akurit PU 024 WDV

WDVS insulation panel according to DIN EN 13165 made of rigid polyurethane foam (PU), normal inflammability - building material class B2

- thermal conductivity λ = 0.024 W/(mK) from 120 mm
- · dimensions: 1000 x 500 mm



Applications

- · for AKURIT thermal insulation systems
- according to general type approvals: Z-33.43-1007, Z-33.41-1600

Properties

- · very good thermal insulation properties
- · ecologically harmless
- · mould and rot resistant
- recyclable

Substrate

Condition / Testing

- The subsurface must be even, dry, clean, load-bearing, absorbent and free of adhesion impairing residues, efflorescence and sinter skins.
- The load-bearing capacity, particularly of old plaster and old paintwork, must be properly tested (e.g. by carrying out a pullout test or cross-cut test).

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

Temperature

 Do not use in air or substrate temperatures of less than +5°C and with expected night time frost, or over +30°C, in direct sunlight and/or in strong wind.

Mixing / Preparing / Processing

- Cut insulation panels to length with an insulation knife or a
- With a saw stand for manual (e.g. SPEWE 1900L-30) or machine cutting (e.g. SPEWE 1900ML-30) a knife or saw makes an exact cut possible, even with mitres.

Alternatively, cutting by hand up to 120 mm thickness is possible with an insulation knife, over 120 mm thickness with a saw with a low-torsion saw blade.

It is recommended to score the insulation panel exactly.



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Applying / Processing / Assembling

- · Fastening glued or glued and anchored.
- 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 %.
- Alternatively it is possible to glue over the whole area using the combed bed method.
- 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.
- On building corners, the insulation panels are to be interlinked in panel thickness. Take care to form the corners perpendicular and flush.
- Do not allow any adhesive mortar to get into the panel joints.

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.
- Flaws or open panel joints are to be closed with strips of insulating material or with AKURIT PS spray foam (maximum joint width 5 mm).
- Protruding panel offsets and uneven areas can be sanded flat over a wide area. Thoroughly brush off sanding dust.
- Any necessary dowelling or application of the reinforcement layer is possible after sufficient hardening of the adhesive mortar.

Notes

- Can be used as base insulation up to a maximum of 50 cm below the top edge of the ground.
- Take into consideration the respective system permissions when using the product in thermal insulation composite systems.
- The coating on the insulation panels serves to protect the panels from UV radiation. At the same time it prevents dust developing from abrasion. The adhesion of the mortar on the uncoated or sanded surface is guaranteed if the separating sanding dust has been removed.
- If the unreinforced insulating material surface is left to rest for longer (approx. 4 weeks), there is the risk of embrittlement due to the effect of UV light, however. To assess the strength, a comparison can be made with a freshly cut and neatly cleaned piece of insulating material. If the glued insulating material is significantly more crumbly, then the glued panels are to be sanded clean and the sanded surface cleaned off thoroughly.

Available insulating material thicknesses

 20 mm, 30 mm, 40 mm, 50 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

Storage

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



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Technical Data

Technical specification	EN 13165
Designation key	PU-EN 13165-T3-DS(70,90)3- DS(-20,-)2-DLT(2)5-CS(10\Y)120- TR100
Application abbreviation	WAP acc. DIN 4108-10
Adhesive coating	coated both sides
Panel format	L x W (mm): 1000 x 500
Fire behaviour	E according to EN 13501
Rated value of the thermal conductivity $\boldsymbol{\lambda}$	0,026 (W/mK) d < 80 mm 0,025 (W/mK) d ≥ 80 mm - < 120 mm 0,024 (W/mK) d ≥ 120 mm (d = Insulation board thickness)
Water vapour diffusion resistance µ	50-70
Compressive strength in case of 10 % compression	120 kPa
Tensile strength vertical to panel plane	100 kPa

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

