

Rendering of external walls with Stucanet® installed on timber or metal framed wall construction backgrounds



Guideline for correct use and placing of Stucanet®

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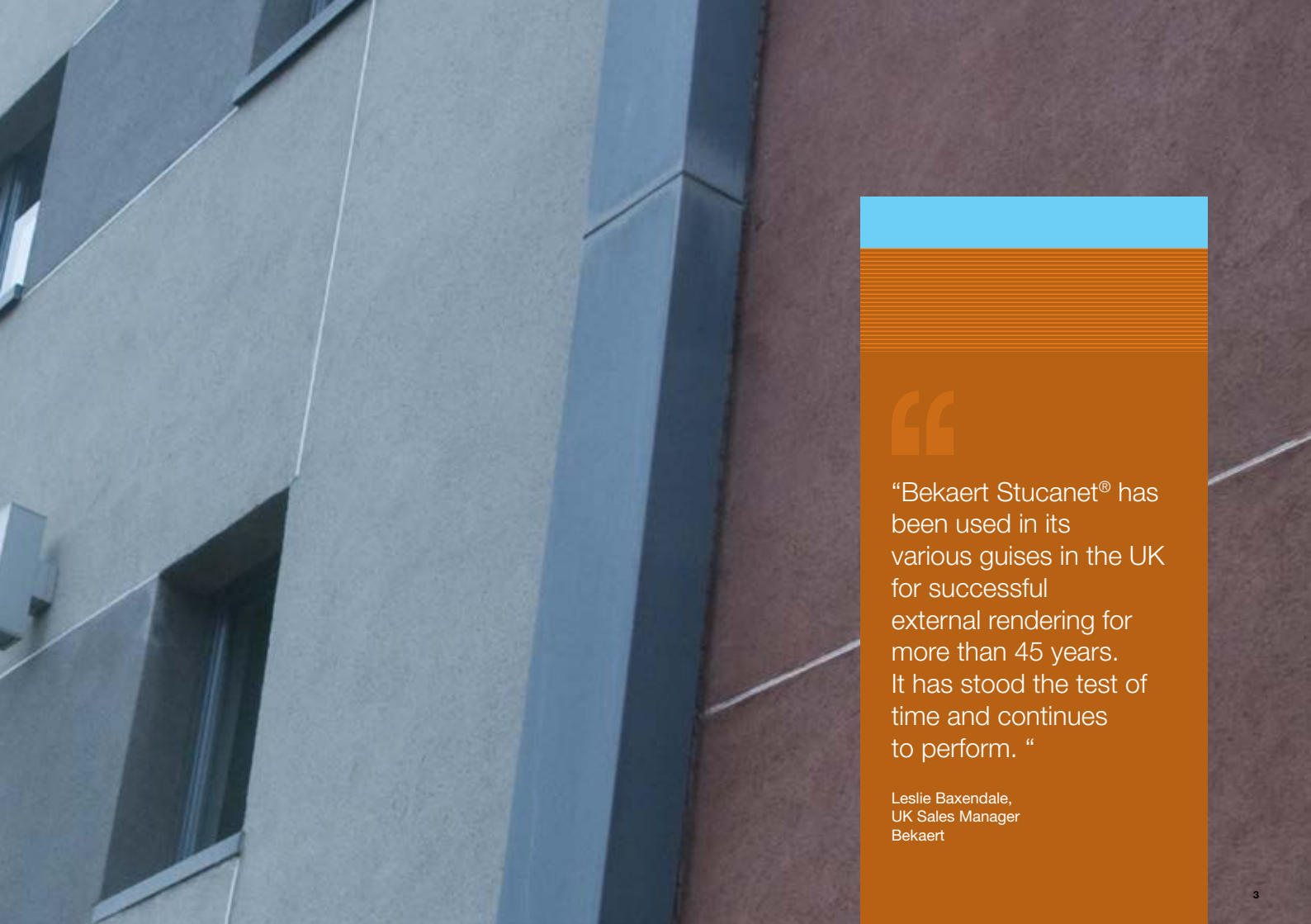
