

CSR report from Trolldtekt A/S:

Trolldtekt A/S reduces carbon footprint with new cement type

The combination of FUTURECEM™, a new cement type developed by Aalborg Portland, and the transition to renewable energy in its own production now enables Trolldtekt to supply acoustic panels with a reduced carbon footprint.

In addition, after switching to a new paint recipe across its entire product range, Trolldtekt advanced to the best Cradle to Cradle category in material health in 2021.

Trolldtekt uses close to 100 per cent renewable energy at its own factory, and with the introduction of the new FUTURECEM cement type, the way has been paved for substantial reductions in the carbon footprint of the procured raw materials. This is the message in Trolldtekt's CSR report for 2021, which has just been published.

The new acoustic panels based on FUTURECEM were launched in March 2022. Trolldtekt developed the panels in 2021 – and produced the first test variants using a total of 40 tonnes of FUTURECEM, according to the report.

“In 2022, we expect to replace a substantially larger share of the cement in our acoustic panels with FUTURECEM, which will help to further reduce our overall carbon footprint,” says Per Leth, CEO, Trolldtekt A/S.

97.8 per cent renewable energy at factory

Trolldtekt now runs its factory in Troldhede using 97.8 per cent renewable energy. When factoring in the entire life cycle of the acoustic panel including production (stages A1-A3 of an EPD), construction process (stages A4-A5), use (stage B1) end of life (stages C1-C4) and recycling potential (stage D), the total carbon footprint is 26 per cent lower for an acoustic panel based on FUTURECEM than for panels based on grey cement. This is documented by Trolldtekt's new environmental product declarations (EPDs).

“We now have a Trolldtekt acoustic panel that offers the same acoustic properties, fire protection and natural strength as our original panels, and which also has a significantly reduced carbon footprint,” says Peer Leth, and he continues:

“We've been working strategically with the Cradle to Cradle design concept for ten years, and we're therefore able to document that our products can be recycled in the biological cycle as a soil improver and in the technical cycle as a raw material in new cement. This is already happening with our production waste, and projects are underway to overcome the logistics challenges associated with also recycling Trolldtekt panels as part of demolition waste.”

From Silver to Gold with new paint

A low carbon footprint is essential in sustainable building. As is material health, which guarantees that products are healthy for people and the environment *during* use – and can be safely returned to new cycles *after* use. In 2021, Trolldtekt – together with Masquelack – developed a paint type based on a newer and more sustainable conservation technology.

Thanks to the new paint, Trolldtekt has advanced to the highest level of material health certification – Platinum – under the Cradle to Cradle design concept. Since Trolldtekt is certified at Gold or Platinum level in the other four Cradle to Cradle categories, this has triggered overall Gold certification for the entire series of Trolldtekt acoustic panels.

“The switch to new paint recipes in 2021 represents a milestone in our ongoing CSR efforts. Getting here has taken a lot of development and testing, and we're proud that we can now offer the market both painted and unpainted Trolldtekt panels with Cradle to Cradle Gold certification,” says Peer Leth.

FACTS: Highlights from Trolldtekt's CSR report 2021

The CSR initiatives realised by Trolldtekt in 2021 included:

> **Optimised paint in production**

In 2021, Trolldtekt started using new and more sustainable paint recipes in production. This has paved the way for the entire range of Trolldtekt acoustic panels in natural wood/natural grey and painted in standard colours advancing to the highest level of certification (Platinum) in the Cradle to Cradle material health category – and to Gold level overall.

> **Acoustic panels based on FUTURECEM**

In 2021, Trolldtekt developed acoustic panels based on the new cement type FUTURECEM. Trolldtekt based on FUTURECEM has a carbon footprint that is 26.4 and 37.7 per cent lower than the carbon footprints of Trolldtekt based on grey and white cement, respectively, measured throughout the entire life cycle of the acoustic panels.

> **Close to 100 per cent renewable energy**

In 2021, Trolldtekt's production was based on 97.8 per cent energy from renewable sources. All electricity comes from wind power, and the heat for the drying process comes from Trolldtekt's own biomass boiler.

> **Introduction of clear plastic foil**

In 2021, Trolldtekt developed a new type of packaging, which means that Trolldtekt acoustic panels are now delivered to customers on pallets wrapped in clear foil rather than white foil. Clear plastic makes it easier to recycle the foil.

> **Supporting the local community**

In 2021, Trolldtekt made a financial contribution towards Troldhede's new activity area and the replacement of the speaker system in the local sports hall. Both venues are important gathering places for the citizens of Troldhede.

[Read Trolldtekt's CSR report 2021 in full here.](#) The English version of the report was uploaded to the UN in June as part of Trolldtekt's membership of the UN Global Compact, a worldwide voluntary CSR initiative. Trolldtekt has uploaded a CSR report to the UN every year since 2010.

FACTS ABOUT TROLDTEKT

- Trolldtekt A/S is a leading developer and manufacturer of acoustic ceiling and wall solutions.
- Since 1935, Danish wood and cement have been the raw materials used in the production process, which takes place in modern facilities in Denmark with a low environmental impact.
- Trolldtekt's business strategy has been developed around the Cradle to Cradle sustainable design concept as the central element.
- Since spring 2022, Trolldtekt has been part of the Irish Kingspan Group, which supplies highly efficient building materials to the global construction market – with operations in more than 70 countries.

FURTHER INFORMATION:

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