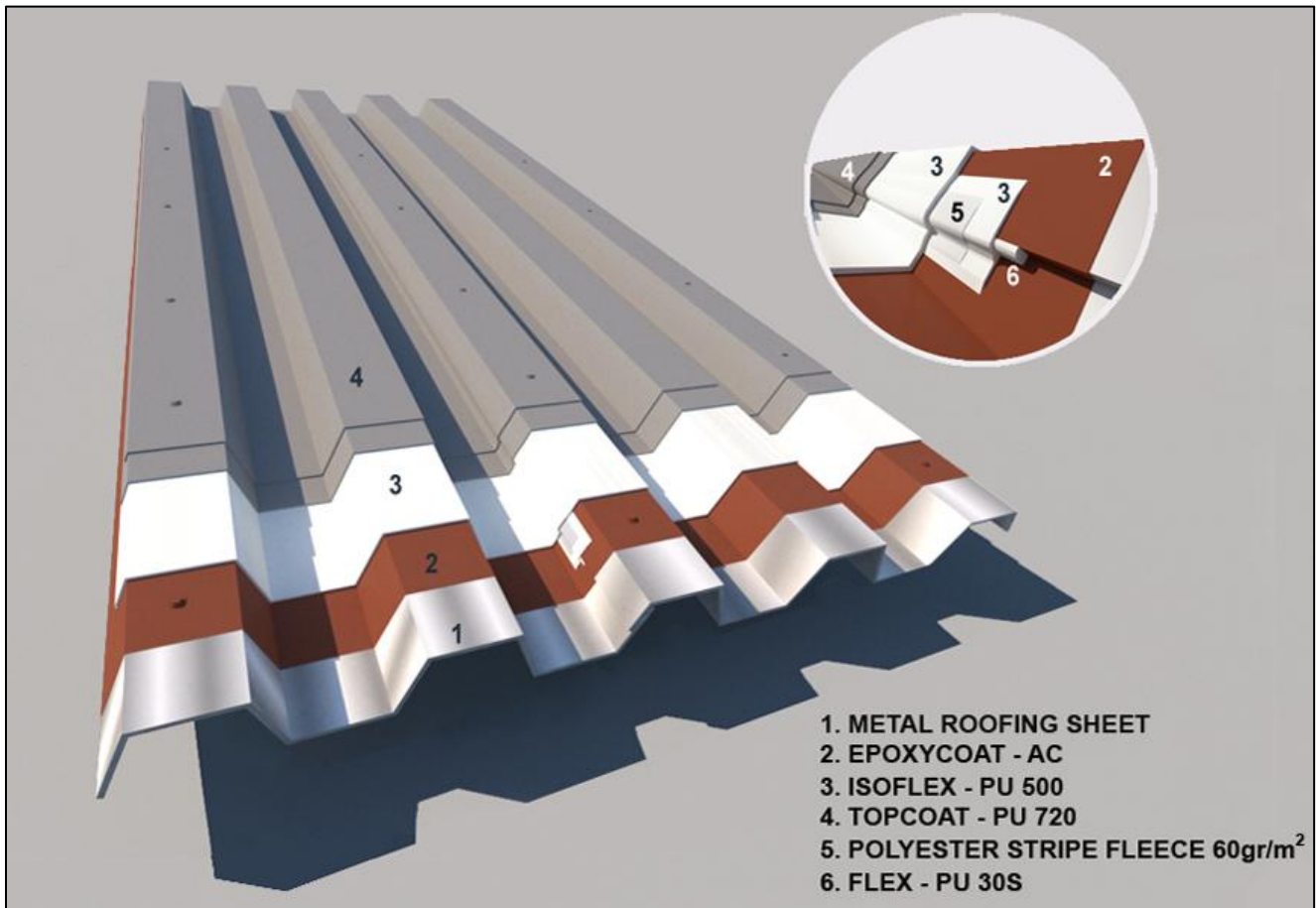


Waterproofing of metallic roof with a polyurethane liquid membrane and aliphatic polyurethane top coat



