TECHNICAL DATA SHEET

DRVOLIT D

Thermal insulation product for general application

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The mark of responsible forestry

Product description:

A light construction panel made of mineralized wood wool (WW) which is connected with a cement binder and additives into a compact unit. With the process of mineralization, the fire resistance of wood wool is significantly increased. Due to its porous internal structure and relief surface, it is an excellent insulator in sound insulation systems.

Product characteristics:

- Thermal conductivity: λ_D = 0,074 W/m·K
- Good adhesion with concrete and an ideal base for plasters
- Reaction to fire: class B-s1,d0 according to EN 13501-1
- Resistance to aging, chemical influences, pests and moulds
- Neutrality in contact with building materials and metals
- Good sound absorption and high water vapour permeability
- Very good mechanical properties
- Simple formatting and other processing during installation
- High capacity of maintenance of phase displacement of penetrating heat through the surface of the building

Purpose, use and installation:

- Improvement of sound and thermal insulation
- Fire protection of wooden and metal load-bearing structures
- Substrate for plasters in the ventilated facade systems
- Construction of partition walls coated on one side and on both sides
- Thermal insulation in insulation systems of pitched roofs (attic) from the inside or outside
- Acoustic cladding of walls and ceilings as a visible surface
- Internal and external linings of the structure in the construction of wooden houses, insulator and plaster carrier
- Installation by subsequent cladding or before concreting in the »lost formwork« system

CE
04

Designation codes:

WW-EN 13168-L1-W1-T1-S2-P1-CI3-CS(10)300-BSi ($d_N \leq 20$ mm)
WW-EN 13168-L1-W1-T1-S2-P1-CI3-CS(10)150-BSi ($d_N \geq 25$ mm)

Product label		D 15	D 20	D 25	D 30	D 35	D 40	D 50	D 75	D 100
Thickness – d_N	mm	15	20	25	30	35	40	50	75	100
Length × width	mm	2000 × 600								
Mass per unit area[1]	kg/m²	8,50	10,00	11,50	13,00	14,50	17,00	19,50	28,00	36,00
Quantity on the pallet[2]	PCS	110	100	80	70	60	50	40	28	20
	m²	132	120	96	84	72	60	48	33,6	24

[1]Tolerance: (-5, +20) % | [2]Pallet dimensions: 2000 × 1200 mm

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Essential characteristic	Symbol	Unit	Value									EN method
Thickness	d_N	mm	15	20	25	30	35	40	50	75	100	EN 13168
Thermal conductivity	λ_D	W/m·K	WW[A]: 0,074									EN 12667 EN 12939
Thermal resistance	R_D	m^2·K/W	0,20	0,25	0,30	0,40	0,45	0,50	0,65	1,00	1,35	EN 12667 EN 12939
Heat transfer coefficient	U	W/m^2·K	2,683	2,271	1,969	1,738	1,555	1,407	1,182	0,845	0,657	EN ISO 6946
Length[D]	L1	mm	+5, -10									EN 822
Width[D]	W1	mm	± 3									EN 822
Thickness[D]	T1	mm	+3, -2[B] +4, -3[C]									EN 823
Squareness	S2	mm/m	≤ 2									EN 824
Flatness	P1	mm	≤ 6									EN 825
Chloride content	Cl3	%	≤ 0,06									EN 13168
Reaction to fire	-	-	B-s1,d0									EN 13501-1
Compressive strength	CS(10)300 CS(10)150	kPa	≥ 300	≥ 300	≥ 150	≥ 150	≥ 150	≥ 150	≥ 150	≥ 150	≥ 150	EN 826
Bending strength	BSi	kPa	≥ 1700	≥ 1500	≥ 1300	≥ 1150	≥ 1000	≥ 850	≥ 700	≥ 600	≥ 500	EN 12089
Water vapour diffusion resistance factor	μ	-	WW: 5									EN 13168

[A]Wood wool | [B]Length ≤ 1.250 mm | [C]Length > 1.250 mm | [D]Allowed deviation

Preparation

The panels must be dry before installation. Likewise, the panels need to be acclimatized for at least a week in the area where they will be installed. If necessary, we recommend sawing the panel using an electric circular or manual saw. The surface on which they are installed must be flat, solid, free of dust and loose particles.

