

Balcony Underlay Sheet and Balcony Cap Sheet

UNDERLAY SHEET

TL2 class (in Finland) elastomer bitumen sheet with self-adhesive strips on the underside covered by a protective film and a bitumen surface on the top covered by a protective film.

CAP SHEET

TL2 (in Finland) class elastomer bitumen sheet with adhesive surface on the underside covered by a protective film and a 120 mm self-adhesive edge on the top at the opposite end and a grey granular surface elsewhere.

GENERAL INFORMATION

The outdoor temperature during installation should be a minimum of +10°C. Installation should not be attempted in the rain. In temperatures below +10°C, the substrate and the surfaces must be warmed up with a hot air gun (do not use an open flame). Make sure that the seams of the sheet are firmly attached and the cap sheet adheres firmly to the underlay sheet and drip plates. Do not attempt to install the sheet at temperatures below +5°C.

The substrate can be made of rough tongue and groove boarding, matched plywood or concrete. The substrate must be dry and smooth. The surface must be sloped (1:80 minimum) and rainwater removal should be from over the front railing of the balcony. If rainwater is removed via roof drainage, it is recommended to use torch-on sheets. Concrete surfaces should be treated with a Katepal K-80 bitumen solution that must be dry before the sheets are installed. Fit a triangular batten at the joint between the walls and the floor of the balcony or shape a corresponding flare-out in the corner when casting the concrete. The sheets should always be installed parallel to each other and in the direction of water flow. The seams of the underlay and cap sheets should not overlap (the seams should be directly next to each other or half way across the sheets). Cut the underlay sheet into the correct lengths (the length of the sheet should extend from the front edge of the balcony to the upper end of the triangular batten: +20–30 mm). The number of sheets needed depends on the covering width of the balcony. The width of one sheet is 880 mm. When handling the rolls and cutting the sheet, avoid peeling off the protective film any earlier than necessary, especially in hot weather and direct sunlight, as the underside of the sheet is highly adhesive. NOTE: Drip trims should be installed on top of the underlay sheet.

Do not use hot bitumen or an open flame when installing the sheet!

INSTALLATION OF UNDERLAY SHEET

Position the first sheet at the far end of the balcony with the self-adhesive strips facing downwards (**Fig. 1**). Position the bottom end of the sheet parallel with

the front edge of the balcony and the upper end 20–30 cm above the triangular batten. After positioning the sheet correctly, roll it up half way (**Fig. 2**). Use a sharp knife to cut the protective film on the underside across the whole width of the roll (in a straight line). Unroll the sheet and remove the protective film as you go, making sure that the sheet adheres firmly and smoothly to the substrate. Then

roll up the other end of the roll (**Fig. 3**), hold the end of the protective film from beneath the roll (**Fig. 4**), remove the protective film and glue the other end to the substrate. At the edge of the back wall, be sure to press the sheet firmly onto the triangular batten and onto the joint between the wall and floor surfaces across the whole width of the sheet. The protective film on the top side of the sheet must remain intact.

Position the second sheet next to the already installed sheet so that the 120 mm self-adhesive strip on the underside overlaps with the previous sheet. Roll the second sheet back half way and use a sharp knife to cut the protective film on the underside across the whole width of the roll, as above (**Fig. 5**). Using the knife, cut off 120 mm of the protective film on the top side of the corresponding edge of the already fastened sheet, and peel off this section of the film. Remove the protective film from the rolled up sheet, and roll out and fasten the sheet. Then press the seam between the sheets together, making sure that no air bubbles remain in the seam. Then roll up the other end of the sheet. Expose 120 mm width of protective film from the edge of the already installed sheet and unroll the other end of the sheet to be installed, removing the protective film from its underside and making sure that the sheet is fastened smoothly to the floor surface of the balcony. Carefully press the seam together. The protective film on the top side of the sheet must remain intact.

Continue installing the sheets in the manner described above.

