

WEM Clay Panel 25 mm

Article no. 10013

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

Scope of application WEM Clay Panels have been designed as levelling panels for the WEM dry-wall heating system. They are fitted to surface areas that are not covered with WEM Climate Panels to provide a homogenous subsurface for the finish plaster coat. They provide a supporting base for plaster in dry-wall construction and offer a wide range of applications in interior finishing as wall boarding of timber frame walls, interior walls, partition walls and suspended ceiling. The panels are often used in loft conversion.



III. 1

- Benefits**
- High noise protection
 - Simple and easy installation
 - Minimum increase in humidity due to thin plaster coats
 - Very short drying times
 - Pure natural product without any harmful substances
 - Permeable to vapour and capillary conductive
 - Good heat storage

Materials

Panel	Milled construction loam, plant fibres, broken sand,
Reinforcement	Glass-fibre fabric

Technical data

Dimensions	100 x 62.5 x 2.5 cm (tolerance +/- 3 mm)
Weight	Approx. 36 kg/m ² (approx. 22.5 kg/pce.)
Bulk density	Approx. 1400 kg/m ³
Thermal conductivity λ	0.59 W/m ² K
Specific thermal capacity C_p	Approx. 1.0 kJ/(kgK)
Vapour diffusion resistance μ	5 to 10
Compressive resistance σ_d	> 2.5 N/mm ²
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 frames 6/12 cm, with 12 cm wood fibres, planked on both sides with diagonal boarding (2.5 cm)

	Solid constr.	Solid timber	Timber fr.
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>