

Technical data

PRODUCT – TROLDTEKT PLUS STRATOCELL

Troldtekt Plus-Stratocell 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 Stratocell, which is produced from recycled bottles (Polyethylene). The two panels are glued together with a non-toxic PVA adhesive.

Troldtekt acoustic panels 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 use certified wood – FSC® or PEFC™ – guaranteeing that it can be traced back to responsible forestry operations. 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. These colour variations are most evident in the grey panels, where the cement gives the panels the grey Troldtekt look. 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 CERTIFICATES

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 – CPD – 222958G
0615 – CPD – 804474G

Product standard number:
EN 13168 and EN 13964

Declaration:
See product data on page 2.

Other approvals

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

Ball impact certification: A wide range of structures with Troldtekt acoustic panels have been tested and certified for use as ceiling and wall cladding in sports facilities in accordance with 'Prüfung der Ballwurfsicherheit, DIN 18032 Teil 3, Sportshallen für Turnen und Spiele' (requirements and testing of ball impact safety, DIN 18032, Part 3, sports facilities). EN 13964 also includes ball impact certification as a parameter, and here Troldtekt is classified as Class 1A.

Light reflection

Light reflection for different types of Troldtekt panels (measured by DELTA Light and Optics):

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 long-haired paint roller or a hand sprayer. Water-based paint will not negatively impact the sound-absorbent properties of the panels.

DISPOSAL

It is important to sort Troldtekt waste so that screws, nails and other materials are not mixed with the cement-bonded wood wool waste. We recommend that you deposit Stratocell for recycling (Plastic). Sorted Troldtekt waste can be deposited at waste disposal sites for burning or composting. Troldtekt waste is suitable for composting

processes because the high proportion of lime (CaO: approx. 34% by weight VS) assists in accelerating the composting process and the fibre structure improves the quality of the compost. Troldtekt waste can also be burned in incinerators at waste disposal sites and here the material contributes to combustion (lower calorific value approx.

1,000 kcal/kg VS). For further information – see disposal guidelines at www.troldtekt.com.

TOLERANCES

It is important to note that Troldtekt is a natural material and 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	
Thickness (mm)	45 (25 + 20) 55 (35 + 20) 65 (25 + 40) 75 (35 + 40)
Width (mm)	600
Length (mm)	600/1200/2400
Weight (kg/m ²)	10.2 (43 mm) 12.5 (53 mm) 10.7 (65 mm) 13.0 (75 mm)
TOLERANCES	
Length (mm)	≥ 1.250 : ±2.0 ≤ 1.250 : ±1.0
Width (mm)	±1.0
Thickness (mm)	Length ≥ 1.250 : ±2.0 Length ≤ 1.250 : ±1.0
% by weight	±10
Perpendicularity (mm)	±≤2
Planeness (mm)	±≤3

FIRE	
Reaction to fire	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 accordance with	EN 13168 EN 13964

* No measurable formaldehyde emission

Troldtekt A/S
Sletvej 2A
DK-8310 Tranbjerg J
Tel. +45 8747 8100
Fax +45 8747 8111
info@troldtekt.dk
www.troldtekt.com