

## INSTALLATION OF BITUMEN SHINGLE ROOFING KERABIT K+, S+, L+

## Before installation, note the following:

## These instructions are indicative. For more detailed instructions, please visit tuotteet.kerabit.fi/en!

Kerabit bitumen shingles may be installed on a roof with an inclination of 1:5 (11.3°) or steeper. Under the bitumen shingles, an underlay membrane must always be installed. Before installation, the packages of bitumen shingles must be kept at a temperature above +15 °C for at least for 24 hours. When the roofing is being installed, the temperature must be higher than +10 °C and the weather must be dry. Bitumen roofing must not be installed in rain. Ensure proper adhesion of all the seams/overlaps by walking on them, for example. Before starting the installation of the roofing, ensure that the substructure is properly and sufficiently ventilated. The material can be laid onto a substrate of rough tongued and grooved boards or moisture proof tongued and grooved construction panels. The substrate must be even and dry and must not bend. The tools needed for the installation task are a hammer, tape measure, carpet knife with a hook blade, steel trowel and application gun. For gluing, use Kerabit Sealing Adhesive. Nail the sheet using hot-galvanised, broad-headed clout nails. Note that the nails must penetrate the wooden substrate. Before installation of an underlay membrane, attach triangle battens at the base of chimneys and upturns and, if needed, also on the verge. Bitumen roofing is installed from the eaves upwards in order to avoid backwater laps. Note that you should install the roofing above chimneys and major penetrations only after the penetrations are completed. A roofing installed in accordance with the installation instructions has no visible nails. Mix together at least five packages of shingles so that the roof colouring is more even. Any variation in hue of the shingles will even out over the course of one year due to UV radiation.

**Renovation sites:** If the old bitumen roofing is not removed, it must be checked that the roof ventilation is working, the substructures are in order, and the substrate is flat. In such a case, a new underlay membrane and bitumen shingles can, if needed, installed over the old roofing. Any folds/bulges must be split and attached to the surface using adhesive and nailing before the new roofing is laid. The nail must penetrate the wooden substrate.

Eaves (Figures 1-5): After the installation of the underlay membrane, Kerabit eaves flashing is installed on the lower eaves.

There are three options for verges: Kerabit eaves flashing (Figure 3), Kerabit eaves flashing with ridge (Figure 4) and Kerabit verge flashing for triangle batten (Figure 5).

**Valley (Figure 6):** Fasten the self-adhesive Kerabit Valley Underlay Membrane in the same colour as the bitumen shingle and nail by the edges at intervals of 100 mm. At a later stage, after installation of the eaves strip, the shingles are overlapped over the valley membrane by at least 150 mm. An area without shingles, at least 150 mm wide, is left at the bottom of the valley. The ends of the shingles are cut to the line of the valley with the help of a floating rule, and carefully fixed with sealing adhesive in a 150 mm wide section, gluing layer by layer. Nailing over the valley membrane is not recommended.

**Eaves strip (Figure 7):** Next, attach the self-adhesive Kerabit Eaves Strip over the lower eaves flashing. Place the lower edge of the strip approximately 10 mm upward from the fold of the flashing. Remove the plastic film covering from the lower surface of the eaves strip and press the strip down. The extensions of the strips are installed firmly against each other.

**Installation of bitumen shingles (Figures 8 and 9):** Start the fixing of bitumen shingles at the centre of the lower eaves. Remove the plastic film protecting the adhesive surface of the bottom edge of the shingle (Note: the plastic film at the top edge is left in place), align the tips of the shingle with the bottom edge and press the shingle in place. Make sure the tabs of the bitumen shingles adhere properly. Where necessary, gently warm the adhesive surface using a hot air blower. Each Kerabit K+ and S+ bitumen shingle is fixed with four and Kerabit L+ with five clout nails approximately 20 mm from the top edge of the slots, not from the top edge of the shingles. Make sure that the nails penetrate the underlay membrane. Kerabit K+ and S+: After nailing down the first row of bitumen shingles, position the tabs of the next row with the slots of the first row. This way, the new row of shingles covers the nails of the previous row. **Note! Kerabit L+:** After you have nailed the first row of bitumen shingles, position the shingles. The middle slot fastener must be nailed close to the right side of the slot. Ensure that the rows of shingles are installed straight by using a floating rule or line that extends for the length of the pane. Remember to keep an eye on the symmetry of the pattern as the installation progresses (does not apply to L+). At the verge, glue the ends of the shingles to the eaves flashing over the distance of at least 100 mm.

Lead-throughs, chimney and upturns (Figures 10-14): Cut the membrane strips needed for the upturns from Kerabit Valley Underlay Membrane or Kerabit Titan.

**Ridge/Hip (Figure 15):** The ridge is made of Kerabit Ridge shingles. The nails of the topmost row of shingles must go below the ridge shingles. Detach the ridge shingles (3 pcs) from each other by bending. Remove the plastic cover, bend and press the ridge shingle in place. Fix with four nails at the end so that the nails go under the subsequent ridge shingle (overlap the ridge shingles by approximately 50 mm). The final ridge shingle is attached using only sealing adhesive and not nails. The hip is implemented in the same manner, starting with the lower eave.

**Finishing the roof after installing shingles:** Protect the chimneys and other upturns after the installation of the shingle roofing with sheet metal cladding, for example, so that water cannot get between the membrane and the vertical surface. If any fixings must be installed on the roof afterwards, ensure their waterproofing.

**Roof maintenance instructions:** Check the condition of the roof twice every year and clean it, if needed. To remove moss and lichen, Kerabit Bio Plus moss remover, for example, may be used. Fix any damage immediately. If you remove snow from the roof, reduce it layer by layer, and leave a snow layer of approximately 10 cm thick.



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