

## Installation Guidelines

### **USER CAUTIONS**

Carefully read all caution labels/safety data sheets. Adhesives should only be used in well-ventilated areas, away from open windows or air intake ventilation fans. Safety glasses and gloves should be used to prevent contact. Safeguard against falling by reading a ladder manufacturers warning and by using scaffolding or edge protection where appropriate. Do not work at heights alone.

### **TOOLS NEEDED**

Soft Broom - 9" Roller Frame & Sleeve - Tape Measure – Scissors - Stanley Knife – Hammer - Disposable Paintbrushes – Handsaw - Piece of chalk - Hot air gun or hairdryer for corners (in cold weather)

### **GETTING STARTED**

Do not undertake roofing works during inclement weather. Always check that you have the correct size materials on site prior to stripping off your existing roof. As with most tasks, preparation is the key!

### **PREPARATION**

Remove any adjacent tiling or copingstones if applicable. Strip off existing roof with shovel and dispose. Cut chase in wall if wall trim is to be inserted and sweep out excess dust with a hand brush. Remove arris rail (triangular section of timber) from perimeter, except where the roof deck adjoins a vertical wall or up stand (e.g. a skylight). Check the roof deck is solid and rot free, if not, replace with 18mm plywood or OSB (not chipboard). Nail in a 25mmx50mm timber batten to the perimeter of the roof. The roof deck must be dry, as moisture will cause poor membrane adhesion and or blistering. Thoroughly sweep deck with a soft broom.

### **MEMBRANE**

Nail in the Gutter Trim base plate where required, using the supplied fixings, the beveled edge should be **5mm** down from the top of the batten, and a 5mm gap should be left between adjoining lengths. Unroll the Rubba-Seal membrane on the roof until it is wrinkle free and in the desired location. If there are any persistent fold wrinkles in the membrane then simply remove by gently warming with a hot air gun hairdryer. Ensure the membrane will overhang the roof by at least 75mm (3") and dress up vertical elevations by at least 150mm (6"). Allow membrane to "relax" in situ for 15-30 minutes. Fold one half of the membrane back on itself thereby exposing 50% of the roof deck. Please do in smaller sections if the weather is particularly warm as the adhesive will begin to set. Roller apply WBA onto timber deck only, but not onto vertical elevations. Coverage should be even and free from puddles and globules. Fluff air under the folded back sheet and gradually roll onto glued substrate. Use a soft broom to sweep out any bubbles or wrinkles. Repeat process on other half of roof.

### **UPSTANDS**

At vertical elevations, the membrane needs to be pulled back neatly until the bottom of the wall or the arris rail is exposed. Contact Adhesive (brush or spray applied) should then be applied to both the wall and the membrane. Ensure the substrate is dust free and clean prior to spreading the adhesive thinly and evenly. Use an off cut of rubber or a thin piece of plastic as a slip sheet, to prevent glue from marking the membrane whilst gluing the folded back edge. Allow adhesive to dry completely. Starting in the middle, slide hand beneath folded back membrane and, applying firm pressure with a finger, ensure membrane is thoroughly adhered to the angle change. Then gradually slide membrane up and along the wall, avoiding wrinkles and bubbles by smoothing with your hand.

### **GUTTER TRIMS**

The base plate has already been nailed into the batten (first stage in Membrane works.) Once the membrane has been adhered to the roof, simply allow the excess membrane to dress over the base plate. With the rounded edge at the top and starting at the top of the batten, slide the Top Plate into place, ensuring the rubber above is not raised or wrinkled. Nail in supplied colour capped fixings and leave a 5mm gap between adjoining lengths of trim to

allow for expansion and contraction. Apply a small bead of mastic to the back of joiner and clip in place or use supplied fixing to pin in place.