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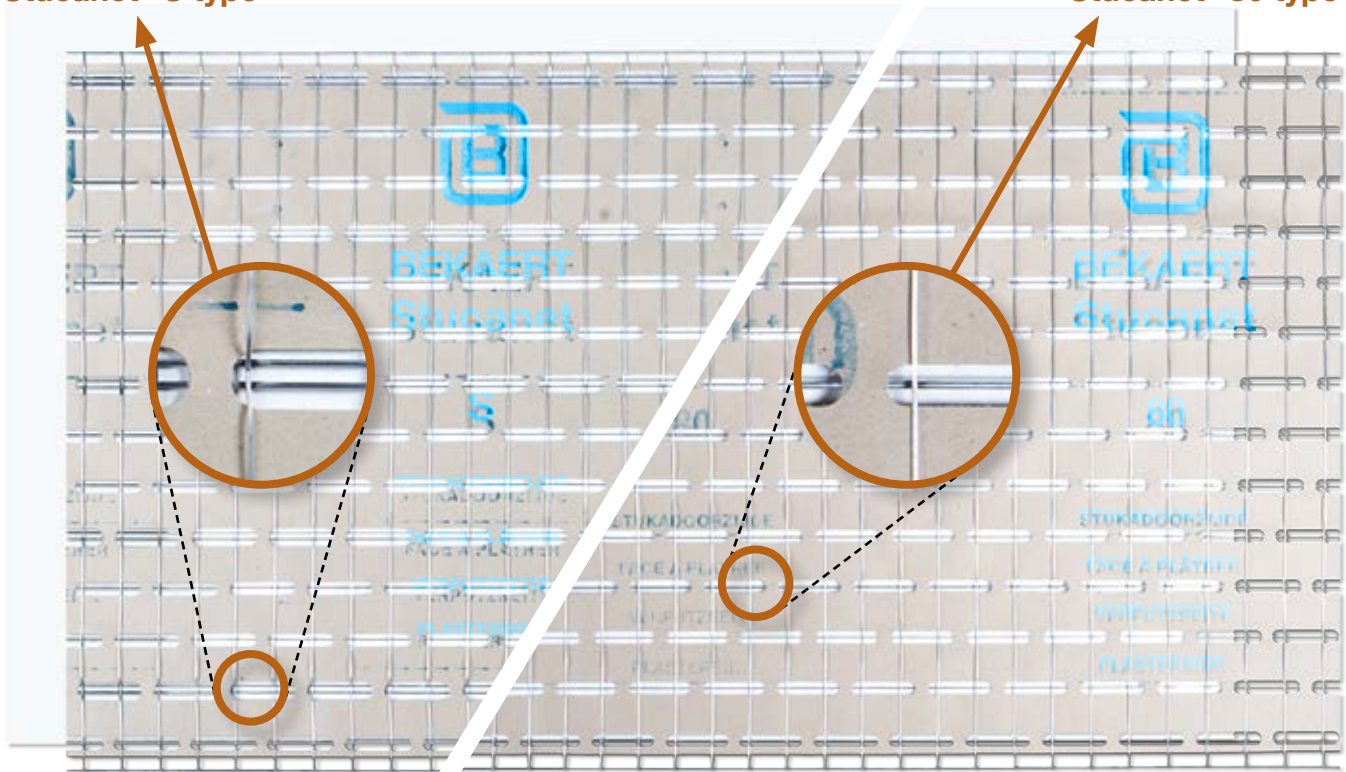
“Bekaert Stucanet® has been used in its various guises in the UK for successful external rendering for more than 45 years. It has stood the test of time and continues to perform. “

