LIVING APART, GROWING OLD TOGETHER

CREATING A SOCIALLY ROBUST LANDSCAPE

P5 presentation AR3A100 Advanced Housing Design Ramon Poot Mentors: Olv Klijn, Ruurd Kuijlenburg & Anne Kockelkorn

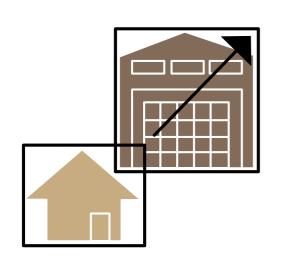
LOCATION

SITE

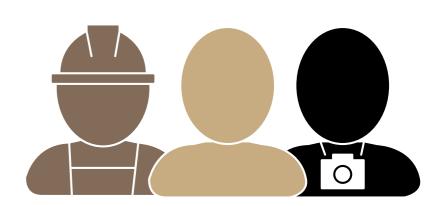


3/74 LOCATION

OPPERTUNITIES & CHALLENGES







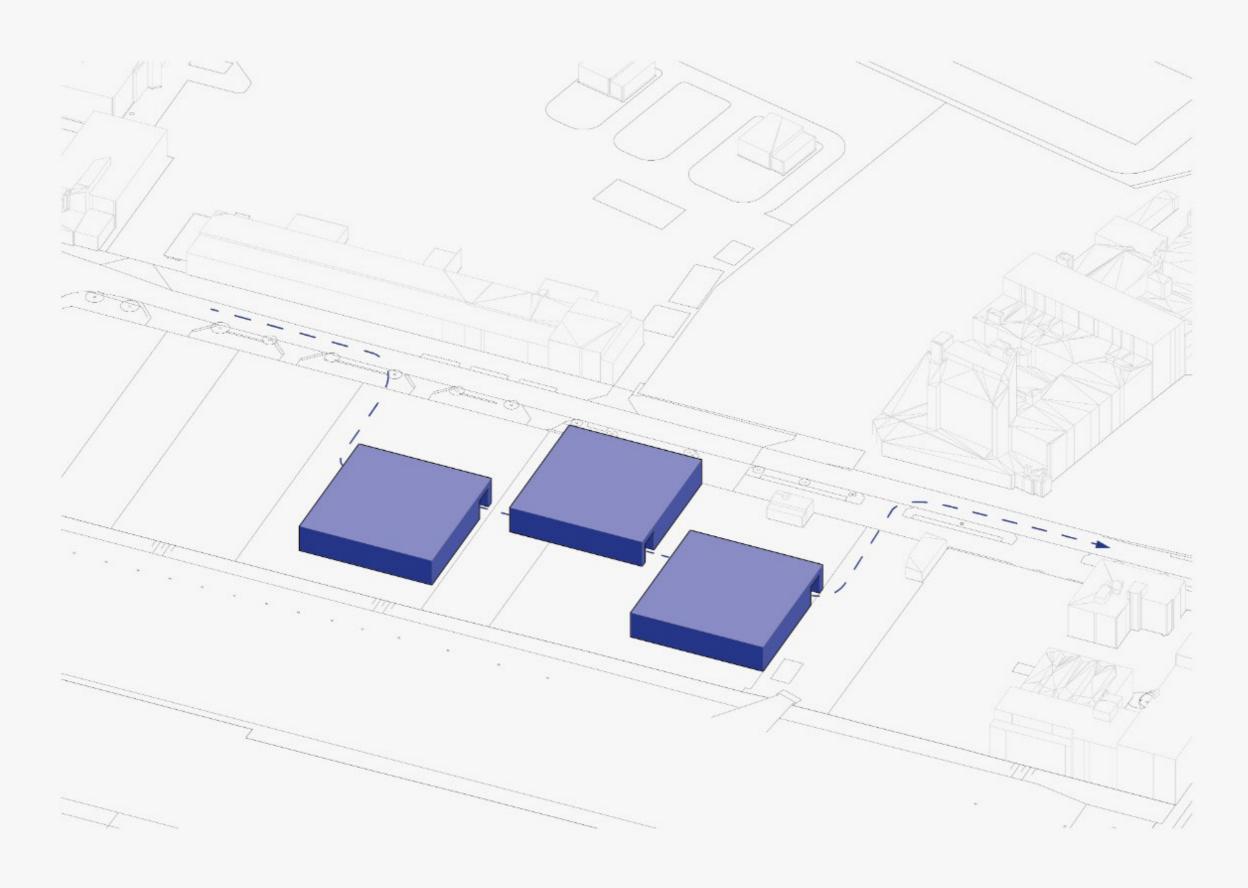
1. Different scales of housing & industry

