

## INSTALLATION GUIDE - PMR

These installation procedures are based upon our experience of installing Silent Roof Material (SRM) over many years to a variety of roof surfaces.

This particular guide concentrates on the installation of SRM to Profile Metal Roofing (PMR) structures.

The installation procedure should be followed as closely as possible where your particular roofing structure allows.

In basic terms, the individual lengths of SRM are rolled out across the roof surface and 'stitched' together using plastic cable ties. This forms a continuous matting over the entire roof area. Note that the smooth side of the SRM must face uppermost. The matting is only secured at the periphery and gutter locations utilising a clip and tie combination and retaining wires. Securing the SRM at intermediary points across the roof is not required and may lead to buckling as the entire stitched mat of SRM expands and contracts due to temperature fluctuations.

An overhang of SRM at the roof edges should be allowed so that the SRM hangs in to the rain water gutter of the roof where possible.

The following images should adequately illustrate the major points of the installation process.

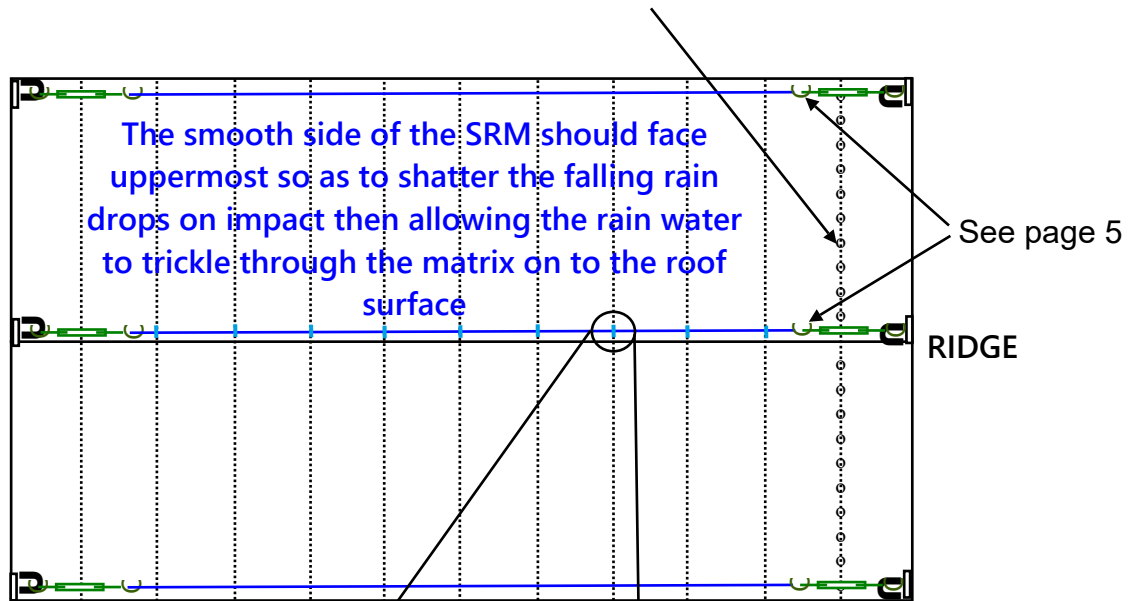


Typical PMR roof structures

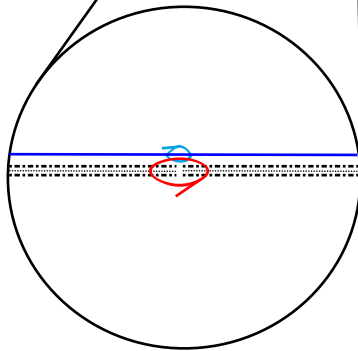


Plan view of typical roof.

Each length of SRM is 'stitched' to it's neighbour using 370 x 3.6mm cable ties at approx 30cm intervals



This enlarged view indicates how a **cable tie** is passed through the loop formed by **stitching ties** and over the **retaining wire** so loosely securing the matting to the wire close to one side of the roof ridge

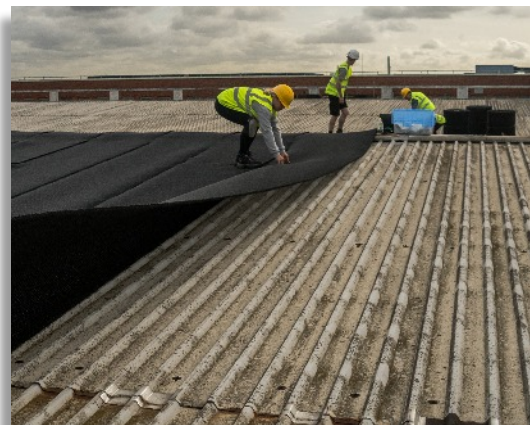


Anchor devices for the retaining wires will be site specific, see page 6 for examples.

