

Instructions for Laying One Piece EPDM

Congratulations and thank you, for choosing from our range of EPDM Products. EPDM is also very effective in the following areas:

Flat roofs, gutters, balconies, roof gardens, awkward shapes, small areas, up-stand detailing, long parapets flashings, repairs, and ad hoc uses such as boat decks, railway carriage roofs, caravan roofs, container and portacabin tops etc.

General Notes: Please read before fitting commences.

Caution: Wear solvent resistant gloves and goggles when handling adhesives/primers. Always open cans facing away from face. Read labels on tins/tubs. All primers /adhesives must be mechanically stirred for 5 minutes until product is uniform in colour and consistency, unless otherwise stated.

Rubber Contraction ~ One Piece rubber needs “tying in” prior to any up-stand edges. Apply **contact adhesive to both mating surfaces up the up-stand and for 100mm prior to the up-stand on the deck, allow to go touch dry (sticky but not stringy)** prior to mating the surfaces.

Touch-Push Test ~ this test is referred to throughout the Guide ~ e.g. in the application of Q Primer. [For “adhesive” read “primer or adhesive”]. To test for dryness of an appropriate adhesive push straight down onto the adhesive with a clean dry solvent proof gloved finger. Push forward on the adhesive at an angle. Adhesive should feel tacky but not stringy to the finger.

EPDM Rubber There is no “direction of grain” or “right side up” it can be laid in any direction or either side up. There are manufacturers vulcanised joins periodically across the width increasing local thickness. The rubber is dusted with talcum powder to aid handling. FR has top ply of fire retardant compound and is laid printed side facing down.

FOR NEW BUILD PROJECTS an external fire rating of F.AA (BS 476-3:2004) is needed so use: -

- 1) Standard Grade EPDM (as above) when surfaced with an isolating layer and 50mm min 16-32mm diameter river washed pebbles.
- 2) FR Grade EPDM fully adhered with Super Decking Adhesive to approved timber boards with any required joins effected with Joining Tape (see below) ~ FR grade is available in 6.1m widths only.

EPDM Coverage ~ Allow 100mm for seams & 100mm min for up-stands plus 150mm at up-stands for easy manipulation.

Tools required: Stirring paddle, throwaway paintbrush, lambs wool roller, scissors, craft knife, measure, and mastic gun, protective wear and metal hand roller.

Adhesives

Water-Based Decking / Super Decking Adhesive

For bonding EPDM to plywood / OSB boards. Not masonry, metal or rubber-to-rubber.

Preparation ~ Surfaces must be clean (use brush), smooth, dry, grease and sharp free etc. Stir well before and during use to ensure uniform mix with no sediment or marbling. Adhesive must be used at 5°C min. and not allowed to freeze.

Application ~ Avoid application if freezing is likely to occur within 48hrs. Apply adhesive at above 5°C. in an even, smooth coat using medium nap solvent resistant paint roller. Avoid globs and puddles. Allow to go touch dry as per instructions on can. Coverage = about 5 sqm litre. Thinning not allowed. **Store at room temperature. Shelf Life** 6 months. Clean rollers / brushes in water.

Precautions ~ Use only in well ventilated areas. Avoid contact with skin and eyes. Refer to Material Safety Data Sheets.



Contact Adhesive. This is used to create good adhesion around the perimeter of the roof and also to “tie-in” the rubber to upstands and corners where necessary. Both mating surfaces are coated and when the adhesive has gone touch dry surfaces are pressed together and a good strong bond is achieved. **Do not leave contact adhesive to go touch dry for more than 45 minutes. After this time the glue loses its effectiveness and a good bond will not be achieved.**

Installation

Preparation.

It is recommended that the old roof covering should, where possible, be removed and the underlying deck checked for damage and repaired. If removal of the old covering is not possible then the surface should be covered with a layer of plyboard or OSB board of around 6mm thickness. The boards should be screwed down and screw heads countersunk. Nails are ok but again must be punched below the surface so as not to tear rubber. Any gaps in boards of more than 5mm need to be filled with suitable filler.

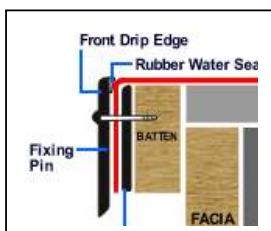
Laying the EPDM SHEET~ Read all the guide through before starting ~

When rubber is on roof orientate it correctly before unrolling and spreading out like a large tablecloth. True it up with the edges and leave for 1 hour or so to allow any packing creases to drop out. Any stubborn creases can be teased out by the use of low temperature heat as created from a domestic hair dryer.

Fold the rubber sheeting back halfway over itself and sweep off if necessary any excess talcum powder deposited by the rubber. Brush or roller on the Decking Adhesive as stated on the tin (horizontal areas only) leaving an uncovered strip of approx 50mm around the perimeter. Adhesive need only be applied to the deck, not the rubber as well. Roll the rubber into the Decking Adhesive using a soft broom to remove air bubbles. Repeat process for the other half, coat that area and lay rubber. The rubber can be repositioned for up to a few hours if Not aligned correctly or wrinkles have occurred while laying.

