

# EcoCocon

December 2025





# About Us



**EcoCocon s.r.o. - Slovakia**

HQ Bratislava  
Factory Voderady

**EcoCocon UAB - Lithuania**

Factory: Kybartai

**EcoCocon Nordic**  
Finland and Sweden

**EcoCocon Denmark**

**EcoCocon France**

**EcoCocon Spain**

**EcoCocon**  
UK, Ireland

**Europe and US**

30 countries, 40+ representatives

- » Founded 2008, Nordic 2022.
- » 100+ in Europe
- » 500+ of projects in 30 countries, on 3 continents
- » 63 852 m<sup>2</sup> walls built
- » 7 199 060 kg CO<sub>2</sub> sequestered





# Our story



2008

EcoCocon was born in the heart of Lithuania in 2008, when a desire to change the world for the better met with a brilliant idea. The company was founded by a civil engineer, Domantas Surkys, and his partners with a clear mission—to develop a new, truly sustainable way of creating real circular buildings. Their very own homes were to serve as first prototypes.



2010

A pivotal moment for the company came in 2010. At an international workshop, Domantas met Bjørn Kierulf, and together they built the world's first load-bearing straw bale dome. To Bjørn, straw had little left to prove. The dome became the seat of his architectural studio, which has been designing straw buildings ever since. The experience with the dome also prompted innovation. Domantas, along with the production manager Vilmantas Mickevičius, perfected the panels, developing a unique multi-directional straw-pressing technique.



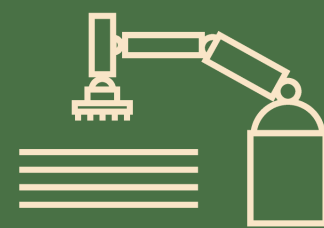
2016

Fast forward to 2016. EcoCocon is attracting professionals from all over Europe under its banner, and straw houses are sprouting across the continent. Years of diligent work, research, and development led by Marius Tarvydas finally pay off, as EcoCocon receives the highly esteemed 'Cradle to Cradle Certified®' and 'Passive House' certifications. The solution is ready, demand is growing, and production is ramping up. At this rate, however, it would not be enough to make a dent...



2019

In 2019, EcoCocon's innovation caught the attention of climate activist and social entrepreneur Petra Régnacq Trnková. Her involvement was the final piece of the puzzle. Petra became a majority shareholder, and the company relocated its base to Slovakia with Bjørn as the CEO. With a newfound ally and strong backing, EcoCocon set out to elevate straw from obscurity to industrial scale.



2024

Recognising that scaling up requires advanced automation, EcoCocon turned its efforts to developing a groundbreaking production line. In 2024, this vision became reality with the creation of its first small, agile, and highly automated production centre, designed for easy setup anywhere in the world. This centre marks a significant milestone in our journey to revolutionise the construction industry. Welcome, and join us as we share the story of straw.



Delivering a climate-neutral,  
healthy, and effective  
construction system designed  
to be returned safely to nature  
after use.



# A wall system designed by nature

EcoCocon® is a construction system based on the Cradle to Cradle philosophy, making the best of natural materials – straw and timber, while ensuring maximum energy-efficiency.

## **CARBON-STORING**

98% natural renewable materials sequester tons of CO<sub>2</sub> in each

## **MADE TO MEASURE**

Custom-made to fit any building design – industrial, retail, hospitality, residential or other.

## **GREAT THERMAL PERFORMANCE**

Excellent indoor microclimate together with great acoustic and thermal performance.

## **LOAD BEARING TIMBER CONSTRUCTION**

Compressed straw infill from agriculture surplus.

## **RAPID CONSTRUCTION**

Precision-cut prefabricated panels for simple and rapid pre-assembly and installation on site.

