



FN'S VERDENSMÅL

SDG'erne som løftestang for nytænkning og forretning

Lasse Lind

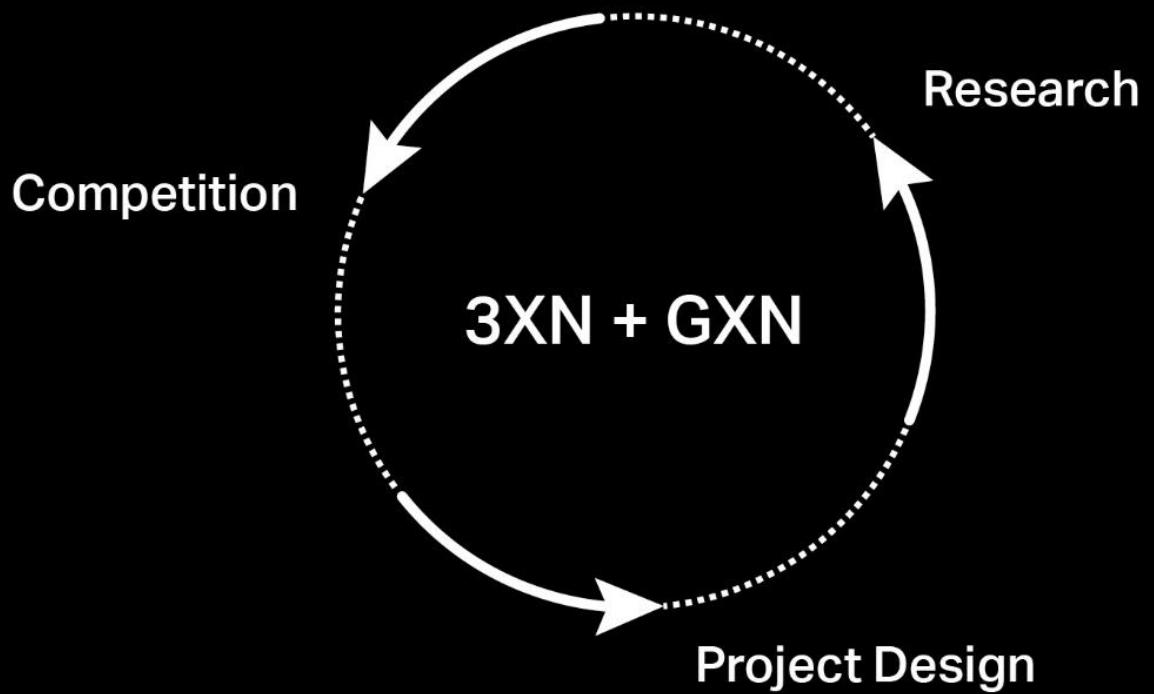
Arkitekt, Partner

lli@3xn.dk

Architecture
Landscape
Interiors
Graphics
Masterplanning
Visuals



Publications
Product
Behaviour
Circularity
Sustainability
Innovation



11 SUSTAINABLE CITIES
AND COMMUNITIES



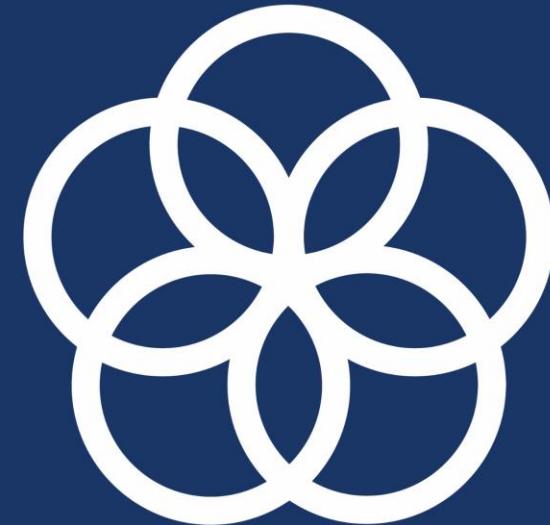
12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



13 CLIMATE ACTION



17 PARTNERSHIPS
FOR THE GOALS



Partnerne bag Circle House

Kernepartnere

Lejerbo (Bygherre), GXN Innovation, MT
Højgaard, Statens Byggeforskningsinstitut,
Foreningen for Byggeriets Samfundsansvar.



Miljø- og Fødevareministeriet
Miljøstyrelsen



Responsible Assets*



LAURITZEN
ADVISING



Industripartnere

Spæncom, Dansk Beton, Peikko, Velfac, Rockwool, Orbicon, Komproment, Caverion, Gyproc, RGS Nordic, NCC Construction, Kingo Karlsen, Tscherning, Troldekt, Kalk, Dovista, Troldekt.

Konsulenter

Responsible Assets, Horten
Advokatpartnerselskab, Lauritzen
Advising, Hildebrandt & Brandi

Fællestegnestue

Vandkunsten,
Lendager Arkitekter,
3XN Arkitekter

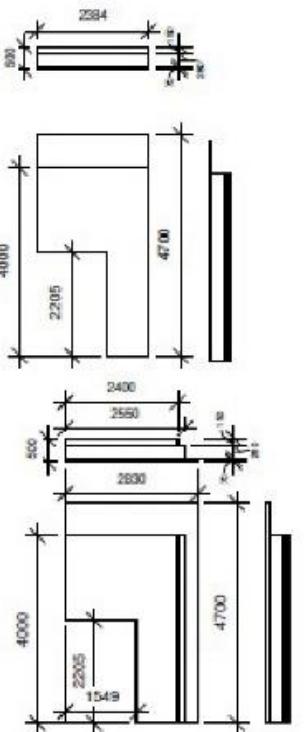
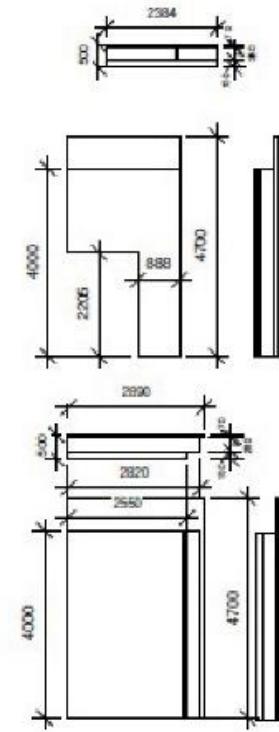
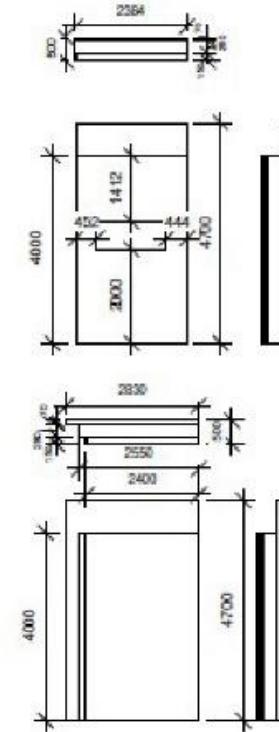
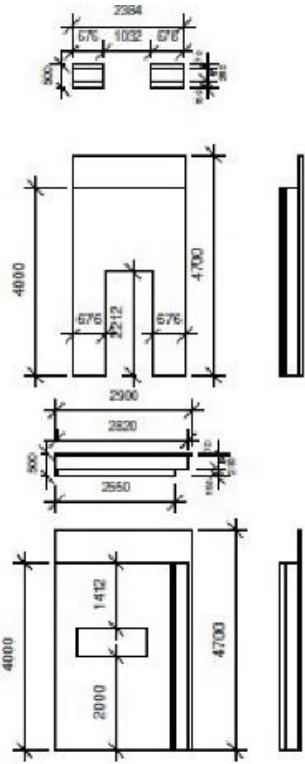
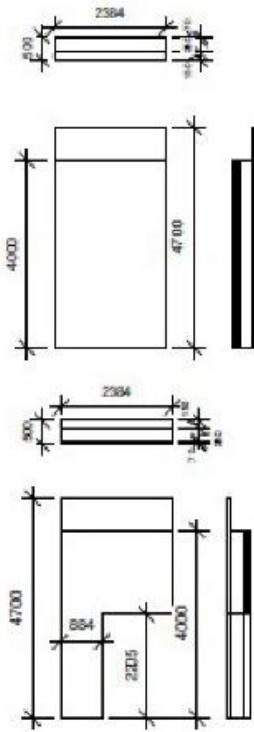
Støttet af

