

portfolio

architecture

ondrej slunecko

arkitekt

bygningstruktor

LEED green associate

concept
result

perspective
future
beauty
projection

graphic

order
abstraction

form
layer
merge

art

progress

balance
icon

urban
city

cluster
colour

icon
style

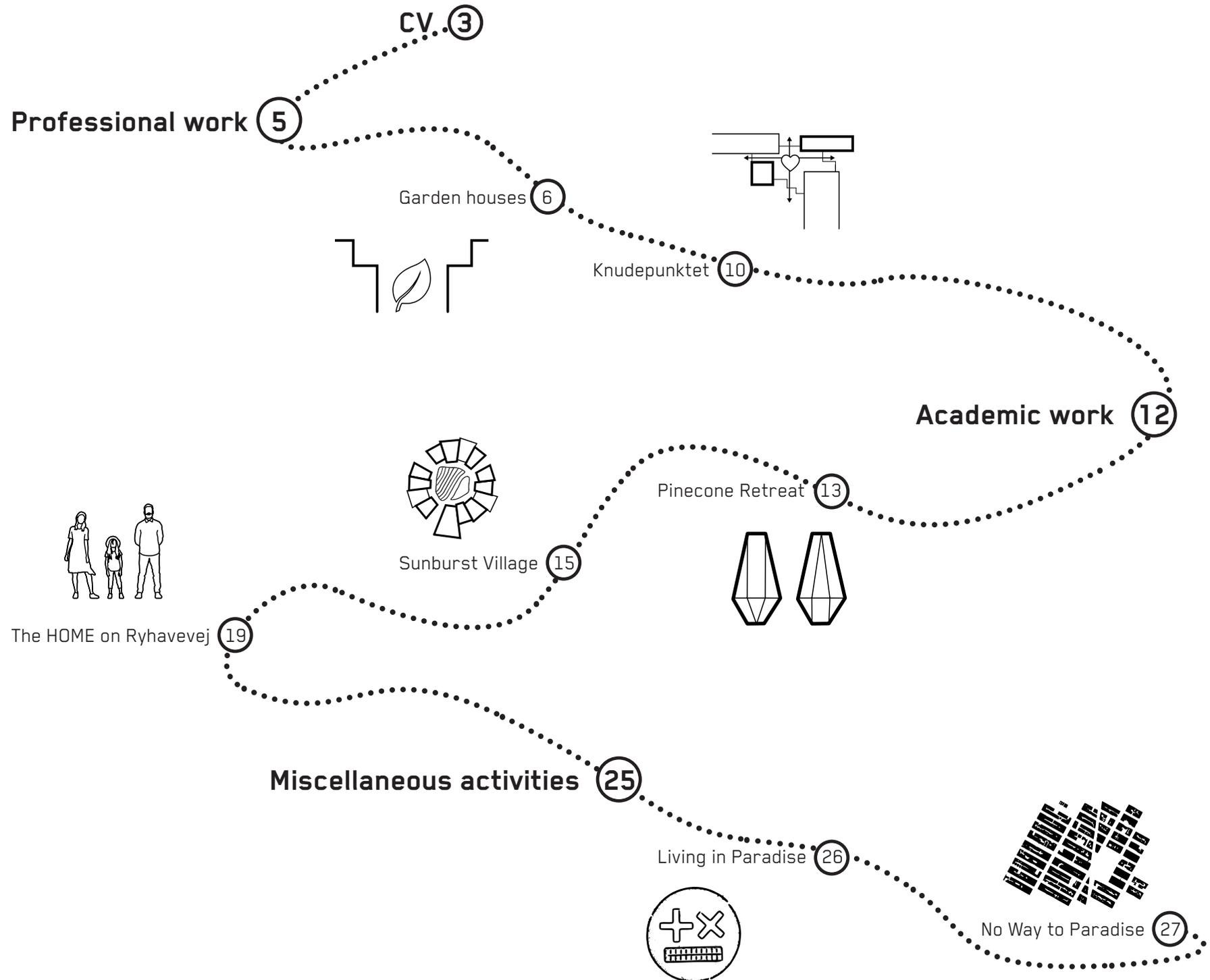
build
symbol
plan

process
proportion

hierarchy

creativity
symbol

design
idea
project





CV

ONDREJ SLUNECKO

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+45 91 87 04 05

Aalborg, Denmark

Architect | LEED Green Associate | Inspireli Advisory Board Member

I believe in one absolute; for architects, the world is realm to shape in the image of our **highest values**, never to be given up to a lesser standard, no matter how long or hard the struggle may be.

And despite being the hardest **endeavour** I have ever encountered, I loved the challenge nonetheless. There is something **magical** about being able to shape the world around us; seeing the reality yet to come. It is a nourishment for the ego and exercise for mind.

It gives people hope that the world can be a better place when we cease to exist, and it gives us a chance to leave something of a value behind. I would call it a quest for **beauty**. We must look for the beauty in the world and reflect it in architecture, for other people to see the world as we see it.

However, all this comes at a price. First and foremost our **freedom** is severely limited by clients, laws and functional requirements. There might be many years between the moment of the first **idea** and the handing over of the building. The process is painfully long and, in the end, how many buildings can we influence in our lifetime? Twenty?

However, in the end, when we see, that we were able to imprint our **hopes and dreams** into concrete, wood, glass and steel by influencing less than one-fifth of parameters, only then will we realize that it was all **worth** it.

Education

- 2022 Master of Science, Architecture Aalborg University, Aalborg, Denmark
- 2020 Bachelor of Architectural Technology VIA University, Horsens, Denmark
- 2018 Erasmus+ Solent University, Southampton, UK

Employment

2021- **Supertrends AG, Zug, Switzerland**



Analyst (contract) - Research and content writing, predicting future in areas of architecture, construction, smart cities and materials.

2019-2020 **TRANSFORM, Aarhus, Denmark**



Constructing architect, architectural assistant

Fængslet in Horsens - competition

Kindergarden Østerhåb II - competition

Kindergarden v Lyreskovskolen - competition

Søvangen, BBBO - housing redevelopment

Garden hoeses in Lisbjerg - competition

Knudepunkt på Mols - Culture, sport, kindergarden

Housing block 87 in Gellerup - housing redevelopment

2018 **UNION Arch, Liberec, Czech Republic**

Architect, BIM specialist (contract)

Private clinic in Chvaly - hospital project

Architecture

Site analysis | layout | material selection | aesthetics massing | innovative solutions | sustainability | creative solutions | sun analysis | volumetric operations | diagrams

Construction

Detailing | sketching | thermal bridge elimination non-conventional connections | timber construction sound reduction | fire protection

Structure

Structural systems | load transmission | solutions | precast concrete | timber elements | preliminary element dimensioning | Engineered wood products | fire protection

Sustainability

LEED Green Associate | LCA | LCC | insulation analysis | water-sensitive urban design | green roofs | re-use of materials | upcycling | low energy materials

Rhino

3D modelling | materials | V-Ray for Rhino | Enscape for Rhino | rendering | complex models | Algorithm-aided design | Grasshopper | Workflow tools

Revit

Managing large projects | parametric families | creating templates | detailing | phases | coordination | BIM7AA

SketchUp

Complex models | sequence animation

Adobe CC

Photoshop | Illustrator | Indesign | After Effects

Continuing education and courses

2020	CitiesX - HarvardX
2020	Future Cities - ETH Zurich
2019	Rhino 3D Advanced course + Galapagos for Grasshopper
2018	Hi-Timber, High-rise timber construction
2018	Solid wood as structural material, TRADA
2017	Mentoring and leadership course, HRRüger

Competitions

2020	Inspireli Awards, 2nd place
2020	Co-life, Habitat shortlisted
2019	Hypermega - Honourable mention

Associations

2020-	Inspireli Advisory Board Advisory board meet once a month to steer, organize and promote Inspireli, the biggest architectural competition in the world.
2021-	AAU Master of Architecture, second semester steering group
2020-	LEED Green Associate
2018-	Timber Research and Development Association (TRADA)
2017-	Danish Association of Architectural Technologist (KF)

Publications

2020	Slunecko, O. (2019). Living in Paradise, 97 Tips for Architects
2019	Slunecko, O. (2019). Algorithm-aided design: Insolation and solar optimization. Bachelor thesis

Other endeavour

2020	No Way to Paradise, art exhibition at Godsbanen, Aarhus
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Garden houses

Timeframe August 2019 -
Typology Row houses
Location Lisbjerg, Denmark
Team Lars Bendrup - Partner
Kristian Boye Thomsen - Architect
(kbt@transform.dk)
Status In progress - Project proposal

After the end of my internship at TRANSFORM, I was offered to stay as architectural assistant for the rest of my studies, which I gladly accepted.

