



Trolldtekt®
Natural acoustic solutions
for ceilings and walls

Superior acoustics – naturally

Troldtekt ensures that aesthetics, superior acoustics and a comfortable indoor climate go hand in hand in architecture.

Buildings with many hard surfaces are acoustically complex. At the same time, consultants, architects and clients face significant challenges when it comes to creating solutions that produce the desired synergies between the aesthetics, the acoustics and the indoor climate – right from the design phase.

What they need are acoustics solutions that contribute positively to their architectural designs, while also significantly reducing reverberation times.

Strong, safe and sustainable

Troldtekt is the natural choice for ceiling and wall cladding in all types of architecture. From schools and sports halls to cultural buildings and offices.

The combination of wood and cement results in the unique sound-absorbing properties of the Troldtekt panels, guaranteeing superior acoustics. The material is naturally strong, withstands humid environments and offers effective fire protection. At the same time, Troldtekt acoustic panels have been certified as a sustainable natural product according to the internationally recognised Cradle to Cradle standard.

Considerable design freedom

With our wide range of colours, textures and flexible design solutions as well as the option of customised project solutions, you are completely free to choose the exact architectural style you are after. And you can even integrate lighting and speakers in the Troldtekt ceiling of your choice.

6 good reasons for choosing Troldtekt®

- Good acoustics
- Healthy indoor climate
- Documented sustainability
- Effective fire protection
- Natural strength
- Flexible design options

Frontpage:
Project: Design Museum, London
Architect: OMA
Photo: Charles Hosea

Page 3:
Project: The Loom, London
Architect: Duggan Morris
Photo: Jack Hobhouse



A simple recipe based on natural ingredients

Troldtekt cement-bonded wood wool is produced from wood and cement. As it has been since 1935.



Wood

We use Danish Norway spruce, which is a carbon-neutral resource. During its growth, each tree absorbs just as much carbon dioxide as is released during its care, felling and transport. Troldtekt is approved to offer products in the 'FSC® 100%' category (FSC® C115450), which means that all the wood in a single panel complies with the FSC requirements.



Cement

We only use cement from Aalborg Portland, which extracts the raw materials from the Danish underground with minimal environmental impact. Aalborg Portland is certified according to the ISO 14001 environmental management system and the European Eco-Management and Audit Scheme (EMAS).



Cement-bonded wood wool

At our factory in Denmark, we produce Troldtekt acoustic panels from cement-bonded wood wool, which combines the inherent strength of cement with the natural properties of wood.

Visit > www.troldtekt.com to see our film about how Troldtekt acoustic panels are produced.

Troldtekt and the circular economy

The well-established Cradle to Cradle design concept is at the heart of Troldtekt's business strategy.

Cradle to Cradle is all about designing products so that the materials can be reused and create new value. This takes place either in the biological cycle, where the materials become a new resource for nature, or in the technological cycle, where they are used to produce new products.

We have based our business strategy on the circular Cradle to Cradle principles, and our products are Cradle to Cradle Certified™ at Silver level. The certification has been granted, among other things, because our acoustic panels contain no harmful substances, and can therefore be returned to the natural cycle as compost.

Wind power and valuable waste

Through focusing on sustainability, and through massive investments in our production facilities, we have achieved a number of value-creating milestones. Among other things, all

the electricity consumed in our production now comes from wind power, while all our cement-bonded wood wool waste is returned to the biological cycle.

Ramboll has prepared a report and documentation package detailing the positive contribution of Troldtekt panels to sustainable building certified under BREEAM, LEED and DGNB.

Visit > www.troldtekt.com and read more about Troldtekt's contribution to sustainable building.