Lengths of SRM rolled out across the roof up and over the ridge

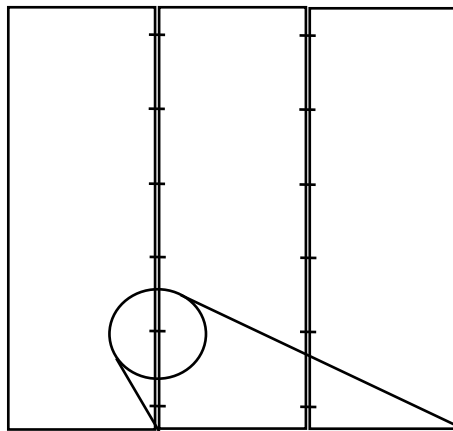


Note that a new length is laid upside down on top of the previous length. This allows for the stitching process to be performed easily. Once the stitching is completed along the entire length, the top layer



is simply flipped over allowing the smooth side to face the falling rain. Leave your stitches loose, over tightening will cause buckling of the SRM.

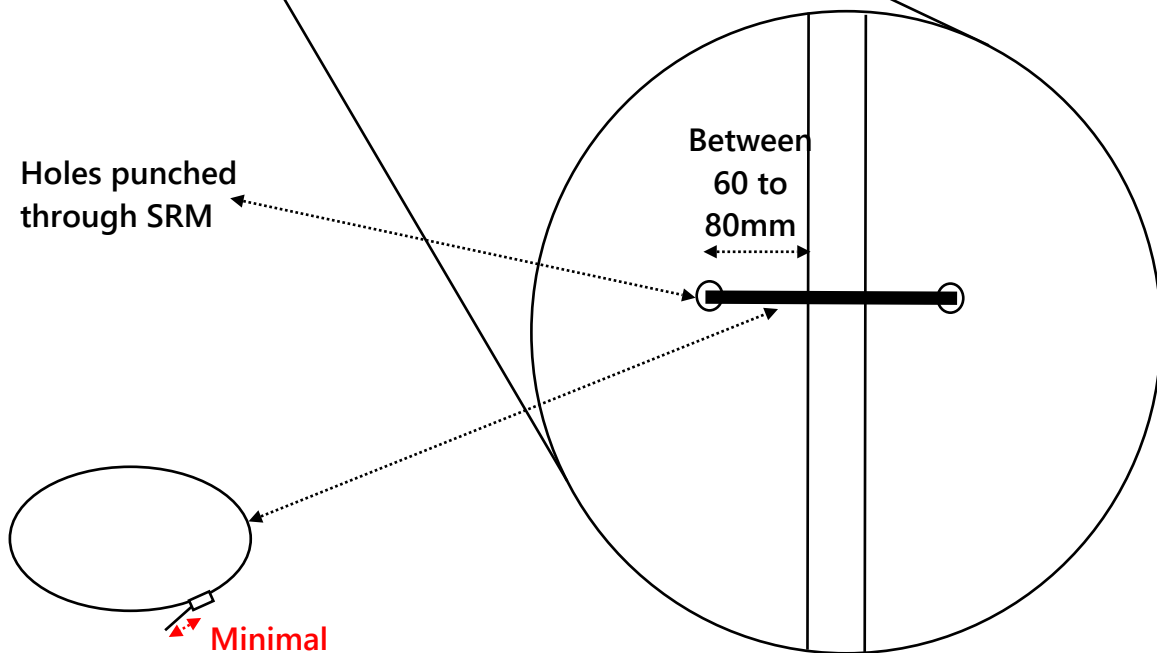
### 'Stitching' Silent Roof Matting Material (SRM)



The graphic opposite shows cable ties looped through adjacent lengths of SRM to form a 'hinge' between lengths. The lengths then form a continuous matting across the entire roof area.

