



technical advice

Stress Relief in Render Around Openings to Avoid Cracking

Weber recommend the insertion of **Weber** standard meshcloth, or alkali resistant fibre mesh, to areas of typical stress points in the construction, i.e. above and below all openings such as windows and doors and at horizontal junctions of dissimilar substrates e.g. ring beams.

This is good practice and should be included in tender documents and technical recommendations for all **Weber** Monocouche products and **weber.rend OCR**.

Process

Embed the mesh into the first pass of the render ensuring that it is not in contact with the substrate. (If using **weber.rend aid** key coat it can be embedded in this application.)

Cut the mesh into a strip that will extend past the junction or point of weakness by 200-500mm. Press the mesh into the fresh render evenly with a trowel or spatula and then overlay with further render to encapsulate the mesh. Please see enclosed drawing. The mesh can be ordered with your **Weber** renders through your normal stockist/merchant.

Purpose

Weber renders are manufactured with carefully selected aggregates to minimise the drying shrinkage of the render. Providing that good practice, appropriate design and preparation is undertaken, the rendering will be fully bonded to the substrate and therefore restrained from movement and will not crack.

The addition of meshcloth as a standard practice will enhance the render's capabilities to resist stress emanating from a failure of the substrate at the weakest points in the construction (usually around openings). It works by distributing the forces, generated from the substrate, over a wide area and reduces the risk of a crack from the substrate being reflected in the applied render. It is not a guarantee against reflective cracking but experience has shown that the process will help to minimise its occurrence.

Additional Information on Movement & Stress

Movement of the construction should be anticipated and accounted for by the client's design team prior to the construction.

The following information is advice we persistently highlight in discussions with specifiers, which you may find of interest.

In masonry construction, guidance for the placement of movement joints should be obtained from the chosen block manufacturer and used in conjunction with the British Standard, Code of practice for masonry BS5628 Part 3 and BS6093.

As a rule of thumb, the guidance normally given from these Standards is that movement joints should be included in the construction at 6 metre intervals and 3 metres from every corner. This will vary depending upon the type of construction and the strength of the brick or block.

The spacing of movement joints can be extended by the use of mortar bedding joint reinforcement. We are advised that this reinforcement should be included above and below openings regardless of the positioning of movement joints.

In our experience, cracking of the substrate can be considerably minimised if the bed joint reinforcement is used specifically around openings. From the rendering contractor's perspective, movement joints in the substrate must always be reflected through the render coat. There is no benefit in having movement joints in the render alone, other than to form a day work joint.

