Troldtekt® 🕹 Acoustic Solutions since 1935 By Kingspan

Troldtekt® Plus-mineral wool

Data sheet

PRODUCT - TROLDTEKT PLUS-MINERAL WOOL

Troldtekt Plus is a double-layer panel made from one 25 mm or 35 mm layer of Troldtekt acoustic panel and one 18 mm (or 40 mm) layer of mineral wool. The mineral wool panel is covered with non-woven material, and the two panels are glued together with a non-toxic PVA adhesive.

Troldtekt acoustic panels are cementbonded wood wool panels. The product consists of of the natural material wood (spruce) which is shredded into wood

wool and mixed with cement. We offer PEFC™-certified or FSC®-certified Norway spruce (FSC® C115450). Both certifications guarantee that the wood comes from responsible forestry operations and other controlled sources.

Troldtekt can be surface-treated, but is often used untreated (natural wood and natural grey). Due to the nature of the material, colour variations may occur with both natural wood and natural grey. These colour variations are most evident in the grey panels, where the cement gives the panels the grey Troldtekt look. To achieve an even distribution of the colour tones, we recommend mixing the panels during installation

Factors affecting colour variations include the water/cement ratio, the water content of the wood, the drying rate, steam curing and curing moisture.

PRODUCT STANDARDS, LABELLING AND CERTIFICATION

CE-marking

Within the EU, all building materials are legally required to be CE-marked. The CEmark indicates that the building material can be legally sold and that it complies with the product standard to which the mark refers. Troldtekt products are CEmarked, and in addition to the marking we state:

Name of producer:

Troldtekt A/S

Certifications:

0615-CPR-222958G 0615-CPR-80474G

Product standard number:

EN 13168 and EN 13964

Declaration:

See product data on page 2

Other approvals

PEFC and FSC: Troldtekt is PEFC™ and FSC®-certified (FSC® C115450), which means that all our products are manufactured using wood from responsible forestry operations and other controlled sources. Customers can choose whether they want their Troldtekt acoustic panels to be FSC or PEFC-certified.





Light reflection: Light reflection for different types of Troldtekt panels (measured by DELTA/Force Technology):

Troldtekt white 101 70.8 % Troldtekt natural wood 55.2% Troldtekt natural grey 26.3%

USE AND MAINTENANCE

Troldtekt panels usually require no subsequent care. However, we recommend regular cleaning along with other surfaces - and otherwise as required. Light cleaning of the panels is easy using a vacuum cleaner with a brush nozzle. If vacuum-cleaning is not sufficient, you can wipe the panels

using a well wrung cloth. If you subsequently want to paint the Troldtekt ceiling, you can use a hand sprayer.

Water-based paint will not negatively impact the sound-absorbent properties of the panels.

RECYCLING

All Troldtekt cement-bonded wood wool (one-layer panels) can be composted and safely returned to nature as a soil conditioner.

The cement in Troldtekt's acoustic panels boosts oxygen levels during the composting process, while the wood adds organic material to the compost.

TOLERANCES

It is important to note that Troldtekt consists of the natural material wood - together with cement extracted from Danish mineral resources. The very nature of the material composition – wood wool and cement – will incur small variations in the panels. Panel dimensions and weights

remain inside the tolerance indicated at 23 +/- 2 °C and 50 +/- 5% relative humidity. However, inappropriate storage and lack of acclimatisation could alter panel dimension and weight. It is therefore important that you observe the installation, storage and acclimatisation instructions carefully.

PRODUCT DATA

The table below indicates the tolerances declared by us in accordance with EN 13168, the standard for cement-bonded wood wool and double-layer panels with cement-bonded wood wool, and EN 13964, the standard for suspended ceilings.

Properties DIMENSIONS

Width (mm)

Length (mm)	600/1200/2400
Thickness (mm)	43 53 65 75 (25+18) (35+18) (25+40) (35+40)
Weight (kg/m²)	
Fine	11.8 15.2 13.4 16.7
Ultrafine	12.6 16.5 14.2 18.0
Extreme fine	12.9 16.8 14.5 18.3
TOLERANCES	
Length (mm)	> 1250 : ±2.0
	≤ 1250:±1.0
Width (mm)	±1.0
Thickness (mm)	Length > 1250 : ±2.0
	Length ≤ 1250 : ±1.0
% by weight	±10
Perpendicularity (mm/m)	±≤2
Planeness (mm)	±≤3

600

600/1200/2400

ACC. 10 EN 15501 1	D 31,00
Fire protection capability	W 10/W 10
Acc. to EN 13501-2	K ₁ 10/K ₂ 10
Cladding class	K ₁ 10/B-s1,d0
IMPACT RESISTANCE	
Ball impact certification	1A
SUBSTANCES	
Chloride %	≤0.06
Formaldehyde	E1*
INDOOR CLIMATE	
Degassing	10 days
Particle release	Low
STANDARD	
Declared in	EN 13168

EN 13964

B-s1.d0

FIRE

Reaction to fire

Acc. to EN 13501-1

accordance with

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 $[\]ensuremath{^{\star}}$ No measurable formal dehyde emission