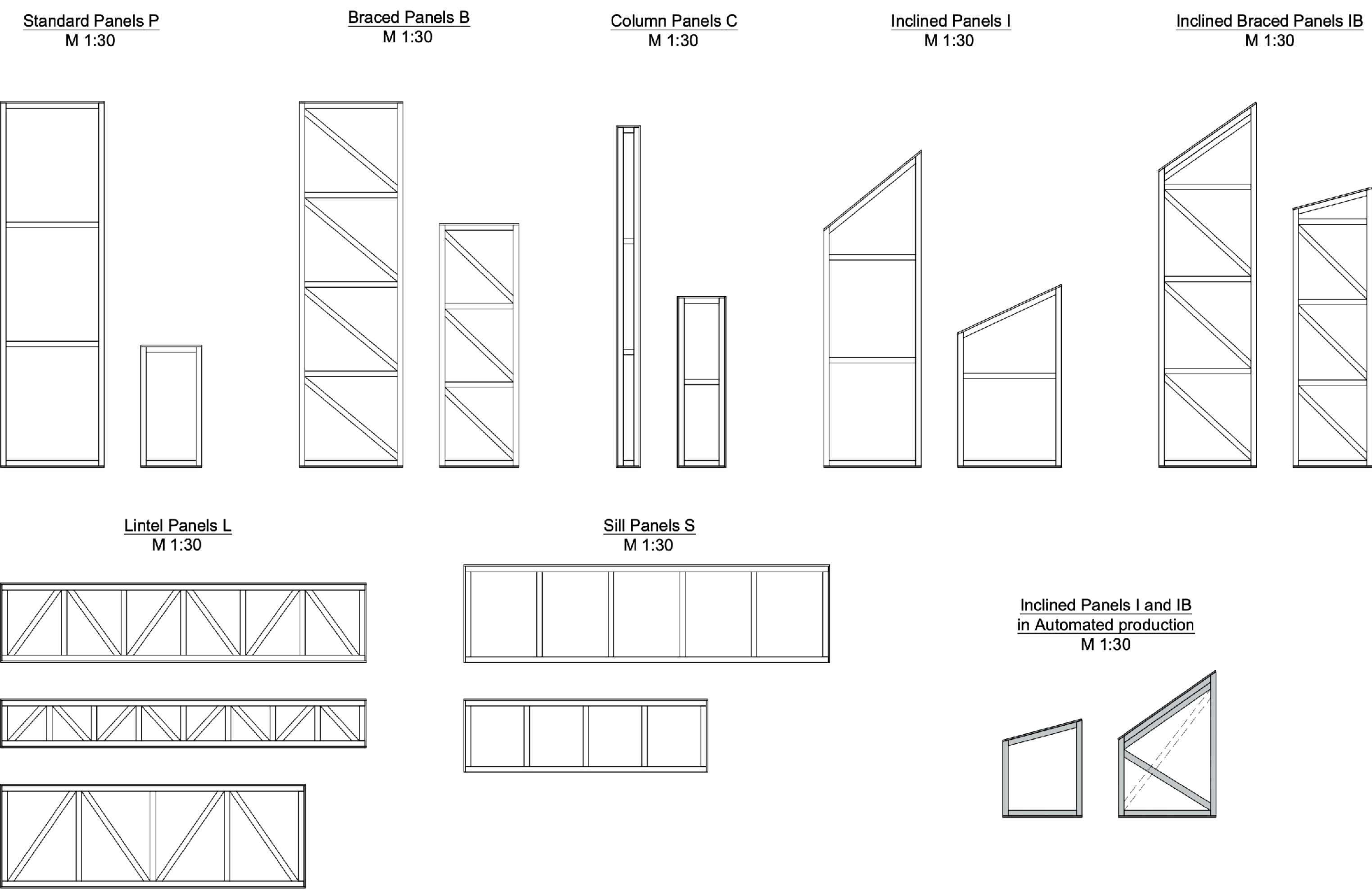
## **LONG-TERM DURABILITY**

Designed for resilience, repairable, maintain indoor performance over time.





# Panel types





# Standard wall build-up



OUTSID

The EcoCocon  
System >>

INSIDE

- 1 Ventilated facade / Render
- 2 Insulating fibre board (60 – 100 mm)
- 3 Airtight membrane
- 4 Timber-straw panel (400 or 300 mm)
- 5 Base clay coat (25 mm)
- 6 Reinforcing mesh
- 7 Fine clay plaster (3 mm)







# Technical characteristics

Characteristics for an average EcoCocon wall with 30mm clay plaster, 400 mm timber-straw panel and 0 mm wood fibre board:

U-value	0.123 W/m2K
Thermal conductivity	0.0645 W/mK
Fire resistance against fire	120 min
Flammability	B-s1, d0
Airborne sound insulation	54 dB
Vertical load-bearing capacity	up to 110 kN/m *
Precision	2 mm over 3 m length *
Average straw density	115 kg/m <sup>3</sup> *
CO <sub>2</sub> emitted in production	2.8 kg/m <sup>2</sup> *
CO <sub>2</sub> sequestered	97.6 kg/m <sup>2</sup> *
Assembly time	20-40 min per m <sup>2</sup> *



# The Process



# The panel project

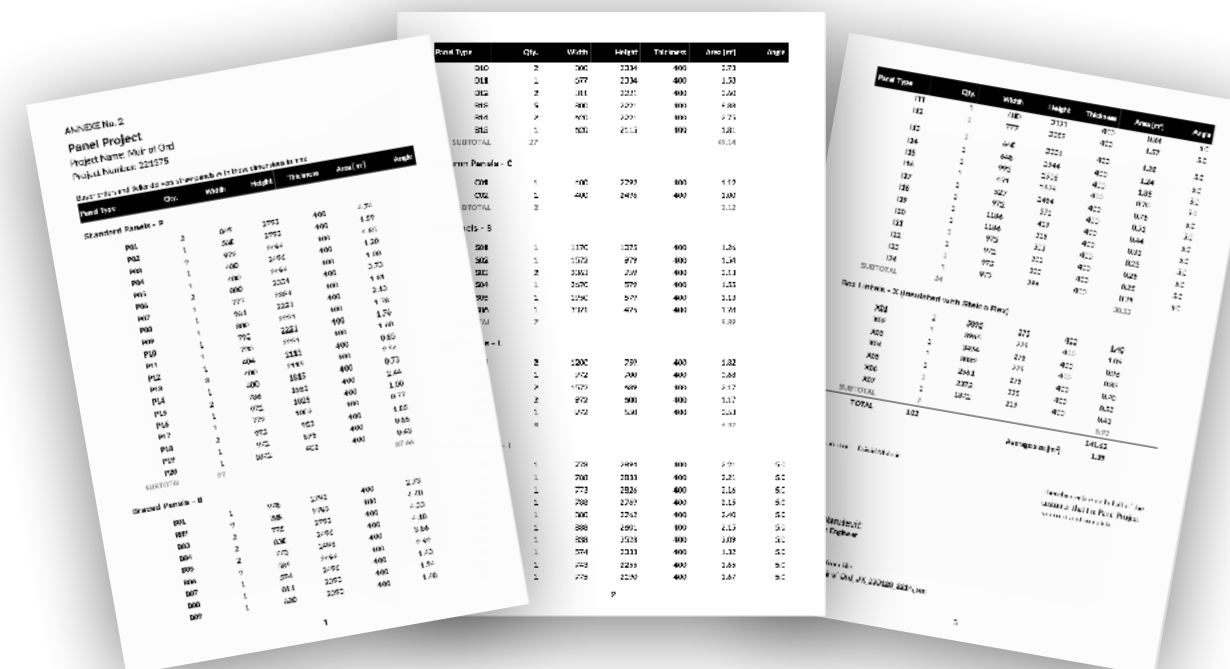
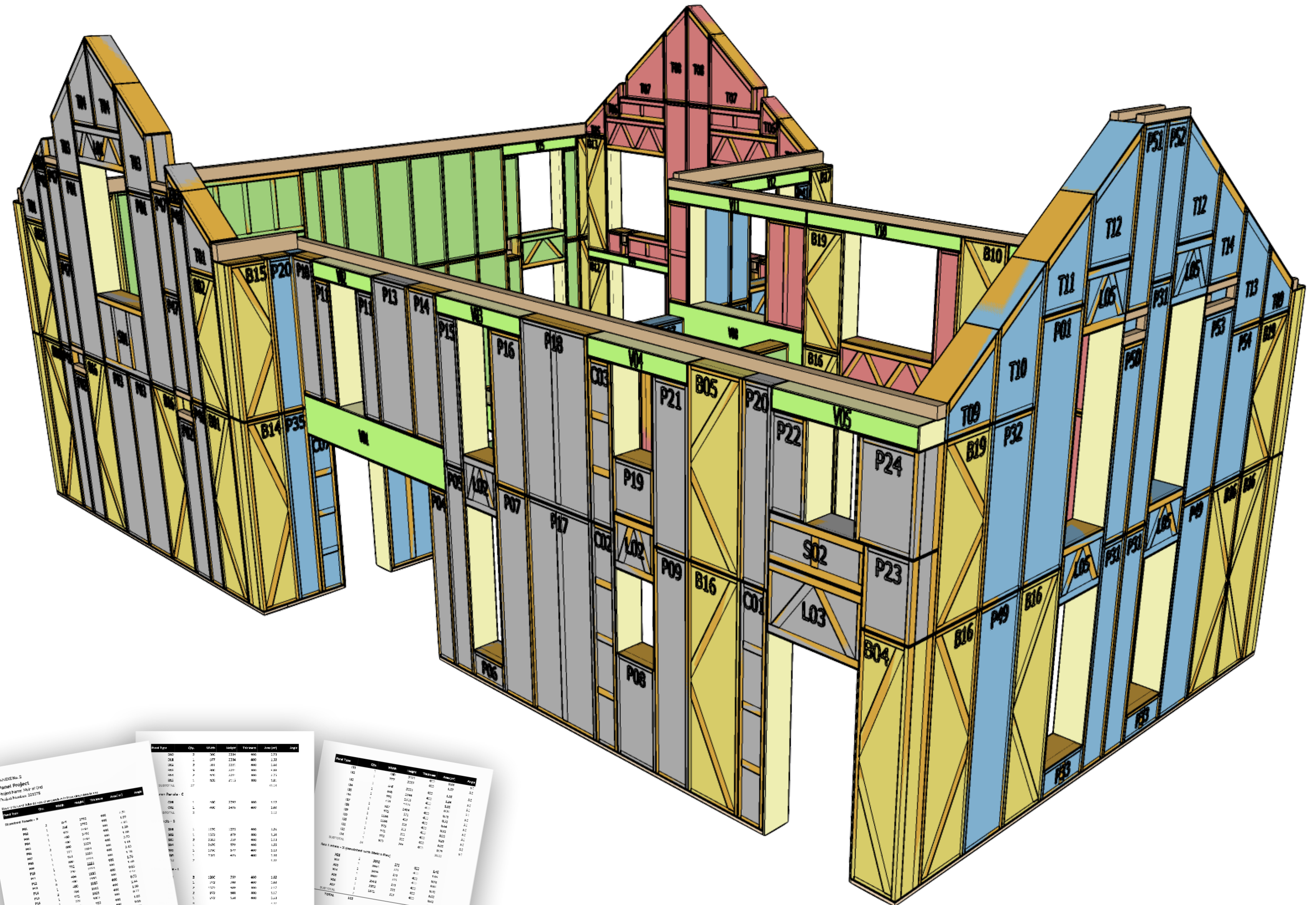
» created by EcoCocon constructor in cooperation with the architect and structural engineer