### **EDGE TRIMS**

Allow rubber to dress over the pre-installed timber and simply nail the trim in place with the colour-capped nail in fixings, ensuring the rubber on the roof is not raised or wrinkled. Leave a gap of 5mm between adjoining lengths of trim to allow for expansion and contraction. Apply a small bead of mastic to the back of the joiner and clip in place. Where a corner piece is to be used with the edge trims, we recommend installing these first. For further information please refer to the Web address below as this gives a detailed page for the fixings of the trim. <http://www.rubba-seal.co.uk/rubbatrim>

### **WALL TRIMS**

After the membrane has been glued up to the height of the brickwork chase, excess membrane should be cut off with scissors. If this chase is very narrow, then we would recommend installing a bead of wall mastic prior to inserting the wall trim, so as to achieve a good seal. The wall trim should then be anchored in place with the supplied fixings and raw plugs (not supplied). If the gap above the trim is narrow then simply fill with wall mastic, squeezed in as densely as possible and smoothed in with a moist finger trowel. If the gap above the trim is too large to fill with mastic then we recommend squeezing in a bead of mastic to seal in the back edge and then re point with mortar.

### **PARAPETS**

Incorrectly installed parapet details cause a lot of leaks. If there is no damp proof course beneath the copings, then water will gradually penetrate through the joints. If a parapet wall is quite close to the deck of the roof then we recommend removing the copings and fully adhere the membrane up and over the brickwork with contact adhesive. The copingstones can then be bedded down straight onto the membrane, which will then act as a damp proof course. The same procedure applies to ridge tiles.

### **TILING**

If the flat roof abuts a tiled roof, it is best practice to ensure that the membrane is secured beneath the tiling and under felt (if applicable)

### **PIPES**

Once the membrane is fully adhered to the base of the pipe, simply cut the pipe seal to ensure a close fit and slide into place. Do not remove backing paper at this stage. Once in place, mark 1cm away from the perimeter of the pipe seal using chalk. Fold pipe seal out of way. Apply primer within the marked area, avoiding the chalk line if possible. Remove backing paper and once the primer has dried, slowly slide pipe seal into place, mating the two surfaces together. Ensure a smooth uniform weather tight seal, free from wrinkles.

Use supplied jubilee clip to seal top of pipe seal c/w a bead of mastic if necessary.

### **SKYLIGHTS**

Wherever practicable, try and install the skylight up stand after the membrane has been laid. This will make it much easier to lay the membrane wrinkle free. Cut the aperture for the skylight in the decking and fully adhere the membrane to the roof. Simply cut the membrane from opposing corner to opposing corner (leaving an X shape), fold back each section and install up stand. Use contact adhesive to adhere membrane to up stands. The 4 exposed corners are then sealed using the external corner procedure (see below).

### **SPLICES**

There are occasions where one piece of rubber is impractical, for example on large or awkward shaped roofs. A weatherproof join is achieved by using splice tape and a primer. Position sheets and adhere to the deck with water-based adhesive, allowing an unglued 75-100mm overlap. Please ensure that seams are stepped correctly to allow water to drain over them. Use a piece of chalk to mark the membrane approximately 1cm away from the seam. Fold back overlap and hold in place if necessary with a weight. Apply primer (Fig.1) and allow to go off,

test touch with a dry finger (Fig.2) primer should feel tacky but not string to the finger. Position the splice tape to the bottom sheet with release paper facing upwards (Fig.3). Lay the top sheet over and trim if necessary. Remove the release paper by peeling from one end at a 90° angle and smooth over with the other hand (Fig.4). Roll the seam both across and along the length (Fig.5).