One of my first tasks was to work on this **competition** as second architect. I was partially responsible for the layout of the development on the plot. We have spent significant portion of time on careful urban **planning** in the newly established neighbourhood.

I had part of responsibility for exteriors - **composition** of facades and materials. In the end, I was responsible for half of the final **graphics** for the competition folder.

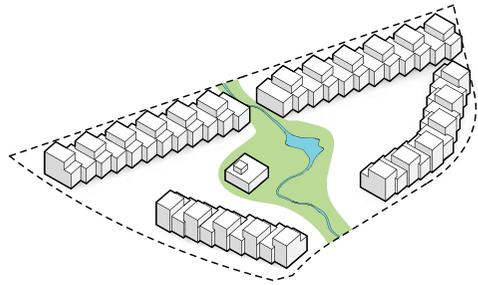


Aerial view of the development



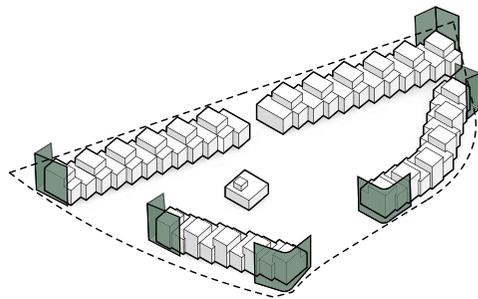
Section towards west - 1:400

Concept development



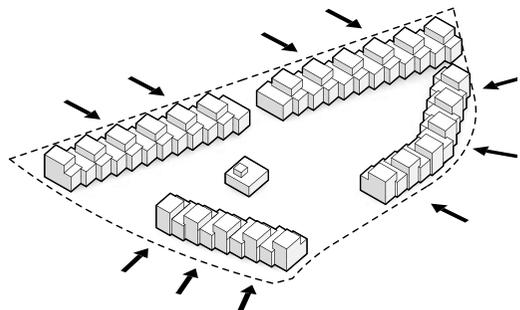
A | THE GREEN URBAN SPACE

The central space is designed with an extensive **greenery** and dry basin for water sensitive urban design. This green belt running in the north-south axis is for all the **dwellers** to enjoy, especially when they meet in the centrally located common house.



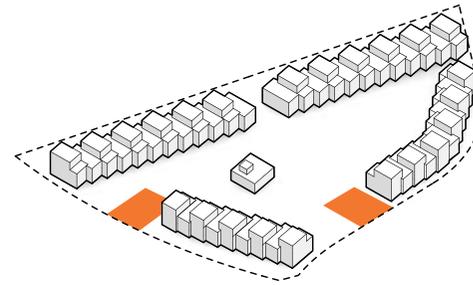
B | CORNER REINFORCEMENT

Strong corners mark the building volume and **emphasize** the urban character, which was eroded by the curving parcelization of the area.



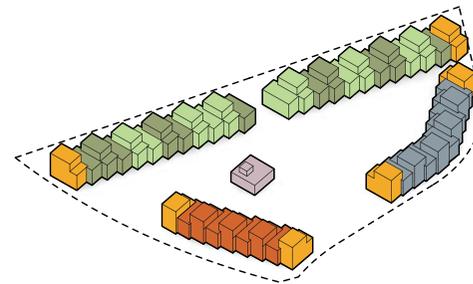
C | ENTRANCES

Urban development is usually characterised by the entrances from the street. It is aim to follow that rule in order to create **lively streets**, where people meet and interact.



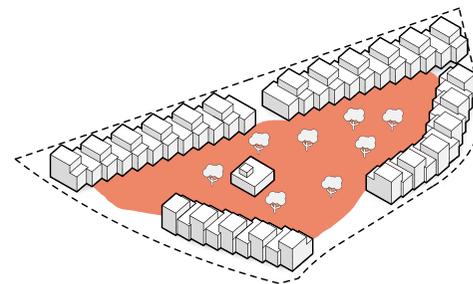
D | Parking

In addition to the street parking, there will be two small parking pockets in order to reach the **requirement** from authorities.



E | Diversity

There will be **5 different configurations** of housing, which will promote diversity of dwellers. Row houses in two or three storeys as well as corner row houses and shared units.



F | COMMON SPACES

The courtyard is **shared space** which contains many footpaths going through. This green space will allow the dwellers to **reconnect with the nature** and rest well in order to tackle challenges they face in their daily lives.

Street edge and garden space

Lisbjerg is a new development which is supposed to **grow by 50.000 people** over the next 20 years. Therefore, there is a goal to create quality spaces of urban character right from the start.

Small front gardens **create soft edge** between the street with parking spaces and private properties. This will create lively urban space bustling with activity. People coming and going, meeting each other and cycling. The front gardens also provide and opportunity for **customization** according to the taste of the dwellers.



The private gardens allow **nature** to come as close to living room as possible. They offer a calm space where one can enjoy sun and drink with friends as well as quality family time.

The common courtyard between the row houses offers **lush landscape** with opportunities to walk and meet with neighbours. It will be common to see children from different houses playing together and **claiming the courtyard** as their territory.



Selected unit

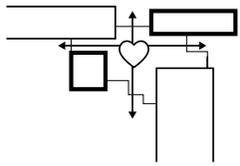
The **3 storey row house** has an entrance through a small front, where one can find practical shed to store bicycles or garden furniture.

The ground floor consist of **public** spaces with now classic combination of living, dining and kitchen in one uninterrupted area.

On the second floor, two more rooms and bathroom are located.

The third floor contains last bedroom and **spacious terraces with view** over the green courtyard.





Knudepunktet

Timeframe	2019-2020
Typology	Kindergarden, Canteen, Sports hall
Location	Knebel, Denmark
Team	Lars Bendrup - Partner Kristian Boye Thomsen - Architect (kbt@transform.dk)
Status	In progress - Tender

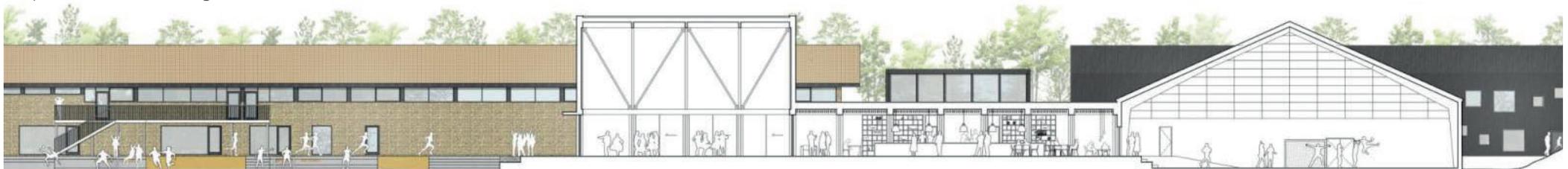
Since I started at TRANSFORM as intern, Knudepunktet was my main project. Initially I was responsible for various **architectural studies** and space optimization. Over time, as project progressed, I made the transition from the architectural model, made in Rhino, into **construction documentation** model in Revit.

As one of the main points, I ensured communication between the **design and construction** team and in the end I was responsible for technical drawings mainly for kindergarden, canteen area and fixed furnishing.

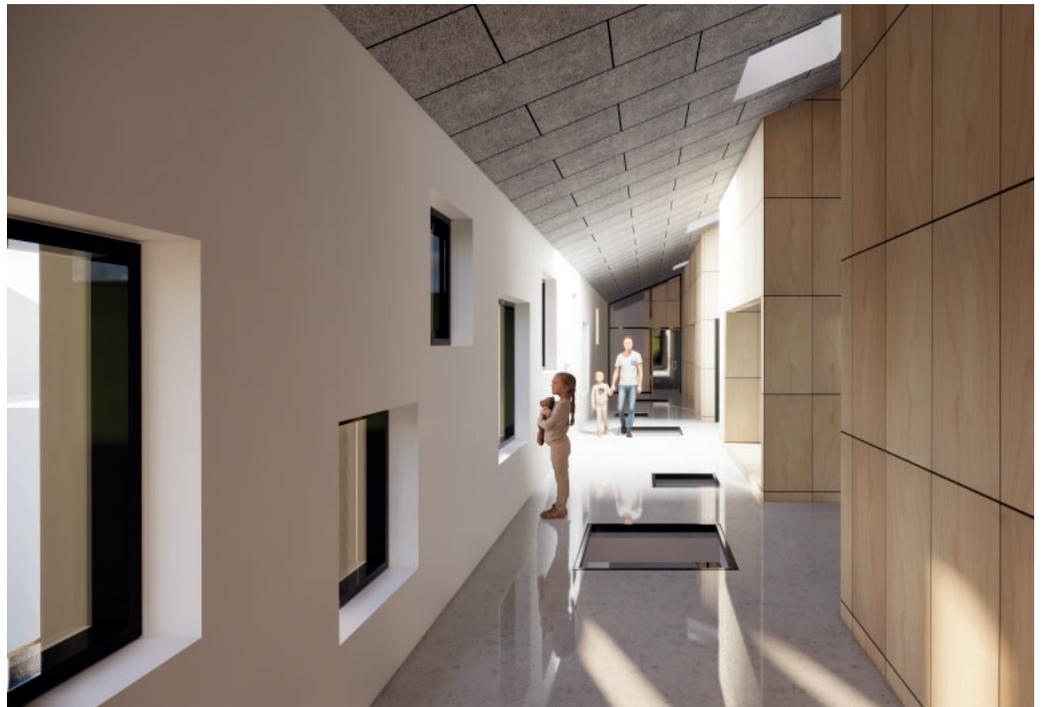
On top of that I **coordinated the technical details** and drawing structure. For the bidding process, we had collected over 300 drawings in total, mainly due to requirement of having A3 as maximum size.