Fold the edge of the rubber over to expose the 50mm edge not covered in adhesive. Apply contact adhesive to both the rubber and 50mm perimeter of roof deck. Allow to dry off until touch dry but not tacky and the firmly press the two together.

Contact adhesive must be used for parapets and other upstands i.e. against house walls. This prevents “bagging or tenting “of the rubber during hot and cold weather. The deck for at least 100mm before the upstand and the upstand itself for a minimum 100mm must be treated this way. The use of contact adhesive around perimeters where no trims are to be used is also highly recommended.



Various edge conditions: -

1) RETAINING RUBBER WITH TRIMS

2) COVERING DRIP WITH RUBBER

Run rubber over bull nosed strips of timber or Plastic and nail batten to underside of roof edge

Joining EPDM

Occasionally it may be necessary to join pieces of EPDM. Where the roof is an irregular shape for example i.e. L shaped. There are two main methods to achieve a good watertight seal and aesthetic look.

Butt Joint Tape 150mm (6")

6" Butt Tape. 150mm tape specifically designed to form watertight seal over an EPDM butt joint.

Preparation. Prepare EPDM surfaces with primer using scrubber pad. Tape must be \Rightarrow 15 Deg C

This is maybe the easiest way to join two pieces of EPDM. Slightly overlap the two sheets to be joined. Using a straight edge and a sharp craft knife cut through both layers of rubber to affect a nice straight butt joint. Measure approx. 85mm from either side of joint and mark with chalk. Prime area between chalk lines with primer as instructed on tin. Leave to go touch dry. Carefully lay tape evenly between chalk lines, sticky side down and gradually remove covering film again pulling at 90 deg to the tape. Roller with metal roller to fully compress tape to rubber to affect a watertight seal

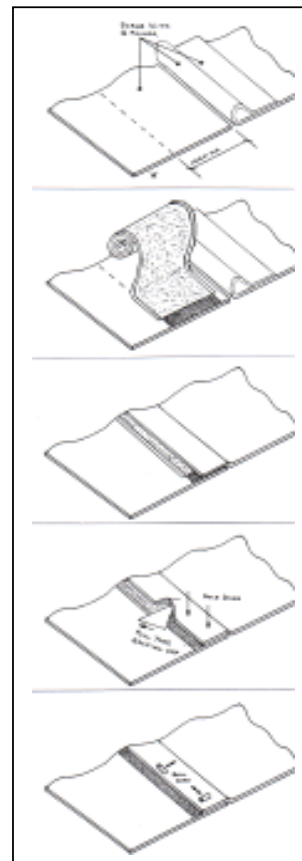
Overlap Tape 75mm (3")

Joining Tape 76 mm (3") is designed for on site joining (also termed splicing) of EPDM rubber sheeting.

Preparation ~ Prepare EPDM surfaces with Primer, using Scrubber Pad. Tape must be $>$ 15° C when applied.

Application ~ If $<$ 10° C and condensation present abandon and await better conditions.

In this method the 2 pieces to be joined are overlapped by 75mm. Start by overlapping the two pieces as straight as possible. Mark intermittently with chalk 10mm from the overlap line. Fold back top sheet, prime both sheets as per instructions on tin, with One piece primer or quick prime, Allow to go touch dry (10-15min). Carefully lay out 75mm tape, sticky side down, along the chalk line rolling with metal roller as you go. Pull backing paper across tape so you are pulling it out at 90 deg to the tape and press down top sheet avoiding creases. Roller lap joint with metal roller to fully compress the rubber and lap tape.



Impact Bonding Adhesive

This is probably the most awkward way to join EPDM and should only really be used where neither tape method can be used.

The EPDM is overlapped as per lap joint method. The overlap however needs to be at least 100mm preferably 150mm. The

EPDM is primed allowed to go touch dry, then the Impact Bonding Adhesive is applied by brush or roller and allowed to go touch dry,

the EPDM is pressed together and a bead of Lap Sealant run along the edge using nozzle supplied.

Warning and disclaimer: - Any information is given in good faith and is based on manufacturers data, our own experience and that of our customers pooling information and is considered best practice but we cannot be held responsible for over or under estimates of materials or technical or regulatory advice as we cannot be aware of all the facts concerning a given roof or other construction. If in doubt ask an industry professional and / or try the proposed method or system on a sample patch and test it out in an unimportant area or on a simulated unit. These materials are very versatile in application and these notes cannot hope to be comprehensive and being a progressive Company we reserve the right to alter specs or methods without notice.

UPVC Distributors Ltd t/a National Roofing

T: (01495) 245066 F: (01495) 248448 E: info@diyroofing.com

Reg'd office Imperial Buildings, Bridge Street, West End, Abercarn, South Wales NP11 4SB