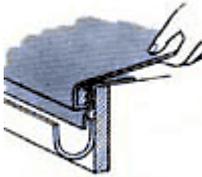
Internal foldover (a)

A battern is stapled/tacked along a 6-8 inch strip (for bonded and mech attached only) of epdm mesdured for entire length of the gutter edge. For the ballasted system, the batten is fitted to the entire sheet.



Internal foldover (b)

Whilst the batten is on the roof, the rubber sheet is draped down the wall and nailed or screwed through the batten, level with the roof.



Internal foldover (c)

When the batten is in place the sheet is brought back over to form a secure internal fixing.



Flashing

If the roof adjoins the house wall, this can be bonded up the wall and into the seam between the brickwork. Or a lead flashing can be used if preferred.

Adjacent piched roof

If the flat roof adjoins a pitched roof, the rubber membrane will be taken up under the tiles approximately 12" (minimum) and fixed to the roof timbers.



Upstand Edge Finish

Where there is an upstand to the edge of the roof, the old felt will be removed where it overlaps the fascia board and the rubber membrane will then be bonded up and over the upstand and 2" down the fascia.

Tools:

Practically no specialised tools are necessary when installing the rubber membrane

- Pliers
- Screwdriver
- Scissors
- Hammer
- Paint brush
- Roller
- Staple hammer (for underlay)

EPDM installation products

EPDM Rubber Membrane is available in 3, 6, 9, 12 & 15 metre widths x 30 metres in length, so most roof dimensions can be catered for either the residential or industrial market. We cut bespoke EPDM to any size or shape to the nearest half meter.

EPDM Rubber Membrane

Rubber membrane sheeting to a thickness of 1.14 mm. For use on all installation methods



Geotextile Underlay

For Ballasted/Mechanically attached systems, the geotextile underlay acts as a barrier between the substrate and EPDM



Water based Bonding Adhesive

Water based bonding adhesive making easier installation as the setting time is 2-3 hours so you can be sure of absolutely flat EPDM surface. Apply to the wooden decking surface only, not epdm! Once tacky, lay epdm over and smooth down. Use on main roof area only. Edges and upstands use substrate adhesive. For use on wooden decking only.



Substrate Bonding Adhesive

This is a type of contact adhesive bonds the EPDM to the substrate which can be anything, but not to be used to bond EPDM to itself. Apply to the substrate and epdm. Bond together once touch dry. For use on wood, brick, stone etc.



Seam Adhesive

This adhesive bonds EPDM to EPDM, this is necessary when used with the mechanically attached system and to splice together two sheets of epdm (i.e. L shaped roof) and raw rubber.



Splice Cleaner

This special solvent cleans and degreases the surface of the EPDM prior to application of substrate adhesive or seam adhesive.



Uncured Rubber

This uncured form of epdm is malleable and can be formed and stretched by hand for detailed work such as pipes, vents or skylights.



Anchor Strip

mechanically attached system; a grid is formed with the strips and is then fastened to the roof decking with anchor plates. The epdm is bonded to this.



Anchor Strips fixing Plates

To us to attach the anchor strip for the mechanically attached system. These are fixed through the anchor strip, underlay and secured into the roof decking.



Lap Sealant

To seal edges of seamed EPDM or uncured rubber (raw rubber) when used on detailed work.



Decanted products

Bonding adhesive, seam adhesive & splice cleaner is available in 5 litre, 2,5, litre and 250 ml cans for smaller installations.



Edge Trim

Aluminium edge trims (3 metre Lengths)available in brushed silver or white. To secure the EPDM to all perimeters except the gutter edge.



Weatherwise adhesive

A non-setting compound that stays semi liquid and prevents the ballast from being dislodged into the gutter.

Sundry Items

Brushes, rollers, silicone sealant, seam adhesive and white caps and covers.



Diy Frequently Asked Questions

Q. Do I need any special tools to install the epdm flat roof system?

A. No! You only need the usual handyman tools such as saw/screwdriver and hammer etc.

Q. Do I need to replace any timberwork?

A. Not unless it's rotten or water damaged.

Q. Do I need to strip the felt off my roof before I start?

A. Only if your roof decking is soft or rotten as the system uses a geotextile barrier membrane, which is laid on the roof prior to laying the rubber membrane.

Q. Does the roof need to be perfectly dry before installation?

A. Your roof will never be perfectly dry as all flat roofs have a certain amount of water retention although the drier the better even though the rubber membrane breathes due to it being vapour permeable.

Q. What if I get stuck during installation?

A. No problem! Just give us a ring and we will talk you through the job step by step in simple terms.

Features and Benefits

Quick and easy installation

EPDM is available in panel sizes up to 15m in width and 60m in length, resulting in fewer seams and less installation time.

Superior weatherability and durability

Due to its composition, essentially EPDM polymers and carbon black, EPDM offers unmatched resistance to ozone, UV, and ultimately ageing.

High flexibility and elongation

EPDM remains flexible at temperatures down to -45° C and can elongate over 300% to accommodate building movements and temperature fluctuations.

Low life-cycle cost

EPDM requires little or no maintenance. This feature combined with the inherent durability and competitive installed cost of EPDM roofing systems, result in a very low life-cycle cost.

Environmentally friendly

EPDM is an inert material with limited environmental impact during manufacture and use of the product. `

Any further questions, just refer to your free installation DVD.

Note: water based adhesive not shown on DVD as, it is a new product. See product detail above for usage.

HOW TO ORDER

Order by Post:

KCS LTD (Bradford)
529 Leeds Road.
Thackley.
Bradford.
BD10 8JZ.

phone: 0845 838 5312

Order by e-mail: info@flat-roof-repair.co.uk

**With every order, a free installation
Video will be provided**

PAYMENT METHOD



- Personal Cheque
- Postal Order or Banker's Draft
- Bank Transfer
- Cash

Pay by cheque - payable to KCS LTD.

Pay by any credit or debit card via [paypal.com](https://www.paypal.com).

Make payment to: info@flat-roof-repair.co.uk