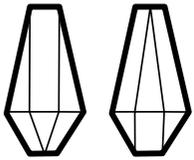


Entrance - courtesy of TRANSFORM



Section - courtesy of TRANSFORM





Pinecone Retreat

Timeframe	Autumn 2020
Typology	Off-grid cabin
Location	Aalborg, Denmark

The Pinecone retreat sits on the bank of the Pebermosen lake, surrounded by densely forested **pristine nature** of Hammer Bakker. This unusual landmass was formed during the Saale glaciation and consist of glacial sediment, forming gentle rolling landscape with lakes in the depressions.

Studying the area influenced the **affinity for natural** form and geometry inherent in the nature.

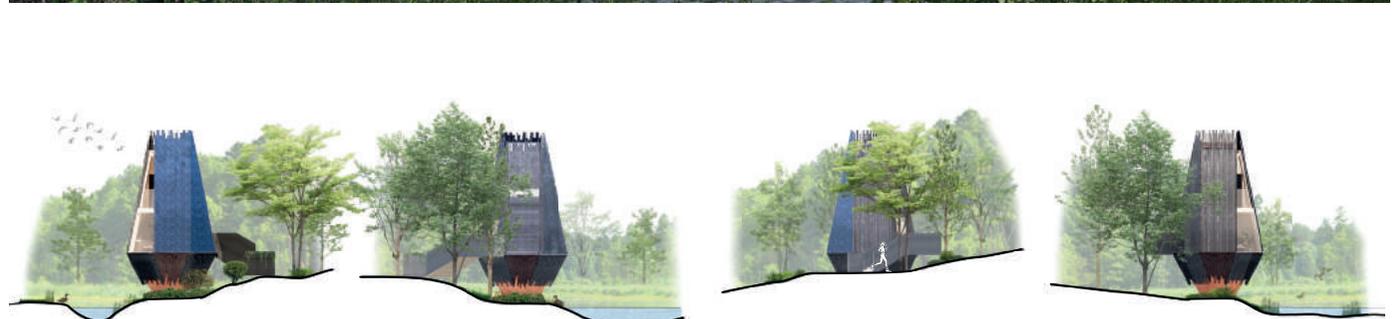
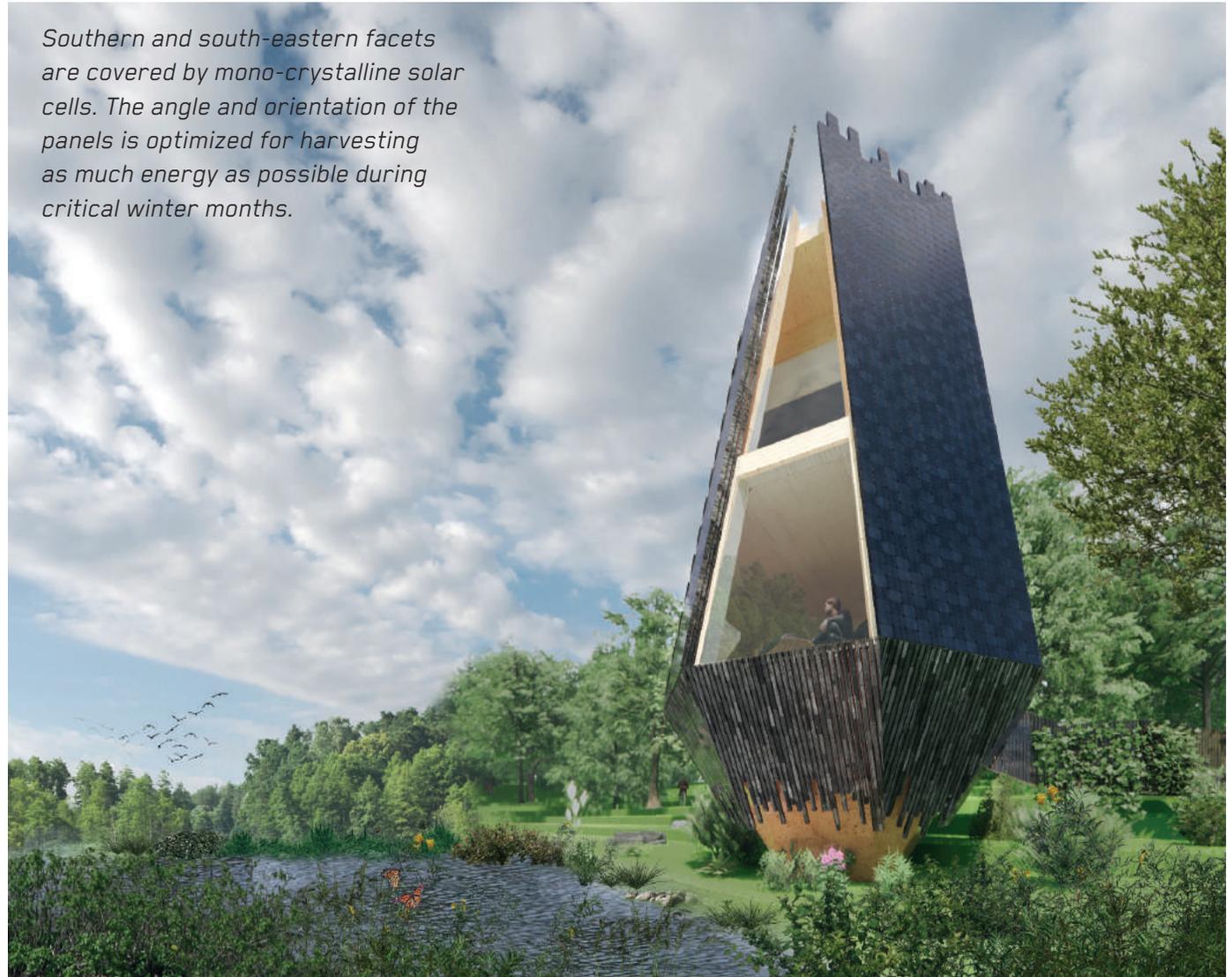
Thus, initial carved out massing study revealed a form roughly resembling a pinecone which was to be **examined** further.

Initial coarse geometry had to be rationalized in order to fully utilise its potential in terms of both architecture and sustainability.

