

# Troldtekt® design

# Data sheet

## TROLDTEKT® DESIGN

Troldtekt design panels are made of wood and cement. The product consists of wood (spruce), which is shredded into wood wool and mixed with cement. Customers can choose whether they want their Troldtekt acoustic panels to be FSC® (FSC®115450)-or PEFC (PEFC/09-31-030)-certified. 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

Among the factors affecting colour variations are water/cement ratio, water content of the wood, drying rate, steam curing and curing moisture.

Troldtekt acoustic panels are suitable for commercial, industrial and residential builds.

# 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 Sletvej 2a DK-8310 Tranbjerg Denmark

Certifications:

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

Product standard number:

EN 13168:2012+A1:2015 EN 13964:2014

Declaration:

See product data on page 2

#### Other approvals

Cradle to Cradle: Troldtekt is Cradle to Cradle-certified at Gold level. Troldtekt acoustic panels are documented as being free of harmful substances and can therefore safely be returned to the biological cycle. Additionally, waste from the production of Troldtekt acoustic panels is returned to the technical cycle and used as a resource in new cement at Aalborg Portland.



Indoor climate labelling: Troldtekt is indoor climate-labelled in the best degassing and particle release categories.



M1 classification: Troldtekt is M1-classified by the Finnish Building Information Foundation RTS sr. This is the best category, and means that the panels have an extremely low emissions level for volatile organic compounds (VOC).



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 FSCor PEFC-certified.





Light reflection: Light reflection for different types of Troldtekt panels can be found on Troldtekt's webpage by scanning the QR code.



## Limitations:

- Must not be used as a structural component.
- Not suitable for surfaces subjected to frequent rubbing or physical contacts.
- Separation or protection must be provided to Troldtekt acoustic panels from heat sources such as fireplaces, flues and chimneys.
- Each panel weighs over 7.5kg. Specific fastening method to satisfy seismic requirements is required when used in suspended grid systems.



#### SPECIFICATION GUIDE - TROLDTEKT ACOUSTIC PANELS

The ceiling and/or wall lining shall be Troldtekt design panels [\_ \_] mm thick

manufactured by Troldtekt A/S and shall be installed in accordance with Troldtekt

installation instructions.

## **USE AND MAINTENANCE**

Troldtekt acoustic panels usually require no subsequent care. However, we recommend regular cleaning along with other surfaces – and otherwise as required. The panels are

easy to clean using a vacuum cleaner with a brush nozzle. If vacuum-cleaning is not sufficient, the panels can be wiped with a slightly damp cloth. If you want to paint the Troldtekt ceiling, use a hand sprayer. Waterbased paint does not reduce the soundabsorbing properties of the panels.

#### REUTILISATION

The entire range of Troldtekt's cementbonded wood wool panels is Cradle to Cradlecertified at Gold level. Consequently, we have complete documentation of the substances in the products, and documentation that the products can be composted and safely returned to the biological cycle as a soil conditioner. The cement in Troldtekt panels has a high lime content, which helps to neutralise the acids produced during composting. The wood in the Troldtekt panels is organic material, and helps to

prevent the compost from compacting, thereby enhancing oxygenation during the composting process. In this way, carbon and nutrients are recirculated in the biological cycle

#### TOI FRANCES

Troldtekt consists of the natural material wood in combination with cement extracted from Danish mineral resources. The mix of these materials – wood wool and cement – inevitably results in slight 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 can affect the dimensions and weight of the panels. 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, which is the standard for cement-bonded wood wool and double-layer panels with cement-bonded wood wool, and EN 13964, the standard for suspended ceilings.

**FIRE** 

# **Product Properties and Performance**

DIMENSIONS (mm)		
Product name	T W L	
Line	35 x 600 x 1200	
TOLERANCES		
Length (mm)	> 1250 : ±2.0	
	≤ 1250:±1.0	
Width (mm)	±1.0	
Thickness (mm)	Length > 1250 : ±2.0	
	Length ≤ 1250 : ±1.0	
Perpendicularity (mm/m)	± <u> </u>	

Reaction to fire	Group 1-S	
acc. to ISO 5660-1:2015		
WEIGHT (ultrafine structure)		
Product name		
Line	14.7 kg/m²	15.7 kg/m²
SUBSTANCES		
In accordance with		
EN 13168:2012+A1:2015 and EN 13964:2014		
Chloride	≤ 0.06	
Formaldehyde	E1*	
SUSPENSION		
Declaration in accordance with		

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

EN 13168:2012+A1:2015 and EN 13964:2014

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The most recent version can be found online by scanning the QR code.



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