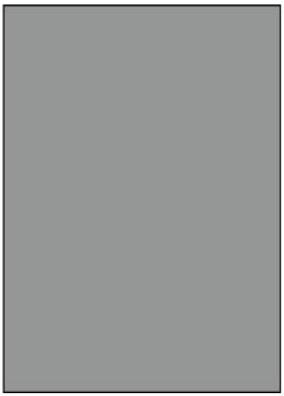
Miljøstyrelsen
og Realdania



CIRCLE HOUSE / DEMONSTRATOR



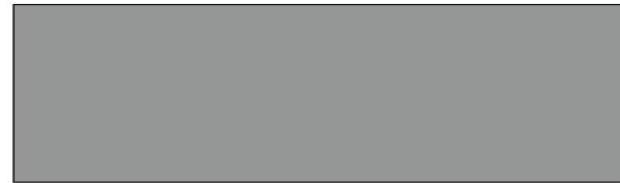




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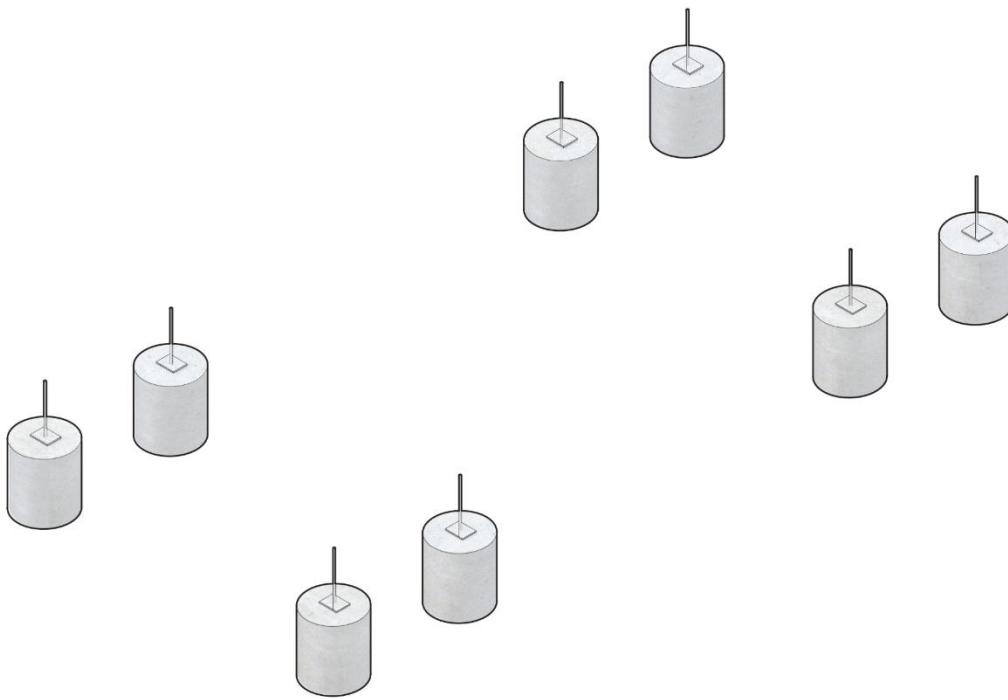
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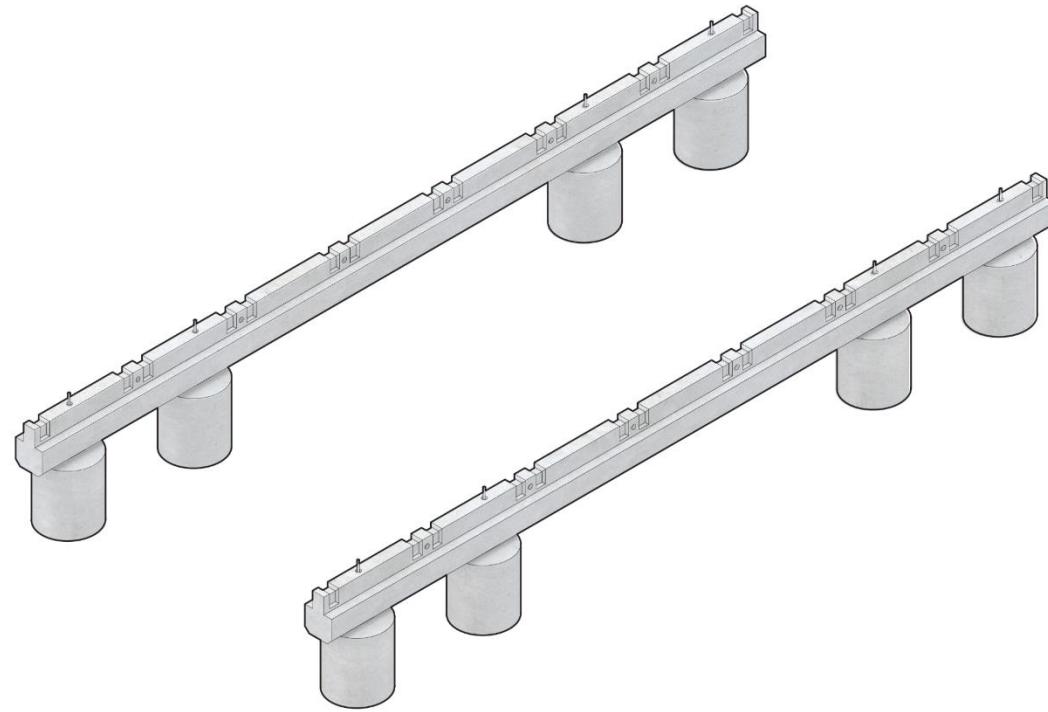
Væg