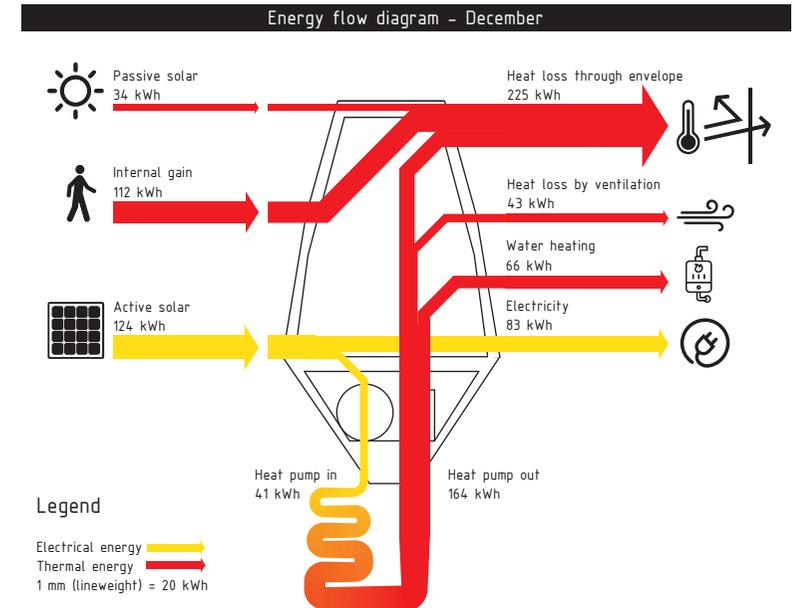
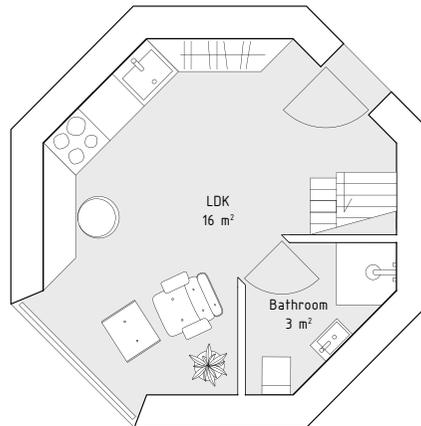
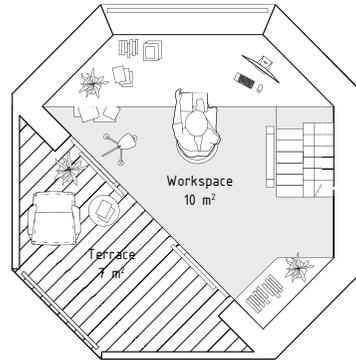
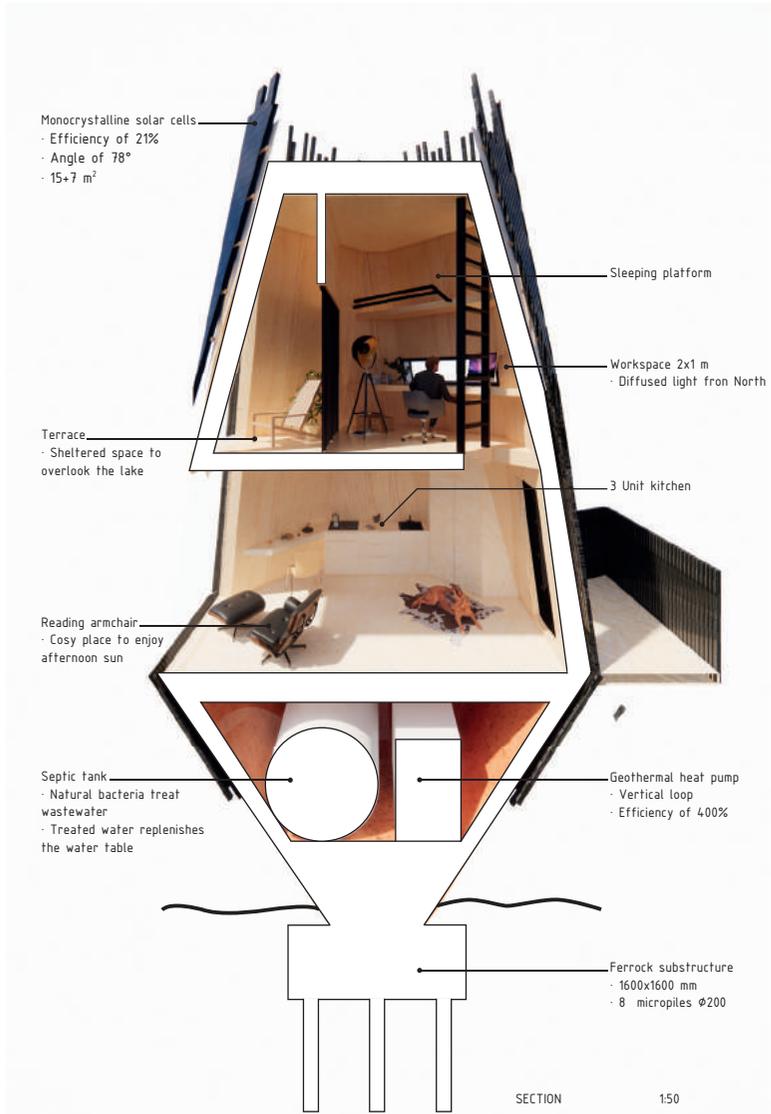
Out of hundreds versions, final prismatic form with alternating **triangular and rectangular** facets emerged. Resulting form consist of planar surfaces and takes into account minimalization of building envelope as well as solar elevation angles with specific consideration for winter months in order to maximize the energy harvested by solar cells.

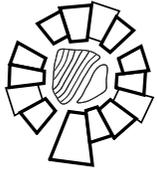
Despite being inspired by natural geometry, the form of the cabin is a **distinct object** manifesting itself clearly in the landscape.

Southern and south-eastern facets are covered by mono-crystalline solar cells. The angle and orientation of the panels is optimized for harvesting as much energy as possible during critical winter months.



Section, Plans and Energy





Sunburst Village

Timeframe	Autumn 2020
Typology	Housing
Location	Aarden, Denmark
Purpose	Semester project
Supervisor	Camilla Brunsgaard
Team	Bjarke Hermansen Mathias Flugel

As master degree students, one of our projects involved a community of dwellers wanting to explore possibilities of **establishing a settlement** in Aarden.

The development of Sunburst Village is going to establish a lively community for **wide array** of dwellers. There are going to be established 3 clusters which can be built in phases.

Units in each cluster are arranged in radial composition in order to maintain a strong and cohesive architectural expression. At the same time, diversity of individual units is **accentuated** by differences in form and materiality. Besides housing units, there are greenhouses incorporated in each cluster so as to prolong the seasons for the occupants and **soften** the transition between the public and private. Common houses serve primarily to allow gatherings of the dwellers and **reinforce the community**.

All the dwellings have reasonable size, dwellers have enough **space to live** comfortably without using excessive amount of floor area.



Southern courtyard presents opportunity for kids to play and adults enjoy sun in the afternoon

Visualization of the courtyard



Concept Development

Community can take many forms. Sunburst Village takes form of a circle. Why was the **circle** chosen and what are its opportunities?

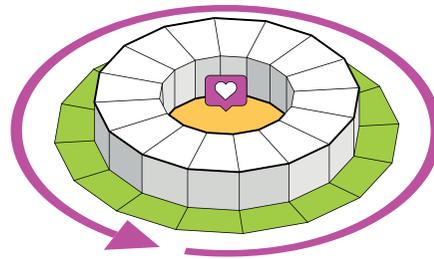
First and foremost, the circle has a center and so should the community. A place for the dwellers to meet, common ground to talk, and **protected space** to enjoy oneself.

Secondly, having a radial formation gives us two sides to work with, inner and outer rim. **The inner rim** is the most public part, living and dining spaces are located on this edge. The outer rim is more **private** and oriented towards lush areas between clusters.

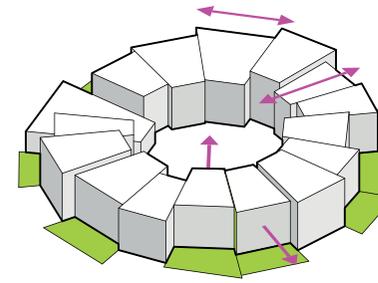
Ultimately, circle means wholeness. Every single one of the dwellers is part of it, **equal as human** among its brethren. Circle means unity. Unity in a common goal and way of life.

All that, however, cannot come as an expense of **personal identity**. Therefore each dwelling is a distinct unit. **Variations in shape** and materials. The mass of the development needs to be broken down into human-sized chunks.

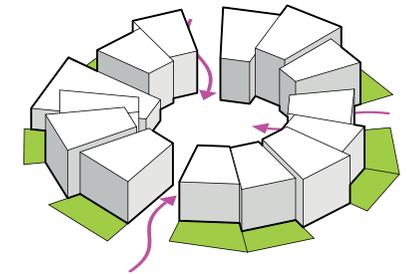
There are also different sizes of dwellings, meant to attract different groups of people. Those will than live, side by side, and **learn** from each other.



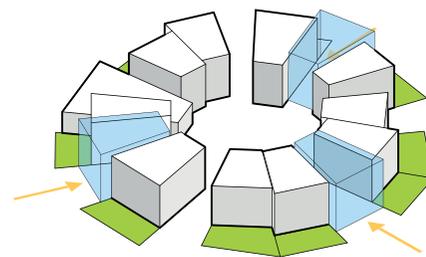
A | RADIAL COMPOSITION
Arranging the housing units in a radial **composition** creates a courtyard in the centre as a heart of the community. There children can play and **neighbours** greet each other when they meet. Semipublic plaza in the center and gardens at the outskirts.



