

## Installing Kerabit Dual on a balcony

Kerabit Dual is suitable for wooden and concrete balconies having an inclination of no less than 1:80 and the maximum depth of 7.5 m, and which have external draining of water, no outlets or other lead-throughs. Note! Dual is intended for use on cold balcony structures, only. In other cases, waterproofing must be implemented by an expert in the field of waterproofing by means of products that can be welded or glued with hot bitumen.

Membrane rolls are stored in the vertical position, protected from rain and sun damage. Before installation, store the rolls at a temperature of +15 °C, or warmer, for at least a day. The membrane rolls are unrolled in advance for them to straighten out. This helps avoid bumps in the surface. The time that the straightening out requires depends on the temperature (approximately 1 to 4 hours). When installing a roofing, the temperature must be over +10 °C and the weather rainless (a roofing must not be installed when it is raining).

Suitable underlays include rough tongued and grooved boards or moisture proof construction panels (e.g. Kerabit OSB roofing board) or concrete. The underlay must be non-sagging, even, clean, and dry. Cement glue must be removed from a concrete underlay.

Before installation of the roofing, a bevelling is made at the points of contact of the balcony and wall: Wooden triangle batten strips are fixed on a wooden underlay, and on a concrete underlay, the bevelling may be done with the Kerabit Bitumen Holkkalista cove or plaster (must have cured!).

Concrete surfaces are treated with Kerabit Bil 20/85 primer. The primer must be allowed to dry to be dry to touch before Dual is installed.

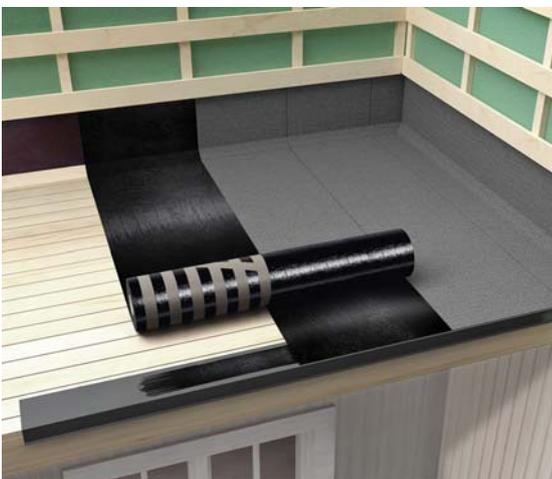
A hook-bladed carpet knife is needed to machine the Kerabit Dual membrane. Kerabit Tiviistysliima sealing adhesive is used for gluing. For nailing on a wooden underlay, hot-galvanized, broad-headed clout nails are used. The nails must penetrate the wood underlay. No mechanical fixing to a concrete underlay is needed, except for upturns.

Before starting the installation of the roofing, ensure proper and sufficient structure ventilation.

In a roofing that has been installed according to the installation instructions does not have a single nail in view. Ensure proper adhesion of all the glued surfaces by walking on them, for example. The adhesiveness of the seam may be enhanced, if need be, by warming the adhesive surfaces of the membranes carefully with a hot air blower (Note: hot work requiring a hot work permit).

Take the high adhesiveness of the adhesive into account when installing Dual. Once the adhesive surfaces have been laid against one another and have adhered to one another, the installation can no longer be amended without new lengths.

### Renovation sites

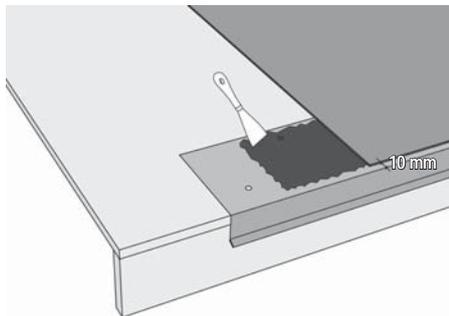


As a general rule, a joint-sealed roofing may on renovation sites be installed on top of the old even bitumen roofing, if the structure ventilation is working and the underlying structures are in order. The new roofing must be installed in parallel with the old roofing so that the longitudinal seams of the roofings do not fall in the same place. Any bumps/pouches must be cut as well as glued and nailed to the underlay before the new roofing is installed.

