

PRODUCT DATA SHEET

S-Vap HD SA

SELF-ADHESIVE VAPOUR CONTROL LAYER & CARRIER MEMBRANE

PRODUCT DESCRIPTION

S-Vap® HD SA is an elastomeric self-adhesive vapour control layer and carrier membrane made of polymer modified bitumen with an aluminium composite and glass combination inlay. The top surface has a sanded finish.

USES

As a VCL, S-Vap® HD SA can be applied over most common substrates such as concrete, metal decks, plywood, timber boards and/or oriented strand fibre board (OSB) deck.

As a carrier membrane, S-Vap® HD SA can be applied over primed Decotherm insulation.

Special application within adhered systems:

- Adhered system: Self-adhesion strength limits max wind uplift design load
- Combined adhered system: Self adhesion strength is part of wind uplift design

Temporary waterproofing layer: S-Vap® HD SA can also be used as temporary waterproofing layer, as top layer can be left exposed for up to 4 weeks.

Important: If used in an adhered roof build-up, as a VCL or carrier, additional installation requirements must be applied e.g. use of Primer 610/600 to achieve full self adhesion strength:

- Self adhesion strength on metal decks, in combination with Primer 610/600 max. design load of 3.2kN/m²
- Self-adhered on concrete deck in combination with Primer 610/600 max. design load 3.2kN/m².

Self-adhered on plywood/OSB deck in combination with Primer 610/600 max. design load 3.2kN/m².

CHARACTERISTICS / ADVANTAGES

- Ease and speed of installation, due to self-adhesive property of backing.
- Can be used in a totally adhered roof build-up. No additional fasteners required for securing the thermal insulation boards to the structural deck.
- Can be used as temporary waterproof layer for up to 4 weeks, as a top layer without the need for additional weight/ballast and/or mechanical fastening.
- Due to its high adhesion strength the VCL and carrier can withstand high wind loads; design load up to 3.2 kN/m².
- High adhesion/bonding strength leading to an air tight roof construction.
- High tearing resistance under foot traffic makes it ideal for use on profiled metal decks.
- High water vapour resistance makes it suitable in combination with all membranes.
- Wide application range, in regard to use in different system applications and/or in combination with different structural deck types, substrates.
- Improved fire resistance achieved by added flame-retardant.

Can be bonded on roof slopes and up vertical abutments.

APPROVALS / STANDARDS

- CE marking according EN 13970
- Reaction to fire according to EN 13 501-1
- Quality management system EN ISO 9001

PRODUCT INFORMATION

Chemical Base	Polymer modified bitumen with an aluminium composite and glass combination inlay and a PE-LD release liner.	
Packaging	Packing unit:	see price list
	Roll length:	15m
	Roll width:	1m
	Approx. Roll weight:	35kg
Appearance / Colour	Surface:	Sanded.
Shelf Life	The product must be installed within 12 months of production date.	
Storage Conditions	Store rolls in vertical position and protected against sunlight, rainfall, snow and heat. During cold weather the rolls shall be protected against frost.	
	Do not stack pallets of rolls during transport or storage.	
Product Declaration	EN 13970	
Length	15.00 m ($\pm 2\%$) EN 1848-1	
Width	1.00 m ($\pm 1\%$) EN 1848-1	
Effective Thickness	2.00 mm ($\pm 10\%$) EN 1849-1	
Straightness	Pass	EN 1848-1
Tensile Strength	$\geq 1200 / 1000$ N/50mm EN 29073-3	
Elongation at Break	$\geq 2\%$ EN 29073-3	
Reaction to Fire	Class E	EN ISO 11952-2: 2002, classification to EN 13501-1
Water Vapour Transimission	> 1000 m	EN 1931

SYSTEM INFORMATION

System Structure	Ancillary, complementary products according to local price list: <ul style="list-style-type: none">▪ Sika® Primer 610/600 on concrete, metal deck and plywood/OSB substrates▪ S-Vap HD SA applied over primed deck and upstands▪ Sika® C-250 Spray or Sika® Decostik SP®, to adhere specified insulation board onto S-Vap® HD SA▪ Decotherm - PIR or Mineral Wool insulation laid into insulation adhesive▪ Sika® Primer 610/600 on surface of Decotherm insulation - fully adhered system only▪ S-Vap HD SA applied over surface of insulation and upstands a carrier membrane▪ Application of specified liquid coating
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APPLICATION INFORMATION

Ambient Air Temperature	Temperature limits for the installation of the S-Vap® HD SA without warming: Ambient temperature: at least +10 °C min.
Substrate Temperature	Temperature limits for the installation of the S-Vap® HD SA without warming: Substrate temperature: at least +10 °C min.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

Before beginning to adhere the S-Vap HD SA®, the substrate must be checked (clean without any surface contamination, free of foreign objects and or surface toppings, oil and grease free, and dry).