The question is

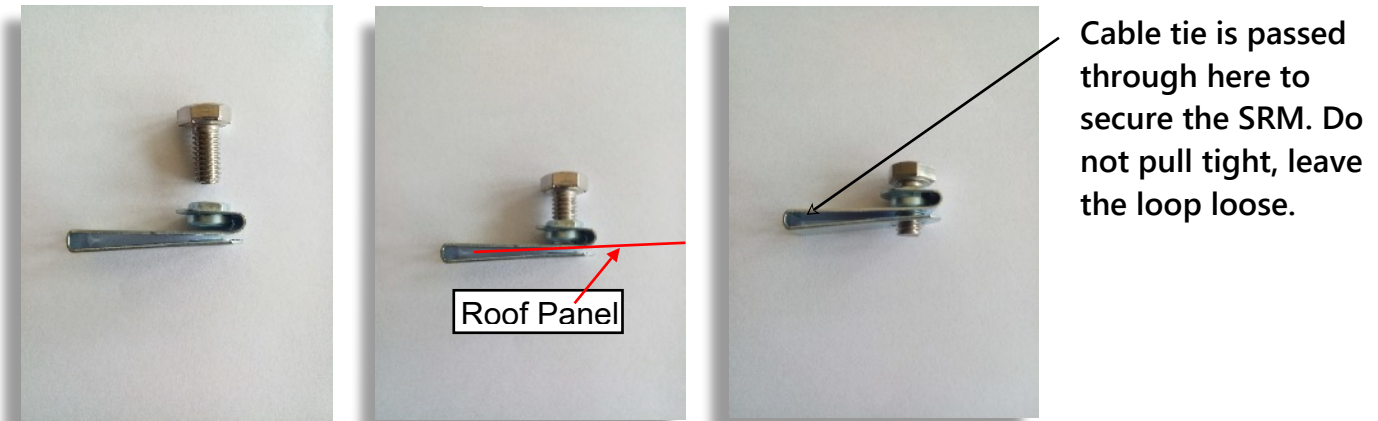
"How tight should these 'hinges' be?"



This is a 370 x 3.6mm cable tie used as a 'hinge' between two adjacent lengths of SRM. The holes are punched through the SRM at a minimum of 60 to 80mm from the edge when the two adjacent lengths are laid topside to topside. Once the 'hinges' are completed along the entire length of SRM, the top length is simply 'hinged' over 180 degrees to lie adjacent to the length that was underneath (see previous page). The dimension to note is that shown in **RED** above, this is the amount of tie that has been pulled through the tie lock which should be minimal when using a 370mm tie. Engage the tie tail in the tie lock, **DO NOT** pull tight. This ensures that the loop formed by the tie provides sufficient slack in the hinge. When this measurement is adhered to, the adjacent lengths of SRM will have sufficient space for expansion/contraction and will avoid buckling of the overall matting on the roof structure.

Securing the edges.

We utilise a purpose made stainless steel clip shown fitted in situ in the images below. The clip is slipped over the panel edge and secured tightly with the integral bolt. The SRM lies over the clip and is secured to it using a cable tie as shown.

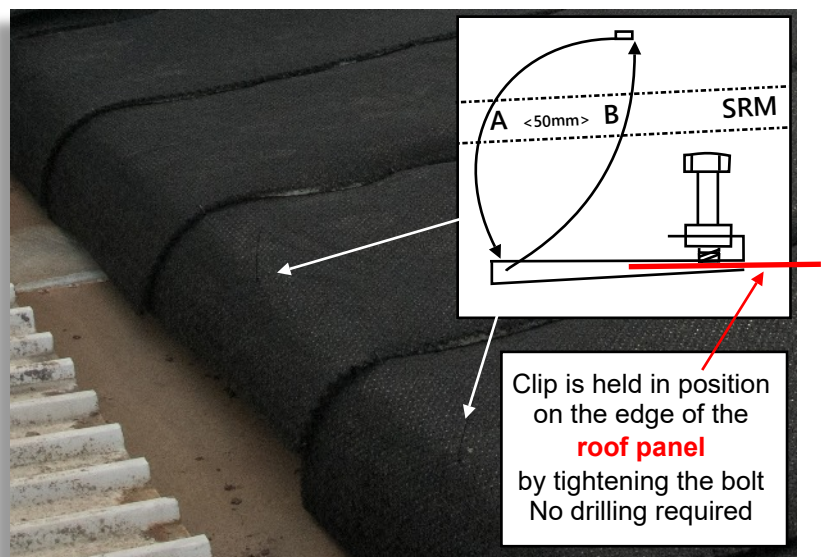


The cable tie is first passed through the SRM at a chosen point 'A', then through the SS clip loop and back through the SRM approx 50mm from 'A' at point 'B' then tied off.