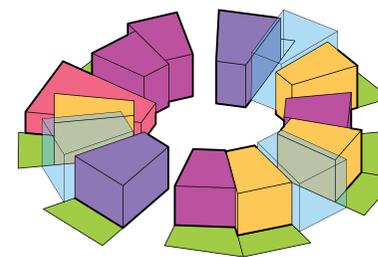
B | BREAKING DOWN THE SCALE
In order to give each unit individual identity they are pulled in and out of the circle and their width is **adjusted**. This gesture breaks down the scale of the development.



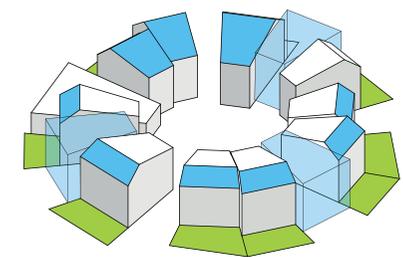
C | CUT THROUGH
Several units are eliminated in order to open each cluster and connect it with the others. The openings create a passage to enter the courtyard and **allow movement** through the whole site.



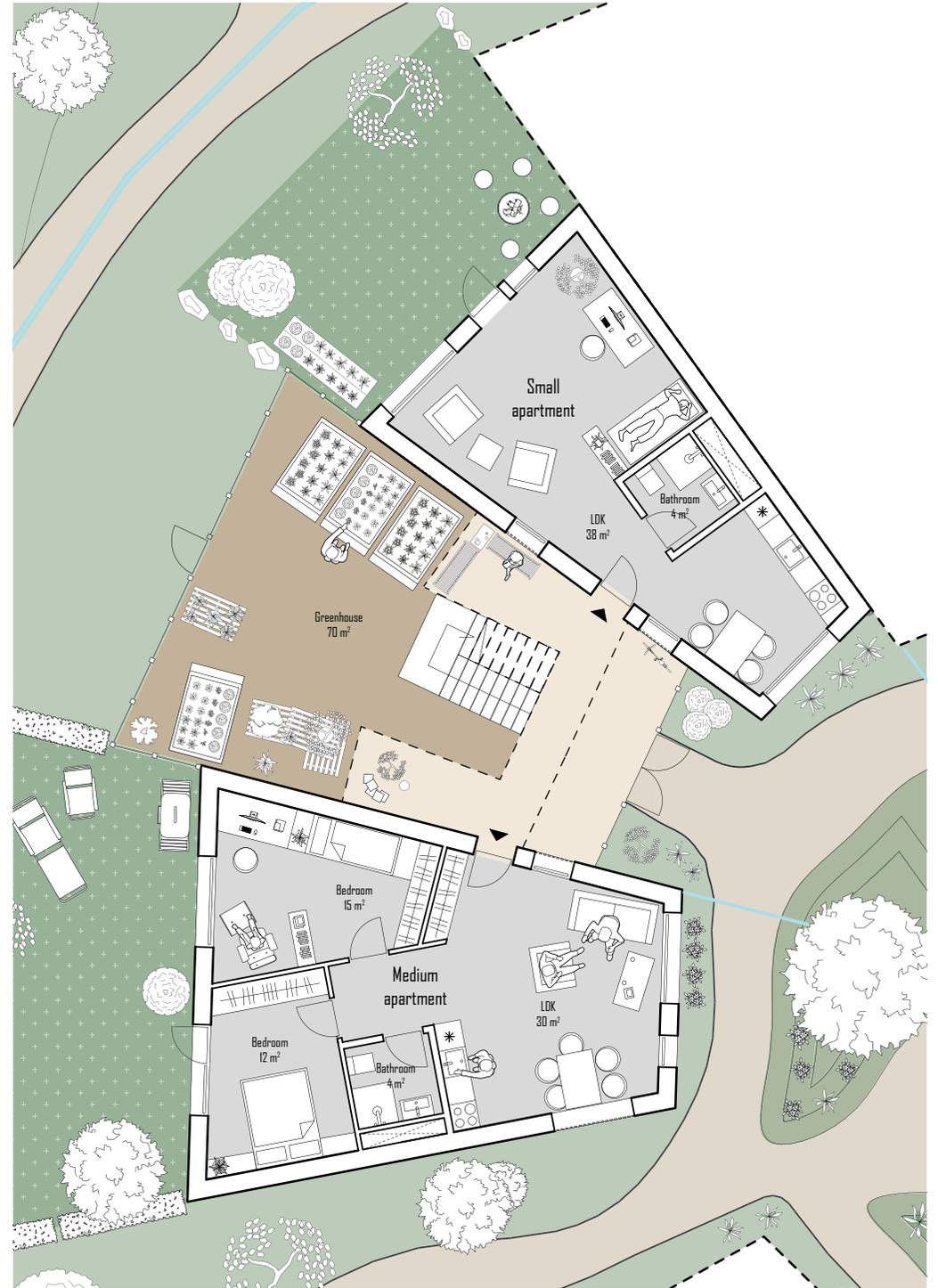
D | GREENHOUSES
Greenhouses replace some units so the light can reach deep into the courtyard from many angles and create a **semi-private space** for the adjacent apartments. There, the dwellers can grow more sensitive plants or sit in the evening and **enjoy outside** from early in spring to late in the autumn.



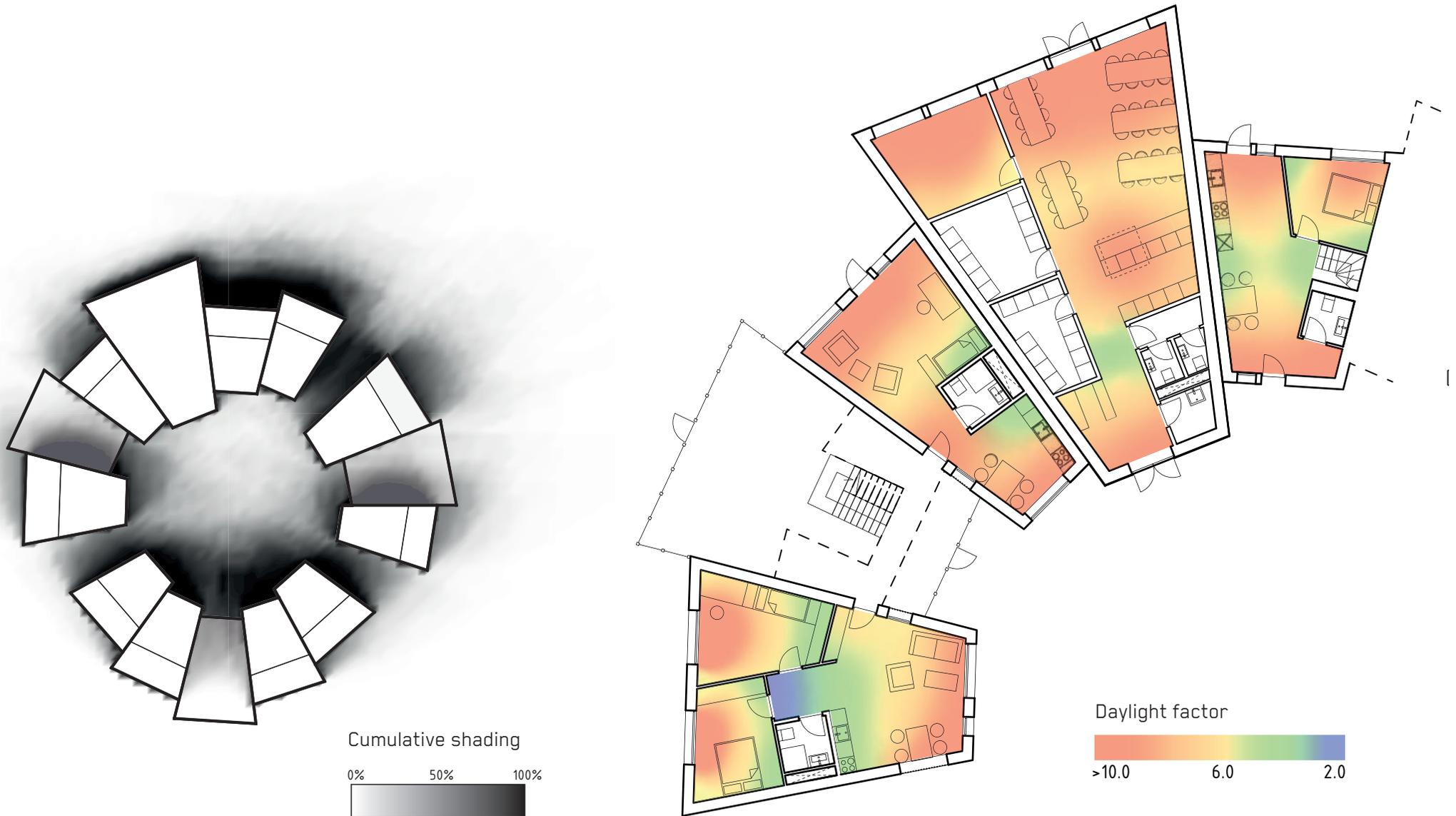
E | MIXING TYPOLOGIES
There are 3 different types of apartments, large, medium, and small. Grouping different units into one **cluster** promotes understanding between various groups and encourages interaction. Each cluster has a common house for dwellers to **dine together**.