2. Nuisance between housing & industry

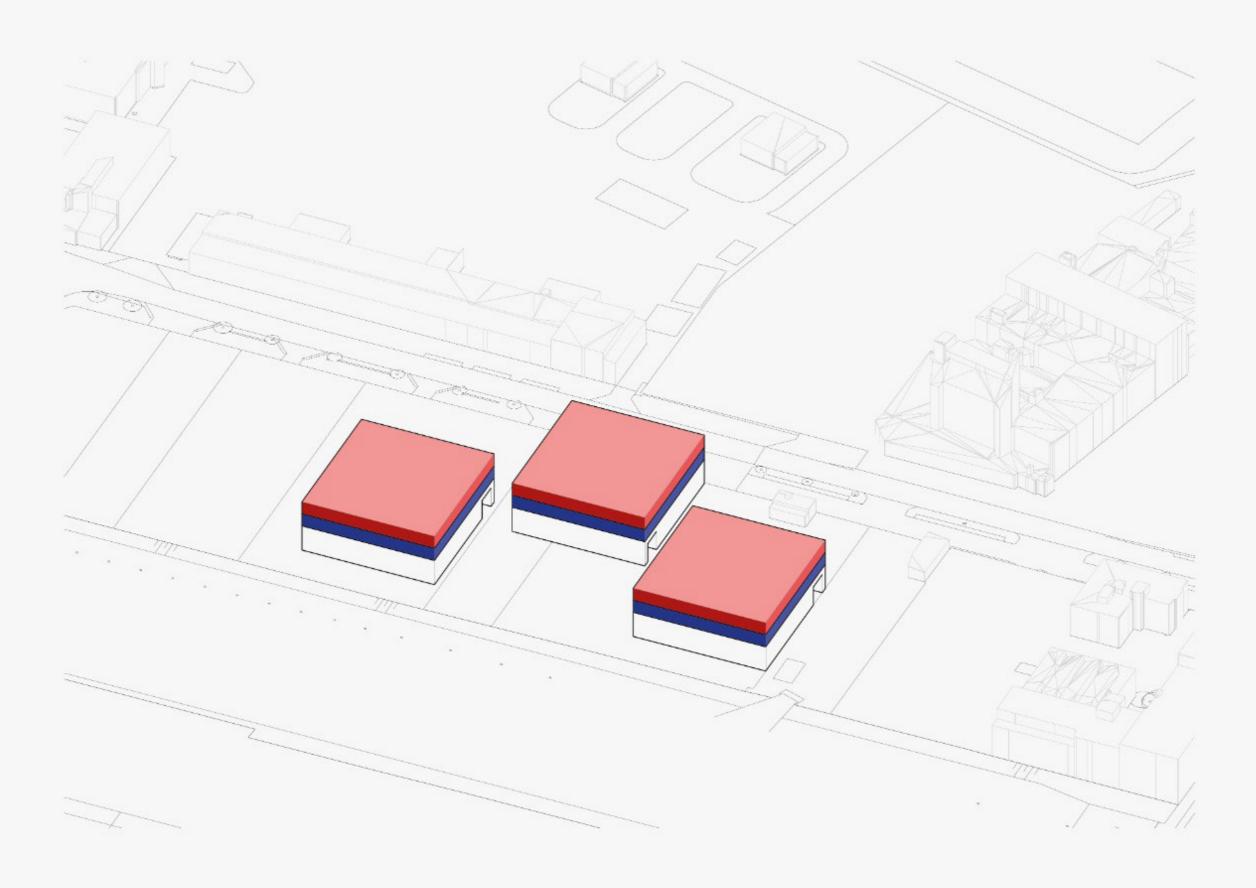
3. Cohesion between workers, residents and visitors