Bjælke

Dæk



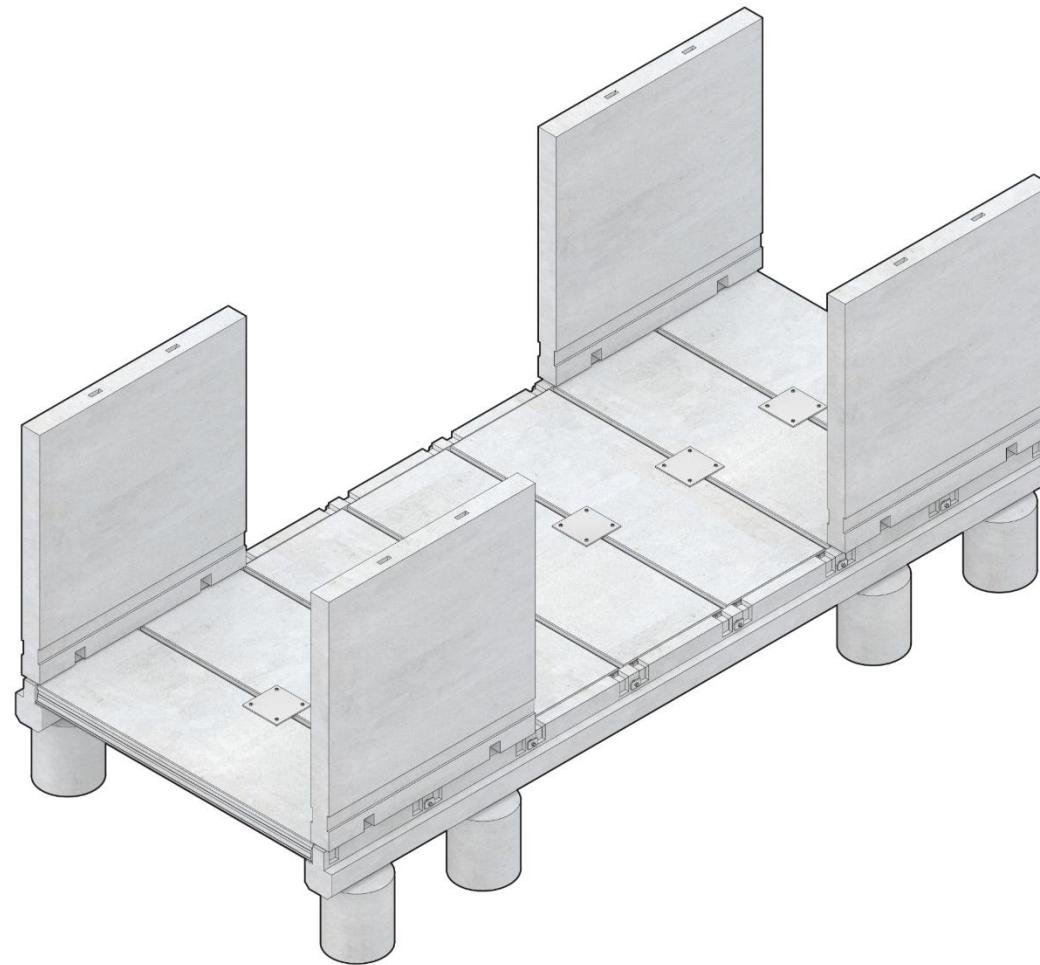
CIRCLE HOUSE / DEMONSTRATOR



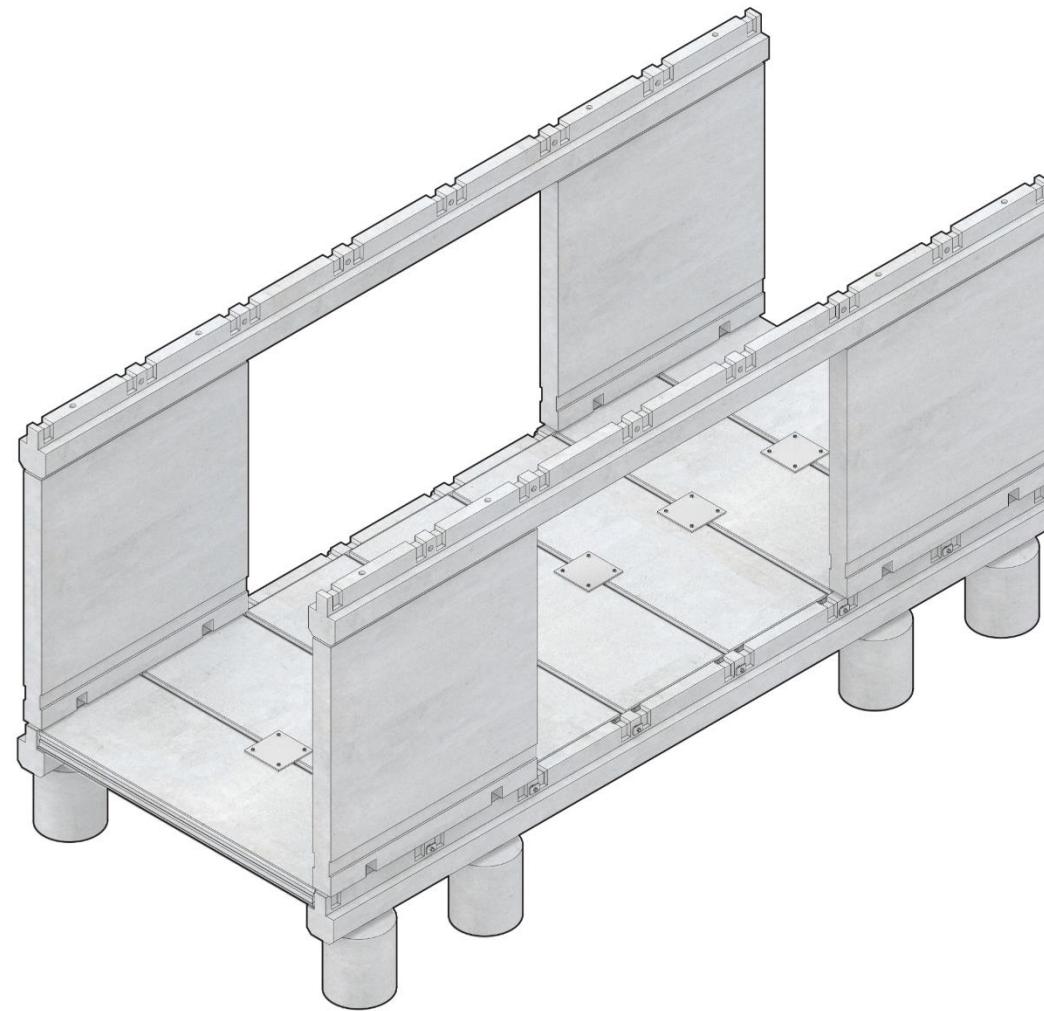
CIRCLE HOUSE / DEMONSTRATOR