Campus UC Syd in Aabenraa, Denmark

Ceiling panels: Troldekt & Troldekt Plus acoustic panels
Colour: Natural wood
Structure: Fine (1.5 mm wood wool)
Edge design: 5 mm bevelled edges, K5
Installation: With C60 profile system

Architects: Henning Larsen Architects
Client: University College Syddanmark
Photos: Tommy Kosior, Troldekt A/S



Fredericia Furniture Showroom in Copenhagen, Denmark

Ceiling panels: Troldekt acoustic panels
Colour: Black 207
Structure: Ultrafine (1.0 mm wood wool)
Edge design: 5 mm bevelled edges, K5
Installation: With Troldekt screws

Architects: Fredericia Furniture + Aarstiderne Arkitekter, Spaceplanning
Client: Datea
Photos: Helene Høyer Mikkelsen, architect



London's Regent's Park Theatre

Ceiling and wall panels: Troldekt acoustic panels
Colour: Natural wood & Natural grey
Structure: Fine (1.5 mm wood wool)
Edge design: Square edge, K0

Architects: Reed Watts Architects
Photos: David Jensen



UK's National Memorial Arboretum

Ceiling panels: Troldekt acoustic panels
Colour: Grey 202
Structure: Coarse (3.0 mm wood wool)
Edge design: 5 mm bevelled edges, K5
Installation: With Troldekt screws

Architects: Glenn Howells Architects
Photos: Rob Parrish Photography

Balneon | Indoor and open-air pool am Rübenberge, Germany

Ceiling panels: Troldekt acoustic panels
Colour: RAL 1008060, RAL 1007050, RAL 2105030, RAL 2106010, RAL 0858080
Structure: Extreme fine (0.5 mm wood wool)
Edge design: 5 mm bevelled edges, K5
Installation: With Troldekt screws

Architects: pbr Planungsbüro Rohling AG
Client: Wirtschaftsbetriebe Neustadt am Rübenberge GmbH
Photos: Fotodesign Bierwagen

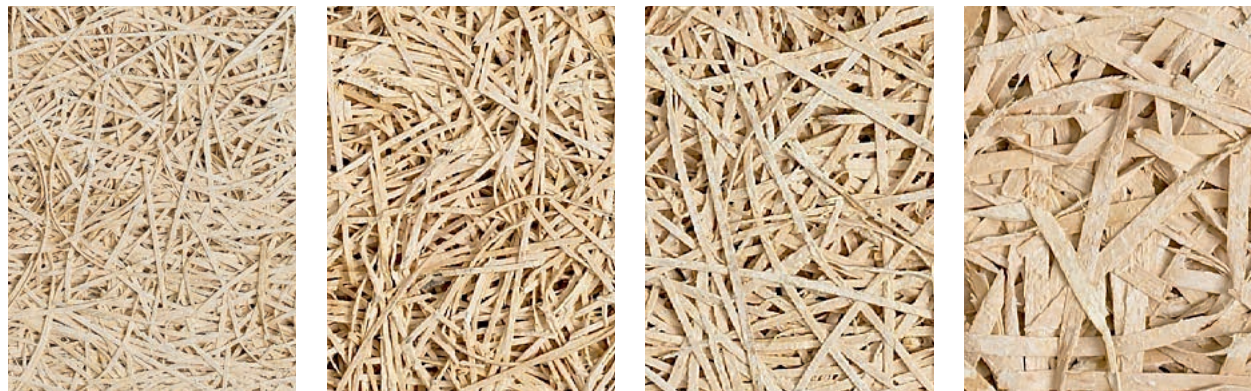


Design Museum, London

Ceiling panels: Troldekt acoustic panels
Colour: Grey 202
Structure: Ultrafine (1.0 mm wood wool)

Architects: OMA
Photos: Charles Hosea



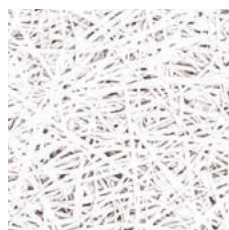


Extreme fine structure, 0.5 mm Ultrafine structure, 1.0 mm Fine structure, 1.5 mm Coarse structure, 3.0 mm

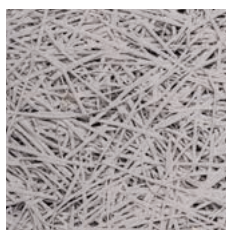
Natural wood



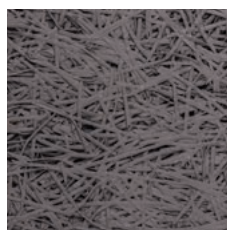
Natural grey



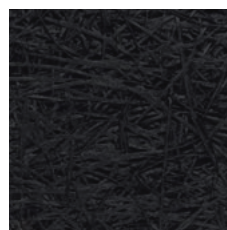
White 101



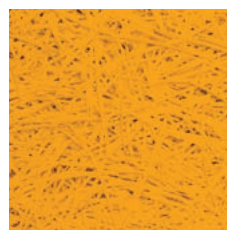
Grey 202



Grey 208



Black 207



Custom colour

Choice of structures and colours

Extreme fine or a distinctly coarse structure? Nature's own colours, classic white, black or a special colour? It's entirely up to you.

