Technical Product Information

WEM Clay Panel D 25 mm

Article no. 10011

Description

The WEM Clay Panel D is a construction board suitable for plaster coating. It is made of plant fibres and reinforced clay mortar.

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Scope of application

WEM Clay Panels D have been designed as levelling panels for the WEM heating and cooling system. They are fitted to surface areas that are not covered with WEM Climate Panels MV-D to provide a homogeneous subsurface for subsequent plastering. They are used for ceiling assembly or for wall heating or cooling systems if a high moisture load is to be expected (e. g. due to condensate formation with high cooling loads).

Benefits

- High noise protection
- Simple and easy installation
- Minimum increase in humidity due to thin plaster coats
- Very short drying times
- Permeable to vapour and capillary conductive
- Good heat storage

Materials

Panel	Natural construction loam, plant fibres, mixed grained washed sand Polymer dispersion < 1 % (only for WEM Clay Panel D)
Reinforcement	Glass-fibre fabric

Technical data

Dimensions	100 x 62.5 x 2.5 cm (tolerance +/- 2 mm)
Weight	Approx. 35 kg/m² (about 22 kg/pce.)
Bulk density	Approx. 1 400 kg/m³
Thermal conductivity λ	0.59 W/m²·K
Specific thermal capacity C_p	Approx. 1.0 kJ/(kg·K)
Vapour diffusion resistance μ	5 to 10
Compressive resistance σ_d	> 2.5 N/mm²
Edge shape	Blunt
Material class	A2 (non-combustible) as per DIN EN 13501-1
To be ensured on site	Protect against moisture, store in dry location, installation temperature ≥ 5°C

Noise protection

A master thesis at the University of Koblenz examined the influence of WEM Clay Panels 25 mm (LP)* on three typical wall structures:

Solid structure: 175 mm lime-sand bricks with a cement plaster coat of 10 mm thickness

Solid timber: 170 mm solid construction timber (Holz 100)

Timber frame: Timber studs 6/12 cm, with 12 cm wood fibres, planked on both sides with diagonal boarding (2.5 cm)

	Solid structure	**Solid timber**	**Timber frame**
Without planking	55.0 dB	39.3 dB	35.0 dB
1 x Clay Panel + 8 mm clay finish coat	57.8 dB *Reduction: 2.8 dB*	47.8 dB *Reduction: 8.5 dB*	45.6 dB *Reduction: 10.6 dB*
2 x Clay Panel + 16 mm clay finish coat	58.5 dB *Reduction: 3.5 dB*	56.9 dB *Reduction: 17.2 dB*	47.7 dB *Reduction: 10.6 dB*
80 mm wood fibres + Clay Panel + 8 mm clay finish coat	64.2 dB *Reduction: 9.2 dB*	60.2 dB *Reduction: 20.9 dB*	58.9 dB *Reduction: 23.9 dB*

* Values can be transferred to the WEM Clay Panel D.