v.1





## **Installation instructions**

## SBS modified bitumen shingles 2 m<sup>2</sup> / package

The substrate for the roofing should be stable, rigid, smooth and dry. Ensure that you comply with the building regulations and guidelines that apply in your country when specifying thicknesses of materials, their quality etc. Allow for possible moisture and thermal expansion of the roof decking by leaving a sufficient gap between the boards. If the temperature falls below +5°C, the roofing shingles and other supplies should be stored in a warm place prior to installation.

Always ensure sufficient ventilation of the roof space. Particular attention should be paid to roof space ventilation with hipped roofs and when ceiling/roof structures are parallel. There should be exhaust vents at the gable ends or suction ventilators near the ridge..

- **1.** If there are valleys in the roof, first install Katepal underlay membrane in them. Nail along the edges with roofing nails at 20 cm spacings.
- 2. First install an underlay membrane over the roof decking, covering the entire roof area. Installation instructions for the underlay can be found on the inside of the underlay roll wrapping. At valleys the ends of the underlay are overlapped by 10–15 cm with the underlay installed along the valley, thus leaving a 70 cm wide strip to be covered with a cap valley sheet (see illustration no. 4 and the applicable text).
- 3. Install metal drip trims along the eaves and verges. Nail them with roofing nails to the roof along the upper edge in a zigzag pattern at 10 cm spacings. Overlap metal drip trim ends by 5 cm at joints and drive two to three nails through both metal sheets there. Figure 11 shows alternative verge details.
- **4.** Then apply Pintari valley sheet in a colour that matches the shingles over the underlay membrane at the valleys. Glue it along the edges with Sealing Compound K-36 and drive nails along the edges at 10 cm spacing.
- **5.** Then install self-adhesive eaves shingles over the eaves' metal drip trims. Remove the plastic protective film from the underside and press the shingles into place with the adhesive edge over the metal drip trim approximately so that it remains 1 cm short of the edge.
- **6.** During installation mix the shingles from 4 to 5 randomly chosen bundles to avoid colour differences. Do not install shingles produced in a different time on the same roof. If it cannot be avoided the colour difference must be checked continuously.

Start the installation of the shingles approximately at the centre line of the eave so that the left edge of the shingle overlaps the edge of the eaves/ridge shingles below by 40–50 mm (6a). The longest tabs of the shingle should be aligned 10–20 mm above the lower edge of the eaves shingle. Remove the plastic protective film (figure 6b) by pulling it from the middle towards the tabs of the shingle.

7. The joints of the underlying row of shingles are covered by the tabs of the next shingle to be installed. Place the next shingle row so that the vertical joints between the shingles match the alignment marks located in the upper edge of the row of shingles to be covered, and align the tips of the shingles with the top of the notches in the shingles to be covered (figure 7).