» describes all the panel types and sizes

» colour-coded and labeled

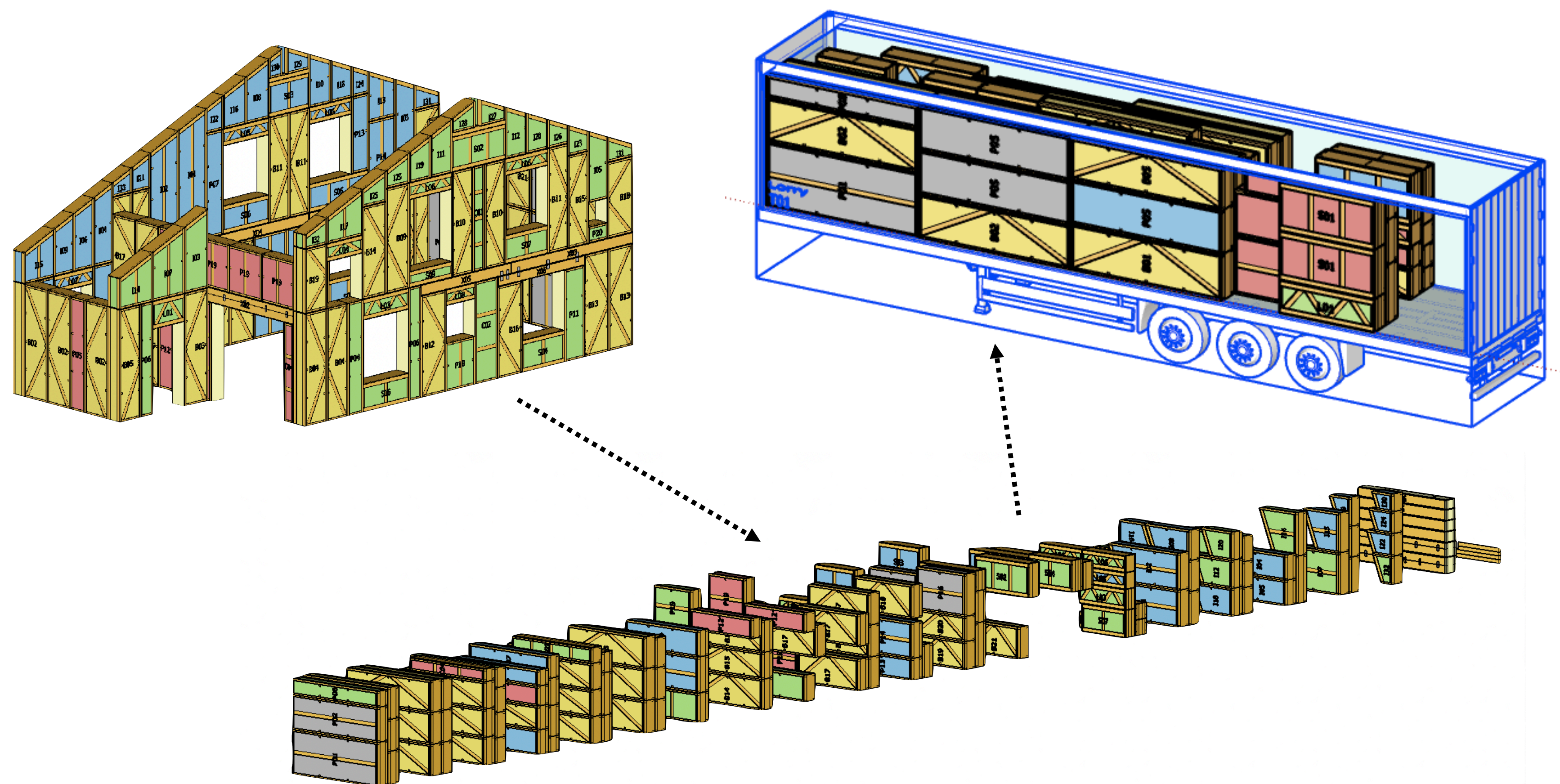
» basis for price quotation (preliminary pricing can be estimated on architectural drawing drafts)

» serves as an assembly plan

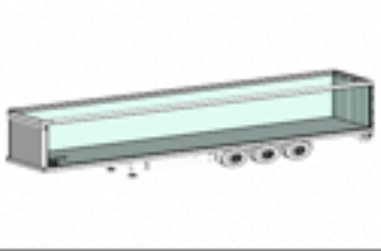




# Streamlined digital process



Component Options



EcoCocon LORRY  
Element  
T01

Lorry trailer or shipping container model for packing and loading. [www.ecococon.eu](http://www.ecococon.eu)

Length

13520 mm

Width

2400 mm

Thickness/Height

2400 mm

Lorry/Container Type

Lorry STANDARD

kg

24000

LayOut\_Label

T01- Lorry STANDARD - 13.52×2.4×2.4

Loading side

Left

SetX

10000 mm

SetY

2400 mm

SetZ

2400 mm

Apply





# Efficient pre-assembly techniques



## Advantages

- » whole wall segments can be pre-assembled in hall conditions
- » windows, membrane, wood fibre, even plasters can be applied in advance
- » speeding up the assembly on site
- » minimising the impact of weather conditions



## REFERENCE



# EcoCocon Factory - Slovakia

**Size:** 620 m<sup>2</sup>  
**Year:** 2024

**Architect:** Createrra  
**CO<sub>2</sub> sequestered:** 46,5 tons



Photo credits: Milan Hutera

- » World's first automated straw wall panel factory.
- » Produces deep green biogenic building solution at an industrial scale.
- » Powered mostly by solar energy.
- » The main hall is made of EcoCocon panels, pushing heating requirements close to zero.



