

## ALSAN RS Floor Insulation System

### Areas of application

The ALSAN RS Floor Insulation System with its two courses consisting of an insulating layer and a load-distribution layer is used to prevent cold (thermal) bridges on surfaces that are walked on, i.e. balconies, loggias or roof terraces. One of the following systems can then be applied on top:

ALSAN RS Waterproofing System  
ALSAN RS Waterproofing System under other surfaces  
ALSAN RS Roof Waterproofing System

### Product quality

Insulating adhesive:

Commercially available insulating adhesive from builders' merchants

Insulation:

At least extruded rigid foam boards with rabbeted edges

Load-distribution layer:

Moisture-resistant and compression-resistant boards with tongue and groove, e.g. Duripanel boards or similar

Disk anchors:

Commercially available anchors from builders' merchants

### Application conditions

The product can be installed at substrate and ambient temperatures between + 3 ° min. and + 35 ° max.

### Preparation of the substrate

The substrate must be sound and dry. If the substrate is very damp, relief holes should be drilled (downwards or to the side) to allow the substrate to dry out subsequently. It must be possible for the tensile stress of the disk anchors (see below) to be absorbed.

The suitability of the substrate should always be tested on site.

### Substrate pre-treatment

Primer does not need to be applied underneath the insulation; primer should be applied in the areas of upturns, junctions etc. above the load-distribution layer in accordance with the specifications for the selected waterproofing system.

Rough areas, differences in height etc. must be filled with ALSAN EPR Mortar or mineral-based products to suit the width and size of the problem areas so that a flush surface is produced.

Working joints are covered with the insulation. Expansion joints are incorporated in the insulation system.

## Installing the insulation system

### Installing the insulation

- Insulation for the main area

First mix the insulating adhesive so it is ready for use, then apply it either in spots and/or beads to the rear of the insulation board as specified by the product guidelines. Then place the insulation board on the substrate, gently press it into position and align it with a spirit level or straight edge (height, slope etc.). It is important that the surface is even so that the slabs subsequently applied can achieve a full bond.

Interval: approx. 30 minutes

- Insulation at the ends

The ends are insulated either with PU insulation boards laminated with fleece on both sides, which can be coated directly, or with extruded, rigid polystyrene boards, which have an EP coating with a fleece inlay as separating layer (see alternative load-distribution layer below).

In both versions the boards are directly anchored to the substrate.

Once the adhesive has hardened and the end insulation has been fitted, the open joints between the slabs or in front of vertical structural elements are filled, e.g. with assembly foam.

## APPLICATION GUIDELINES

### Installing the load-distribution layer

- Load distribution achieved via board surface

The boards are laid on top of the insulation, with adhesive applied to the tongue and groove areas. The boards are then duly attached to the substrate by means of disc anchors. When anchoring the boards, attention must be paid to the excess length of board at the end insulation areas. To prevent the boards from bending, sufficient number of anchors (at least 4 anchors/m<sup>2</sup>) must be inserted and evenly spaced. All open joints around the edges of the boards must be filled with foam or solvent-free EP mortar. This prevents water penetrating through the system installed on top.

- Alternative using ALSAN EP Coating

In the case of very small projects or structural elements with many corners and intersections, load distribution can also be achieved by applying a layer of ALSAN EPR with a glass fibre mat (at least 600 g/m<sup>2</sup>) as inlay. The coating is then fully topped with fire-dried quartz sand 0.2 – 0.6 mm.

### Important - please note:

- The insulation and the boards used for the load-distribution layer should always be brought up as closely as possible to vertical structural elements and intersections.
- A plastic strip (at least 20 x 20 mm) should always be glued to the underside of the end insulation to act as a water drip and should be coated together with the rest of the system.
- If the system requires e.g. extreme pressure loads near the outer edges to be covered as well, then a bracket can be anchored in the end faces of the projecting board between the insulation for the main area and the end faces.

### Recommendation:

On account of the many possible versions and combinations, we recommend that you contact **SOPREMA AG** before the start of the project so that a solution that is technically problem-free and financially acceptable can be developed or specified. We can then supply the appropriate specification texts and project-related drawings.

### Joints

A loop of fleece saturated in ALSAN EPR is installed in the expansion joints incorporated into the insulating system to prevent re-activation and partial dissolving of the insulating material. The joint is then completed as described in the drawings for "ALSAN RS Joint Waterproofing". Strips of different widths are used in

keeping with the expected amount of movement. The subsequent coating of self-levelling mortar must not be applied to the expansion area if the joint movements are greater than 0.5 mm.

For more information please refer to the application guideline for the ALSAN RS Joint Waterproofing System and the relevant detail drawings.

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