

TECHNICAL DATA SHEET

30088

WDVSMART EPS 034



AREA OF APPLICATION

WDVSmart EPS 034 insulation board is made from expanded polystyrene foam with straight-edged edge formation and compliant with EN 13163. The insulation boards meet the enhanced requirements of the IVH directive for bonded (anchored) WDVSmart systems. For use in interiors and exteriors.

PROPERTIES

- Nominal value λ_D 0.034 W/(mK)
- Ageing-resistant
- High transverse tensile strength
- Limited combustibility
- Shrinkage-free
- Free from CFC, HCFC
- Meets the stringent requirements of the Verband für Dämmsysteme, Putze und Mörtel e.V. (VDPM) (Germany)
- Compliant with the enhanced requirements of the Industrieverband Hartschaum e.V. (IVH) (Germany)

COLOUR SHADE: grey

CONTAINER: 100 x 50 cm

COVERAGE:

Version		Coverage
2 cm	12.0 m ² /bundle	1 m ² /m ²
3 cm	8.0 m ² /bundle	1 m ² /m ²
4 cm	6.0 m ² /bundle	1 m ² /m ²
5 cm	4.5 m ² /bundle	1 m ² /m ²
6 cm	4.0 m ² /bundle	1 m ² /m ²
8 cm	3.0 m ² /bundle	1 m ² /m ²
10 cm	2.0 m ² /bundle	1 m ² /m ²
12 cm	2.0 m ² /bundle	1 m ² /m ²
14 cm	1.5 m ² /bundle	1 m ² /m ²
16 cm	1.5 m ² /bundle	1 m ² /m ²
18 cm	1.0 m ² /bundle	1 m ² /m ²
20 cm	1.0 m ² /bundle	1 m ² /m ²
22 cm	1.0 m ² /bundle	1 m ² /m ²

24 cm	1.0 m ² /bundle	1 m ² /m ²
26 cm	1.0 m ² /bundle	1 m ² /m ²
28 cm	1.0 m ² /bundle	1 m ² /m ²
30 cm	1.0 m ² /bundle	1 m ² /m ²
32 cm	0.5 m ² /bundle	1 m ² /m ²
34 cm	0.5 m ² /bundle	1 m ² /m ²
36 cm	0.5 m ² /bundle	1 m ² /m ²
38 cm	0.5 m ² /bundle	1 m ² /m ²
40 cm	0.5 m ² /bundle	1 m ² /m ²

Edge design	Straight-edged
Colour-shade	grey

AREA OF APPLICATION

GENERAL RULES:

The substrate must be prepared and the coating work performed in accordance with the state of the art. All coatings and preliminary work should always be geared towards the project and the requirements it is exposed to. Please also observe the current BFS data sheets, published by the German Federal Committee for Paints and the Protection of Objects. Also see German construction contract procedures (VOB), Part C, DIN 18363, Paragraph 3 "Painting and coating work". Treating/removing layers of paint by sanding, welding, burning off, etc. can cause harmful dust and/or vapours. Only carry out work in well-ventilated areas. Use appropriate breathing apparatus/protective equipment, if necessary. All substrates must be clean, dry, load-bearing, and free from release agents. Substrates must be checked in terms of their load-bearing capacity and suitability for subsequent coatings. If necessary, create a test surface and test the adhesion. Substrates must be checked in terms of their load-bearing capacity and suitability for subsequent coatings. If necessary, create a test surface and test the adhesion.

TECHNICAL DATA:

	Data	Unit	Standard/appraisal
Thermal conductivity group	035		
Declared thermal conductivity λ_D	0.035	W/(m ² K)	
Water vapour diffusion/ μ value	20/50		EN 13163
Tensile strength perpendicular to the faces	≥ 100	kPa	EN 1607
Shear load resistance	≥ 50	kPa	DIN EN 12090
Shear modulus G	≥ 1,000	kPa	DIN EN 12090
Building material class in accordance with DIN	B1		DIN 4102
Building material class in accordance with EN	E		DIN EN 13501 -1

SUBSTRATE

The substrate must be dry, clean, stable, and load-bearing.

SUBSTRATE PREPARATION:

Efflorescence, sintered layers, and other release agents must be removed. Remove coarse mortar burr, level significant unevenness with suitable rendering and plastering mortar. Levelling with

WDVSMART K+A UniMörtel, WDVSMART K+A Mörtel Weiss might be possible depending on size. Check existing plaster and render for cavities and touch up. Remove all traces of non-load bearing plaster/render and coatings. Unevenness of up to 1 cm on bonded systems and up to 2 cm on bonded and anchor-fixed systems may be bridged.

Once the levelling mortar has dried, work can continue as normal. Observe the technical data for the mortar. You will also need to observe the technical data for the bonding mortar you have chosen. Anchor fixing may be necessary depending on the type of substrate.