MASTERPLAN

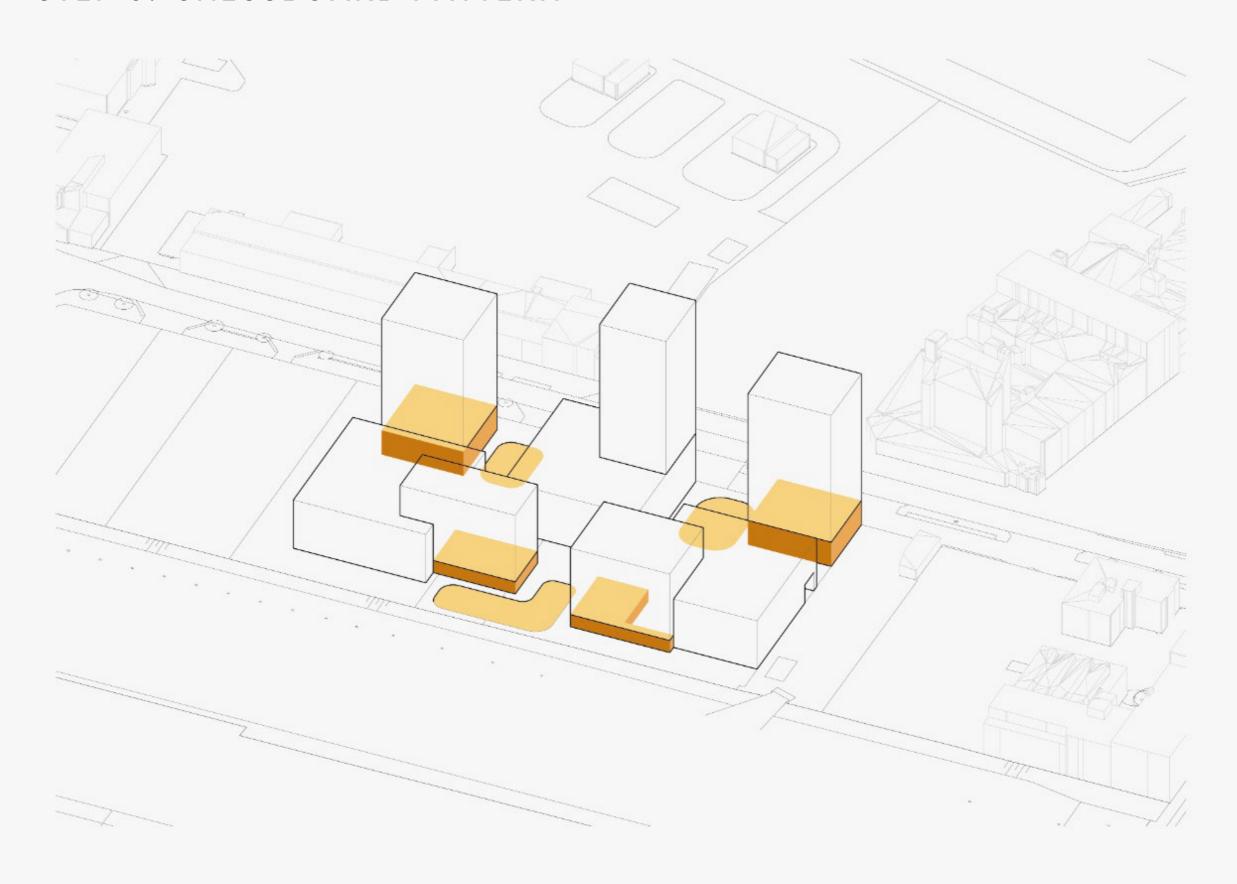
STEP 1: BACKBONE