Leslie Baxendale,
UK Sales Manager
Bekaert

step 1 Selection of the correct Stucanet® type

Stucanet® S type

Stucanet® 80 type



step 2
paper removal

step 3
placing

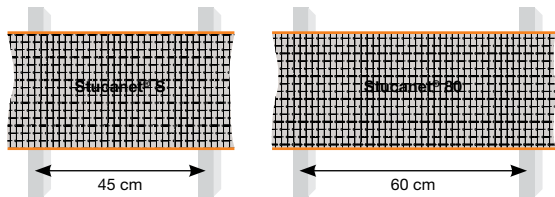
step 4
rendering

Verify the distance

Verify the distance between the studs of the timber or metal framed wall construction backgrounds to select the correct Stucanet® type.

For framed applications the maximum span (distance between fixing centres) is:

- **45cm** for all **Stucanet® S types** (Stucanet® S HG-BM, Stucanet® S E-BM)
- **60cm** for all **Stucanet® 80 types** (Stucanet® 80 HG-BM, Stucanet® 80 E-BM)



Austenitic stainless steel and galvanised Stucanet® types are available. For external render applications, the choice of material is determined by the exposure situation. Generally, for coastal and exposed aspects, Bekaert recommends the use of stainless steel Stucanet®. For inland and more sheltered exposure locations, galvanised Stucanet® is acceptable. Please contact Bekaert if further information is required.

Product characteristics

In terms of product characteristics, the main difference between Stucanet® S types and Stucanet® 80 types is the shape and number of stiffening wires.

The panel stiffening wires also serve as fixing wires with fixing anchors installed along this line back in to the frame stud.

For Stucanet® S types, the fixing wires are a **double row of wires**.

For Stucanet® 80 types, the fixing wire is a **solid flat wire** (6 x 2 mm).

For more detailed product information, we refer to our product data sheets that are available at our local sales offices.

step 1
selection

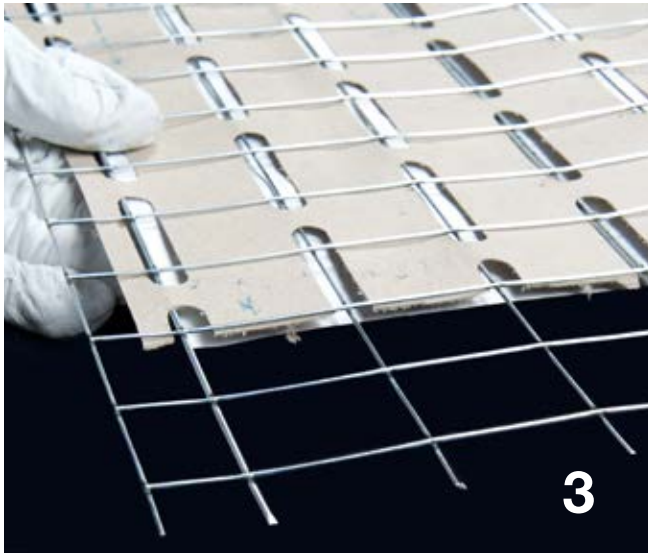
step 2 Removal of brown card paper in overlap



zones

step 3
placing

step 4
rendering



Cut and remove

On the vertical (short side) edge, the brown card paper must be removed for two full meshes to enable a 'steel on steel' mesh overlap with the adjacent panel. Remove the brown card paper only on one short side of the panel being installed. This is normally the right hand side panel edge when fixing from right to left. On the horizontal (long side) edge this is not required as the mesh edges are not covered totally by brown card paper, enabling the mesh overlap to interlock securely and the render to flow around and so anchor all wires across the overlap.

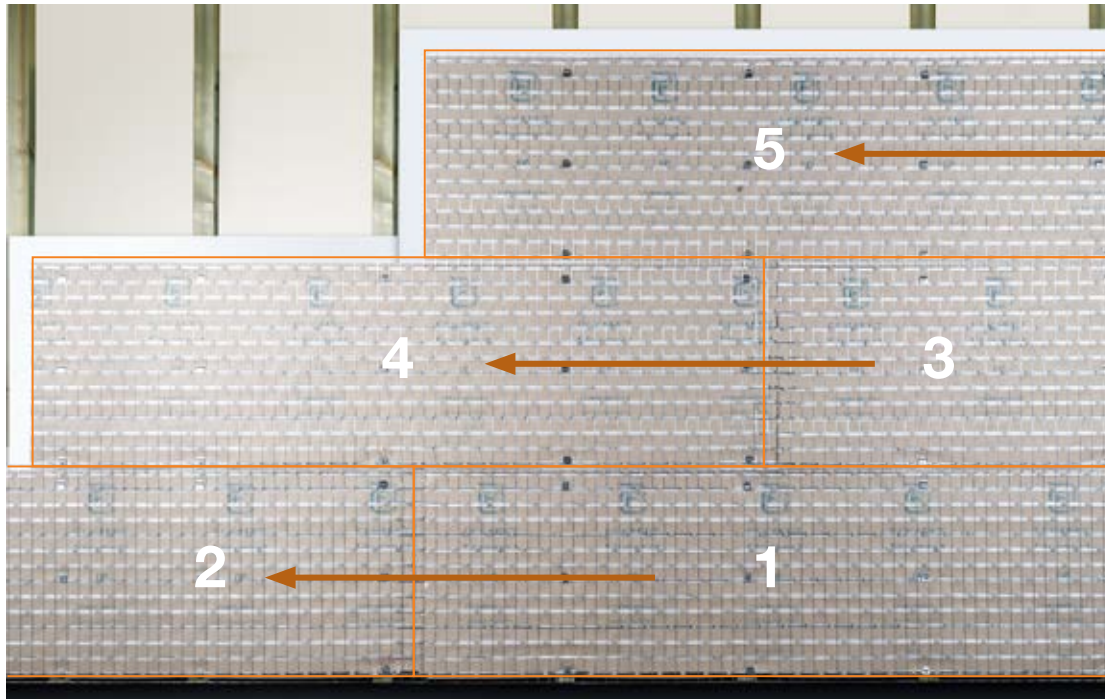
During installation, Bekaert recommends that appropriate safety gloves and eye protection should be used .