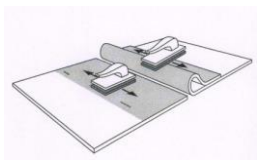


Fig. 1

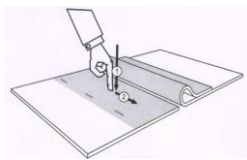


Fig. 2

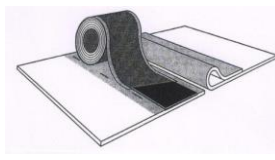


Fig. 3

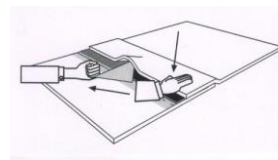


Fig. 4

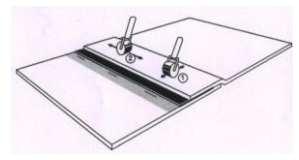


Fig. 5

### **INTERNAL CORNERS**

EPDM can be folded into a pig-ear (Fig. 1) and adhered to the upstand. This offers a non-penetrating, watertight detail that can be applied on any roof. Note: this detail becomes more difficult to execute and less esthetic on higher upstands. Work the EPDM tightly into the angle change and continue up against the upstand. Continue the flashing up against the other wall, allowing the membrane to form an internal pig-ear (Fig. 2). Close the pig-ear and work from the base to remove all entrapped air. Apply primer to close the pigs-ear against the upstand. Close the pigs-ear and roll the adhered part tightly into the corner (Fig. 4).

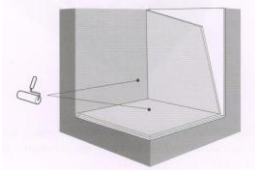


Fig. 1

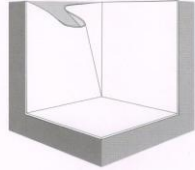


Fig.2

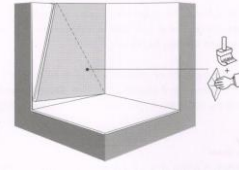


Fig.3

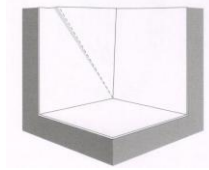


Fig.4

### **EXTERNAL CORNERS**

Using a square piece of 9” Flashing Tape align it central to the corner (Fig. 1) and mark the outline with chalk. Round off the bottom 2 corners (Fig.2) and apply primer to the shaded area. Allow to go off, test touch with a dry finger, primer should feel tacky but not string to the finger. Peel back the top half only of the backing tape and wrap around the 2 sides. Remove the remaining backing tape from the rounded edges and work the flashing tape in a downward direction (Fig. 3). Work the piece in to the angle and continue out onto the horizontal surface, without overstretching. Roll the corner detail with a silicone roller from the inside towards the outer edge.

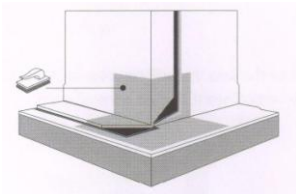


Fig.1

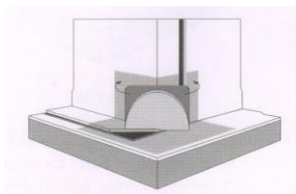


Fig.2

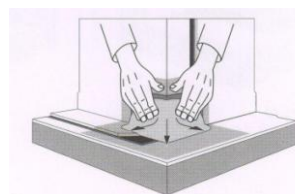


Fig.3

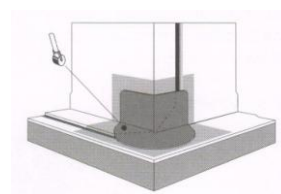


Fig. 4

### **TROUBLESHOOTING**

**Bubbling** - Bubbling beneath the main sheet, just after it has been laid onto the water based adhesive, sometimes occurs during very hot weather. Simply sweep out with a soft broom. Bubbling will occur if contact adhesive is not allowed to dry completely prior to mating two surfaces together. Always allow to dry.

**Trapped chippings** - Debris trapped beneath the membrane can easily be removed as long as the water based adhesive has not yet set. Simply peel the sheet back, remove debris, and reinstate sheet and broom over. If the debris is discovered after adhesives have set, then either leave in place or cut out and patch.

**Wrinkling in membrane** - Gentle warming with a hot air gun or hairdryer will usually remove wrinkles in the membrane. Stubborn ones should be fully adhered to the deck using contact adhesive.