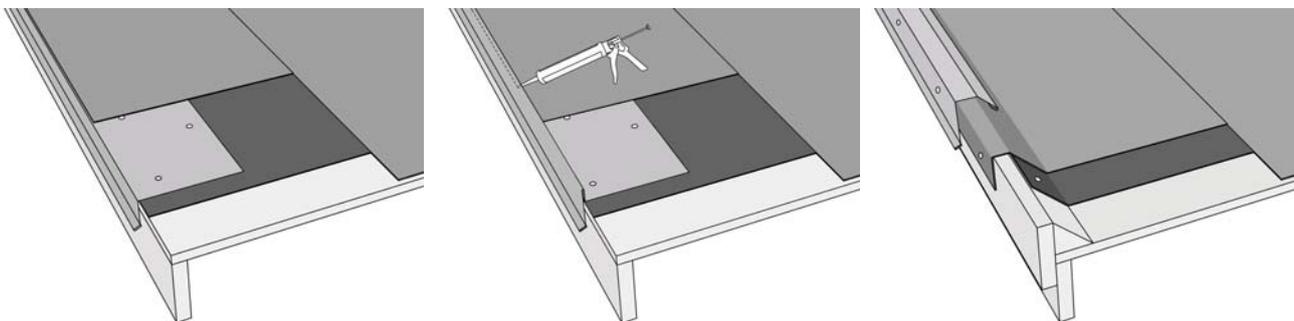
### Installation direction

Kerabit Dual is always installed on a balcony in the direction of water flow. Measure the balcony from front edge to back wall and add 300 mm to the measurement for the upturned piece. Cut the required number of strips from Dual according to the measurement. NOTE! The waterproofing of the balcony is constructed without joints in the membranes.

## Eaves flashing



**On lower eaves**, Kerabit Eaves Flashings are installed. The extension points of the flashings are overlapped by at least 50 mm and fixed by felt nails or KFR-headed thin sheet screws at intervals of 100 mm in a zigzag pattern. At extensions, the drip of the topmost flashing is opened and the drip of the lower flashing is installed within the opened one.



**For verges**, there are three options: Kerabit Eaves flashing, Verge flashing with ridge, and Verge flashing. The first two referred to must be installed as the lower eaves flashings but on verges only in connection with installing the roofing, because the collar of the flashing needs to be installed between the membranes.

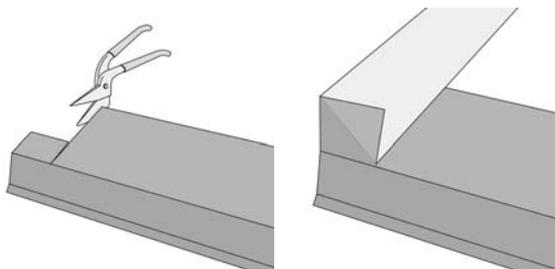
The installation of the verge flashings is started at the lower eaves towards the ridge.

Note! When using the Kerabit verge flashing with ridge, sealing adhesive is finally added to the seam of the membrane and flashing.

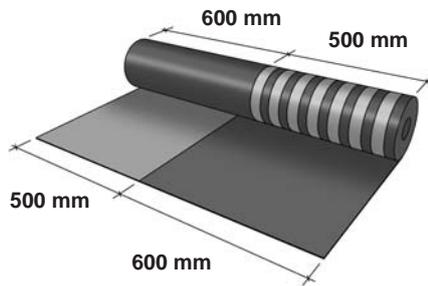
Note! When using Kerabit verge flashing, triangle batten strips of 50 x 50 mm are first attached, deviating from the instructions, and facing boards to their sides. The starting strip is installed flush with the top edge of the triangle batten strip and nailed to the triangle batten strip. The Dual membrane is folded over the facing board by approximately 50 mm and fixed to the facing board. Finally, the Verge flashings are fixed to the facing board.

See installation instructions of Kerabit eaves flashings.

### Joint between lower eaves flashing and triangle batten strip:



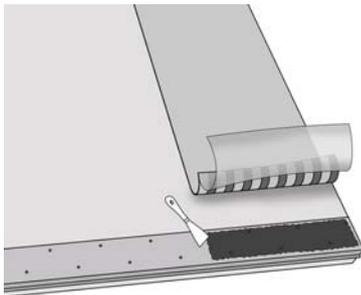
Cut the eaves flashing as shown in the image, put it in place and fold the corner of the metal sheet against the side of the triangle batten strip. Nail the flashing to the underlay in a zigzag pattern at 100 mm intervals. Overlap the extension points of the flashing by 50 mm.