step 1
selection

step 2
paper removal

step 3 Placing of the



Fixing of the Stucanet® panels

Front side and back side of panels

The front side for application of render is on the printed side.

Always apply Stucanet® panels with the long side perpendicular to the main supports

– i.e horizontally on vertical supports and vertically on horizontal supports

Always continue installation in the same direction

Fixing of Stucanet® panels is best approached starting from right to left in rows and continued in the same direction along the wall (and around the building when required) to ensure uniformity and continuity of the panel overlaps.

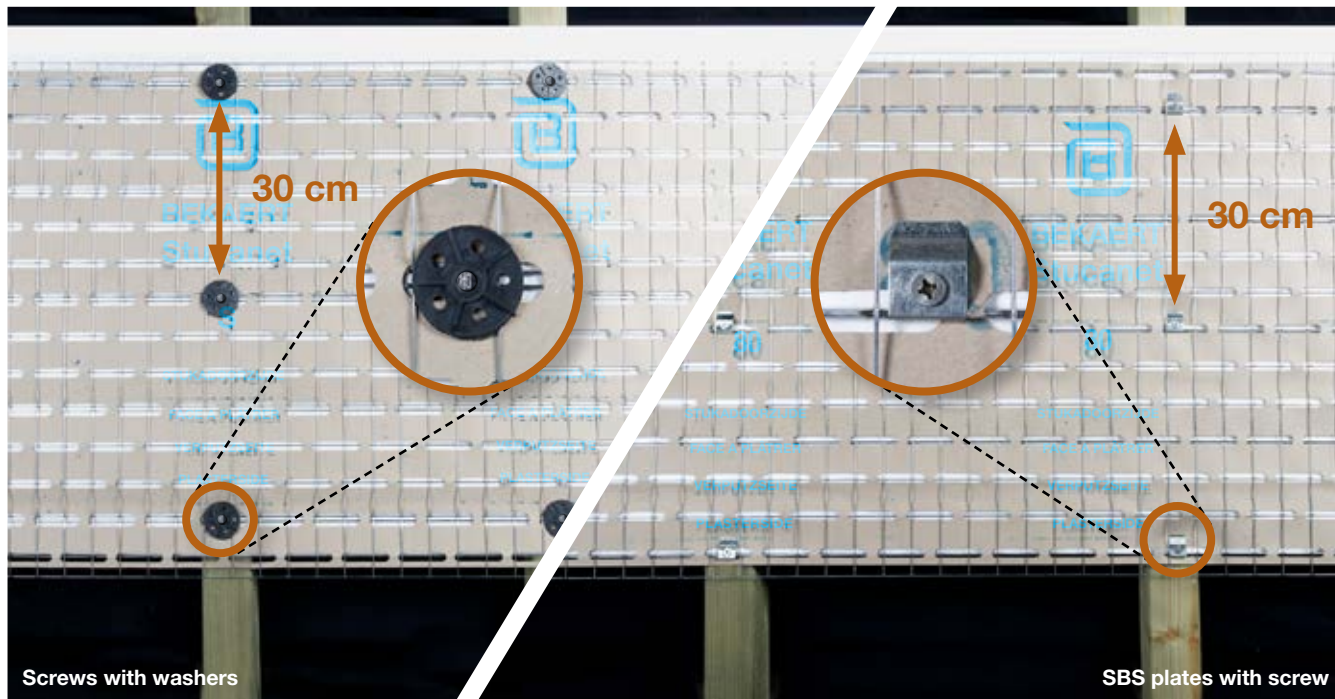
Pattern of the panels

Vertical (short side panel edge) overlaps must not be in line and should be staggered in a 'brickwork' type of arrangement.

step 1
selection

step 2
paper removal

step 3 Placing of the



Distance between fixing points

At the position of the reinforcing/fixing wires, fix the panels with suitable fixings onto the frame every 30 cm. The length of the fixing should be minimum 60 mm.