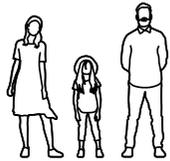


F | POWER
Asymmetrical roof with steeper pitch towards the outer rim and gentler pitch towards the inner rim allows sun to **penetrate deep** into the courtyard. At the same time it creates optimal angles to collect highest amount of **energy** on the limited surface area through various times of the year.



Analysis





The HOME on Ryhavevej

Timeframe	June 2019 - January 2020
Typology	Mixed (Housing + Retail)
Location	Aarhus, Denmark
Purpose	Individual bachelor project
Supervisor	Torben Lundberg (tolu@via.dk)
Phases	Up to tender design

For the bachelor project, we were given complete freedom in choosing our own project. I noticed that there is going to be a **new development** in my neighbourhood and people were protesting against it, due to its monstrous size, which did not correspond to the rest of the area.

I decided to use the same site and propose alternative which would be **delicate** enough to honour the danish architectural tradition, while at the same time promote diversity of dwellers and use sustainable **timber construction** techniques.

The project lies at the heart of Hasle neighbourhood, 2 km west from the center of Aarhus, Denmark.

The area is a **boundary phenomenon**. South from the site lies sub-urban residential neighbourhood, Åbyhøj, characterised by single-family houses.

In contrast with this, there is a belt of industrial properties and shops towards north and the edge of infamous ghetto, Bispehaven, towards north-west. This part is slowly being **transformed** and consist of mid-rise housing.



View from the south shows the stacked terraces and connection between the apartments and the lush meadow in the courtyard.

Visualization of the courtyard



Design phases

Concept Development

The site itself hosted office building of questionable architectural quality which is to be **demolished** as part of the development.

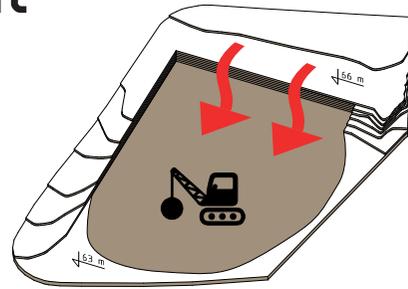
The HOME on Ryhavej reacts to these complex conditions and provides a solid foundation for a development of a new community on the verge of change in **turbulent times**.

The aim is to create a small welcoming community by bringing different people together, under one roof. The architectural qualities, **abundant light** and greenery are going to attract diverse array of people.

We believe in symbiosis between a city and nature, therefore we pushed for use of as much of the natural products as possible. The whole development was **dipped in greenery** from all the possible angles.

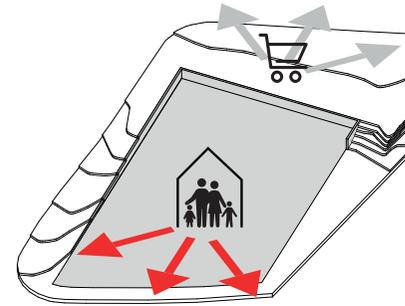
The project **respects** the low and suburban area of Åbyhøj and defines the edge between this calm neighbourhood and busier industrial zone towards north.

There is a vision to create a **holistic** project which combines new typologies for **contemporary** inhabitants with cutting-edge technology involving timber products for construction.



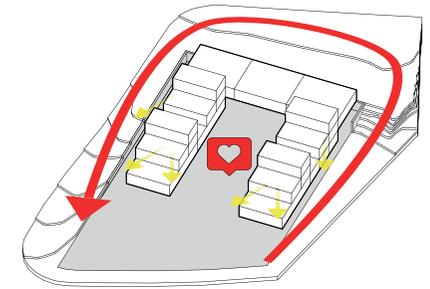
A | THE DEMOLITION PIT

After the demolition of an existing building, we are left with a scar in the sloping site. The position of the pit **reflects the contours**. The northern part is positioned towards the main road, while the southern part is 3-4 meters lower and faces towards suburban residential area.



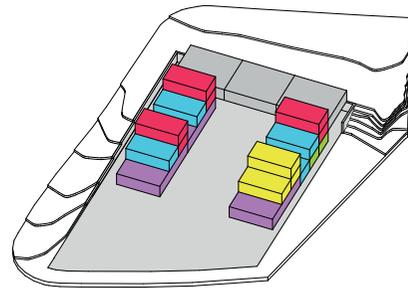
B | REINFORCEMENT

The former footprint is ideally positioned in order to establish shops towards the main street and residential units toward south. Therefore the lowered platform is kept as a **foundation** for a new development.



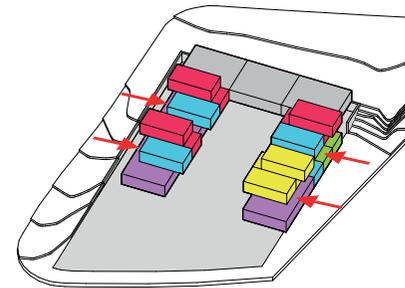
C | HALF COURTYARD

Units are **dispersed** to form half circle formation around the courtyard, which serves as a meeting place for the community, to have bbq or place for kids to play. At the same time, various roof terraces are created, with **view** over Åbyhøj.



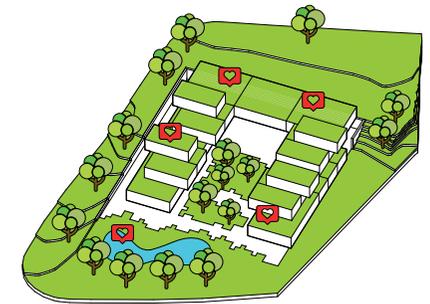
D | BLENDING OF TYPOLOGIES

Different housing typologies are blended and oriented towards south, where the sun and views are. Grouping different units to clusters promotes **understanding** between different groups and encourages meeting of people.



E | VOLUMES SHIFT

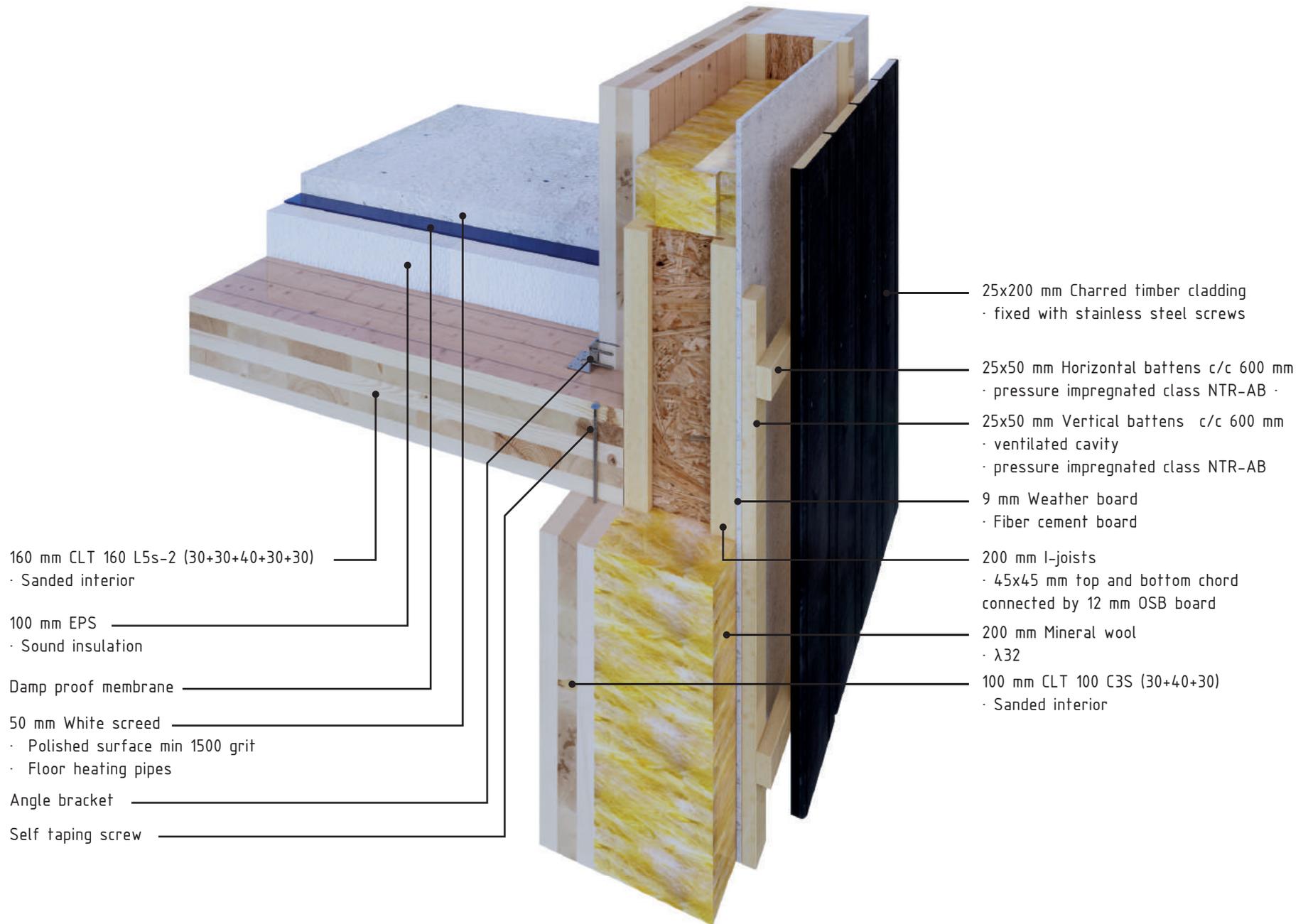
Gentle push of volumes allows access to the units. **Circulation paths** through the site and around units are freed. The roofs serve as access and are joined with courtyard to form a loop.