APPLICATION

Fixing Method – VCL:

S-Vap® HD SA is adhered to the substrate. In case of a concrete, metallic or plywood/OSB substrate Primer 610/600 must be applied as substrate treatment, to achieve the required adhesion strength.

Concrete deck:

In plane concrete deck and or/levelled screed. Substrate shall fulfil general requirements and shall not contain any pointy and/or coarse-grained surface areas.

Primer 600/610 must be used in any case, at specified coverage, depending on surface smoothness and porosity, if used in an adhered system.

Plywood/OSB deck:

Substrate shall be clean, dry and primed first at the specified coverage rates, if used in an adhered system.

Corrugated metal deck:

Corrugated metal deck shall be clean, dry and free of oil, dust and grease. No primer is required.

Vertical areas / upstands and flashing

Flashings and terminations form the edges of the vapour control function and airtight layer; thus these must be executed with care (until top edge of the insulation boards).

Fixing Method - Carrier:

Decotherm® Insulation shall be properly installed, smooth, without steps at joints, clean, dry and free of oil, dust and grease. The boards must be primed with Primer 600/610 at the specified coverage rates and fully dried before application of S-Vap HD SA as the carrier.

When adhering S-Vap HD SA to itself, on an end-lap, or when terminating onto the sanded surface, a coat of primer 600/610 should be applied to that area of the sanded surface. The adhesive lap edge, provided on the top-side of the membrane, should always be completely covered by the next layer of lapping membrane.

APPLICATION METHOD / TOOLS

Before beginning to adhere the S-Vap HD SA®, the substrate must be checked (clean without any surface contamination, free of foreign objects and or surface toppings, oil and grease free, and dry). To ensure an adequate bond the minimum substrate or ambient air temperature should be 10°C.

On profiled metal decks, the sheets must be laid in the direction of the deck, where the side/longitudinal seams are fully supported, positioned on the top flange of the profiled metal deck. At the end of the roll, an additional 20 cm wide S-Vap® HD SA strip has to be adhered firmly on the already laid VCL sheets, positioned on centre and running perpendicular to the deck direction (laid rolls). This provides a firm backing to which the ends of the sheets can be adhered to.

S-Vap® HD SA seams (side and end laps) are formed with an overlap of 8 cm by self-adhesion, no additional primer needed. To achieve tightly sealed seams the laps must be rolled down firmly with a pressure roller (silicone roller) or by applying pressure.

If the S-Vap® HD SA serves as a temporary waterproofing layer (max. 4 weeks during construction) and is applied between 5°C and 10°C ambient temperature it is necessary to have all seams heated first (by hot air e.g. Leister Triac). From above (approx. 300°C with 5 m/min) before firmly rolled down with a pressure roller.

Roll out first S-Vap® HD SA in the direction of the metal profile. Following rolls must be rolled out and aligned with the line marking which marks the overlap area at 8 cm. Adhere the first part of the self-adhesive vapour barrier and peel away the release liner sideways.

At T-joints the edge of the middle, covered sheet is to be bevelled at 45°. Using a silicone roller, all laps including the steps at bevels are to be firmly pressed together after being adhered into position. All flashings, upstands and penetrating elements e.g. vent pipe must be closed airtight, whereby the S-Vap® HD SA must always be attached on the warm side of the insulation.

The full area of S-Vap® HD SA must be pressed into place immediately after adhering, using pressure roller or similar.

OSB and Plywood boards of more than 50 cm width are not primed at the joints. Leave a strip of max. 10 cm width free of primer each side of the joint, to facilitate smaller movements of the boards. Where the width of the OSB or Plywood boards is less than 50 cm, the boards are primed with Primer 610 to a full spread. If the S-Vap® HD SA layer is to serve as temporary waterproofing during construction (for up to 4 weeks), a slope of at least 1:80 must be provided to ensure drainage with no standing water. Roof drainage lines must be adequately sized.

LIMITATIONS

Installation works shall be performed only by Sika® Roofing Contractors.
S-Vap® HD SA is not suitable as permanent waterproofing. It is not designed as roofing membrane and therefore cannot replace the waterproofing membrane.

VALUE BASE

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

ECOLOGY, HEALTH AND SAFETY

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

TECHNICAL ENQUIRIES

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