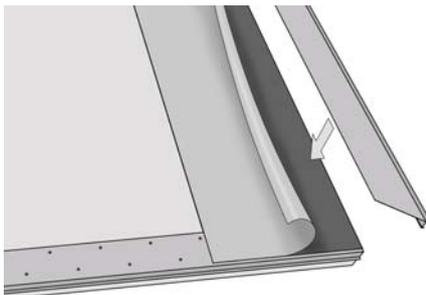
## Installation of Dual membranes

Cut one length of Dual in two along the edge of the granulated surface. The strip with the adhesive surface will be the starting strip and the granulated one will be the end strip.

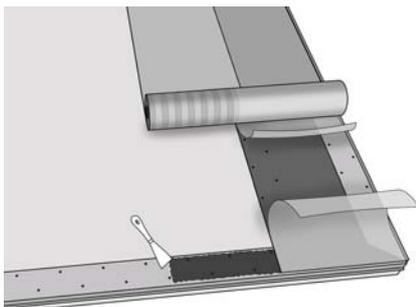
The installation starts as follows, if the balcony has an open verge. Exception: If the balcony in question is a recessed balcony, see the specifications under Recessed balcony, starting at a corner.



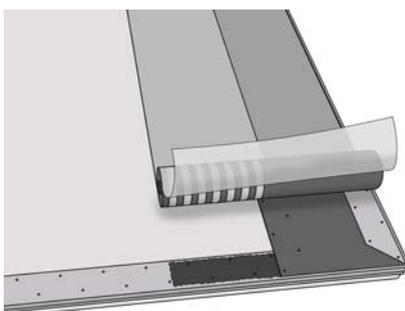
Align the starting strip that you cut to be parallel with the verge, the lower edge approximately 10 mm above the fold of the lower eaves flashing and the top edge lifted up 300 mm on the wall. Roll up the aligned strip halfway back from the lower eaves. Spread a 1 mm layer of sealing adhesive on the lower eaves flashing over the width of the strip. Cut the protective plastic cover on the bottom side. Roll out the strip while simultaneously removing the film and press the strip to attach it evenly to the underlay and eaves flashing. Install the other end of the strip in the same way. Glue the upturn on the wall by sealing adhesive.



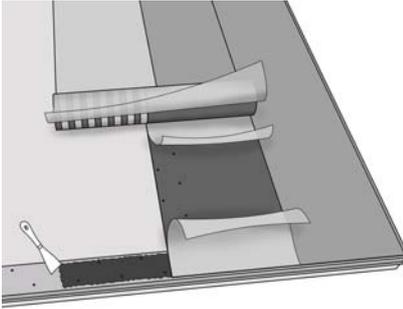
Turn the plastic film covering of the starting strip back and set the eaves flashing of the verge on top of the adhesive surface of the starting strip. Nail the flashing to the underlay in a zigzag pattern at 100 mm intervals. Turn the protective plastic cover back.



Align the subsequent membrane with the lower and side edges on top of the starting strip. Roll up the aligned membrane halfway back from the lower eaves. Cut the protective plastic cover on the top side of the starting strip, and then remove it for the visible part. Nail the starting strip to the underlay at the edge at 150 mm intervals in a zigzag pattern. Spread an approx. 1 mm layer of sealing adhesive on the flashing of the lower eaves over a width of 500 mm.

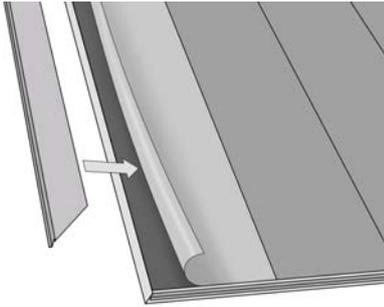


Cut the protective plastic cover on the bottom side of the membrane. Roll out the membrane while simultaneously removing the film and press the membrane to attach it evenly to the starting strip and eaves flashing. Install the other end of the membrane in the same way.