F | REINTRODUCING NATURE

Introducing nature to our cities is one of the **crucial challenges** of our age. Lush greenery is more than aesthetic folly to fill leftover spaces. The foliage helps to clean air, help with pollination, store carbon and improve the **well-being** of the dwellers. Therefore terraces and roofs are covered with sedum.

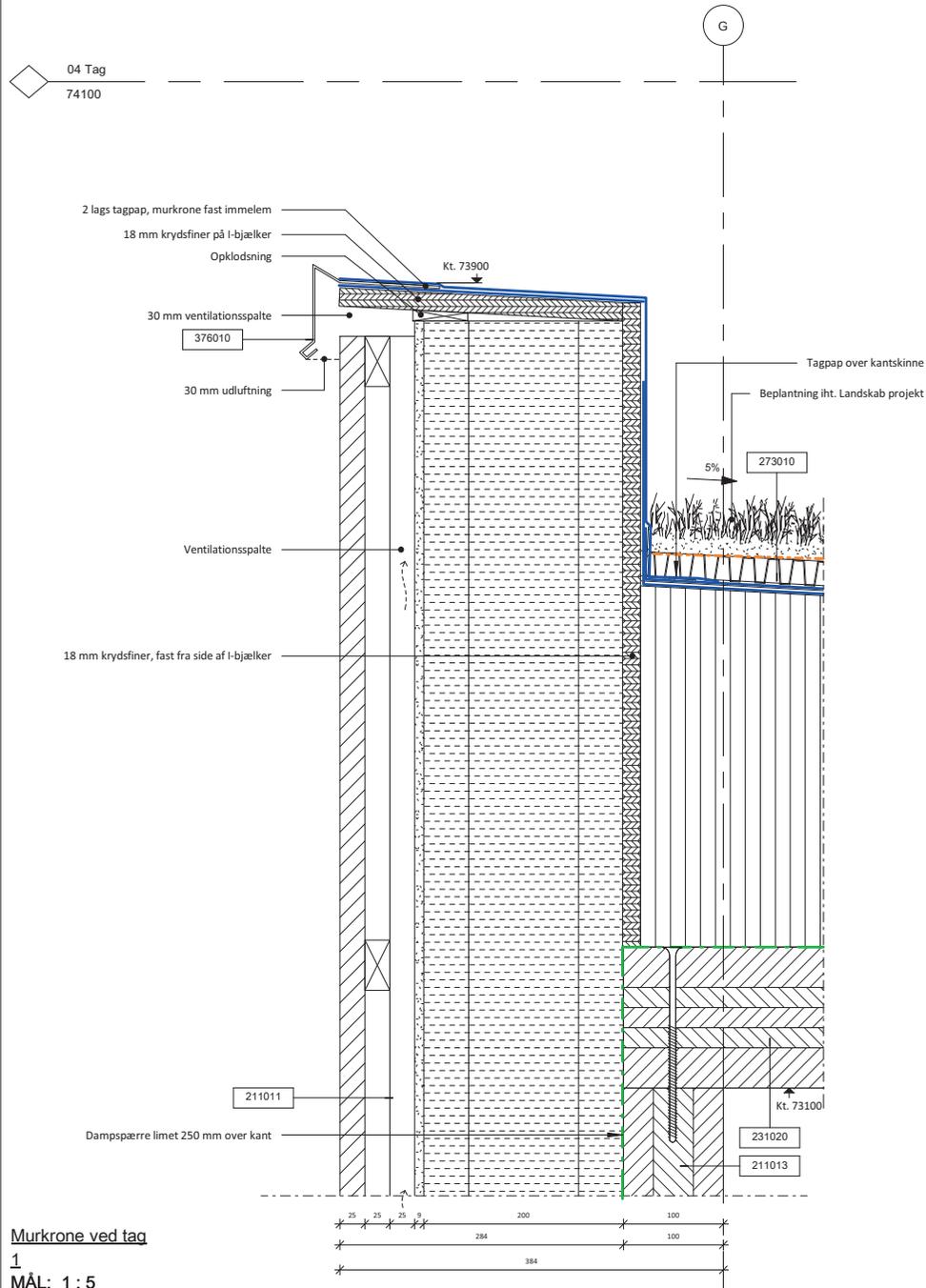
3D structure



Section and Elevation



Construction detail



Murkrone ved tag
1
MÅL: 1 : 5

BIM7AA	Bygningsdelsbeskrivelse
211011	284 mm Ydervæg - uden CLT - 195 mm Mineraluld λ32 - 200 mm I-bjælker 45x45mm isoleret med mineraluld c/c 600 - 9 mm Vindspærrer - 25 mm Ventilret hulrum 25x50 mm afstandliste, trykimprægneret kl. NTR-AB - 25 mm Sømlægte, trykimprægneret kl. NTR-AB, c/c 600 - 25 mm Lodret beklædning iht. Farve og materiale skema
211013	100 mm Ydervæg bærende CLT - 100 mm (30+40+30 mm) CLT 100 C3s VI WW C24 SAN
231020	140 mm CLT dæk - 140 mm (40+20+20+20+40 mm) CLT 140 L5s VI WW C24 SAN
273010	425 mm Sedum tag - 30 mm Mos-sedummatte iht. landskabbeskrivelse - 25 mm Drænplade - 2x5 mm Tagpap 2 lag som ICOPAL Base 500 PG + Icopal Top 500 P - 400 mm (maks.) Isolering, trykfast λ32
376010	Zink murkrone - iht. FM-skema

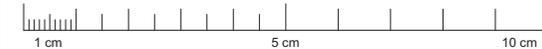
Alle mål skal kontrolleres på pladsen. Eventuelle fejl skal meddeles den tegningsansvarlige. Hvis ikke andet er specificeret, er alle mål i millimeter. Indehaver af ophavsretten til denne tegning er BUREAU BOUJEE ApS

SIGNATURFORKLARING:

	BIM7AA-nummer med henvisning til bygningsdelsbeskrivelsen
	Kotehenvisning (koterne er absolutte)
	Dampspærre
	Tagpap
	Fiberdug
	Vandtæt Radonspærre
	Vådums vandtætning
	Ventilret



1:1 Målestok



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Rev.:	Dato:	Udført:	Godk.:	Emne:
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Projekt navn:
The HOME on Ryhavevej

