

Technical data

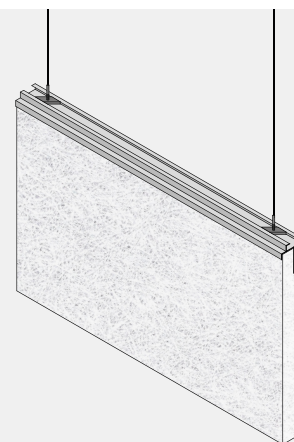
TROLDTEKT® BAFFLES

Troldtekt baffles are an effective and flexible acoustics solution that can supplement existing sound-absorbing surfaces on walls and ceilings while regulating the acoustics in rooms where it is not possible to install a suspended acoustic ceiling. Using Troldtekt acoustic baffles, the acoustics can be adapted according to need, as the baffles are suspended individually from the ceiling structure. This allows a great deal of freedom with regard to the interior design and architectural look while achieving an impressive acoustic effect, because the suspended Troldtekt baffles absorb sound on both sides of the panels. The design is simple and elegant, with a visible

aluminium profile at the top to which one attaches the thin steel wires.

Troldtekt baffles are available in natural wood/natural grey or painted in our standard colours. Custom-painted baffles can also be supplied, painted in an RAL or NCS colour of your choice. All Troldtekt cement-bonded wood wool products in natural wood/natural grey and standard colours are Cradle to Cradle-certified at Gold level.

The baffles are available with Troldtekt acoustic panels in fire class B-s1,d0 or A2-s1,d0.



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-CPD-222958G

0615-CPD-804474G

Product standard number:

EN 13964

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).



Blue Angel: Troldtekt is eco-labelled under the German Blue Angel eco-labelling scheme, which guarantees that the product has a low impact on the environment and the climate and meets high standards for health protection.



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. 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% |

OPERATION AND MAINTENANCE

Troldtekt 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 subsequently want to paint the Troldtekt ceiling, you can use a long-haired paint roller or a hand sprayer. Water-based paint does not reduce the sound-absorbing properties of the panels.

REUTILISATION

All Troldtekt baffles can be separated into cement-bonded wood wool and metal parts. Cement-bonded wood wool products can be composted and returned to nature 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.

TOLERANCES

Troldtekt consists of the natural material wood, and cement extracted from Danish mineral resources. The mix of natural materials – wood wool and cement – inevitably results in slight 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 can affect the dimensions and weight of

the panels. Therefore, it is important to carefully follow the installation, storage and acclimatisation instructions.

PRODUCT DATA

The table below indicates the product data which we declare in accordance with EN 13964, which is the standard for suspended ceilings.

Properties:

Dimensions

| | |
|----------------|----------|
| Width (mm) | 300/600 |
| Length (mm) | 600/1200 |
| Thickness (mm) | 40 |

Brand

Baffles are made of panels in fire class:
Reaction to fire in accordance with EN 13501-1

B-s1,d0

A2-s1,d0

Weight (kg/m²)

| | | |
|-----------|------|----|
| Fine | 18.5 | |
| Ultrafine | 20 | 23 |

Standard

Declaration in accordance with EN 13964

Suspension

Steel wires and cable holder*

Aluminium fastening blocks and top profile

* Not suitable for use in swimming pools etc.

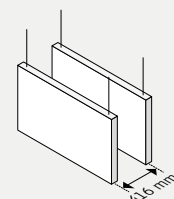
Technical data

ACCREDITED SOUND MEASUREMENTS

40 x 600 x 1200 mm
Centre distance = 416 mm

| | | | | | | |
|----------|------|------|------|------|------|------|
| Hz | 125 | 250 | 500 | 1000 | 2000 | 4000 |
| α | 0.35 | 0.35 | 0.50 | 0.70 | 0.85 | 0.95 |

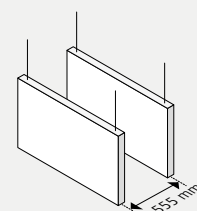
$\alpha_w = 0.55$ - NRC = 0.60 - Absorption class D



40 x 600 x 1200 mm
Centre distance = 555 mm

| | | | | | | |
|----------|------|------|------|------|------|------|
| Hz | 125 | 250 | 500 | 1000 | 2000 | 4000 |
| α | 0.30 | 0.30 | 0.45 | 0.65 | 0.75 | 0.85 |

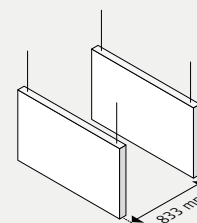
$\alpha_w = 0.50$ - NRC = 0.55 - Absorption class D



40 x 600 x 1200 mm
Centre distance = 833 mm

| | | | | | | |
|----------|------|------|------|------|------|------|
| Hz | 125 | 250 | 500 | 1000 | 2000 | 4000 |
| α | 0.35 | 0.35 | 0.35 | 0.55 | 0.65 | 0.75 |

$\alpha_w = 0.45$ - NRC = 0.45 - Absorption class D



40 x 600 x 1200 mm
Centre distance = 1666 mm

| | | | | | | |
|----------|------|------|------|------|------|------|
| Hz | 125 | 250 | 500 | 1000 | 2000 | 4000 |
| α | 0.25 | 0.20 | 0.25 | 0.35 | 0.40 | 0.50 |

$\alpha_w = 0.35$ - NRC = 0.30 - Absorption class D