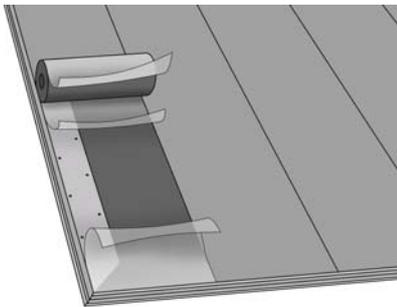


Align the next membrane strip on top of the adhesive surface of the previous strip so that the granulated surfaces meet. The membrane is rolled, nailed, and installed as in the above.

Continue the installation until you reach the other end of the roof. Depending on excessive width, the last strip can be cut to fit the edge of the eaves before or after installing the strip.

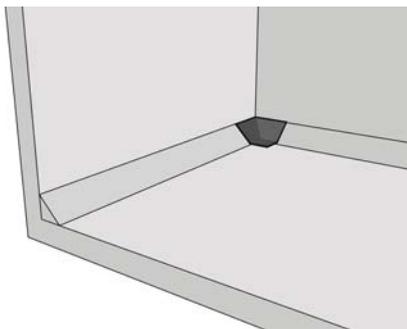


Turn the protective plastic cover of the adhesive surface back, set the eaves flashing of the verge on top of the adhesive surface and nail to the underlay at 100 mm intervals in a zigzag pattern. Turn the protective plastic cover back.



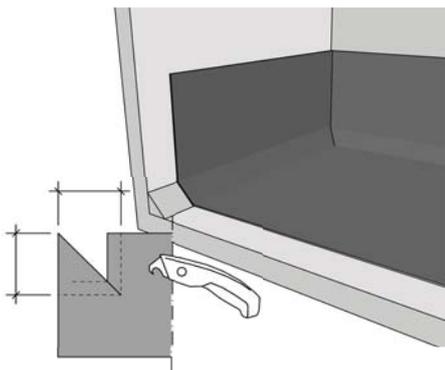
The last strip to be installed is always the end strip with the granulated surface. Do not nail the last strip!

Finally, fix the upturns with felt nails at 100 mm intervals at a distance of approximately 20 mm from the top edge of the membrane. Finally, cover the upturn with sheet metal plating, unless wall panelling covers the edge. Where there is a door opening, cut the top edge at the level of the doorstep and carefully glue over a distance of 150 mm.



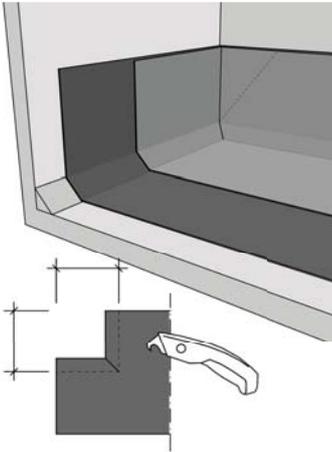
**Exception: Recessed balcony, starting at a corner**

Cut a square piece out of Dual and fix it with sealing adhesive to a corner, with the adhesive surface up.



Align the starting strip with the balcony edge so that there is a 300 mm upturned section on the walls. Cut off a piece from the corner of the starting strip, as in the image. The width of the back of the triangle batten strip affects the dimension of the piece to be cut off. Fold the upturn pieces so that they settle to a butt seam at the corner.

Apply sealing adhesive on the eaves flashing along the width of the strip, glue the strip to the flashing and the underlay and glue the upturned pieces to the walls. Then seal the corner with sealing adhesive.



Cut off a triangular piece from the corner of the surface strip, as in the image. The width of the back of the triangle batten strip affects the dimension of the piece to be cut off. Fold the upturn pieces in place, remove the protective plastic cover and, press tightly in place.

Continue installation with full membrane lengths, as explained in the above. At a second corner, cut the strips to the correct width, cut the corners, and fix in the same way as in the first corner. When the installation of the membranes is complete, seal the corners neatly with Kerabit sealing adhesive and ensure the mechanical fixing of the upturns by nailing, as described below.

### Subsequent measures

If through mountings must be installed on the balcony afterwards, ensure their waterproofing.

To protect the balcony waterproofing, wooden grating must be installed on top of it. Their fixing must be implemented as a floating structure, that is, it must not penetrate the waterproofing. Under the runs, unfastened membrane strips are installed for reinforcement.