If needed, cut the last sheet to the correct width. If more than 20 cm needs to be cut from the sheet, cut the sheet to size before installing. If the sheet extends beyond the edge of the balcony by only a few centimetres, it is easier to cut it to size after installation. At pillars and railing posts, make small cuts in the underlay sheet from the edge of the sheet to the edge of the post and additional cross-cuts from the corners of the posts (**Figs. 6 a, b and c**). For round posts, cut off a round piece of sheet that is approx. 20 mm smaller in diameter than the post, so that the edges of the sheet bend approx. 10 mm against the post (**Fig. 7**).

INSTALLING DRIP TRIMS

After the underlay sheet, install the drip trims to the edges (**Fig. 8**). Turn up the protective film of the underlay sheet at the edges so that approx. 15 cm of the self-adhesive surface is exposed. Drip trims should be positioned and nailed (or screwed) onto the wooden substrate in a zigzag pattern at an interval of approximately 10 cm. The nails should be long enough to penetrate through

the wooden substrate. If the nails should not be visible on the underside, then slightly shorter sheet metal screws with a flat head can be used. If the substrate is concrete, use plugs with a flat head.

INSTALLING THE CAP SHEET

Begin installing the cap sheet by cutting the correct length from the roll (the same length as with the bottom sheet). Install the sheet so that the self-adhesive edge on the top side is positioned vertically.

A. When beginning from the same edge as the underlay sheets, place the edge with the self-adhesive strip next to a seam in the underlay sheets so that the edge with the granular surface extends 120 mm over the edge of the balcony. Position the top end of the sheet in line with the upper edge of the triangular batten (20–30 mm below the upper edge of the underlay sheet), in which case the bottom edge will extend 20 to 30 mm over the edge of the balcony. Roll the top sheet up half way (**Fig. 9**). Use a sharp knife to cut the protective film on the top of the underlay sheet (in a straight line across the width of the sheet) and cut the film on the underside of the cap sheet to the same length. Remove the protective film from the visible end of the underlay sheet and remove the protective film from the cap sheet as you unroll it. When unrolling the cap sheet, make sure that there is no air between the cap sheet and the underlay sheet. Then roll up the other end of the cap sheet, remove the protective film and unroll the sheet (**Fig. 10**). Position the next sheet parallel with the previous sheet with a 120 mm overlap. The sheet should cover the self-adhesive edge of the previous sheet completely. Roll up the sheet as before (**Fig. 11**). Always remember to cut through the protective film on the previous sheet and remove the film from between the sheets. After fastening the sheets, cut off the parts that extend over the edge of the balcony. Continue until you reach the other end of the balcony. Cut the last sheet to size as with the underlay sheet.

B. You may also begin installation from the opposite end to the underlay sheets,

in which case the granular edge is positioned in line with the edge of the drip plate. **NOTE: The self-adhesive edge must not overlap with a seam in the underlay sheet. Otherwise proceed as described in option A.**

In case of pillars and railing posts, proceed as with the underlay sheet, but the cut from the edge of the cap sheet must not coincide with the one on the underlay sheet (50–100 mm).

UPTURNS AGAINST WALLS AND RAILING POSTS

Next, create upturns against the wall with the cap sheet. Cut strips of the correct size from the cap sheet. The upturn must extend 50–100 mm towards the surface of the balcony and some 300 mm up the wall (**Fig. 12**). At the door, the upper edge should be cut to the height of the threshold. Secure the upper edge of the upturns by nailing the upper edge to the substrate using roofing nails at 50–200 mm intervals about 20 mm from the upper edge. Sheet metal screws can also be used. Cover the upper edge with a flashing, unless it is covered by wall cladding.

Ensure the tightness of waterproofing at the root of railing posts and other pillars. With round posts, use round penetration seals (if possible); with square posts, use pieces cut off the cap sheet (**Fig. 13**), the height of the upturn should be 100–200 mm (**Fig. 14**). If a suitable sealing flange cannot be found for a round post or it is not possible to loop the flange around the post, then the cap sheet can be sealed with a sheet strip on which comb-like cuts are made (**Fig. 15**). The frequency of the cuts depends on the diameter of the post.

Finally, (if necessary) seal the seams at the inner and outer corners of the sheets and at the root of railing posts and other pillars with Katepal K-36 sealing compound.



