

## Material description

Gypsum board contains gypsum and wastepaper. The two natural materials are mixed into a homogeneous mixture and water (without binders) is added, and a stable and odorless building board is pressed under high pressure. It is dried and cut to the required size (the world's largest plate dimensions are 2.54 x 6 m).

## Advantages

Gypsum board is resistant to mechanical shocks, fireproof (A2 EN 13501-1, ie from 30 minutes), sound-insulating, moisture-resistant, load-bearing structure, and stiffness board. All these properties are in ONE board for new buildings as well as buildings under renovation.

FERMACELL's thinner design solutions increase the usable area of buildings. Moisture resistance is also tested and issued in Sweden by SITAC approval. Fermacell gypsum board is inspected by ECO INSTITUT and IBR (Rosenheim Institute of Building Biology). Thus, the name of a product that is safe for human health has been proven.

## Places of use

Indoor wall, ceiling, and floor constructions.

## Acknowledgments

Construction supervision approval ETA-03/0050

Building material class. Non-combustible according to DIN EN 13501-1, A2

Designation according to DIN EN 15283-2 GF-I-W2-C1

Board thicknesses 10 / 12.5 / 15/18 mm

## Tolerance of a standard-sized plate with an equilibrium moisture content

Length, width + 0 / - 2 mm

Permissible tolerances for diagonals  $\leq 2$  mm

Thickness tolerance  $\pm 0,2$  mm

## Technical specifications

Board dimensions: 1500x1000; 2000x1200; 2500x1200; 2400x1200; 2600x1200; 3000x1200

Density  $1150 \pm 50$  kg / m<sup>3</sup>

Water vapor diffusion resistance factor  $\mu = 13$

Thermal conductivity  $\lambda = 0.32$  W / mK

Specific heat capacity  $c = 1.1$  kJ / kgK

Brinell hardness 30 N / mm<sup>2</sup>

Thickness expansion after soaking in water <2%

Coefficient of thermal expansion 0,001% / K

Expansion / volume reduction with a change in relative humidity of 30% (20 ° C) - 0.25 mm / m

Equilibrium humidity at 65% relative humidity and 20 ° C - 1.3%

pH 7 - 8

Further information and information can be found in European Technical Approval ETA-03/0050

## Storage

Pallets packed on pallets, protect from moisture.

## Cutting

With conventional woodworking machines, tools made of hard alloy material should generally be used for cutting to size.

## Distance between substructure

Wall  $\leq$  plate thickness [mm] x 50

Ceiling  $\leq$  plate thickness [mm] x 35

## Finishing options

Painted, plastered or tiled.