Typical tie lengths are 370 and 430mm

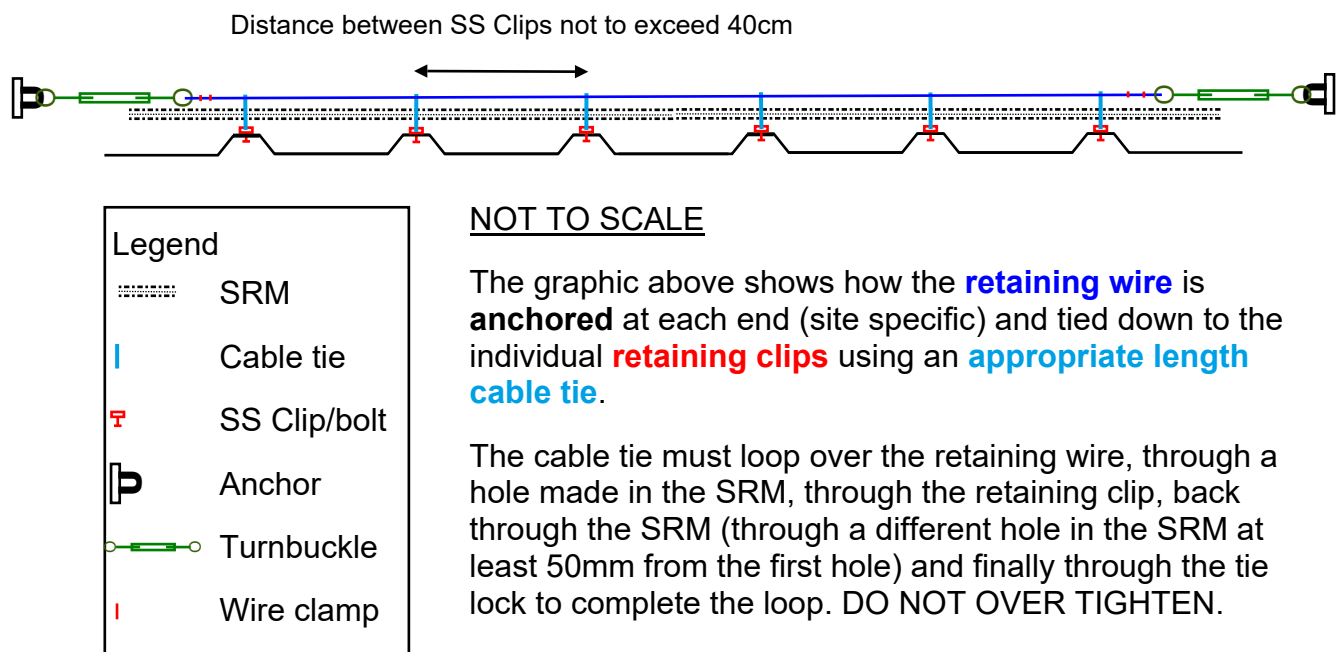
A cable tie is also passed over the retaining wire (Page 5) and through this clip.

We can of course supply the stainless steel clips and cable ties retaining wire/fittings if you cannot obtain similar components locally.



## Retaining Wire Installation

As per stated previously, SRM when installed following these instructions will form a continuous matting across the entire roof area. Due to the 'open lattice structure of SRM, it offers very little resistance to wind and consequently minimal uplift. The tie/clip arrangement around the periphery of the roof secures the entire mat in position. To provide additional securing of the SRM mat to the roof structure we also recommend the installation of retaining wires along the edges of the roof where tie/clips have been installed. The retaining wires should be tensioned utilising turnbuckle's or similar. The method of securing anchor points at the ends of the retaining wires will be site dependant.



**Images of the various components required for the installation of retaining wires are shown on the next page.**

If in doubt please ask, we are always here to help

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# Not to Scale

Click on description to go to a suppliers website

Hook & Eye Turnbuckle



Thimble



Wire rope clip



Assembly example



Shield Anchor



Staple eye on plate



Wire Rope



There are numerous varieties of fixings from various suppliers, the above are simply an example.



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