

Troldtekt® acoustic panels

Data Sheet - 15 mm Thickness Panels

THE PRODUCT – TROLDTEKT ACOUSTIC PANELS

Troldtekt are cement-bonded wood wool panels made from wood and cement.

The product consists of wood (spruce) which is shredded into wood wool and mixed with cement. We offer PEFC™-certified or FSC®-certified Norway spruce (FSC® C115450). FSC certification guarantees that the wood comes from responsible forestry operations.

As Troldtekt consists of natural material wood and cement extracted from Danish mineral resources, colour variations will

exist on non-painted panels. 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.

15mm thick Troldtekt acoustic panels are suitable for commercial, industrial and residential builds with direct fixed or suspended ceiling grid system applications.

PRODUCT STANDARDS, LABELLING AND CERTIFICATION

CE marking:

CE marking of building materials is required by law in the EU. The CE mark indicates that the building material in question can be legally sold and is in correspondence with the product standard to which the mark refers. Troldtekt products are CE marked and in addition to the marking, we state:

Name of the producer:
Troldtekt A/S

Certificate numbers:
0615 – CPR – 222958G
0615 – CPR – 80474G

Product standard number:
EN 13168:2012+A1:2015
EN 13964:2014

Declaration:
See product data on page 2

Indoor climate certification:

Troldtekt is certified to the best indoor climate categories by the Danish Indoor Climate Labelling (Dansk Indeklima Mærkning).

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.co.nz/web-tools-downloads/download-materials/light-reflectance-values/



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

SPECIFICATION GUIDE - TROLDTEKT ACOUSTIC PANELS

The ceiling and/or wall lining shall be Troldtekt acoustic panels [_] mm thick manufactured by Troldtekt A/S and shall be installed in accordance with Troldtekt installation instructions.

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. Should vacuum-cleaning prove insufficient, you can wipe the panels using a lightly damp cloth.

If you subsequently want to paint the Troldtekt ceiling, you can

use a hand sprayer. Water-based paint will not reduce the sound-absorbing performance of the panels.

When using 15 mm thick Troldtekt panels in suspended ceiling grid systems, ensure that the selected system is designed to carry the weight of Troldtekt panels and it meets the building's specific seismic requirements.

COMPLIANCE

Troldtekt acoustic panels meet the performance requirements of NZBC Clause B1 Structure (B1.3.1, B1.3.2, B1.3.3(a), B1.3.4), Clause F2 Hazardous Building Materials (F2.3.1) providing:

- It is not damaged, dented or fractured.
- It is installed in accordance with installation instructions.

RECYCLING

The entire range of Troldtekt cement-bonded wood wool panels are Cradle to Cradle-certified in the gold category.

Consequently, we have complete documentation of the substances in the products, and documentation that the products 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

This table indicates the tolerances declared by us in accordance with EN 13168:2012+A1:2015, the standard for cement-bonded wood wool and double-layer panels with cement-bonded wood wool, and EN 13964:2014, the standard for suspended ceilings.

Properties:

DIMENSIONS

| | |
|----------------|----------|
| Width (mm) | 600 |
| Length (mm) | 600/1200 |
| Thickness (mm) | 15 |

| | |
|-----------------------------|-----|
| Weight (kg/m ²) | |
| Ultrafine | 7.2 |

TOLERANCES

| | |
|-------------------------|------|
| Width (mm) | ±1.0 |
| Length (mm) | ±1.0 |
| Thickness (mm) | ±1.0 |
| % by weight | ±10 |
| Perpendicularity (mm/m) | ±≤2 |
| Planeness (mm) | ±≤3 |

FIRE

| | |
|--------------------------|-----|
| Reaction to Fire acc. to | |
| ISO 5660-1:2015 Group | 1-S |

SUBSTANCES

| | |
|--------------|--------|
| Chloride % | ≤ 0.06 |
| Formaldehyde | E1* |

INDOOR CLIMATE

| | |
|------------------|---------|
| Degassing | 10 days |
| Particle release | Low |

STANDARD

| | |
|-----------------------------|--|
| Declared in accordance with | EN 13168:2012+A1:2015 EN 13964:2014 |
|-----------------------------|--|

* No measurable formaldehyde emission