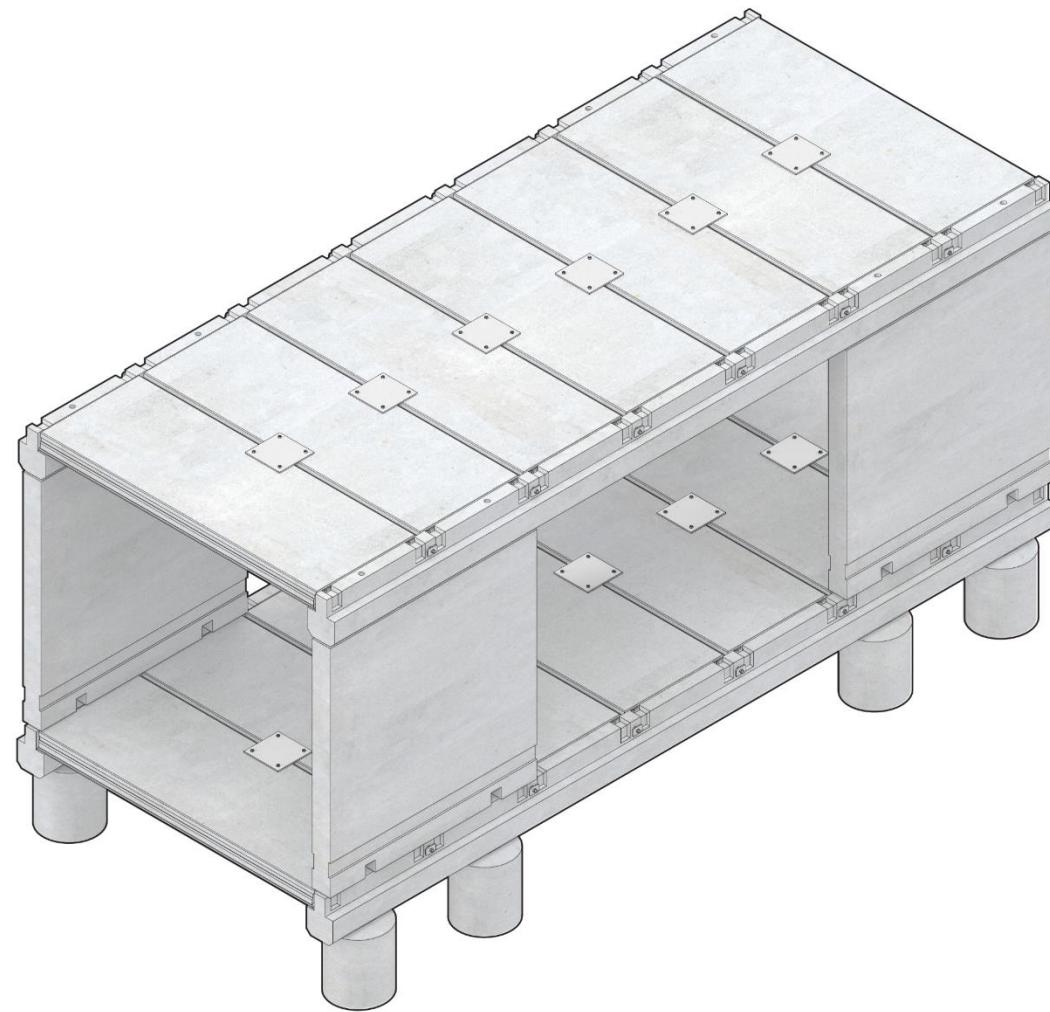
CIRCLE HOUSE / DEMONSTRATOR



CIRCLE HOUSE / DEMONSTRATOR

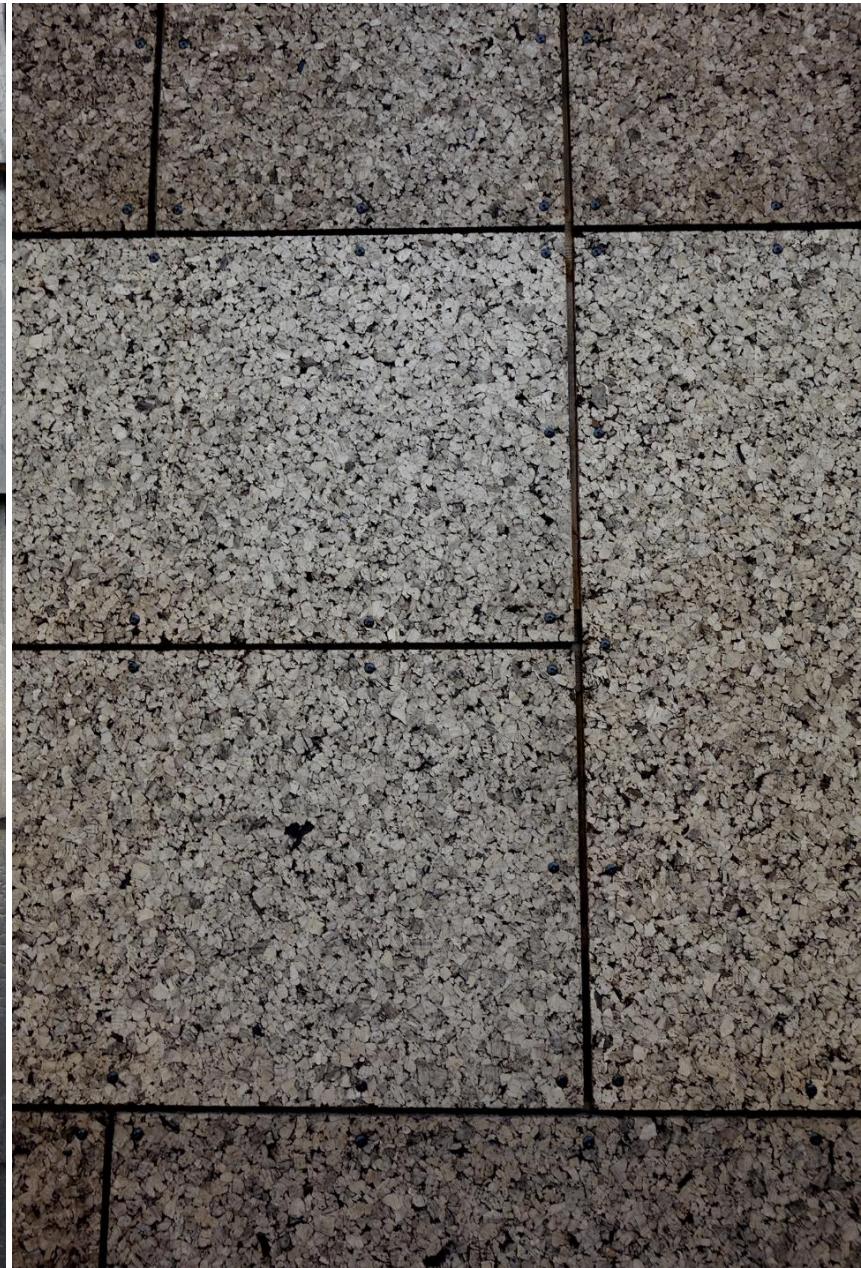
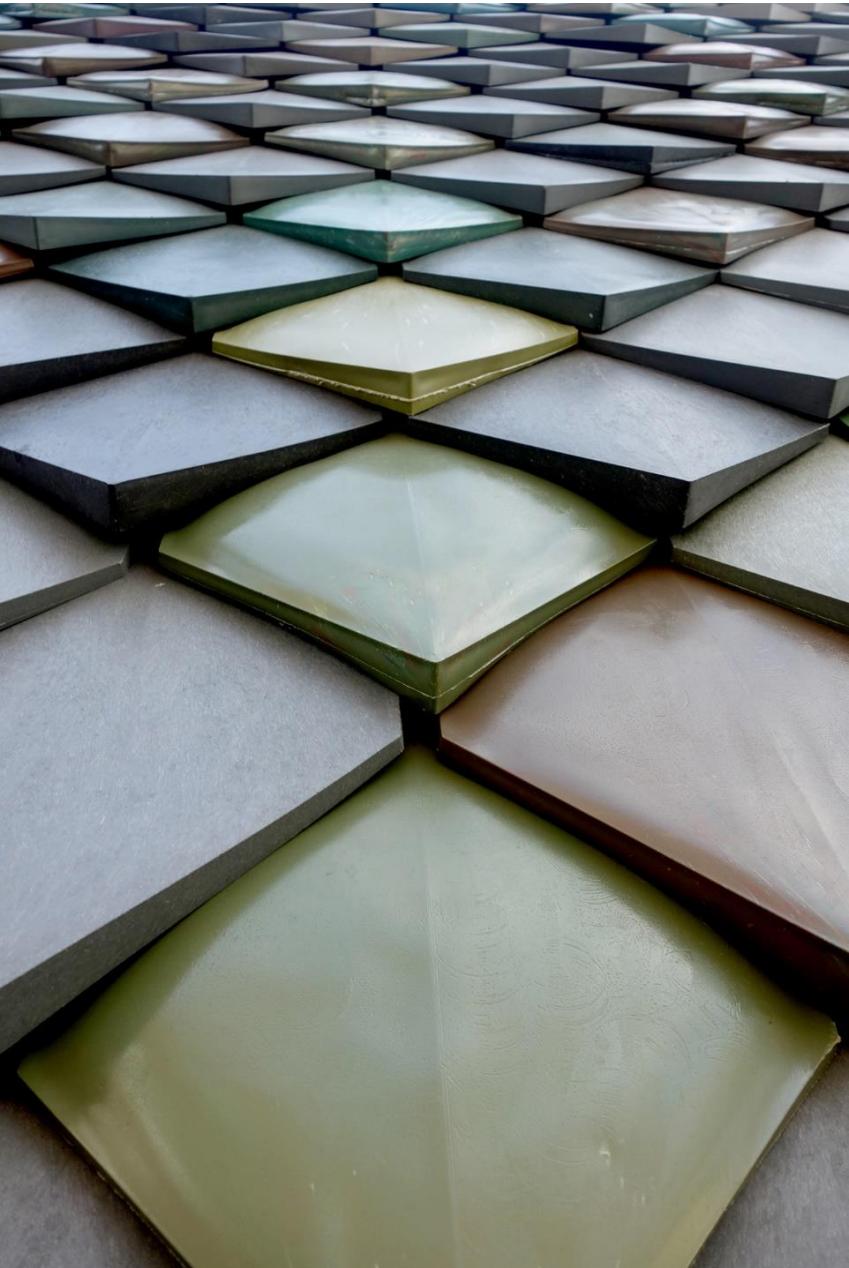


