

Soudatight SP

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Technical data

Basis		Synthetic dispersion
Consistency		Paste
Curing system		Physical drying
Skin formation* (23°C/50% R.H.)		Ca. 60 min
Density		Ca. 1,08 g/ml
Viscosity (Brookfield)		110.000 mPa.s → 130.000 mPa.s
Elongation at break	ISO 37	> 500 %
Drying time (23°C and 50% R.H.)		Ca. 24 - 48 h
Consumption*		Approx. 0.8 kg/m ² (1 mm layer thickness)
Fire reaction class	EN 13501-1	Class E (normal flammability)
Air permeability coefficient (in joint)	EN 12114	a ≤ 0,1 m ³ /(h.m.(daPa)n) c ~ 0 dm ³ /(s.(Pa)n)
UV light and weather stability		> 3 months
Water vapor permeability (Sd)	EN ISO 12572	43,10 m
Water vapor diffusion resistance factor (μ)	EN ISO 12572	43100
Radon diffusion coefficient (D)	ISO/TS 11665-13	1,3 x 10e-12 m ² /s
Radon resistance (RRn)	ISO/TS 11665-13	993 Ms/m
Temperature resistance**		-20 °C → 80 °C
Application temperature		5 °C → 45 °C

* These values may vary depending on environmental factors such as temperature, moisture, and type of substrates. ** This information relates to fully cured product.

Product description

Soudatight SP is a high-quality water-based polymer paste which, after drying, forms a seamless, airtight and vapour-retardant elastic membrane.

Properties

- Airtight
- Vapour retardant
- Radon barrier
- Certified Passive House Component (phA)
- Stays elastic after curing and very durable
- Forms a seamless membrane
- Very good adhesion on many porous materials
- Good adhesion on slightly moist substrates
- Good adhesion on slightly dusty substrates
- Can be painted, plastered or taped after drying
- EC-1 Plus label: very low emission

- M1 emission label
- ecobau certified: eco-1 label

Applications

For airtight, vapour retardant and radon resistant finishing of:

- Wall-floor connections
- Wall-ceiling connections
- Wall-wall connections
- Surfaces (no roof applications)
- Timber frame construction
- Window connections:
 - inside inner leaf (reveal area)
 - outside inner leaf (prior to application of the facade insulation)

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Packaging

Colour: dark blue (becomes black after drying),
White (without color change)

Packaging: 600 ml foil bag, 11 kg bucket, 16 kg bucket

Shelf life

At least 12 months in unopened packaging in a dry storage place at temperatures between +5 °C and +25 °C. Protect against frost.

Substrates

Substrates: all common porous surfaces in construction and renovation. The materials used by window manufacturers such as PVC, aluminium and wood. On the SWS window tapes (remove liner if present). Compatible with most EPDM and bitumen. The drying time may increase onto non porous substrates. Not suitable for glass, PE, PP and PTFE.

Nature: Clean and free of grease. Slightly moist or slightly dusty substrates are no problem.

Surface preparation: No pretreatment required. A preliminary adhesion test on every surface is recommended.

Joint dimensions

Cracks, joints or gaps < 5 mm can be coated with Soudatight LQ. Cracks, joint or gaps > 5 mm can be filled (with e.g. Flexifoam) or closed with Soudatextile in combination with Soudatight SP.

Application method

It is strongly recommended that Soudatight SP is brought to room temperature before use, otherwise its processing properties may be adversely affected. Stir well before use. Do not dilute with water or solvents. Soudatight SP is applied directly from the packaging onto the surface using airless or air-assisted spray equipment. The choice of spraying equipment, pressure, gun and spray tip depends on the application. Contact Soudal for further customized information. Apply the airtightness

paste undiluted and evenly in several layers (at least 2) on the substrate to a layer thickness of minimum 1 mm and maximum 3 mm. For the best possible coverage, the product is applied the second time under a different angle. It is recommended to apply the 2nd layer only after skin formation occurs at the first layer. The application thickness must be measured (wet) using a wet film comb. For window applications, ensure that the airtightness paste forms a seamless membrane of at least 3 mm on the window frame, over the flexible foam to ± 5 cm on the reveal area of the structural work. The use of masking tape (on the window frame) is recommended. This should, however, be removed shortly after the application of Soudatight SP, before curing. For wall-to-floor connections, apply the airtightness paste sufficiently high (to above the water barrier) to guarantee an overlap with the plaster. For other connections, ensure that Soudatight SP forms a seamless membrane over the joint with a minimum width of 3 cm on both sides of the joint.

Cleaning: Before curing, Soudatight SP can be removed with water from substrates and tools.

Repair: With the same material.

Health- and Safety Recommendations

Take the usual labour hygiene into account. Consult the label for more information.

Remarks

- Do not use in applications where continuous water immersion is possible.
- Soudatight SP should not be diluted.
- After curing and trimming Flexifoam, Soudatight SP can immediately be applied where with other PU foams it's necessary to wait 24h to 48h after trimming before applying Soudatight SP.
- Not suitable for dilatation or expansion joints unless in combination with Soudatextile.
- Limited UV-resistant.

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Standards and certificates

- BBRI-report DE621XB622 LMA 5748: Determination of the adhesive strength of a liquid membrane (Soudatight SP) on different types of substrates.
- BBRI-report DE621xB622-2 LMA 5748: Determination of adhesive strength of gypsum plaster applied to a substrate (breeze blocks) treated with Soudatight SP.
- BBRI-repport DE621xB622-3 LMA 5748: Determination of the water-vapor-permeability-properties of Soudatight SP.
- MO-01/1 Bauteilprüfung (System test: air- and driving rain-tightness of a sealing between window and wall) - (IFT Rosenheim)
- Air permeability (c-value) according to EN 12114 (in conformity with BRL 2804-1) determined by SKG-IKOB, Geldermalsen
- Passive House certified component determined by PHI, Darmstadt
- Czech Technical University Prague test report - Determination of the radon diffusion coefficient in accordance with ISO/TS 11665-13
- EC-1 PLUS label: very low emission
- M1 Emission classification of building materials
- eco-1 label: meets the highest requirements of eco-building, determined by ecobau Zürich

Liability

The content of this technical data sheet is the result of tests, monitoring and experience. It is general in nature and does not constitute any liability. It is the responsibility of the user to determine by his own tests whether the product is suitable for the application.

Environmental clauses

Leed regulation:

Soudatight SP conforms to the requirements of LEED. Low –Emitting Materials: Adhesives and Sealants. SCAQMD rule 1168. Complies with USGBC LEED 2009 Credit 4.1: Low-Emitting Materials – Adhesives & Sealants concerning the VOC-content.

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