Cladding of walls and ceilings

Subsequent installation:
The panels must be installed mechanically through the entire thickness with anchors, the type and consumption of which depend on the type and the thickness of the substrate. Advice on the type and consumption of fasteners can be found in our Installation Manual. If it is necessary to level the substrate to a lesser extent, the panels can be glued to the substrate with construction adhesive in strips along the edge of the panel and dotted in the middle, but only as an additional and optional fastening element that does not exclude mechanical fastening with anchors.

"Lost formwork" system:
A simple and economical method of installation:

- Variant when the panels are subsequently processed (e.g. plaster and other additional loads)
  Anchors for concreting (ESA KOMBI) of the appropriate length are installed in the panels, and then the panels are laid on the formwork construction tightly fitting each other. A reinforcing is then laid over the panels and everything is poured with concrete. Removing the formwork is quick and easy because the formwork is not in direct contact with the concrete. The panels are firmly bonded to the concrete over the entire surface, and additional strength is provided by concreted anchors.

- Variant when the panels are not processed additionally (without additional load)
  Concrete anchors (ESA KOMBI) are not required. It is mandatory to avoid any contact with formwork oil and all unbound particles that could weaken the wood wool-concrete bond. The pouring of concrete must be carried out in such a way that the concrete covers the DRVOLIT panel over the entire surface. In the event of concrete segregation, additional concrete fasteners must be installed.

Factory-made processing options

- width of wood wool: 3 mm
- format: 2000 × 600 mm
- cement color: standard gray; white on inquiry
- coloring of one (visible) side: standard without coloring ; possible on inquiry
- edge processing: straight edges
- rabbet edge: without rabbet

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Note on the color tone of unpainted panels

The panels are produced with wood from responsibly managed forests. Wood has its own natural characteristics that affect the final natural color of the produced panels, namely its color tone, the conditions in which the tree grew, moisture content, and the time when the trees were felled. However, this does not affect the final quality of the panels. The final natural color of the panels also depends on the production conditions and their drying. In other words, there is no complete uniformity of color tone between the panels, but if it is important, then we recommend painting the panels after installation in the natural color of the panel or in another color.

Safety

The installation of panels should be entrusted to a professionally trained person with the use of protective equipment.

Storage

The panels are packed and delivered on pallets; the quantities are specified in the table on the first page. They should be stored in covered premises and protected against humidity and direct sunlight. The panels on the pallet are stacked in a horizontal position on a flat surface and they should be carried around in a vertical position (usually by the edge of the longer side).

Waste management

The waste generated during the application of the product, including the packaging, must be disposed of in accordance with your country's waste management laws and regulations.

European Waste Catalogue Codes: (according to Commission Decision 2014/955/EU)
- wood wool waste – 17 06 04 – „insulation materials other than those mentioned in 17 06 01 and 17 06 03“
- cardboard – 15 01 01 – „paper and cardboard packaging“
- wrapping foil, plastic wrapping tape, plastic corners – 15 01 02 – „plastic packaging“
- pallets – 15 01 03 – „wooden packaging“

Expiration date

Unlimited with proper storage and installation of panels.

Certificate

The product complies with the requirements of: EN 13168:2012+A1:2015.

- 1139 – Magistrat der Stadt Wien, MA 39, Rinnböckstrasse 15, A-1110 Wien, Österreich (Austria)
- 2477 – Institut IGH d.d., Janka Rakuše 1, 10000 Zagreb, Hrvatska (Croatia)
- Declaration of Performance No DoP-WW-001/25-1, in accordance with Regulation (EU) No 305/2011

Croatian Quality
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The quality and environmental management systems comply with EN ISO 9001 and EN ISO 14001.

This product is FSC 100 % certified.

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