

# akurit EPS 031 WDV grey plain

**ETICS insulation panel according to DIN EN 13163  
made expanded polystyrene (EPS), flame retardant**

- **building material class B1**
- thermal conductivity:  $\lambda = 0.031 \text{ W/(mK)}$
- dimensions: 1000 x 500 mm



## Applications

- for AKURIT thermal insulation systems
- as reveal panels for window and door reveals (insulating material thickness: 10, 20, 30 mm)

## Properties

- thermally insulating
- dimensionally stable
- economical
- age-resistant
- good workability

## Substrate

### Condition / Testing

- The substrate must be dry, load-bearing, clean, dust-free and free of adhesion-reducing residues, release agents, efflorescence and sintered coatings.
- The load-bearing capacity, particularly of old plaster and old paintwork, must be properly tested (e.g. by carrying out a pull-out test or cross-cut test).

### Pretreatment

- Non-load-bearing plaster and paint, loose parts, dust and dirt must be removed.
- Uneven areas can be bridged up to 1 cm/m with bonded and up to 2 cm/m with bonded and anchored ETICS systems. Larger uneven areas in the substrate must be levelled mechanically or by applying a levelling plaster.

## Processing

### Applying / Processing / Assembling

- The insulation panels are fastened according to the specifications of the respective ETICS-approval/type approval
- Bonding in the spot bead method: Apply adhesive mortar in a surrounding bead on the edge of the panel as well as spots of adhesive in the centre of the panel. The adhesive contact area must be at least 40 %.
- Bonding over the whole area in the combed bed method on even substrates: Apply adhesive mortar with a notched trowel over the whole area on the back of the panel.
- Bonding on part of the area: Apply adhesive mortar onto the substrate in vertical stripes in a snake formation so that at least 50 % of the area is covered with mortar. The adhesive beads must be approx. 5 cm wide and approx. 1 cm thick in the centre. The centre distance of the adhesive beads must not exceed 10 cm.
- Position insulation panels immediately, at the latest however 10 minutes after applying the adhesive, in horizontal rows with at least 10 cm overlap butt jointed and press on whilst pushing. Cross joints are to be avoided.
- Do not allow any adhesive mortar to get into the panel joints.
- On building corners, the insulation panels are to be interlinked in panel thickness. Take care to form the corners perpendicular and flush.
- On facade openings, cut insulation panels to length accordingly (notching, right-angled cut) and process overlapping to prevent a continuation of the insulation panel joints beyond the corners of the facade opening.
- Existing building expansion joints must be adopted in the external thermal insulation composite system with special expansion joint profiles.

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## Drying / Hardening

- The required intermediate rest time depends on the adhesive mortar used and the ambient and structure temperature.
- The drying and hardening process will be slowed down by low temperatures and/or high air humidity and accelerated by high temperatures and/or low air humidity.
- Insulated areas are to be protected from the effect of extreme damp and direct sunshine using suitable measures e.g. by covering the scaffolding. Apply reinforcement layer quickly.

## Subsequent coating / workability

- It is possible to process bonded panels further once the adhesive mortar has hardened sufficiently.
- Any flaws or open panel butt joints must be filled with strips of insulating material. Joint widths up to 5 mm can be filled with AKURIT PS spray foam.
- To achieve an even surface, as well as in case of a surface damaged by sunlight, this must be sanded down with a sanding board once the adhesive has had sufficient time to dry.
- Any necessary dowelling or application of the reinforcement layer is possible after sufficient hardening of the adhesive mortar.

## Notes

- Take into consideration the respective system permissions when using the product in thermal insulation composite systems.
- For more execution information about processing the product in the ETICS, see brochure "ETICS - basic principles and planning".
- The panels must be anchored according to the structural analysis or the details according to the general building approval / general type approval issued by the DIBt that belongs to the system.
- Damaged or soaked insulation panels must not be installed. Adhesive mortar in the panel joints, the use of contaminated leftover panels as well as patchwork must be avoided.

## Available insulating material thicknesses

- 10 mm, 20 mm, 30 mm, 40 mm, 60 mm, 80 mm, 100 mm, 120 mm, 140 mm, 160 mm, 180 mm, 200 mm, 220 mm, 240 mm, 260 mm, 280 mm, 300 mm, 320 mm, 340 mm, 360 mm, 380 mm, 400 mm

## Storage

- Store dry and as per instructions.
- Protect against direct sunlight.

## Technical Data

<b>Panel format</b>	L x W (mm): 1000 x 500
<b>Edge form</b>	dull
<b>Fire behaviour</b>	E according to EN 13501
<b>Rated value of the thermal conductivity <math>\lambda</math></b>	0.031 W/(mK)
<b>Tensile strength vertical to panel plane</b>	$\geq 80$ kPa according to EN 1607
<b>Water vapour diffusion resistance <math>\mu</math></b>	20-50

All data are average values that were determined under laboratory conditions according to relevant test standards and application tests. Deviations are possible under practical conditions.

## General notes

This information sheet provides only general recommendations. Should you have any queries relating to a specific application, please contact our technical sales advisor or call our hotline: +49 541 601-601. All of the details given are based on our current knowledge and experience and on the assumption that the materials are professionally applied and used for their normal purpose. All of the details are non-binding and do not release users from their duty to undertake their own tests to ensure suitability for the intended application. Due to the effects of different weather, processing and construction site conditions, no guarantee can be given for the general validity of all details. We reserve the right to make changes as a result of further development of the product and applications engineering. The general rules for construction engineering, the valid standards and guidelines, and the technical working guidelines must be observed. The publication of this technical data sheet renders all previous editions of this data sheet void. Please obtain the latest information from our website.