CIRCLE HOUSE / DEMONSTRATOR

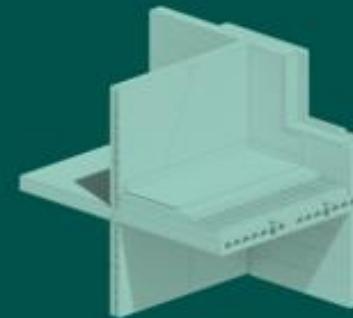
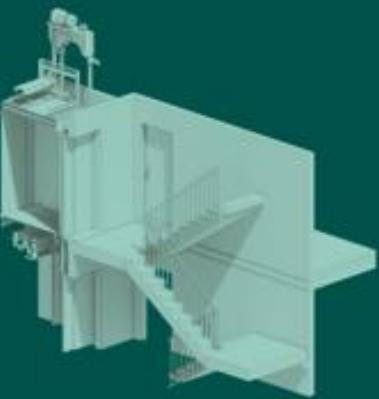
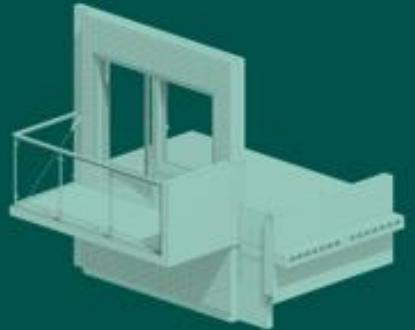
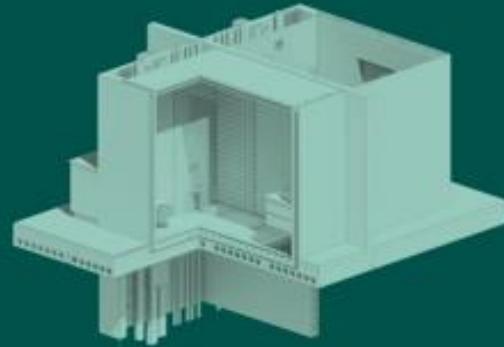
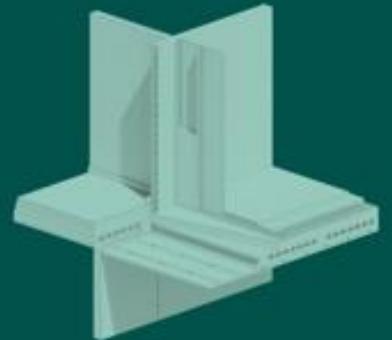


CIRCLE HOUSE / DEMONSTRATOR





CIRCUIT



Transformative Housing

Design for disassembly and flexible construction

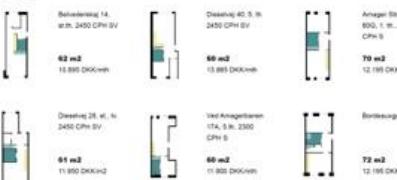
Mapping of apartment typologies

Rental



1 Bedroom 52 m² - 73 m²

Rental



Freehold



Freehold



- 1. Strandloev 11
- 2. Belvederet
- 3. Elsa Afløv Vej 640
- 4. Dessauvej
- 5. Flydanskolen 17 st. 9.
- 6. Glichavej 508
- 7. Engavevej 18 1. fl.
- 8. Tusen Tårn 25/1 7. 1. fl.

2 Bedroom 78 m² - 89 m²

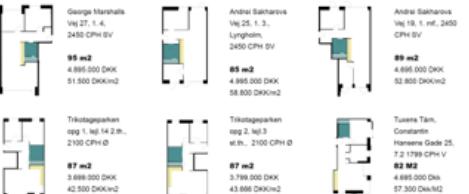
Rental



Rental



Freehold

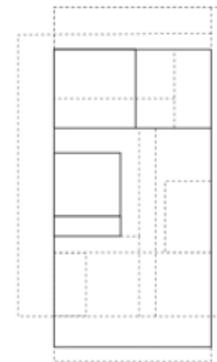


Freehold



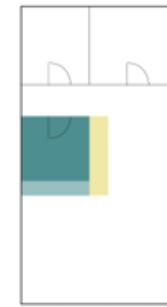
Stacking of plans

Five different floorplans are stacked to show spatial variations. The bathroom core is used as reference point.



Analysis of spacial divisions

An outtake and simplification of the spatial divisions in the floorplans. The most defined areas are shown as lines and the deviations are dashed.

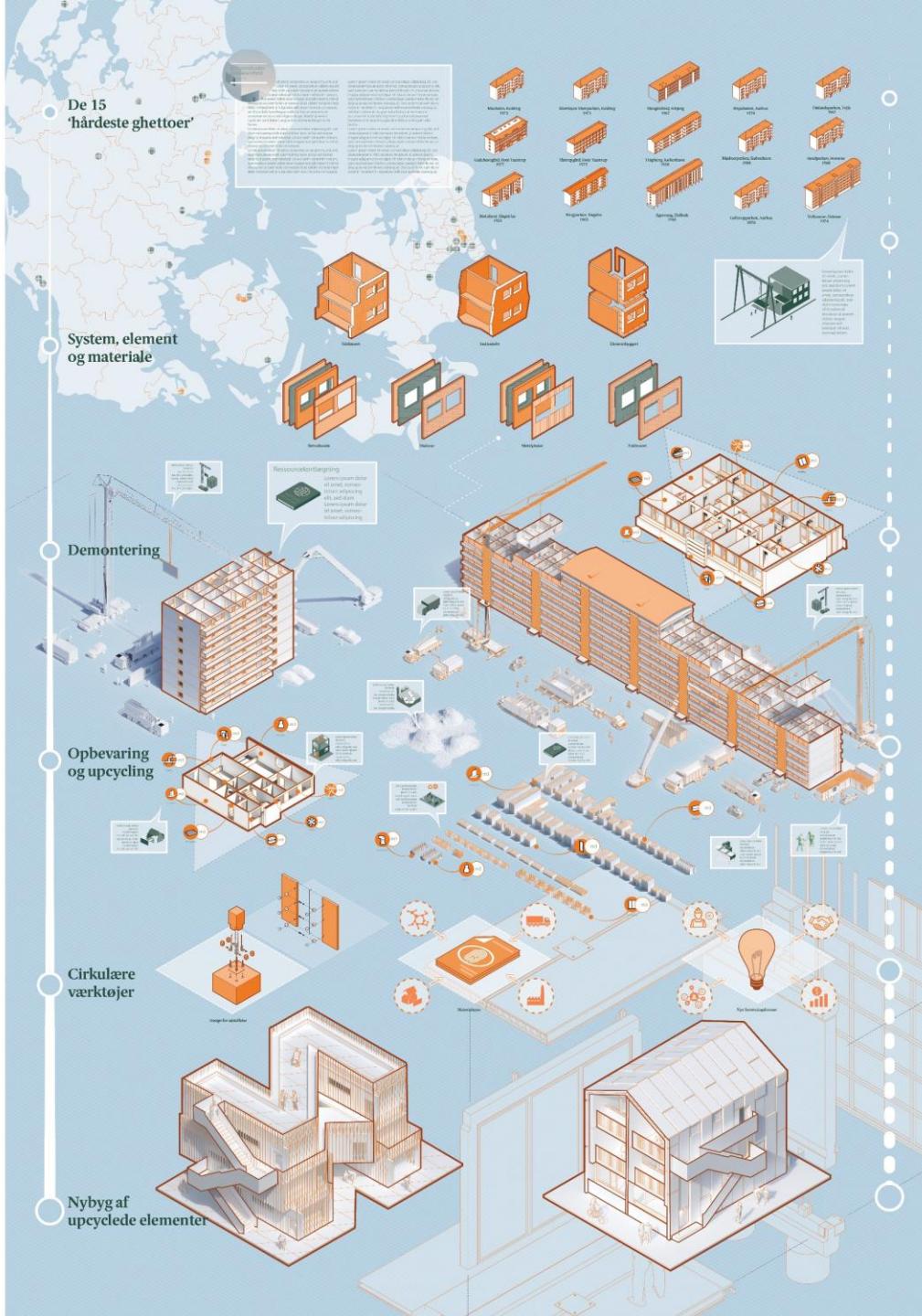


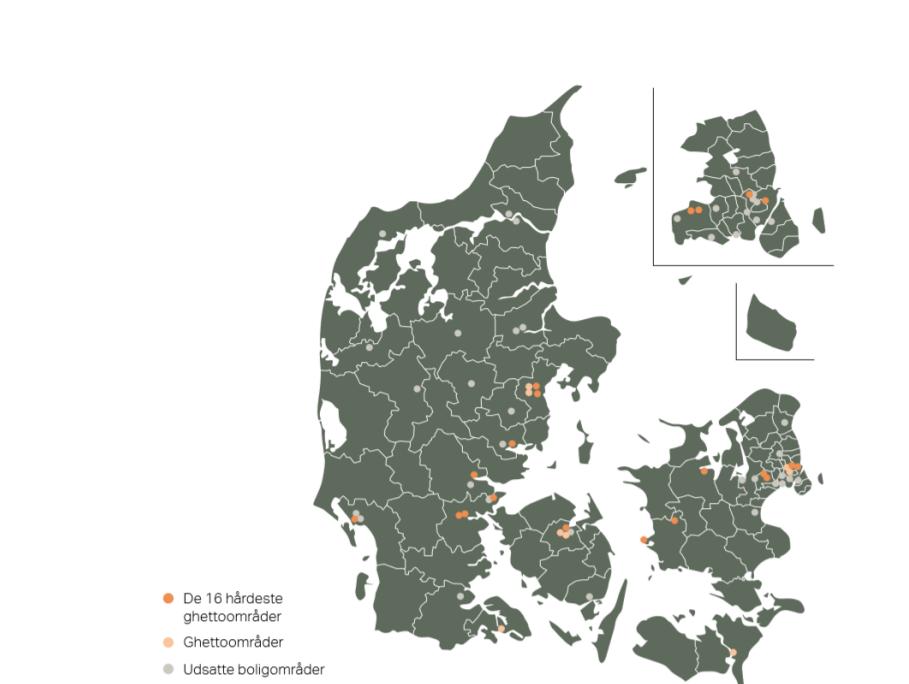
Baseline Apartment

The baseline apartment floorplan is based on the analysis of the spacial divisions and can be interpreted as an average of the five floorplans.