Related Materials

ISOFLEX-PU 500: One-component, polyurethane, waterproofing liquid membrane for flat roofs

TOPCOAT-PU 720: One-component, aliphatic, elastic, polyurethane top coat

EPOXYCOAT-AC: Two-component, anticorrosive epoxy primer

POLYESTER FLEECE 60 gr/m²: Polyester fleece for reinforcing waterproofing layers

FLEX PU-30 S/ FLEX PU-50 S: Polyurethane sealants

APPLICATION

Substrate preparation

The surface to be coated should be:

- Dry and stable.
- Free of materials that prevent bonding, e.g. dust, loose particles, grease etc.
- Free of rust or any corrosion that may prevent bonding.

According to the nature of the substrate, it should be prepared by brushing, grinding, sand blasting, etc. Following this, the surface should be cleaned from dust.

Primer application

EPOXYCOAT-AC is applied by roller, brush or spray in two layers. The second layer follows after the first has dried, but within 24 hours. Consumption: 150-200 g/m²/layer.

Application of ISOFLEX-PU 500 should follow within the next 24 hours.

Along the edges at the junction of the metal roof with vertical elements (parapet, stairwell termination, etc.), pipe joints, ventilation joints, metal element joints, connection-joints between the metal sheets or panels, screws, joints on the substrate (wider than 1 mm) have to be sealed with the polyurethane sealants **FLEX PU-30 S** or **FLEX PU-50 S**, 12-24 hours after the application of the epoxy primer.

Application of ISOFLEX-PU 500

It is recommended to reinforce ISOFLEX-PU 500 with the polyester fabric along the edges at the junction of the metal roof with vertical elements (parapet, stairwell termination, etc.), pipe joints, ventilation joints, metal element joints, connection-joints between the metal sheets or panels.

As soon as the epoxy primer EPOXYCOAT-AC has dried, a coat of the polyurethane waterproofing liquid membrane ISOFLEX-PU 500 is applied along the joints and, while it is still fresh, a 10cm wide strip of polyester fleece (60 g/m²) is embedded. ISOFLEX-PU 500 is totally applied on the remaining surface in a single layer. After 8-24 hours, depending on weather conditions, a total second coat of the polyurethane waterproofing liquid membrane ISOFLEX-PU 500 is applied. After 8-24 hours, depending on the weather conditions, a third layer is applied in the spots where reinforcement has been used for its full coverage.

Total consumption of the polyurethane, waterproofing liquid membrane, ISOFLEX-PU 500: 1.0-1.5 kg/m², depending on the substrate.

ISOFLEX-PU 500 could be applied also with the addition of ACCELERATOR 5000. ACCELERATOR 5000 is a special set accelerator for ISOFLEX-PU 500 that enables its application at low temperatures or in thicker layers. It also increases the thixotropy and mechanical strength of ISOFLEX-PU 500.

Application of the one-component, aliphatic, elastic polyurethane top coat, TOPCOAT-PU 720

As long as the last layer of the polyurethane, waterproofing liquid membrane for flat roofs, ISOFLEX-PU 500, has dried, the entire surface may be brushed with the aliphatic polyurethane top coat **TOPCOAT-PU 720**. The aliphatic polyurethane top coat TOPCOAT-PU 720 is applied by roller in two layers. The second layer is applied crosswise with respect to the first one, after 4-24 hours, depending on the weather conditions.

Consumption of the aliphatic polyurethane top coat **TOPCOAT-PU 720**: 0.20-0.25 kg/m², depending on the substrate.

NOTES

- Maximum consumption of the polyurethane waterproofing liquid membrane ISOFLEX-PU 500 should not exceed 750 g/m² per coat. With the addition of ACCELERATOR 5000 each layer should not exceed the 1.25 kg/ m².
- Consult the directions for safe use and precautions written on the packaging.
- ISOFLEX-PU 500 may be applied when the ambient temperature is 5 °C and rising, and the temperature of the substrate is a minimum of 3 degrees above the dew point. The maximum application temperature is approximately 35 °C. Low temperatures retard curing while high temperature accelerates curing. High values of humidity may affect the final finish of the membrane.