Ecological wood wool cement boards

Wood wool cement boards

Krupinit®

harmless to human health
convenient for bio constructions
resistant to biological pests
heat insulating
acoustic insulating
fireproof
natural material
recyclable material

Norm: WW-EN 13168
Boards: Krupinit
Abbreviation: K

Use

Bio constructions *– making walls, partition walls, floors and attics*

Acoustic facings *of ceilings and walls – recreation rooms*

Partition walls *– reconstructions of the old ones and building the new ones*

Flat roofs *– the base for a hydro – insulation layer*

Advantages

- *an enjoyable living, without harmful chemical substances*
- *quiet and energy saving*
- *very permanent*
- *fireproof*
- *environmentally friendly*

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Characteristic

The Krupinit® *is a heat and acoustic insulation board made of the wooden fibres linked via the Portland cement. It is the oldest industrially produced board which the builders have known for more than 75 years. Till now it has been used in various applications because of its perfect properties tested for a lot of years.*

Assembly

Bio constructions

The ones are used for the construction of the outer assembled walls of a frame of a wooden or a steel construction, partition walls, ceilings and attics. The boards are fixed to a grid or a hanging system. They are convenient mostly for their perfect properties and a simple assembly.

Partition walls

Difficult conditions of the sound insulation of partition walls in old and new buildings can be solved by the boards Krupinit. They can be used either for heavy or light partition walls. The brick partition walls are sheathed by the Krupinit from one or both sides and the Krupinit is fixed with anchors. After that the Krupinit is plastered or sheathed with plasterboards. The achieved acoustic resistance Rw = 54dB. Pict. 1

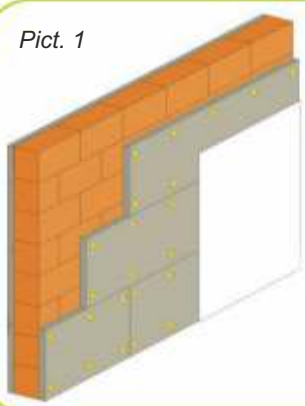
Acoustic facings of ceilings and walls

To improve the acoustic in sports halls, recreation rooms, industrial areas and other places is possible with a facing of a ceiling and walls using the Krupinit which is not plastered. The open structure of the boards absorbs the sound and also their colour creates an aesthetic area. Pict.2

Flat roofs

Thanks to the properties of the Krupinit boards such as the fire-resistance, the strength, the heat and acoustic insulation, it is possible to use them for making a solid cover step layer which is suitable for the application of the hydro insulation layer with the flame. This layer protects the heat insulation layer made of the foam polystyrene.

Pict. 1



- *Drywall*
- *Krupinit® 25*
- *Masonry*
- *Krupinit® 35*
- *Drywall*
- *Slips*

Pict.2

Technical parameters of the boards

Kind	Thickness (mm)	Weight (kg)	Volume Weight (kg/m³)	Thermal Conductivity λ (W/mK)	Heat Transmission Resistance R (m²K/W)
K 15	15	7,5	480	0,09	0,15
K 20	20	8,5	415	0,08	0,20
K 25	25	10,5	410	0,07	0,30
K 30	30	12,5	410	0,07	0,35
K 35	35	14,0	390	0,07	0,45
K 40	40	16,0	395	0,07	0,50
K 50	50	19,0	380	0,07	0,60

Other parameters

- *it is harmless to human health and environmentally friendly – without harmful chemical substances*

Advantages

- *an enjoyable environment given by good thermal and acoustic insulation*
- *a perfect permeability of water vapours (μ = 4 to 7)*
- *an easy work with common tools*
- *a perfect adhesiveness*
- *a simple application of facings*
- *the long lifetime supported with the resistance to:*

- fire (B – s l, s0)
- ligniperdous insect (also termites)
- rodents and birds
- dry mushrooms and mildew

Certificates

Declaration of conformity of products by STN EN 13168 and STN EN 13172

Slovenský výrobok

Notes

Rw – it is the index of the air acoustic resistance calculated according to STN EN ISO 717-1. It evaluates the acoustic insulating ability of partition walls.
The classification of the reaction to the fire: B – s l, d 0
(hardly flammable – with the minimal speed of making smoke, without forming of burning dripping elements)
The diffusion resistance factor μ is the nondimensional number, defined by STN EN 12086
The diffusion coefficient conductivity δ (mg/m.h.Pa) according to STN EN 12086