Technical Data Sheet

Sto-Insulation Board PIR BLF-S

Insulation board made of polyurethane block foam in accordance with EN 13165

Characteristics

Area of application

- exterior
- as insulation board in external wall insulation systems
- bonded or bonded and anchor-fixed
- in StoTherm PIR
- cannot be used in the ground

Properties

- declared thermal conductivity λ_D: 0.023 - 0.025 W/(m*K)
- fire classification E in accordance with EN 13501-1

Format

- 100 x 50 cm
- edges: straight
- for board thicknesses, see product guide

Information/notes

- type of application WAP (rendered external insulation of walls) in accordance with DIN 4108-10
- normal combustibility in accordance with DIN 4102

Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Water vapour diffusion-equivalent air layer thickness μ	EN 12086	50 - 110	
Water absorption	EN 1609	< 0.3 kg/m²	
Rated value of thermal conductivity λ		0.026 W/(m*K)	20 ≤ d < 80 mm
Rated value of thermal conductivity λ		0.025 W/(m*K)	80 ≤ d < 120 mm
Rated value of thermal conductivity λ		0.024 W/(m*K)	120 ≤ d < 300 mm
Tensile strength perpendicular to faces	EN 1607	≥ 100 kPa	
Declared thermal conductivity λ_D		0.025 W/(m*K)	20 ≤ d < 80 mm
Declared thermal conductivity λ_D		0.024 W/(m*K)	80 ≤ d < 120 mm

Technical Data Sheet
Sto-Insulation Board PIR BLF-S

Declared thermal conductivity λ_D	0.023 W/(m*K)	120 ≤ d < 300 mm

The characteristic values stated are average values or approximate values. Due to the natural raw materials in our products, the stated values can vary slightly in the same delivery batch; this does not affect the suitability of the product for its intended use.

Substrate

Requirements

The substrate must be level, firm, dry, free from grease and dust and suitable for adhesive.

A qualified professional needs to examine the long-term compatibility of any existing coatings with the adhesive used.
It is possible to bridge unevenness of up to 1 cm/m on bonded EWIS and up to 2 cm/m on bonded and anchor-fixed EWIS. Level any larger irregularities mechanically or by using a render in accordance with EN 998-1.

Preparations

In accordance with the application regulations regarding adhesive compounds.

Application

Consumption

Type	Approx. consumption	
	1.00	m²/m²

Material consumption depends on the application, substrate, and consistency, among other factors. The stated consumption values are only to be used as a guide. If required, determine precise consumption values on the basis of the specific project.

Application

Applying adhesive to the insulation board manually/by machine:
Spot/edge bonding:
Apply adhesive all around the edges in a strip approx. 5 cm wide. Apply three dabs of adhesive the size of small plates to the centre of the board. The adhesive contact surface must be at least 40 %.
Full-surface bonding: Only possible on smooth substrates; apply the adhesive using a notched trowel.

Applying adhesive to the wall by machine:
Beaded application: Adhesive contact surface of at least 60 %, max. adhesive bead distance 10 cm. Comb the bonding mortar over the entire surface using a notched trowel immediately before installing the insulation boards.

Fix the insulation boards to the pre-treated substrate in a bond from bottom to top, aligned flush, even, and tight butted. Always ensure that no bonding mortar is on the front edge and long sides of the insulation board (does not apply to Sto-Turbofix). Create a staggered offset in board thickness on all corners of the building (offset joints) and form corners so they are right-angled (perpendicular)

	and flush. For substrates that are suitable for bonding, but have an insufficient load-bearing capacity (tensile strength < 0.08 N/mm²): after the adhesive has dried enough, additionally fix the insulation boards with approved collared dowels as defined in the structural engineering verification. For further details, see the corresponding system approvals. To achieve a level and smooth surface and to treat surfaces damaged by UV radiation/sunlight, sand surfaces with a sanding board after the adhesive has dried enough. Reinforcement: Observe the current Technical Data Sheet of StoLevell Novo. Ensure a minimum layer thickness of 10,0 mm. Facade openings: Cut insulation boards to size (e.g. cut notches as necessary) and plan their overall positions, because the insulation board joints must not protrude beyond the corners of the openings in the facade. Board joints: Fill any gaps or open butt joints between the insulation boards with strips of insulation material, if necessary with Sto-Gun Foam SE (for joint widths of up to 5 mm). Structural expansion joints: Existing expansion joints in the building must also be carried over into the EWI system.
Notes, recommendations, special information, miscellaneous	Protect insulation boards mounted on the facade from humidity and coat them as soon as possible with a reinforcing compound/base coat. Damaged insulation boards must not be installed.
Delivery	
Packaging	bundle
Storage	
Storage conditions	Store in dry conditions. Protect from direct sunlight.

Technical Data Sheet
Sto-Insulation Board PIR BLF-S

Certificates/approvals

	ETA-17/0041	StoTherm PIR European Technical Approval

Identification

Product group	Insulation board
Safety	Observe the Safety Data Sheet!

Special notes

The information in this Technical Data Sheet serves to ensure the product's intended use, or its suitability for use, and is based on our findings and experience. Users are nevertheless responsible for establishing the product's suitability and use.
Applications not specifically mentioned in this Technical Data Sheet are permissible only after prior consultation. Where no approval is given, such applications are at the user's own risk. This applies in particular when the product is used in combination with other products.

When a new Technical Data Sheet is published, all previous Technical Data Sheets are no longer valid. The latest version is available on the Internet.

Sto SE & Co. KGaA
Ehrenbachstr. 1
79780 Stühlingen / Germany
Phone: +49 7744 57-0
Fax: +49 7744 57-2178
Infoservice.export@sto.com
www.sto.com