## REFERENCE

# Hyllie, Malmö - SWE

**Size:** 12-story

**Year:** 2025-26

**Architect:** Kaminsky Architects

**Developer:** ETC Bygg

- » CLT mass wood, EcoCocon panels as external envelope.
- » Built by passive house standard with extremely low energy consumption to provide long-term sustainability.
- » Goal to create a climate-positive energy system with its own energy production and storage, without being connected to district heating.





# EcoEspai, Spain, 2025

Photo credits: gpK | Architect: Pepe Milà



**Size:** 1 000  
m<sup>2</sup>

**Year:** 2025

**Architect:** Pepe Milà (OP Team)

**Type:** Public Administration, cultural Co-Working Spaces





## REFERENCE

# Apartment building, Riom - France

**Living area:** 390 m<sup>2</sup>, (6 apartments of 65m<sup>2</sup> each)

**Year:** 2025, under construction

**Thermic Performance:** PassivHaus Plus < 9,5 kWh/m<sup>2</sup>/annually





# Trudo, Eindhoven, NL

**Size:** 3 600  
m<sup>2</sup>

**Year:** 2025

**Architect:** Faam Architecten  
Eindhoven **CO<sub>2</sub> sequestered:** 351  
tons

- » 89 units on for a social housing foundation
- » 'Trudo,' is designed entirely with bio-based materials. The dwellings are close to passive house standards and have minimal energy consumption.
- » The exterior of the houses meets high ecological standards, fostering biodiversity and social connectedness through communal gardens located behind the dwellings.

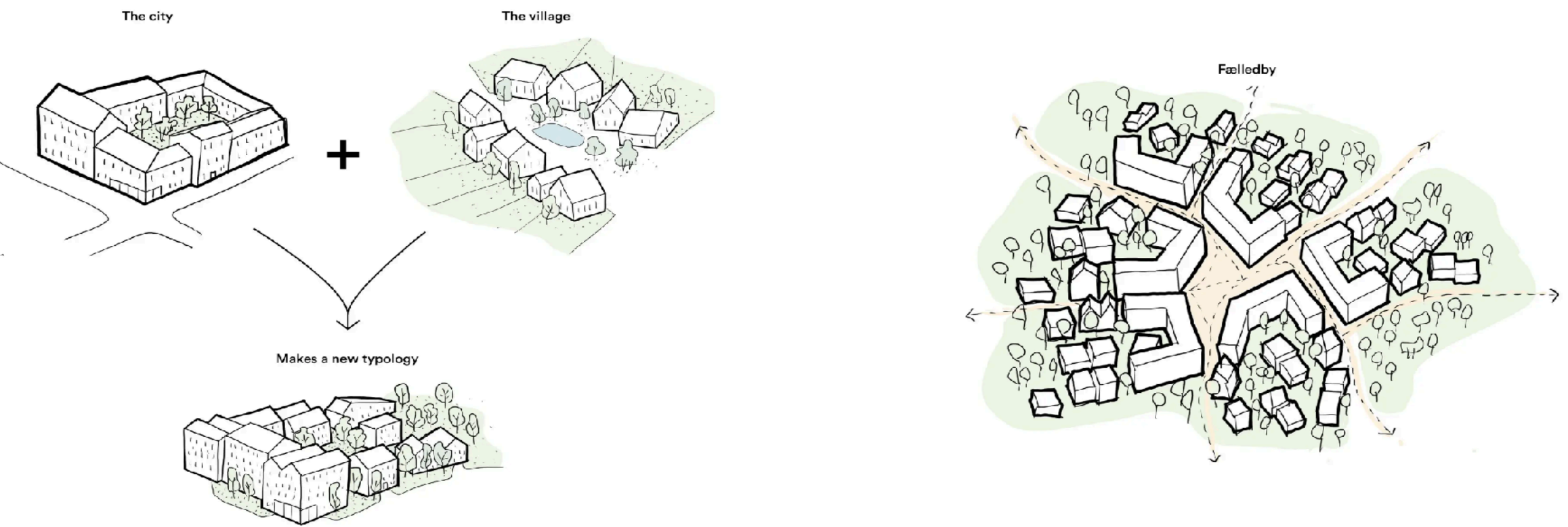
Photo credits: Faam Architecten Eindhoven