Panel fixing points and locations

Only use the panel stiffening wires, that also serve as fixing wires, to fix the panels in to the frame stud. The fixing screws or anchors have to be installed along this line back in to the frame stud.

- **Fixing of Stucanet® S type**

For Stucanet® S types, the fixing wire is a double row of wires. Install the fixings in between these two wires. Commercial fixings can be used. Bekaert recommends using screws (minimum 60 mm) in combination with 50 mm plastic washers. For metal framed wall constructions, is it advised to use self drilling / self tapping screws.

- **Fixing of Stucanet® 80 type**

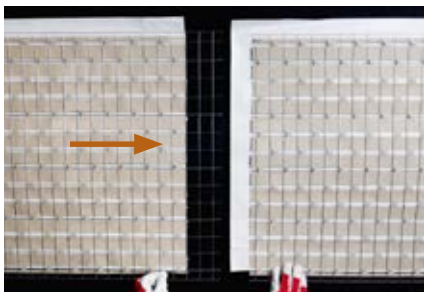
For Stucanet® 80 types, the fixing wire is a solid flat wire. Commercial fixings can be used. Bekaert recommends using screws (minimum 60 mm) in combination with SBS plates. For metal framed wall constructions, is it advised to use self drilling / self tapping screws.

step 1
selection

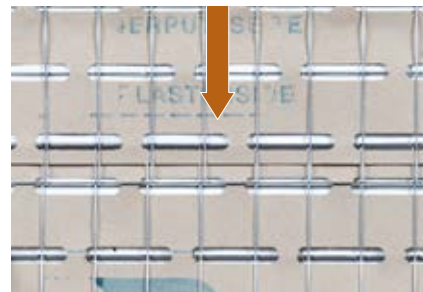
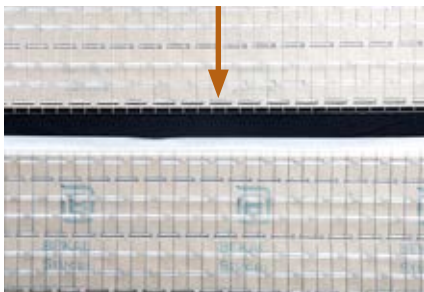
step 2
paper removal

step 3 Placing of the

Short side overlay



Long side overlay



Correct overlapping of Stucanet® panels

on the long edge and the short edge

It is important to achieve a 'steel on steel' mesh overlap in both directions to ensure continuity of reinforcement for the render. The breather membrane fixed to the rear of the panel is extended at the top (long side) and at the left hand edge (short side). Also, on the right hand edge (short side), the breather membrane is stopped short by 95mm behind the brown paper. This ensures the correct overlap for the membrane is maintained by simply installing panels on top of previously fixed panels, when following the overlap instructions detailed above.



