

# 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.

**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).



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- 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. 37,6 kg/m <sup>2</sup> (about 23,5 kg/pce.)
Bulk density	Approx. 1 560 kg/m <sup>3</sup>
Thermal conductivity $\lambda$	0.7 W/m <sup>2</sup> ·K
Specific thermal capacity $C_p$	Approx. 1.0 kJ/(kg·K)
Vapour diffusion resistance $\mu$	5 to 10
Compressive resistance $\sigma_d$	> 2.5 N/mm <sup>2</sup>
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 $\geq 5^\circ\text{C}$

**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)

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

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