The characteristic structure of the Troldekt acoustic panels is determined by the width of the wood wool strands. You can choose between extreme fine, ultrafine, fine and coarse.

We use two different types of cement – grey and white – to produce Troldekt acoustic panels in natural grey and natural wood, respectively.

Troldekt requires no further surface treatment, but we offer to supply panels spray-painted using water-based paint in the standard colours white 101, grey 202, grey 208 and black 207. Moreover, Troldekt acoustic panels can be supplied to order in all NCS and RAL colours.

Neither factory painting nor the subsequent painting of Troldekt acoustic panels will affect their unique sound-absorbing properties.



Multifunctional ceilings

Troldekt acoustic panels can be used to create uniform ceilings with hidden features. Here are some of the solutions available.

Troldekt® acoustic panels

Our classic Troldekt acoustic panel. Ensures superior acoustics when used as ceiling and wall cladding in all types of buildings.

Troldekt® Plus

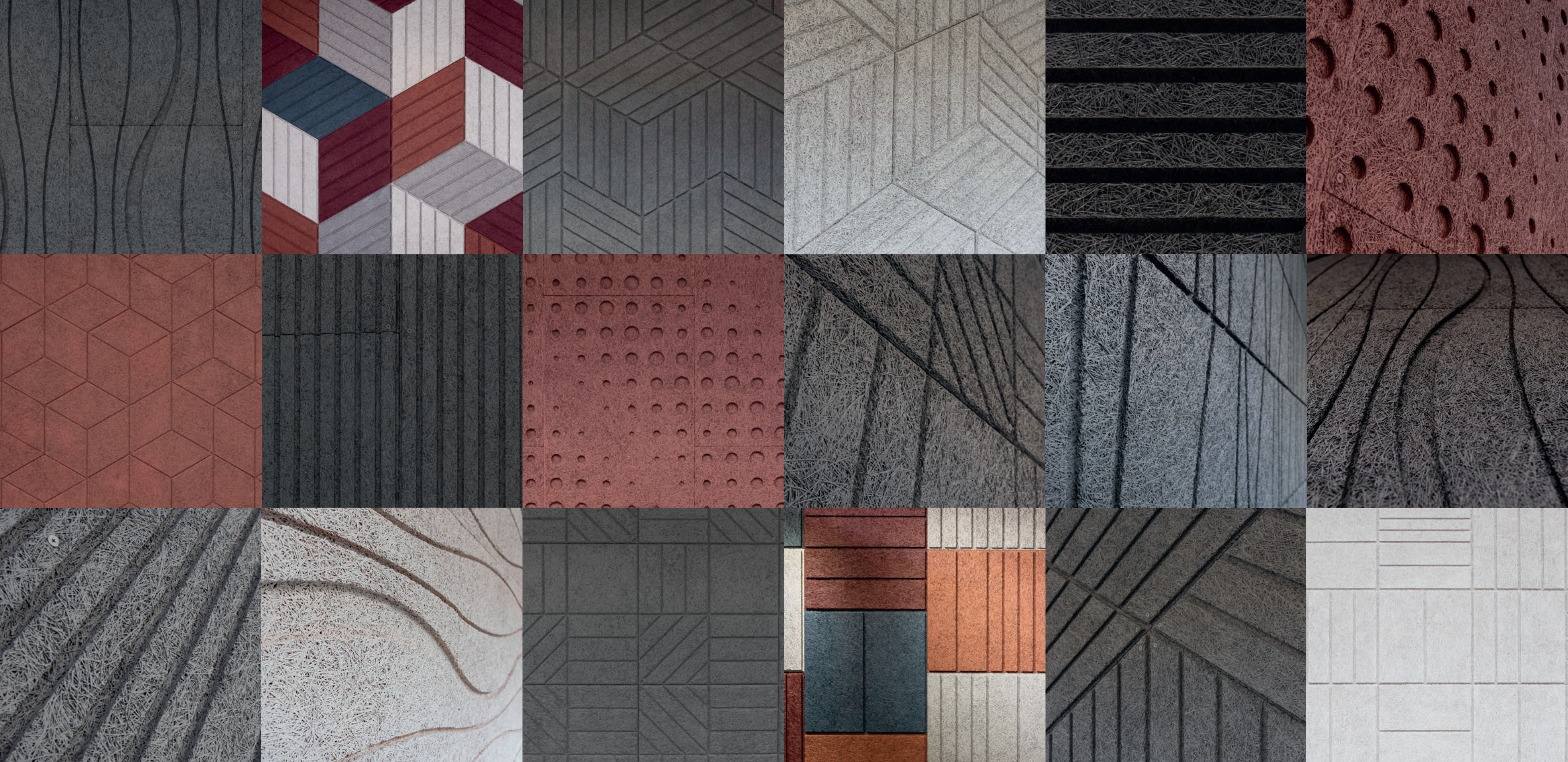
Acoustic panel with a backing of sealed mineral wool. Space-saving solution for retrofitting on existing ceilings or suspended ceilings.

