

# INSTALLATION INSTRUCTIONS FOR UNDERLAYS INSTALLED ON FULL BOARDING

Katepal SteelBase // Katepal SuperBase Grip Green // Katepal HeavyBase // Katepal LiteBase 500 // Katepal XtraBase

All Katepal underlays are made from SBS-modified bitumen and polyester or glass fibre reinforcement. The upper surface of the product is coated in sand, fabric or grip granules depending on the intended use. The bottom surface is coated in either sand or fabric. Traditional sand-covered products are suitable for many applications.

Fabric-covered products are specially designed for sheet metal roofs where metal sheets are installed directly on the underlay without any ventilation space between the underlay and metal sheet. The fabric won't damage the metal sheet when it expands and contracts due to thermal expansion.

Grip granules are not slippery under foot, which increases work safety, especially when working on steep roofs.

All Katepal underlays have watertight adhesive edges.

## KATEPAL SUPERBASE GRIP GREEN

An underlay sheet for roofing shingles and other applications, especially on steep roofs. The upper surface has a grip granule coating to prevent slipping and the underside is coated in fine sand. There are adhesive edges on both sides. With Katepal SuperBase Grip Green, the roof can remain with just the underlay for up to 12 months.

## KATEPAL STEELBASE

Katepal SteelBase is an underlay sheet designed for metal roofs where the metal sheets are installed directly onto the underlay without a ventilation space in between. It is covered with fabric on both surfaces and has adhesive edges on both sides. We particularly recommend using Katepal SteelBase on low-pitched metal roofs. With Katepal SteelBase, the roof can remain with just the underlay for up to 12 months.

## KATEPAL HEAVYBASE

Katepal HeavyBase is an underlay sheet for metal and tile roofs. It can also be used as an underlay for multilayer bitumen roofs. Both surfaces of the product are coated in fine sand and it has adhesive edges on both sides. With Katepal HeavyBase, the roof can remain with just the underlay for up to 12 months.

## KATEPAL XTRABASE

Katepal XtraBase has a sand-coated surface for use as an underlay for bitumen roofing shingles. It is also suitable as an underlay for tile and metal roofs. The final roofing material or other structures securing the underlay must be installed immediately after Katepal XtraBase. If there is any delay, the underlay must be secured with additional structures or weights to prevent damage from wind load.

## KATEPAL LITEBASE 500

Katepal LiteBase 500 is designed to be used as an underlay on solid substrates (e.g., tongue-and-groove boards or plywood) for tile and metal roofs. As with Katepal SteelBase, metal sheet roofing can be installed directly on top without a separate ventilation gap. For particularly low-pitched metal roofs (less than 1:7), we recommend using Katepal SteelBase. Katepal LiteBase 500 can also be installed as a hanging underlay between roof trusses. With Katepal LiteBase 500, the roof can remain with just the underlay for up to one month.

## GENERAL INFORMATION

Underlay sheets can be installed either parallel to the ridge (horizontal installation) or perpendicular to the ridge line (vertical installation). We recommend vertical installation, especially for steeper roofs where it makes installation easier. The roofing nails used for installation must penetrate the wooden substrate of the roof. The Katepal K-36 sealing compound should be applied in a 0.5–1 mm layer. Thicker layers may damage bitumen roofing.

Both the temperature during installation and the temperature of the product should be at least +10°C. If installing in lower temperatures, the product's adhesive edges should be heated (for example, with a hot air gun) to ensure good adhesion. If necessary, rolls should be stored indoors prior to installation.

With Katepal SuperBase Grip Green, Katepal HeavyBase and Katepal SteelBase, the roof can remain with just the underlay for up to 12 months before installing actual waterproofing. However, we recommend that the final waterproofing is installed as quickly as possible after the underlay is installed. All chimneys, flues and other roof penetrations must be completed before installing the waterproofing.

## SUBSTRUCTURE

The substrate for the roofing must be stable, rigid, smooth and dry. It can be made of air-dry, rough-sawn tongue-and-groove boarding (approx. 95 mm wide) or moisture-resistant building panels. Please consult the supplier for minimum thicknesses for different substrate materials. Leave a sufficient gap between board or panel products to allow for possible moisture expansion.