# Fælledby - A Commitment to Sustainability

Photos: Henning Larsen





## Fælledby, Denmark: Apartments



**Size:** 528 m<sup>2</sup>  
**Year:** 2024

**Arkitekt:** Tegbestuen LOKAL  
**Contractor:** PensionDanmark and By&Havn (Fælledby P/S)





REFERENCE

# Logistic Center, Lelystad - NL

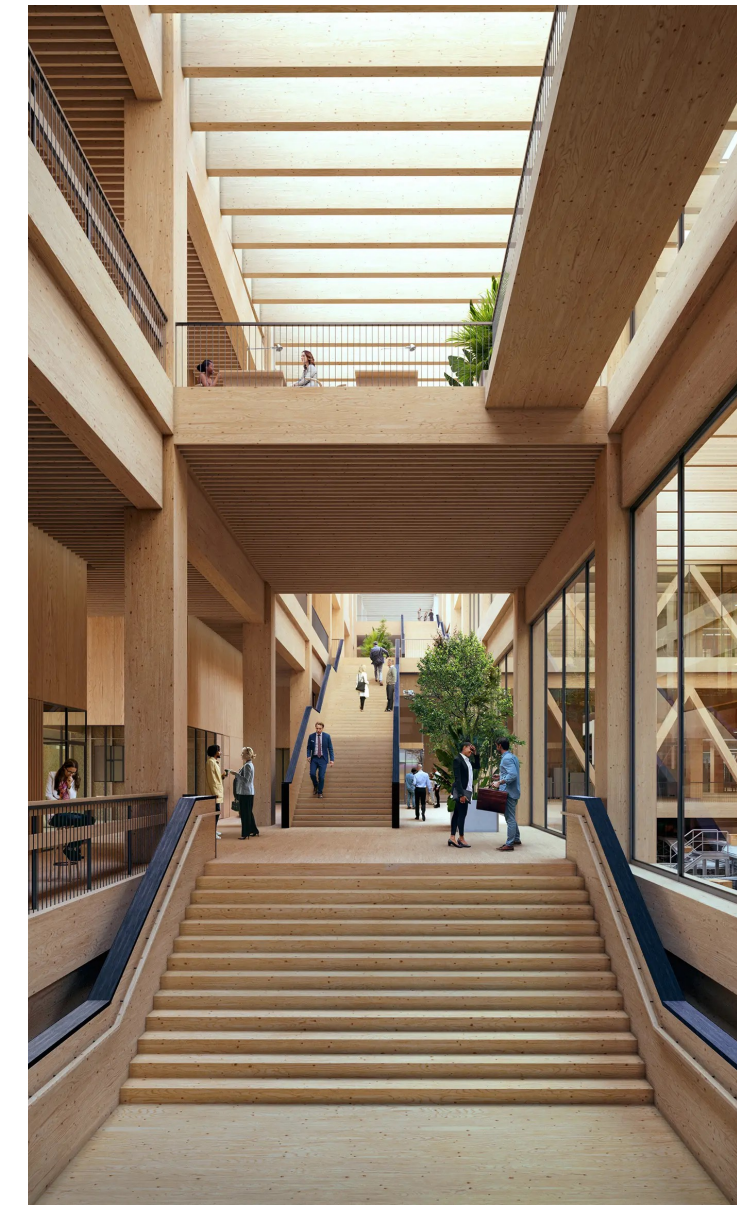
**Size:** 155,000  
m<sup>2</sup>

**Year:**  
2025-2026

**Architect:** Henning Larsen  
**EcoCocon Panels:** 40,900 m<sup>2</sup>



Photo credits: Photo Aesthetica



- » Designed with biogenic materials to reduce emissions and support a regenerative, circular economy
- » Prioritises employee well-being through natural light, green spaces, and a healthy indoor climate for nearly 600 staff
- » Over 40% of the site dedicated to landscape, aiming to increase local biodiversity by at least 10%



# Hybrid, Retrofit and Wrapping





“We haven’t found a better alternative material when it comes to sustainability”.

-Magnus Reffs Kramhøft, Architect, Henning Larsen





# EcoCocon Global Expansion Strategy

## **Western Europe (2–3 years)**

- » New factory planned in France or Spain
- » Production technology already underway

## **United States (3–4 years)**

- » Clear roadmap for US operations
- » Strong partners and groundwork in place



Goal for 2035:  
**1 million m<sup>2</sup>**  
produced annually





# Thank you!



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