

Press release from Troldekt A/S

Circle House aims to pave the way for circular construction

Circle House involves 60 public housing units, that are to be built according to circular principles. A show house is already being opened to demonstrate the concept, which is the first of its kind in the world. Troldekt A/S is a partner in Circle House – and the company’s CEO hopes the project will help more people in the industry see the potential for re-use.

Construction of the world’s first public housing based on circular principles will commence in 2019. The project is called ‘Circle House’, and is to be built in the new Lisbjerg Bakke quarter in Aarhus, Denmark. A show house will open on Friday 28 September at Lejerbo’s headquarters in Valby, Copenhagen, where visitors can see the Circle House concept first hand.

The aim of Circle House is that 90 percent of the building elements can be reused with virtually no loss of value. The project involves a number of partners, one of whom is Troldekt A/S, which produces acoustic panels made of natural wood and cement.

“We believe Circle House will be a positive business case which shows that you can build sustainable and circular buildings without it being expensive. It is a *learning by doing* project, where all links in the value chain are seated around the table. The atmosphere among the partners is very positive,” says Peer Leth, CEO of Troldekt.

The challenges are practical

Troldekt has been following circular Cradle to Cradle principles since 2012, and Peer Leth gave an inspirational presentation at the Confederation of Danish Industry earlier in 2018 as part of the Circle House project. He discussed the opportunities and challenges here in working with the circular economy.

“The Danish Government’s new strategy for the circular economy shows that there is political focus on this area, and this is positive, leading to better framework conditions. However, this is not enough alone, because the challenges are practical. Let me give an example: Troldekt panels are a natural material that can be returned to nature as compost or used as a resource in new materials. For this to happen to a greater extent, there have to be players who see it as a good business to collect and sort waste fractions at building sites,” says Peer Leth.

“I hope that Circle House becomes a pilot project for work with sorting at source and material stores. What we need is to have a database in 40-50 years’ time where you can see which materials have been used, and that the materials have not been impacted by environmentally-damaging paint etc. during their life cycle,” he adds.

Raw elements should be used 1:1

A key objective in Circle House is to use ‘raw’ elements that ideally do not require reprocessing once the building is completed. Casper Østergaard Christensen, architect and project manager for the GXN studio, and the project leader for Circle House, explains.

“The aim is that most of the elements can be reused 1:1 when the building has to be dismantled in many years. It will be a challenge for residents if they are not allowed to paint their raw concrete walls a new colour, for example,” he notes.

“There will be some things residents are not able to do, but the apartments will also have a more flexible layout, such that it is easy to move an interior wall to change how the space is distributed.

The Circle House show house will officially open on 28 September at Gammel Køge Landevej 26, Valby, Denmark.

FACTS ABOUT TROLDTEKT A/S:

- Troldekt A/S is a leading developer and manufacturer of acoustic ceiling and wall solutions.
- Since 1935, wood and cement have been the main natural raw materials in our production, which takes place in Denmark in modern facilities with a low environmental impact.
- Troldekt's business strategy is founded on the Cradle to Cradle design concept, which plays a key role in safeguarding environmental benefits towards 2022.

CIRCLE HOUSE IN NUMBERS:

- Circle House will be 60 public housing units, built in line with circular economy principles.
- The aim is for 90 percent of the materials in the homes to be re-usable without losing significant value.
- Construction is expected to be tendered out under market conditions in late 2018.
- Building is expected to commence in 2019 and be completed in 2020.
- The project involves more than 35 companies from the Danish construction industry, across the value chain.
- Circle House has received a grant of DKK 6.9 million from the Danish Environmental Protection Agency and DKK 3 million from Realdania.

FURTHER INFORMATION:

Peer Leth, CEO, Troldekt A/S: +45 8747 8130 // ple@troidtekt.dk

Tina Snedker Kristensen, Head of Marketing and Communications, Troldekt A/S: +45 8747 8124 // tkr@troidtekt.dk