## VENTILATION OF ROOF STRUCTURE

In the roof structure, the ventilation gap between the thermal insulation and the roof decking must be sufficient (usually at least 100 mm). The gap must be sufficiently open both below the eaves and as close to the ridge as possible. Ventilation grates, or underpressure vents at the ridge, should be used to ensure natural air circulation.

### 1. Valleys

The membranes parallel to a valley should always be installed before the underlay on the roof slope, with the midline of the sheet at the base of the valley. Nail the membrane to the substrate along the edges to ensure the sheet is tight along the valley base. The sheets on the slope should overlap the valley sheet by 15 cm and be glued to it using Katepal K-36 sealing compound.

### 2a. Eaves, horizontal installation

Align the underlay sheet along the eave so that it overhangs the edge by 1–2 cm. To avoid creases, it is important to install the underlay sheet in a straight line even if the eaves are not completely straight. Only remove the protective film from the top surface after having aligned the next sheet.

### 2b. Eaves, vertical installation

Align the edge of the underlay sheet so that the adhesive edge on the underside overhangs the verge and can be bent to extend 1–2 cm below the substrate of the roof decking to form a drip edge. Ensure the sheet is straight to avoid creasing. Only remove the protective film from the top surface after having aligned the next sheet.

### 3. Aligning and fixing

Start the installation by aligning the first sheet with either the eave or the verge, depending on the direction of installation. Ensure the sheet is installed in a perfectly straight line. Pre-nail the adhesive edge through the protective film at approx. 1 m intervals and ensure the membrane is sufficiently tight. The next sheet should be aligned over the adhesive edge of the previous sheet and pre-nailed in the same way (Fig. 3a). Fold the free edge of the sheet away from the adhesive edge of the previous sheet. Remove the protective film and nail the pre-nailed edge to the substrate at approx. 10 cm intervals, along the middle of the adhesive strip (Fig. 3b). After this, remove the protective film from the underside of the upper sheet and press the edges firmly together. Ensure the overlapping sheet is straight and laid sufficiently tightly. Continue installation in this manner until you reach the ridge or opposite verge or valley (Fig. 3c). Katepal LiteBase 500 doesn't have protective film on the upper adhesive edge, so it can be nailed immediately at 10 cm intervals.

### 4. Underlay sheets lengthwise joints

Underlay sheets should be overlapped lengthwise by 15 cm. At lengthwise joints, cut a triangular piece from one corner of each sheet and nail the underlapping sheet to the substrate. Apply a 0.5–1 mm layer of Katepal K-36 sealing compound to the overlap area and press the overlapping sheet firmly into place.

### 5. Verge

If a triangular batten (Fig. 5a) or a bevelled board (Fig. 5b) is used along the verge, the edge of the underlay sheet should be turned down over the verge so that the bottom edge extends approx. 1–2 cm below the underside of the substrate to form a drip edge. To ensure the membrane sits tightly against the substrate without leaving a gap at the edge of the batten, first nail it to the bevelled edge of the batten and then to the vertical surface of the verge at approx. 20 cm intervals. When installing a steel roof on Katepal SteelBase or Katepal LiteBase 500, follow the waterproofing material manufacturer's instructions for verge installation.

### 6. Upturns

At upturns (chimneys, etc.), the underlay should be turned up to at least the top edge of the triangular batten and nailed in place. Use adhesive if necessary. Make the final upturn with a cap sheet (e.g., Katepal Pintari). When installing a steel roof on Katepal SteelBase or Katepal LiteBase 500, follow the waterproofing material manufacturer's instructions for upturns and pass-throughs.

### 7. Flanges of pass-throughs

Glue the flanges of pass-throughs tightly to the top of the underlay sheet using Katepal K-36 sealing compound and then nail them to the substrate.

### 8. Ridge

Cut the upper edge of the underlay sheet from the first slope along the ridge and nail it to the substrate. Fold the underlay sheet from the opposite slope over the ridge to overlap by approx. 10 cm. Glue the overlapping sheet down with Katepal K-36 sealing compound.

