

fermacell Product Data Sheet



fermacell Powerpanel HD

external board for timber frame constructions

Product

The **fermacell** Powerpanel HD is a cement-bonded, glass fibre-reinforced lightweight concrete board with a sandwich structure. The middle layer contains lightweight aggregates of expanded clay and recycled glass foam granules. The boards are reinforced with alkali-resistant glass-fibres over the entire board cross-section proving high structural rigidity and strength.

Application

fermacell Powerpanel HD is an external board giving structural strength in load-bearing/reinforcing cladding in timber frame constructions. The exposed Powerpanel HD offers temporary weather protection for 6 months with HD joint technology and permanent weather protection with a subsequently applied render system.

If used as a system, single layer **fermacell** Powerpanel HD has a fire resistance rating of F90-B (from outside).

Approvals	
European Technical Approval	ETA-13/0609
General Building Approval	Z-31.1-176
Building material class pursuant to DIN EN 13501-1	Non-combustible, A1
IMO FTPC part 1	Non-combustible
Component classification	National/European

fermacell Powerpanel HD

Properties

- No hazard label, low in harmful substances and emissions
 - tested by eco-Institute Cologne
- Easy to process
 - Butt jointed – with requirements for weather protection with HD joint technology and an approved render system according to ETAG 004

Material properties	
Gross density	950 ± 100 kg/m ³
Surface weight	approx. 15 kg/m ²
Balancing humidity	approx. 7 %
Water vapour diffusion resistance coefficient	$\mu = 40$ *
Thermal conductivity $\lambda_{10, tr}$ (in acc. with DIN EN 12664)	0.30 W/mK
Specific heat capacity c_p	1.0 kJ/kgK
rel. length change (in acc. with EN 318)	- 0.40 mm/m ** 0.16 mm/m ***
Alkalinity (pH value)	~ 12
Frost-resistant	

* Powerpanel HD incl. tested HD joint technology and plaster system

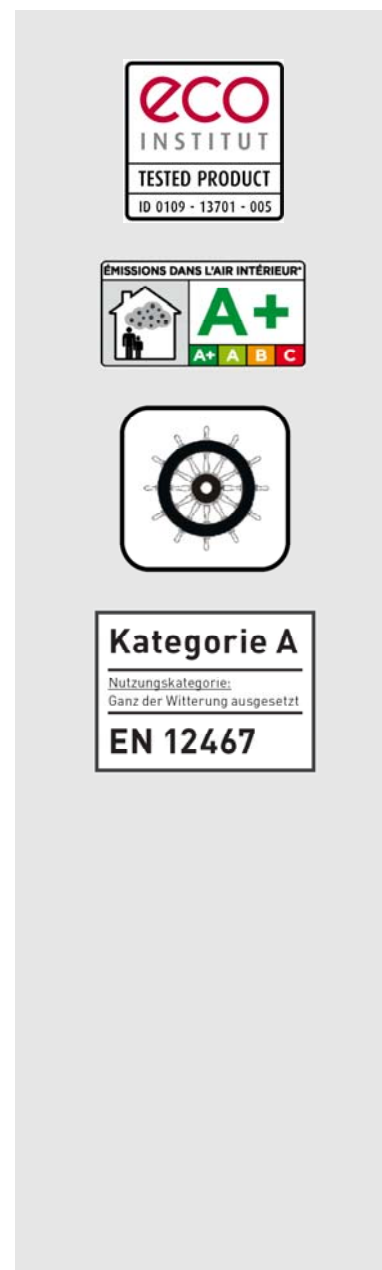
** between 65 % and 30 % rel. humidity

*** between 65 % and 85 % rel. humidity

Further data and information concerning strength values can be found in the European Technical Approval ETA-13/0609 or General Building Approval Z-31.1-176

Dimensional tolerances with regard to balancing humidity for standard board formats	
Board thickness	15 mm
Length, width, thickness	± 1 mm
Diagonal difference	≤ 2 mm
Board formats	1000 x 1250 mm 2600 x 1250 mm 3000 x 1250 mm

*Delivery date on request, cuttings possible



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Surfaces

Visible side: smooth exposed concrete surface with marking
 Rear side: slightly undulating or ground for calibration
 Colour: Cement grey

Storage

Packed flat on pallets, outdoor storage possible due to frost resistance (plastic sheathing is recommended for the prevention of contamination).
 Max. 3 pallets stacked on top of each other.

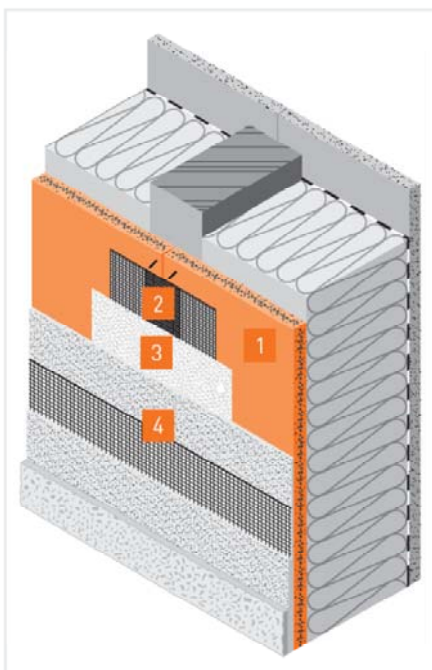
Processing

With conventional wood working machines, carbide-tipped tools should generally be used when cutting.

Substructure spacing	
Internal wall	≤ 625 mm
Internal ceiling	≤ 420 mm

Please also observe our detailed processing instructions in our brochures and videos at www.fermacell.com

System setup



- 1 15 mm **fermacell** Powerpanel HD
- 2 **fermacell** Reinforcement Tape HD
- 3 **fermacell** Adhesive HD
- 4 Directly applied plaster system

Coating system setup for **fermacell** Powerpanel HD for permanent effective weather protection for the external facade

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Further information

Our recommendations are based on extensive testing and practical experiences. They do not replace guidelines, standards, approvals and applicable technical data sheets. Due to the large number of possible influences for processing and application, we recommend that you carry out trial processing and application. No claims for compensation may be derived from the information provided. Delivery, processing and the warranty on features assured by us will be in accordance with our GTCs.