- **8.** Nail each shingle to the decking with four nails approx. 2–3 cm above the notches of the shingle (8). **NOTE! Do not nail through the upper edge of the shingle!** Nails must penetrate through the roof deck. Continue the installation of shingles one row at a time and ensure that the rows of shingles stay parallel. You can use an aligning board to align the rows with the longest shingle tabs. The level of the upper edge may vary a little.
- **9.** Cut the shingles along the verge edge and glue the shingle ends to the metal drip trim with Sealing Compound over a 10 cm wide area.
- 10. At valleys the shingle ends should overlap the cap valley sheet, leaving a 20–40 cm wide strip at the bottom of the valley free of shingle roofing. Cut the shingle ends in the direction of the valley and glue to the membrane underneath by applying adhesive over the entire overlap area.
- 11. If no metal drip trim is installed along the verges (a), a triangular batten (b) or a board with a bevelled edge that creates an upstand (c) should be fixed to the verge prior to applying the underlay membrane. The edge of the underlay should be turned over the verge so that the edge of the membrane on the outside reaches 1–1.5 centimetres below the underside of the decking boards. The roofing shingles should be installed so that the shingle edges follow the verge edge. The ends of the shingles should be glued to the underlay with Sealing Compound along an area that is at least 10 cm wide. A metal drip trim is installed over the roofing (not a standard product).
- 12. At the abutment of a chimney or other major penetration, triangular battens to form a cove should be nailed to the roof deckling prior to installing the underlay membrane. Continue applying the shingles all the way to the upper edge of the chimney (the side of the chimney facing the roof ridge), after which the actual upturn is formed. Using Pintari of a colour matching that of the shingles, cut sheets to go around the chimney so that they reach at least 30 cm above the roof surface on the chimney face and overlap the shingles by a minimum of 20 cm. The instructions for cutting the upturn sheets can be found on the wrapping of Pintari rolls. Glue the upturn strips to the chimney over their entire undersurface area with Sealing Compound and attach the top of the strips mechanically to the chimney, for example by nailing the upper edges to brickwork joints.
- **13.** Continue the installation of the shingles above the chimney so that the shingles overlap the strip along the chimney abutment. Finally protect the upturn with a flashing and seal the joints with Sealing Compound.
- **14.** With smaller penetrations, the abutments are best sealed by using lead through sleeves (or flanges). Glue and nail the sleeve (I) to the substrate and bond the shingles installed on top (III) with Sealing Compound (II) to the flange.
- **15.** On the ridge or hip of a roof, bend and cut the eaves shingles along the perforations into three parts to make ridge capping shingles. Remove the plastic film and install the ridge shingles over the ridge and hips with 5 cm overlaps so that the nails are covered by the next overlapping shingle.

NOTE! For more information about installation, maintenance and the warranty policy, please go to: www.katepal.fi

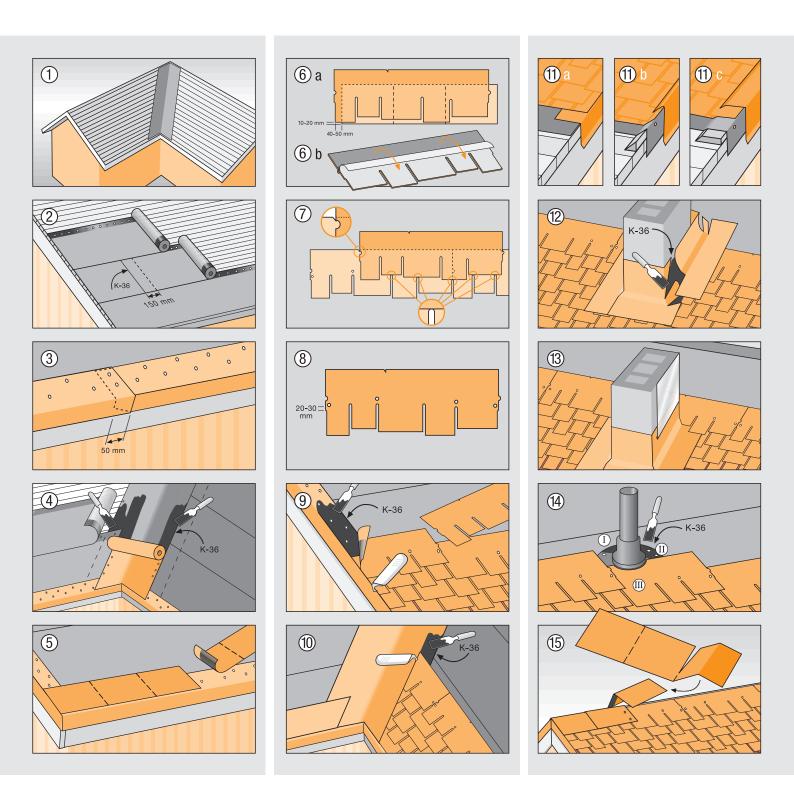






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Detailed installation instructions are also available at www.katepal.fi