Ressource Blokken

Upcycling of the 60's and 70's
social housing typologies



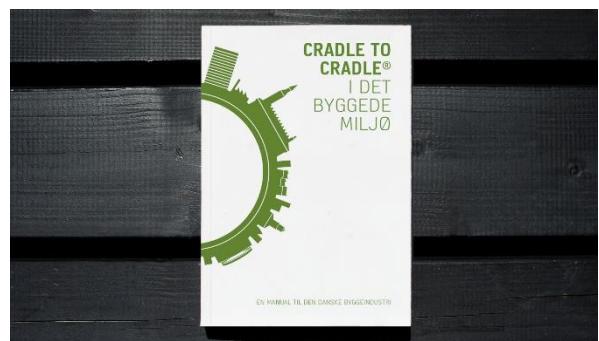
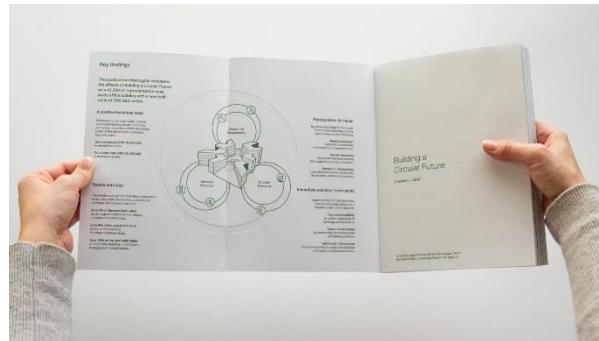


40 procents reglen

I 2030 må der ikke være mere end 40% af boligerne i de 'hårde ghettoer' der er almene familieboliger.



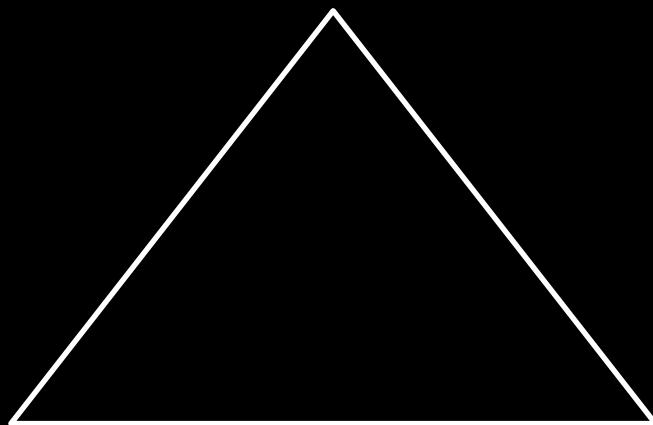
Publication



GXN

AREAS OF RESEARCH AND PRAXIS

DIGITAL DESIGN
Tools



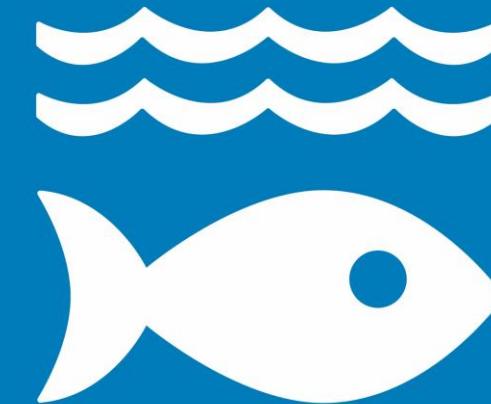
BEHAVIOUR DESIGN
People

CIRCULAR DESIGN
Environment

6 CLEAN WATER AND SANITATION



14 LIFE BELOW WATER

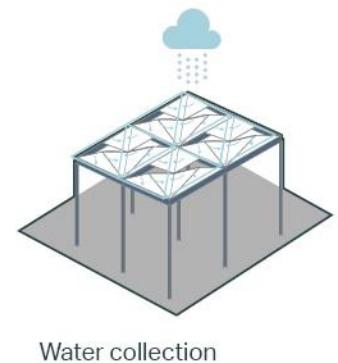
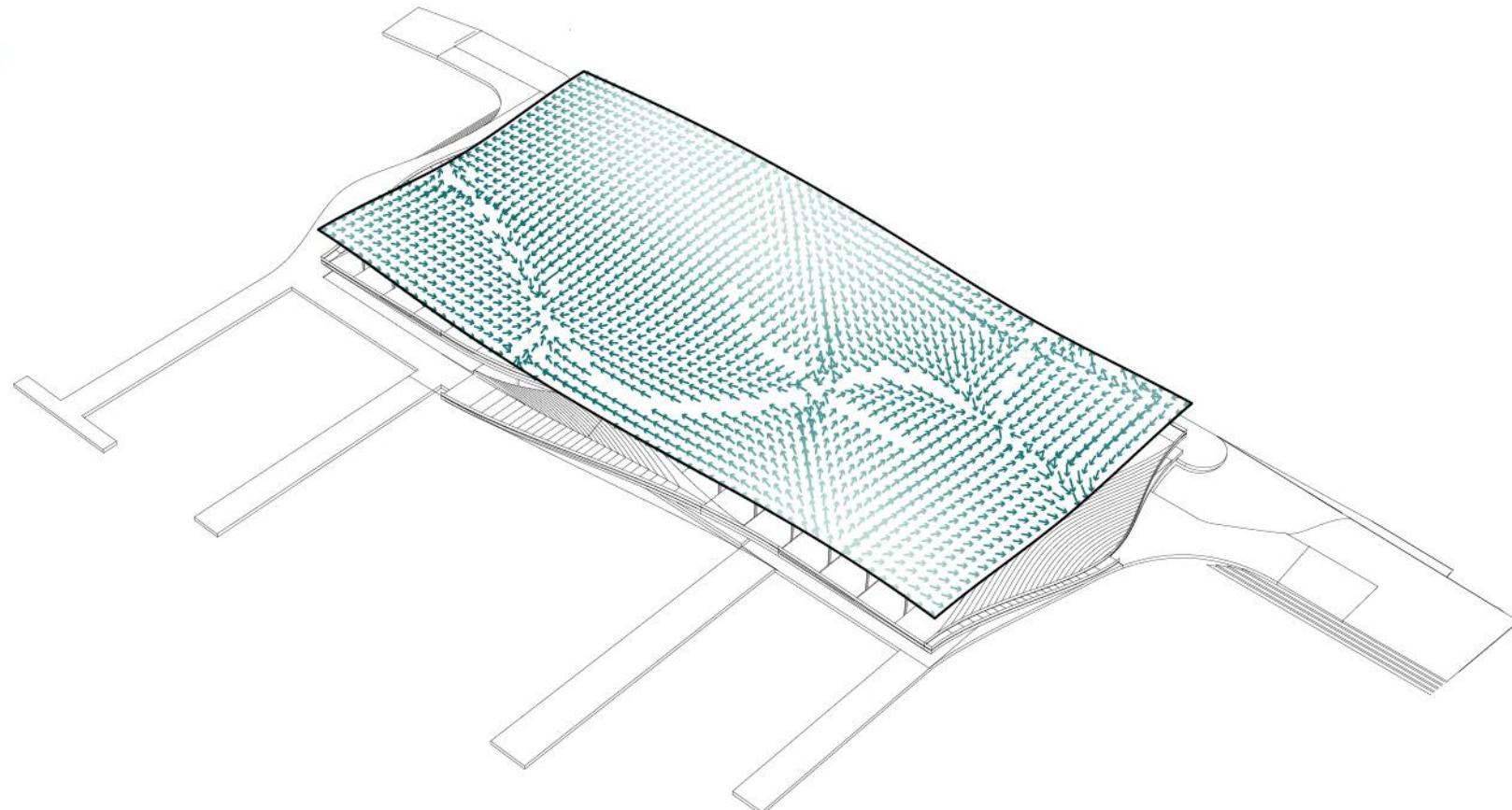




