Technical Data Sheet
Sto-EPS Board PS15SE 040

Insulation board made of expanded polystyrene foam in accordance with EN 13163

Characteristics

Application
• For exterior use
• As insulation board in external wall insulation systems
• Fixing, bonded or bonded/dowelled
• In the StoTherm Classic and StoTherm Vario facade insulation system
• Not useable in the soil

Properties
• Thermal conductivity group 040
• Fire classification E in accordance with EN 13501-1
• Free of CFC and HCFC
• Shrinkage-free

Format
• 100 x 50 cm (Covering dimensions: 99,0 x 49,0 cm)
• Edges: straight or tongue and groove offset
• For board thicknesses, see product guide

Specific characteristic/Remarks
• Application type WDV in accordance with DIN 4108-10
• Of limited combustibility to DIN 4102
• In accordance with the guidelines of the Fachverband Wärmedämmverbundsystem e.V. - qualities beyond standard requirements

Technical Data

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Norm / Test Prescript</th>
<th>Value / unit</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor µ for resistance to water vapour diffusion</td>
<td>EN 12086</td>
<td>20 - 50</td>
<td></td>
</tr>
<tr>
<td>Water absorption</td>
<td>EN 1609</td>
<td>&lt; 1 kg/m²</td>
<td></td>
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<tr>
<td>Thermal conductivity rated value λ</td>
<td>EN 1607</td>
<td>0,040 W/(m²k)</td>
<td>in accordance with technical approval of the manufacturer</td>
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</tbody>
</table>

The characteristic values stated are average values or approx. values. We use natural raw materials in our products, which means that the stated values can vary slightly in the same delivery batch; this does not affect the suitability of the product for its intended purpose.

Substrate

Requirements
The substrate must be firm, level, dry, load bearing, free from grease and dust and suitable for bonding.

Permanent compatibility of existing coatings with the adhesive must be examined
Unevenness of up to 1 cm/m at bonded EWIS as well as unevenness of up to 2 cm/m at bonded and dowelled EWIS can be bridged. Major unevenness must be equalized mechanically or levelled out with a render in accordance with DIN EN 998-1.

**Preparation**
In accordance with the processing requirements of the adhesive compounds.

**Application**

<table>
<thead>
<tr>
<th>Consumption</th>
<th>Type of application</th>
<th>Consumption approx.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straight-edged</td>
<td></td>
<td>1,00</td>
</tr>
<tr>
<td>Tongue &amp; groove</td>
<td></td>
<td>1,04</td>
</tr>
</tbody>
</table>

The spreading rate of the material depends on the application method, substrate and consistency, amongst other factors. The stated spreading rate is only to be used as a guide. Where required, precise spreading rates should be established on the respective property.

**Application**
By means of manual / machine adhesive application to the insulation board:
Spot-edge adhesion:
Adhesive strip on the board edge, approx. 5 cm wide and min. 3 big adhesive dots in the board centre. The contact area for bonding must be at least 40% of the board size.
Full-surface bonding:
Only possible for level substrates, adhesive application with toothed trowel.

Machine adhesive application to the wall:
Bead-shaped application:
The contact area for bonding must be at least 60% of the board size; the maximum distance of the adhesive beads is 10 cm.
The bonding mortar will be combed full-surface by a toothed trowel imminent the application of the insulation boards.

Apply insulation boards to the pre-treated substrate in masonry bond pattern, from bottom to top, correctly aligned, absolutely level, and tightly butt-jointed. It must be ensured, that no bonding mortar will be applied on the end- and long side of the boards (this does not affect Sto-Turbofix). Dovetail joints to the thickness of the board should be created at all building corners (staggered joints), and the plumb and building lines must be matched exactly when creating corners.
Insulation boards applied with adhesive must be fixed additionally using approved plate dowels according to static engineering requirements onto adhesive-suitable substrates without load-bearing capacity (adhesive tensile strength < 0,08 N/mm²) after an adequate drying time of the adhesive. Further details see corresponding system approvals.

The surface must be grinded with an emery board after an adequate drying time of the adhesive to achieve an even surface and in case of damaged surface due to UV radiation/ sunlight.