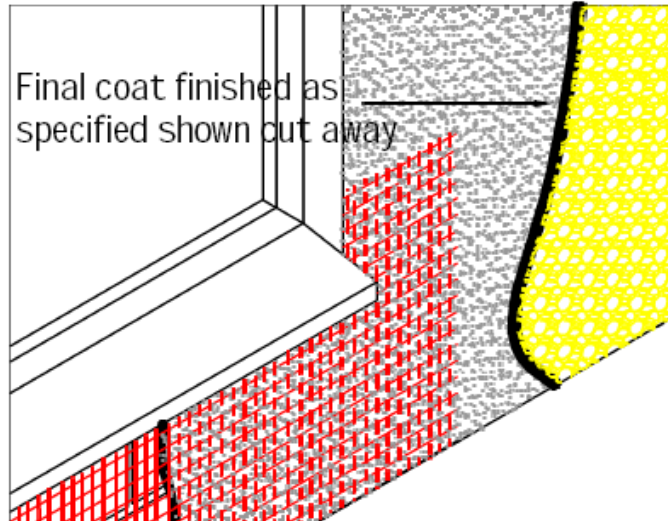
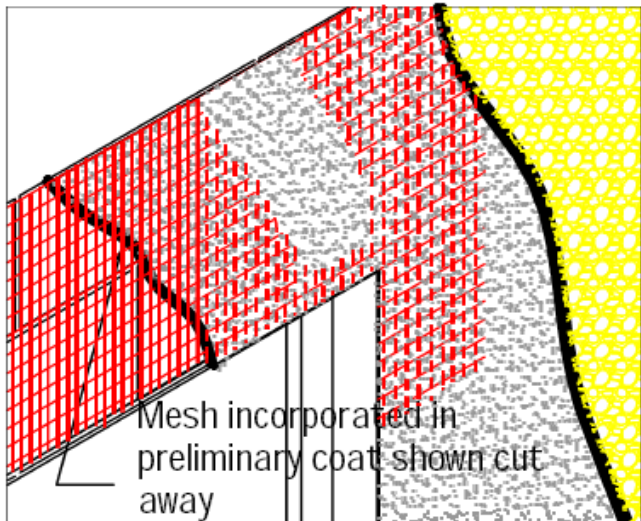
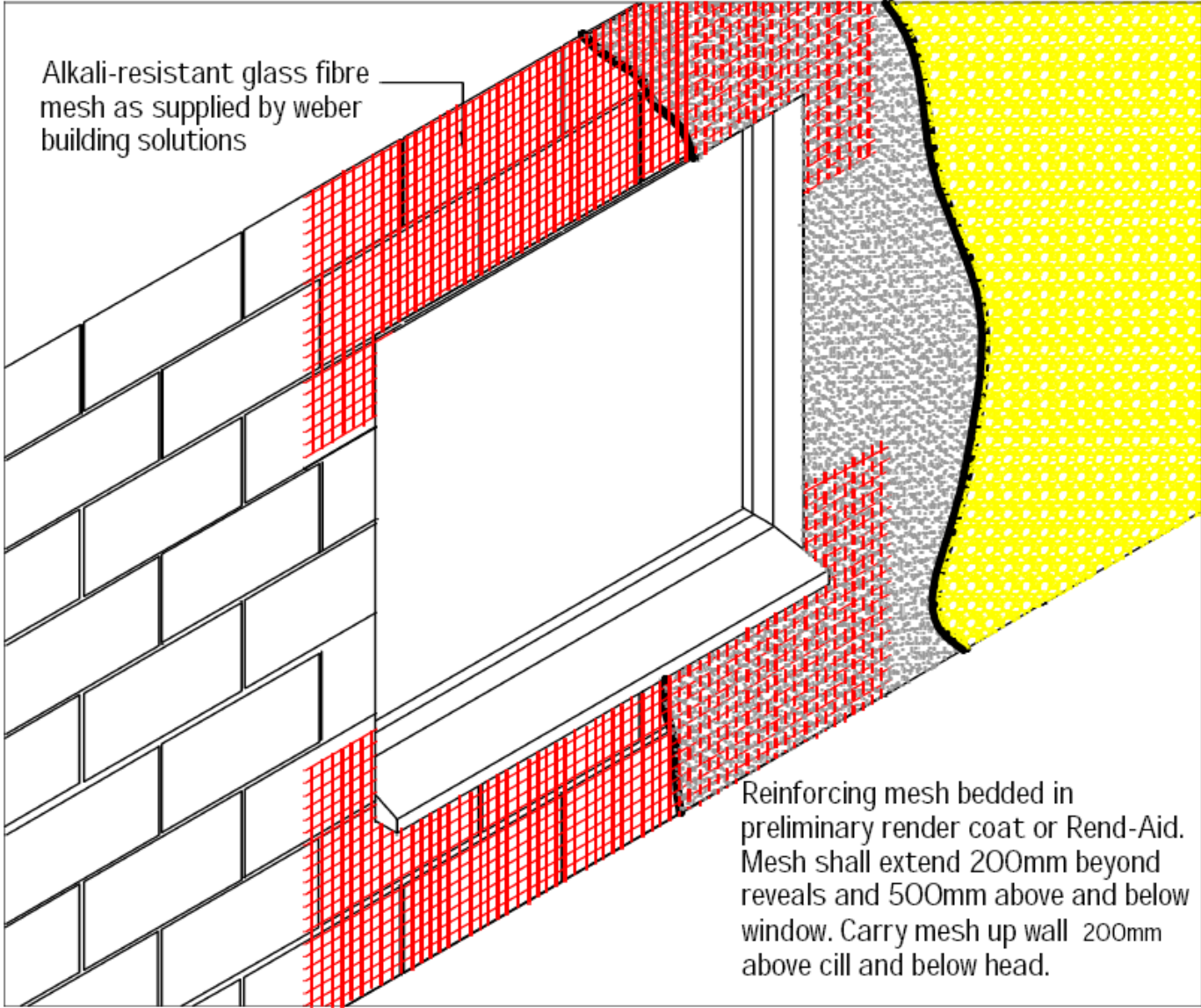
Many of you may well be fully aware of these recommendations already. Please remember straight line cracking in render is not attributed to render or application failure, it is a reflection of a problem in the substrate.

If you wish to discuss any of this information further, please do not hesitate to contact your **Weber** representative or the undersigned.

We trust that this is of assistance to you,



Paul Roberts
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Weber
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|---|------|-------|
| Client | Date | Scale |
| Project Render details | | Ref |
| Dwg Title Isometric detail - mesh reinforcement at openings | Drn | No. |