Design Principles

Modules - Water Collection

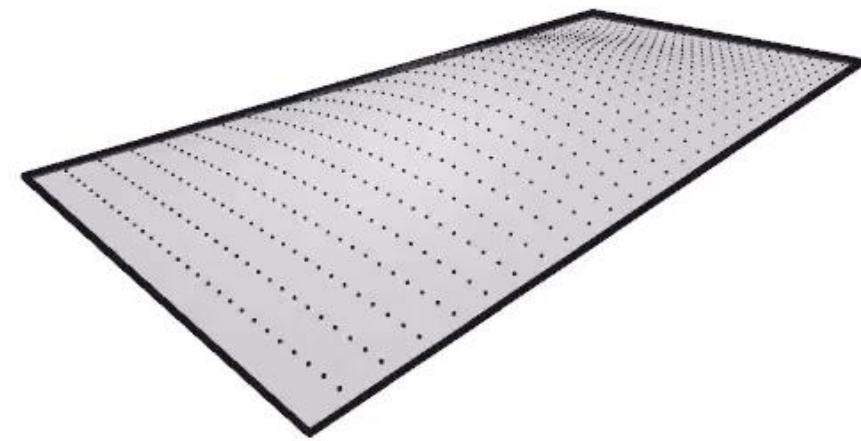
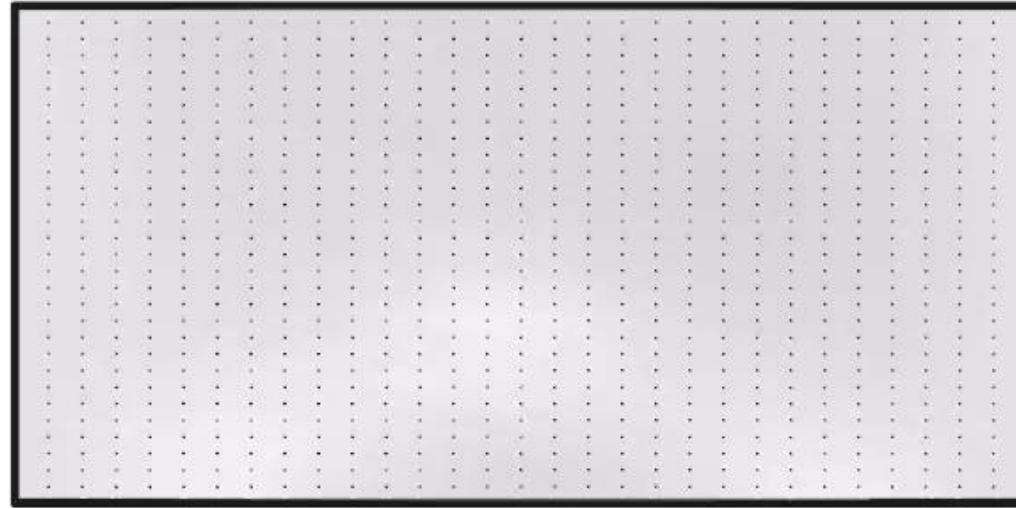
Sparse Dense
Water accumulation quantity



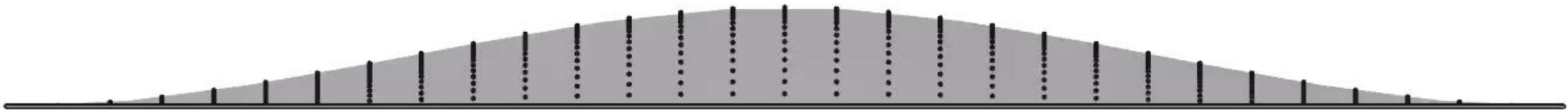
Water collection

View_Top ▾

View_Perspective ▾



View_Elevation ▾



2.12 Built Form & Urban Design Analysis

Biofiltration of Storm-water

Greywater filtering and re-use

The primary biofiltration zone in the Eastern plaza is designed to filter water for reuse in the mechanical systems of the fishmarket. This takes advantage of the constant water demand from evaporative cooling systems as well as the regular daily supply of greywater, topped up by rainwater overflow. The system operates separately to harvested rainwater which is treated and retained for higher-end uses.

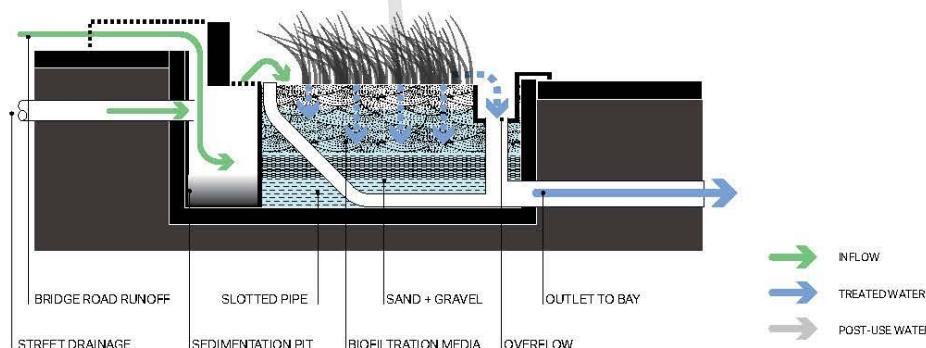
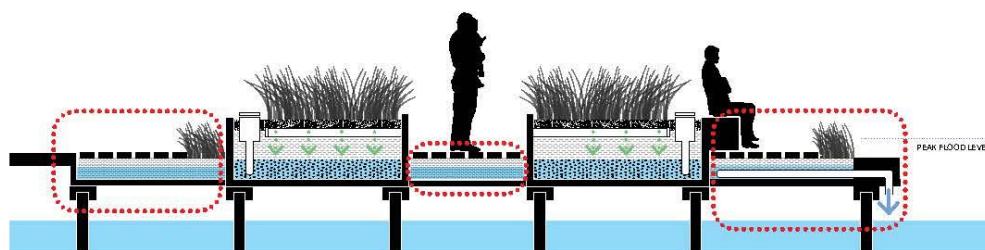
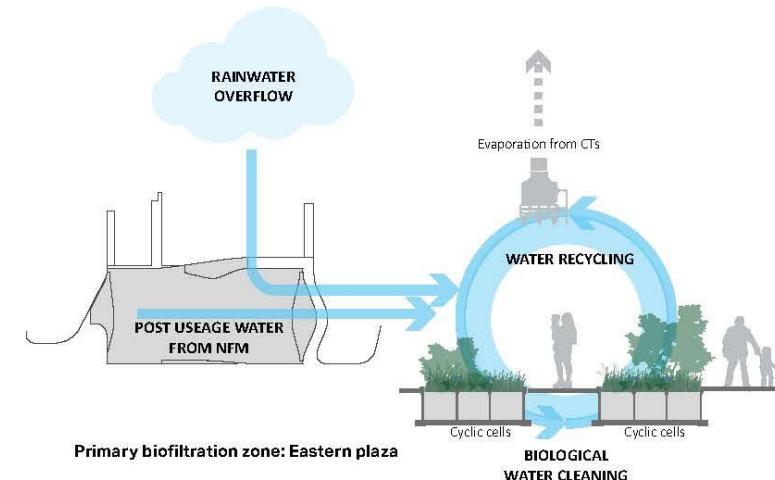


