

akurit Fibreboard 039 ST

**WDVS insulation panel according to DIN EN 13171
made of normal inflammability wood fibre (WF) –
building material class E**

- thermal conductivity: $\lambda = 0.039 \text{ W/(mK)}$
- dimensions: 600 × 400 mm



Applications

- for AKURIT thermal insulation systems
- Wood fibre insulation board for ecological façade design

Properties

- made from coniferous wood - for sustainable climate protection through CO₂ storage

Substrate

Condition / Testing

- The substrate must be dry, clean, load-bearing, dust-free, absorbent 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).
- The insulating material should only be processed on dry substrates to prevent discolouration on the facade.

Pretreatment

- 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.
- 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.

Subsequent coating / workability

- It is possible to process bonded panels further once the adhesive mortar has hardened sufficiently.
- Any necessary dowelling or application of the reinforcement layer is possible after sufficient hardening of the adhesive mortar.

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Notes

- Take into consideration the respective system permissions when using the product in thermal insulation composite systems.
- For further instructions on processing the product in ETICS, see brochure "Processing & Execution Wood Building Systems".
- 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.

Storage

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

Available insulating material thicknesses

- 100 mm, 140 mm, 160 mm, 180 mm, 200 mm

Technical Data

Technical specification	EN 13171
Designation key	WF-EN 13171-T5-DS(70,90)3-CS(10\Y)50-TR10-WS1,0-MU3
Panel format	L x W (mm): 600 x 400
Nominal value of thermal conductivity λ	0.037 W/(mK)
Rated value of the thermal conductivity λ	0,039 W/(mK)
Fire behaviour	E
Bulk density	approx. 110 kg/m ³
Water vapour diffusion resistance μ	3
Compressive strength	≥ 50 kPa
Tensile strength vertical to panel plane	≥ 10 kPa
Specific heat capacity	2100 J/(kg \times K)

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.