Troldekt® lighting

Light fittings specially designed for installation in Troldekt acoustic ceilings. Architecturally simple combination of clean lines and optimum effect.

Troldekt® speakers

Specially designed speaker units which are integrated into and concealed on the back of acoustic panels. Elegant and discreet sound experience without any undesirable reverberation.



Trolldtekt® design solutions

Enjoy the freedom to unite form and function in interior design.
Choose one of our special design solutions.

Trolldtekt design solutions allow you to combine superior acoustics and a healthy indoor climate with expression and character. You can create your own patterns and rhythms in the design – and vary and scale the individual design solutions.

The solutions are mass-produced, drawing on CNC technology, which means they are competitively priced. All the solutions are designed to ensure that ceilings or walls are experienced as large cohesive surfaces. In a nutshell, it's not about the panel, but the surface.

Freedom for architects to create original designs

The new Trolldtekt design solutions result from a goal on the one hand, and a rule on the other. Our goal is to give architects the greatest possible flexibility when designing ceilings and walls for good acoustics. The rule is that the solutions must be suitable for mass production.

- We wanted our new design series to appeal to architects who want the scope to do something out of the ordinary in their interiors, but who also have to keep within a reason-

able budget, says the architect Michael Christensen MAA, who works as a product developer at Trolldtekt A/S.

Michael Christensen is behind the series of design solutions, which are based on industrial CNC technology.

- We have sought to create a synergy of form and function in a wide range of products. Some of the new solutions dovetail perfectly with Nordic design – with straight lines and angles – while others are more expressive, he says.

GOOD ACOUSTICS SINCE 1935

Troldtekt A/S has been designing, developing and manufacturing Troldtekt acoustic panels since 1935 – from locally sourced natural materials and under modern conditions with minimal environmental impact. Our products are developed and manufactured in Denmark, and distributed in a number of countries.

We are trendsetting

It is our vision to be a trendsetter within intelligent acoustic solutions that focus on a sustainable indoor climate. We therefore develop new solutions in close collaboration with industry experts, architects and other building consultants.

We take responsibility

It is important for us to play an important role in society – also for our own sake. We believe that sustainability pays in the long run. We have therefore systematised our social responsibility efforts by committing to the UN Global Compact – the world's largest voluntary corporate social responsibility initiative.

We create added value

The sustainable Cradle to Cradle design concept is a key part of our business strategy. The concept focuses on ensuring that materials add value for the environment, for society and for our business.

Visit Troldtekt online for more inspiration:



#troldtekt
#goodacoustics

This magazine is 100 % biodegradable.
The paper is FSC® and Cradle to Cradle
Certified™ PurePrint Paper and printed with
Cradle to Cradle Certified Inks - free of all
hazardous chemicals and heavy metals.