Fire protection measures for boards with greater thicknesses (100 mm < d ≤ 300 mm) to ensure limited combustibility if necessary:
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a. all around fire strip
b. lintel protection on building openings

See Technical System info 6 from the “Fachverband Wärmmedämm-Verbundsysteme e. V.” for further information concerning the application.

Openings in facades:
To avoid the continuation of the joints of the insulation boards over the edges of the openings in facades, cut insulation boards accordingly (release) with overlapping application.

Board joints:
Potential gaps and voids or open board joints must be filled with an insulation strip or where necessary with Sto-Pistol Foam SE (for joint width of up to 5 mm).

Structural expansion joints:
Existing expansion joints of the building must be continued in the External wall insulation system.

Indications, recommendations, general information, miscellaneous
To avoid increased heating of the dark surface of the board, protect the insulation board from sunlight. The shading of the façade with the fixed insulation boards must be ensured with suitable measures. The fixed insulation boards on the façade must be protected from moisture and be coated with reinforcing plaster/mortar short-term. Do not apply damaged insulation boards.

Do not combine with aromatic solvents.

Delivery
Packaging Bundle

Storage
Storage conditions Store in dry conditions. Protect against direct sunlight.

Certificates / approvals

<table>
<thead>
<tr>
<th>Certificate</th>
<th>Description</th>
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<tbody>
<tr>
<td>ETA-03/0027</td>
<td>StoTherm Classic 1 (EPS and StoArmat Classic) European technical approval</td>
</tr>
<tr>
<td>ETA-05/0098</td>
<td>StoTherm Classic 2 (EPS and StoLevell Classic) European technical approval</td>
</tr>
<tr>
<td>ETA-06/0004</td>
<td>StoTherm Classic 3 (EPS and Sto-RFP) European technical approval</td>
</tr>
<tr>
<td>ETA-09/0058</td>
<td>StoTherm Classic 5 (EPS and StoArmat Classic plus) European technical approval</td>
</tr>
<tr>
<td>ETA-09/0266</td>
<td>StoTherm Classic 8 (EPS and StoArmat Classic/Classic plus) European technical approval</td>
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<tr>
<td>ETA-06/0003</td>
<td>StoTherm Classic QS 1 (EPS and StoArmat Classic QS) European technical approval</td>
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<tr>
<td>ETA-06/0148</td>
<td>StoTherm Classic QS 2 (EPS and StoLevell Classic QS) European technical approval</td>
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<tr>
<td>ETA-05/0148</td>
<td>StoTherm Vario 1 (EPS and StoLevell Uni) European technical approval</td>
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<tr>
<td>ETA-06/0045</td>
<td>StoTherm Vario 3 (EPS and StoLevell Novo) European technical approval</td>
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| ETA-06/0107 | StoTherm Vario 4 (EPS and StoLevell Duo) European technical approval |
| ETA-03/0037 | StoTherm Vario 5 (EPS and StoLevell Beta) European technical approval |
| Z-33.41-116 | StoTherm Classic / Vario, bonded on solid substrates National technical approval |
| Z-33.43-61  | StoTherm Classic / Vario / Mineral, bonded and dowelled National technical approval |
| Z-33.46-422 | EWIS with ceramic or natural stone cladding National technical approval |
| Z-33.47-811 | StoTherm Classic / Vario / Classic L, bonded in timber construction - National technical approval |

### Identification

<table>
<thead>
<tr>
<th>Product group</th>
<th>Insulation board</th>
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<tbody>
<tr>
<td>GISCODE</td>
<td>No data available</td>
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</tbody>
</table>

### Health and safety

You will receive an EC Material Safety Data Sheet with your first order. Please take note of the information regarding the handling of the product, its storage and disposal.

This product contains material according to list of candidates for appendix XIV of the REACH-Regulation 1907/2006/EG. Further information is available at www.sto.de Rubrik Fachhandwerker / REACH.

### Special information

The information and data in this technical data sheet is intended for common applications and the product's suitability for these, and is based on our findings and experience. Nevertheless, users are responsible for establishing the suitability of the product for their intended use.

Applications other than those mentioned explicitly in this technical data sheet may not be carried out unless they have been discussed with Sto AG. Where no approval is given, such applications are at the risk of the user. 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.
Tongue and groove offset