Diagram: Eastern plaza grey-water treatment system



Primary biofiltration zone: Eastern plaza



Primary biofiltration zone: Eastern plaza



NEW SYDNEY FISH MARKET – WATER RECYCLING

712 m³ daily consumption. Aprox. 70% recycled
Average AUS consumption = 0,9 m³ per household
Saves around 0,5 mil. AUSD on operation pr. year



8 DECENT WORK AND ECONOMIC GROWTH



11 SUSTAINABLE CITIES AND COMMUNITIES



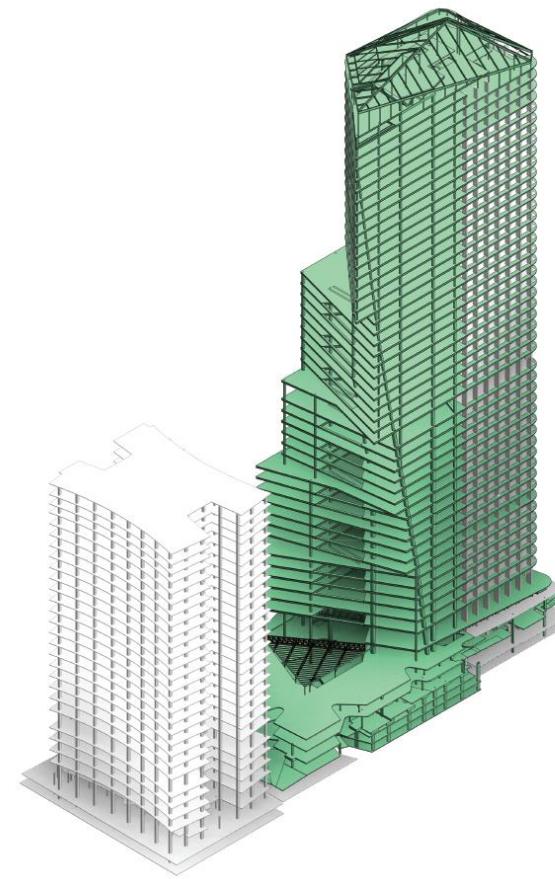
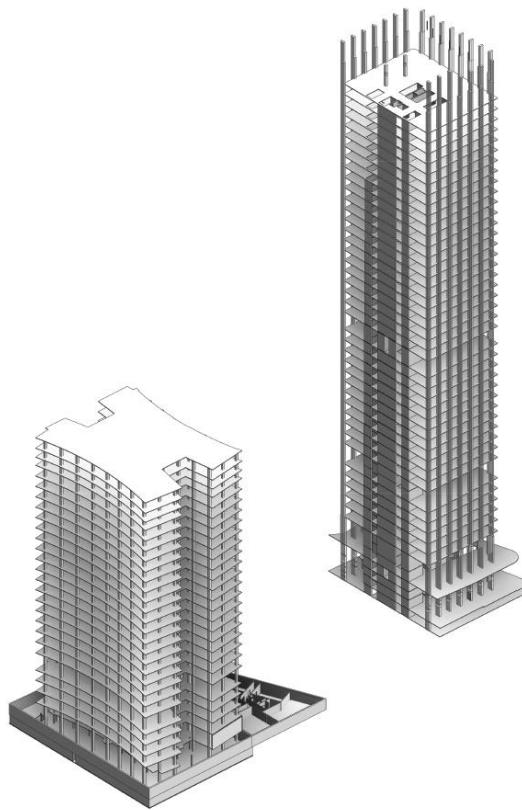
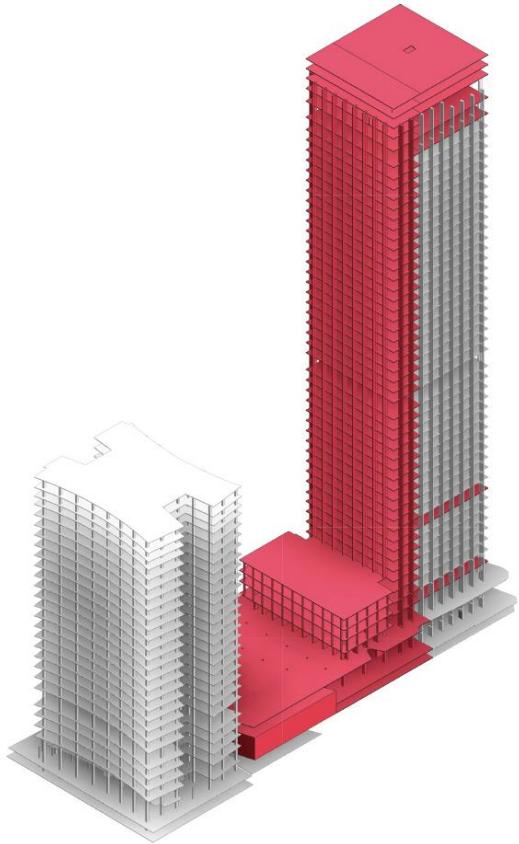
12 RESPONSIBLE CONSUMPTION AND PRODUCTION









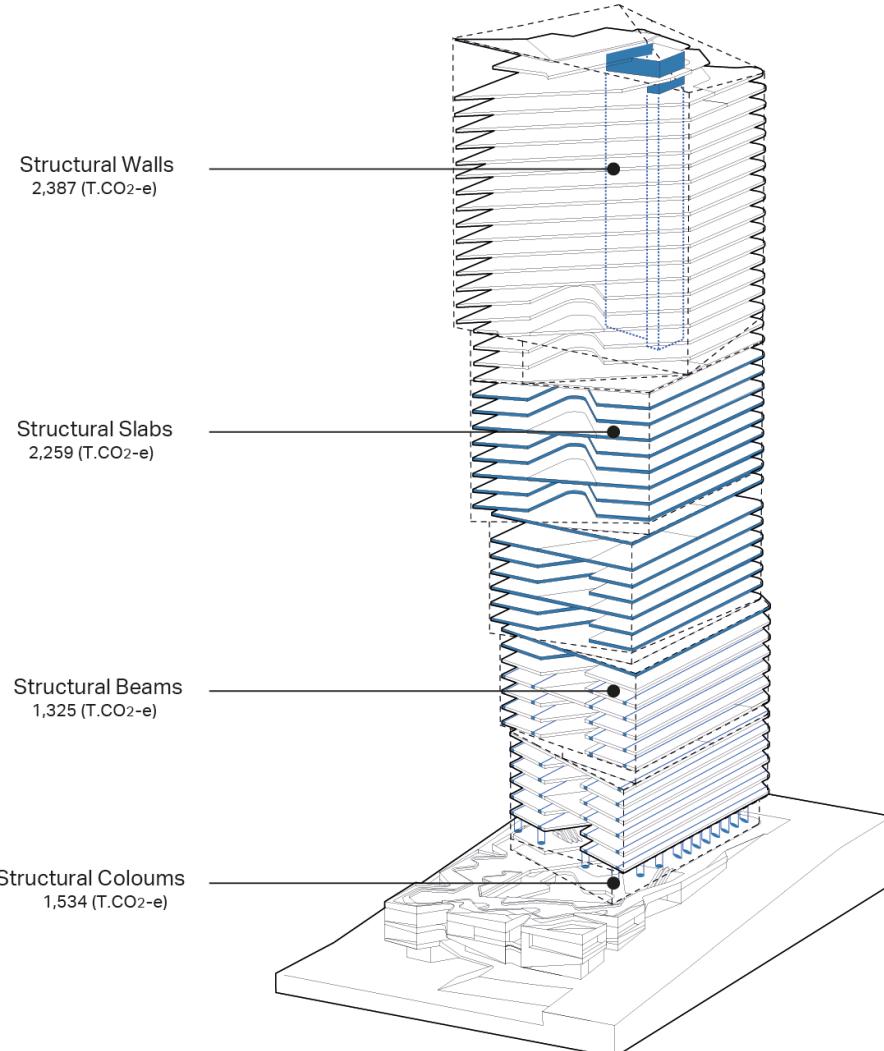


RETAINING 98%
STRUCTURAL WALLS

7.505 Tons of CO₂
EMISSIONS SAVED

*

* The results are based on a published Australian data.



7.505 Tons of CO₂

*

EMISSIONS SAVED

Equivalent to **2500 one-way flights**
from Sydney to Copenhagen