Projekt nr.:	Status:
1904	Hovedprojekt

Emne:	Eksisterende Dok. Navn.:
Murkrone ved tag	

Format:	Udført:	Godkendt:	Kontrol:
420 x 297	OSL	OSL	PEP

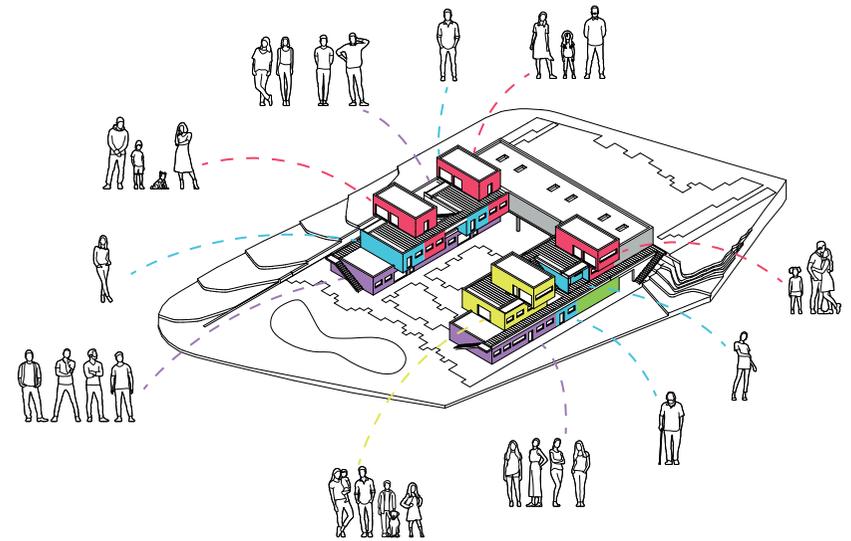
Mål:	Dato:
As indicated	2019/12/20

Tegn. nr.:	Rev.:
K01_H7_N12	

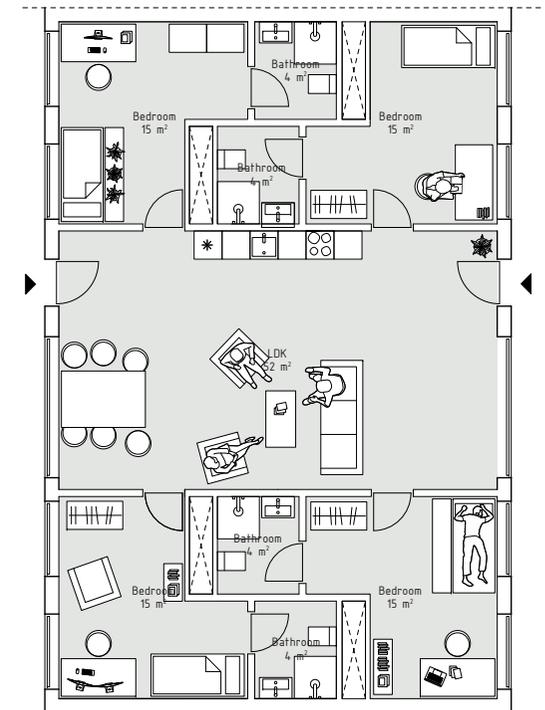
Dwellers

The HOME on Ryhavevej is based on life and community. Here all dwellers will live and **co-exist**. There is a place for families, students, young professionals. Place for both extroverts and introverts, young and old.

All gathered around one courtyard, **sharing joys** of life, in close connection to nature.

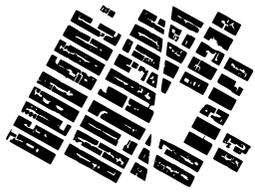


Unit types diagram



Shared apartment plan

miscellaneous
activities
art exhibition
book
exposure
modern
canvas
feel
contemporary
draft
print
action
kinetic
combine
colour
abstract
express

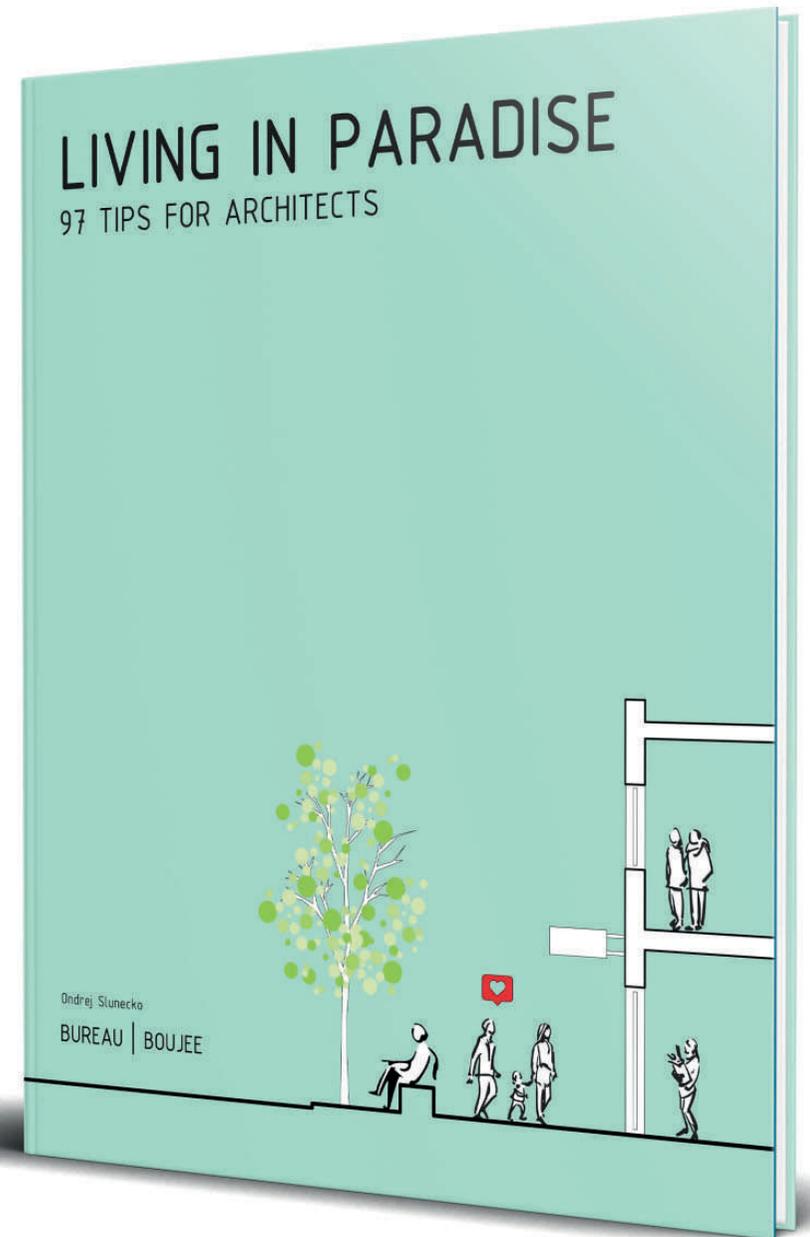
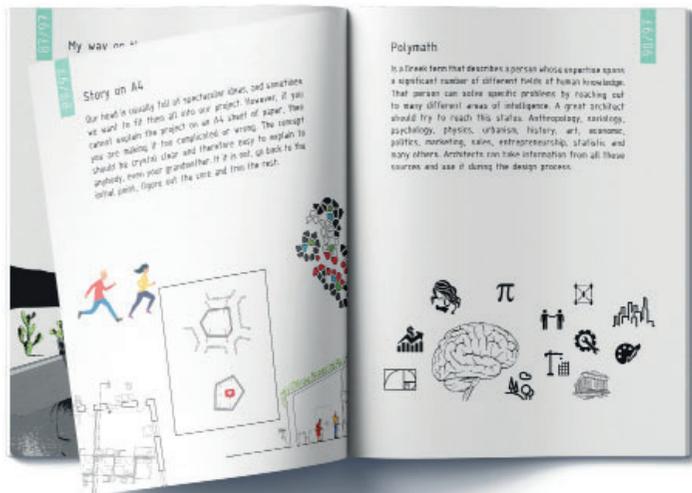


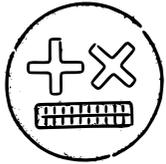
Living in Paradise

Architecture is **awfully chaotic**. There are thousands of sources of information and hundreds of approaches on how to design. This book is neither a guide nor a comprehensive source of data. It is the essence of architecture as I see it. Messy, disorganized collection. **Shards of wisdom** collected over the years. From books, colleagues, teachers, lectures and famous architects.

I found out that often, it takes a whole lecture to introduce one concept. Or that a book has two hundred pages to explain four core ideas. Famous architects also often repeat one trick over and over. Therefore, I took the notes I **collected** over the course of my career and summed up the most interesting ideas into short and clear tips.

They are laid there, one after the other. Each tip accompanied by an **illustration** which is at least tangentially connected to the tip itself. Illustrations have many different styles since I am unable to stick with one and I get bored easily. To further **emphasize** this, I invited some of my dear friends to help me and illustrate some of the tips.





No Way to Paradise

In January 2020, I had my first solo exhibition at Godsbanen, Aarhus.

NO WAY TO PARADISE
ONDREJ SLUNECKO | @ITSBLAZPHEMY

1-31 JANUARY 2020

GODSBANEN, SKOVGAARDSGADE 3
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GODSBANEN