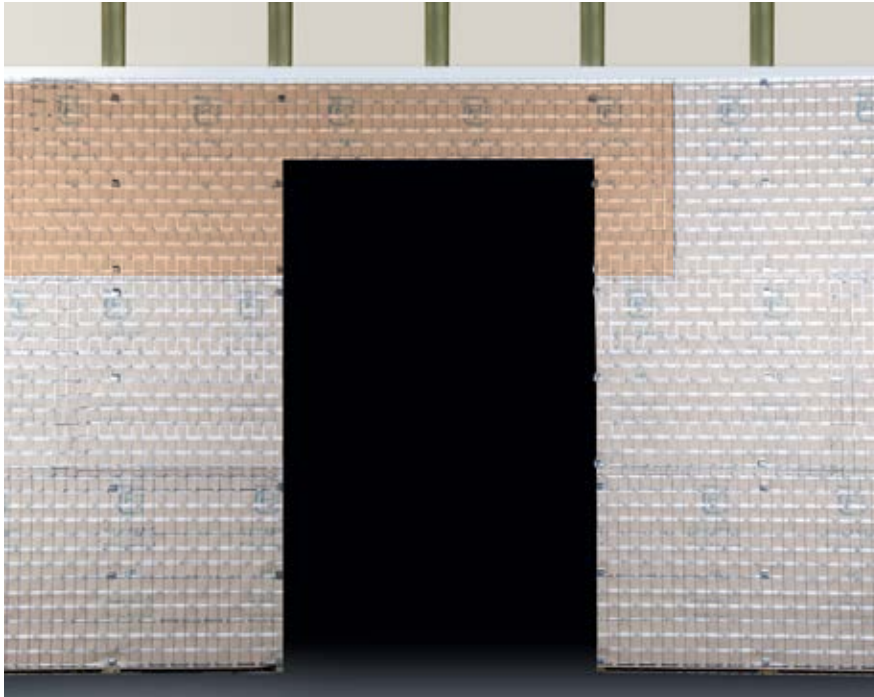
Connection of overlapping panels

The panels should be wire tied together with suitable tying wire at every 4 meshes.

step 1
selection

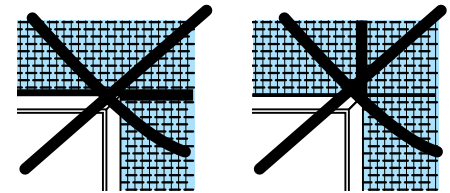
step 2
paper removal

step 3 Placing of the



Correct overlapping
around doors and
windows

No overlaps should occur in line with
window / door openings.





Correct overlapping around corners

Always bend sheets into or around corners. The panels should always be extended to the next stud, to avoid overlaps in the corners.

Stiffening wires can be cut along the line of the corner to make bending of the panel easier.

For protecting corners Bekaert advises to use Widra® corner profiles

step 1
selection

step 2
paper removal

step 3
placing



step 4 Rendering on the Stucanet® panels

The render can be applied manually or mechanically using machine spray techniques.

The total thickness of the render should be minimum 20 mm. The render should be applied in two layers.

First layer/base coat

Combing

Drying and curing

Second layer/top coat

step 1
selection

step 2
paper removal

step 3
placing



First layer/base coat

- The first render layer forms the basecoat and will key into the purpose designed Stucanet® card paper slots and anchor securely around the mesh wires.
- The basecoat thickness is 12mm to 15 mm and combed before hardening to help key and bond with the 2nd layer top coat.
- In general, please consult the render manufacturer in order to get detailed placing instructions and follow these instructions carefully.

step 4 Rendering on the Stucanet® panels



Combing

- The basecoat must be combed before hardening to help key and bond with the 2nd layer top coat

step 1
selection

step 2
paper removal

step 3
placing



step 4 Rendering on the Stucanet[®] panels

Drying and curing

Please consult the render manufacturer for full details of correct render application requirements.

Second layer / top coat

The top coat thickness is normally 5 to 8mm.

Please consult with the render manufacturer, for full details of correct render application requirements

step 1
selection

step 2
paper removal

step 3
placing



Weather protection

If the brown card paper has become wet during outside storage of the panels, then the render should not be applied until it has completely dried out. It may be necessary to provide sheeting to protect the Stucanet® panels during periods of wet or frosty weather. If in doubt please consult with Bekaert for advice on rendering during adverse weather conditions.



Securing heavy objects

The securing of heavy objects (e.g. satellite dishes, external wall lights, etc.) needs careful consideration as such items cannot only be fixed back to the rendered Stucanet® panel. These items should be fitted with suitable fixings carefully through the Stucanet® rendered panel and secured back into the main wall frame.



Movement joints

For rendering large surface areas, the characteristics of the mortar used and provision for possible movement may need closer consideration. It may be necessary to incorporate into the render movement/expansion joints to reduce the risk of render cracking taking place. Also in this case, please contact the designer and the render manufacturer in order to get detailed instructions and follow these instructions carefully.

Corner profiles

For protecting corners Bekaert advises to use Widra® corner profiles

Bekaert (www.bekaert.com) is a world market and technology leader in advanced solutions based on steel wire transformation and coatings. Bekaert (Euronext Brussels: BEKB) was established in 1880 and is a global company with headquarters in Belgium, employing more than 25 000 people worldwide. Serving customers in 120 countries, Bekaert pursues sustainable profitable growth in all its activities.



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