# Troldtekt® Acoustic Solutions since 1935 By Kingspan

# Troldtekt® Plus

# Data sheet

### PRODUCT - TROLDTEKT PLUS

Troldtekt Plus is a double-layer panel made from one 25 mm or 35 mm layer of Troldtekt acoustic panel and one 20 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 Plus is also available in a version with a 25 mm Troldtekt panel glued to a thin layer of acoustic fleece.

Troldtekt acoustic panels are cement-bonded 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 (PEFC/09-31-030)-certified or FSC® (FSC® C115450)-certified Norway spruce. Both certifications ensure that the wood comes from responsible forestry operations and other controlled sources.

Troldtekt can be surface-treated, but is often used untreated. Due to the nature

of the material, colour variations may occur with natural wood and natural grey (FUTURECEM™). 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 CE-mark 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 CE-marked, 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 (PEFC/09-31-030)and FSC® (FSC® C115450)-certified, 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 Teknologisk Institut, Denmark) can be found on Troldtekt's webpage. Please follow the link or scan the QR code.

troldtekt.com/web-tools-downloads/ download-materials/light-reflectance-values



### **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.

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#### 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 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

DIMENSIONS					
Width (mm)	600				
Length (mm)	600/	1200/	2400		
Thickness (mm)	25	45 (25+20)	55 (35+20)	65 (25+40)	75 (35+40)
Weight(kg/m²)					
Fine	-	12,3	15,7	13,4	16,7
Ultrafine	11,5	13,1	17,0	14,2	18,0
Extreme fine	11,8	13,4	17,3	14,5	18,3
TOLERANCES					
Length (mm)	> 12	50:±2	,0		
	≤ 12	50:±1	,0		
Width (mm)	±1,0				
Thickness (mm)	Leng	th > 12	250 : ±2	2,0	
	Leng	th ≤ 12	250 : ±1	1,0	
Perpendicularity (mm/m)	±≤2				

Reaction to fire	
Acc. to EN 13501-1	B-s1,d0
ire protection capability	
Acc. to EN 13501-2	K <sub>1</sub> 10/K <sub>2</sub> 10
Cladding class	K <sub>1</sub> 10/B-s1,d0
IMPACT RESISTANCE	
Ball impact certification	1A
SUBSTANCES	
Chloride %	≥ 0.06
	≤0.06 E1*
Formaldehyde	
Formaldehyde	
Chloride % Formaldehyde  INDOOR CLIMATE  Degassing Particle release	E1*
Formaldehyde INDOOR CLIMATE Degassing	E1*
Formaldehyde INDOOR CLIMATE Degassing Particle release	E1*
Formaldehyde  INDOOR CLIMATE  Degassing	E1*
Formaldehyde INDOOR CLIMATE Degassing Particle release STANDARD	E1*  10 days  Low



www.troldtekt.com

Troldtekt A/S

<sup>\*</sup> No measurable formaldehyde emission