HIGHLY ABSORBENT SUBSTRATES

Prime with SÜDWEST InnenGrund, SÜDWEST HydroGrund, or SÜDWEST ThixGrund (depending on the area of use) and treat the substrate accordingly. Solvent-containing deep-acting primer is not suitable in the external wall insulation system. Read and follow the Technical Data Sheet for the corresponding adhesive compound.

APPLICATION

BEAD/SPOT BONDING:

A strip of adhesive compound approx. 5 cm wide at the edge of the board, plus three palm-size globs along the longitudinal axis of the board. The adhesive surface must be a minimum of 40 %.

ADHESIVE APPLICATION BY MACHINE:

5 cm adhesive beads spaced max. 10 cm apart. The adhesive must be combed through with a notched trowel immediately before installing the boards. Adhesive contact surface minimum 60 %.

FULL-SURFACE BONDING:

Only possible on smooth substrates. Application with a notched trowel on the back of the board. Note the technical description of the corresponding product.

APPLICATION TEMPERATURE:

Surface and ambient temperatures must not fall below +5°C or exceed +30°C during application and drying.

APPLICATION NOTES:

Ensure compliance with applicable legislation and directives (e.g. building regulations, EnEV, Buildings Energy Act in Germany, etc.), BFS data sheet no. 21, information from the Fachverband

Wärmedämmverbundsystem in Germany, and the relevant EWIS system approval, as well as the technical approval for the anchors. Other directives must also be followed, e.g. BFS data sheet no. 19 and the following, as well as other applicable arrangements for plastering work.

SPECIAL INFORMATION

Not for use in soil.

PRODUCT-SPECIFIC INFORMATION

Do not bring into contact with solvents, ensure protection against moisture. Bond and press on the insulation boards tight-butted in a bond from bottom to top. Ensure flush and perpendicular installation. Use the same insulant to close unavoidable gaps (over the entire depth of the insulant layer). Defects up to 1.0 cm can be filled with filler foam. Do not apply adhesive to the long and front sides of the boards. Overlap building corners.

Fire protection measures must be observed. Please ensure compliance with all current legal directives; unbiased information is also available from the Fachverband Wärmedämmverbundsysteme in Germany.

For substrates that do not have sufficient load bearing capacity (bond strength < 0.08 N/mm²), the bonded insulation boards must be additionally fixed with anchors after drying. It is also advisable to fix surfaces that have previously been coated with facade paint with anchors. Here too, the minimum bond strength of 0.08 N/mm² applies. In case of doubt, create a test surface with bonded insulation boards. Prior to reinforcement, the insulation boards should be allowed to dry sufficiently and then sanded with a sanding board for external wall insulation systems. This will level the surface and restore board surfaces that have previously been damaged by UV light. Make sure that there are no cross joints and that the joints do not continue vertically. The insulation boards must be laid in an offset pattern.

Structural expansion joints must be incorporated into the system. Until they are reinforced, the insulation boards must be protected against direct solar radiation, excess heating up, and other

effects of the weather. Depending on the intensity of the exposure, such protection might need to be in place until the final layer of plaster or render is applied. Insulation boards have a tendency to deformation when exposed to excess heat. The WDVSmart EPS 034 insulation board is not suitable for use in areas that are close to the ground and at risk from moisture.

APPROVALS

Z-33.41-955 WDVSmart EPS bonded
Z-33.43-956 WDVSmart bonded + anchor-fixed
New WDVSmart lamella bonded

STORAGE

Store dry, protected against moisture. Do not expose to the effects of the weather and UV without protection. Store in enclosed rooms or under shade.

DISPOSAL

Sorted by type and in compliance with the applicable legal directive governing waste polystyrene.

GENERAL SAFETY ADVICE

Good ventilation must be ensured while paints and varnishes are being applied and are drying. Keep away from food, drink, and animal feed. Avoid contact with skin and eyes. Do not breathe in dust during sanding work. Keep out of reach of children. Do not allow to enter ground water, bodies of water, or the sewer system in undiluted or large quantities. Further information and the current SDS are available at www.suedwest.de.

TECHNICAL CONSULTATION

Please contact our technical customer service team (06324-709-0) if you have any questions that have not been answered in this Technical Data Sheet or relate to a specific project. We would be happy to provide further assistance.

DISCLAIMER

We are committed to taking the utmost care. However, we are only able to provide general information based on our own experiences, developments, and investigations, and these naturally cannot take the individual conditions of a project (substrates, weather conditions, other conditions) into account. The applicator is therefore obliged to maintain

their knowledge in accordance with the state of the art and act responsibly. Our employees are available to provide specific advice and will be happy to do so.

We accept no responsibility for the use of the product in combination with other products. The data provided in this Technical Data Sheet does not constitute binding information or liability.

Furthermore, suspension or the appearance of a subsequent edition will invalidate this Technical Data Sheet; information about this can be accessed at any time on our website:
www.suedwest.de.

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