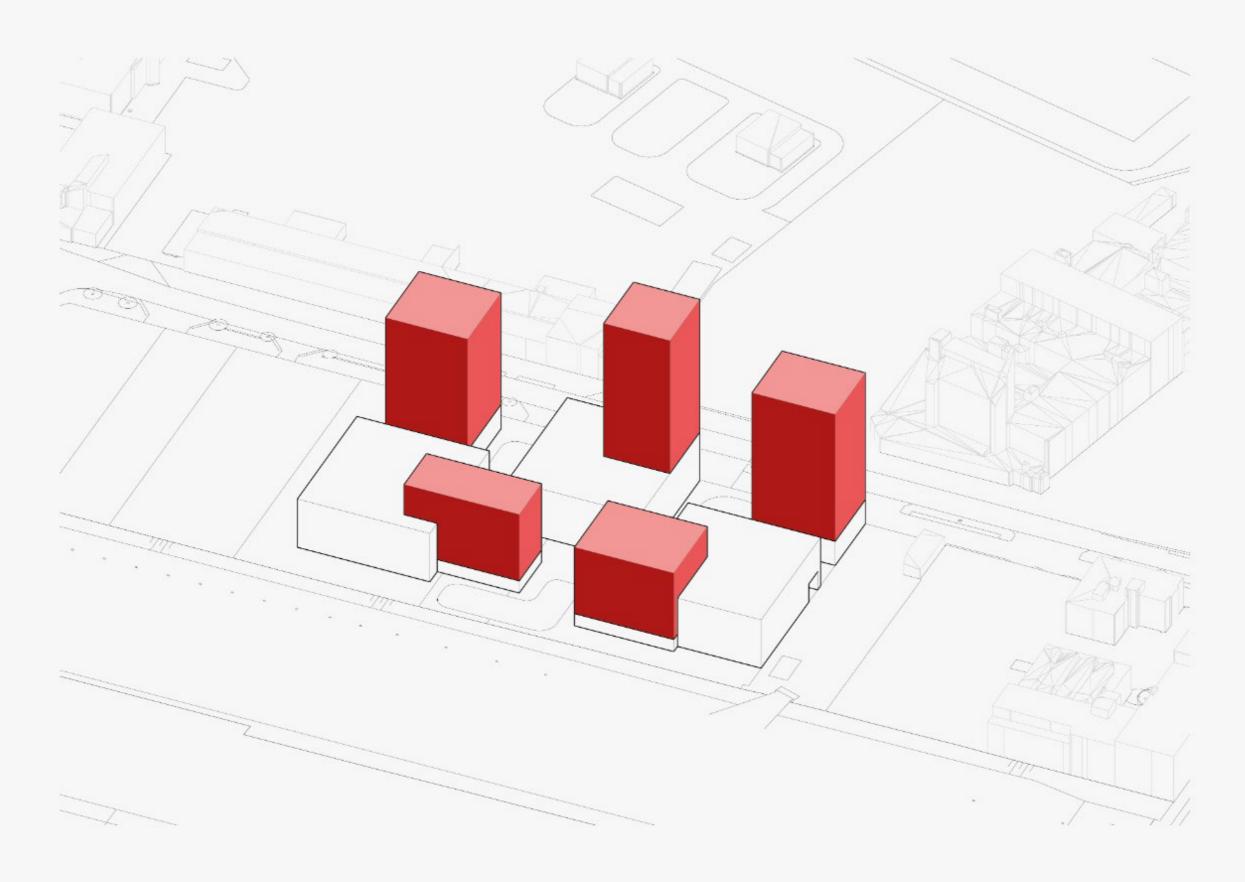
STEP 2: STACKING



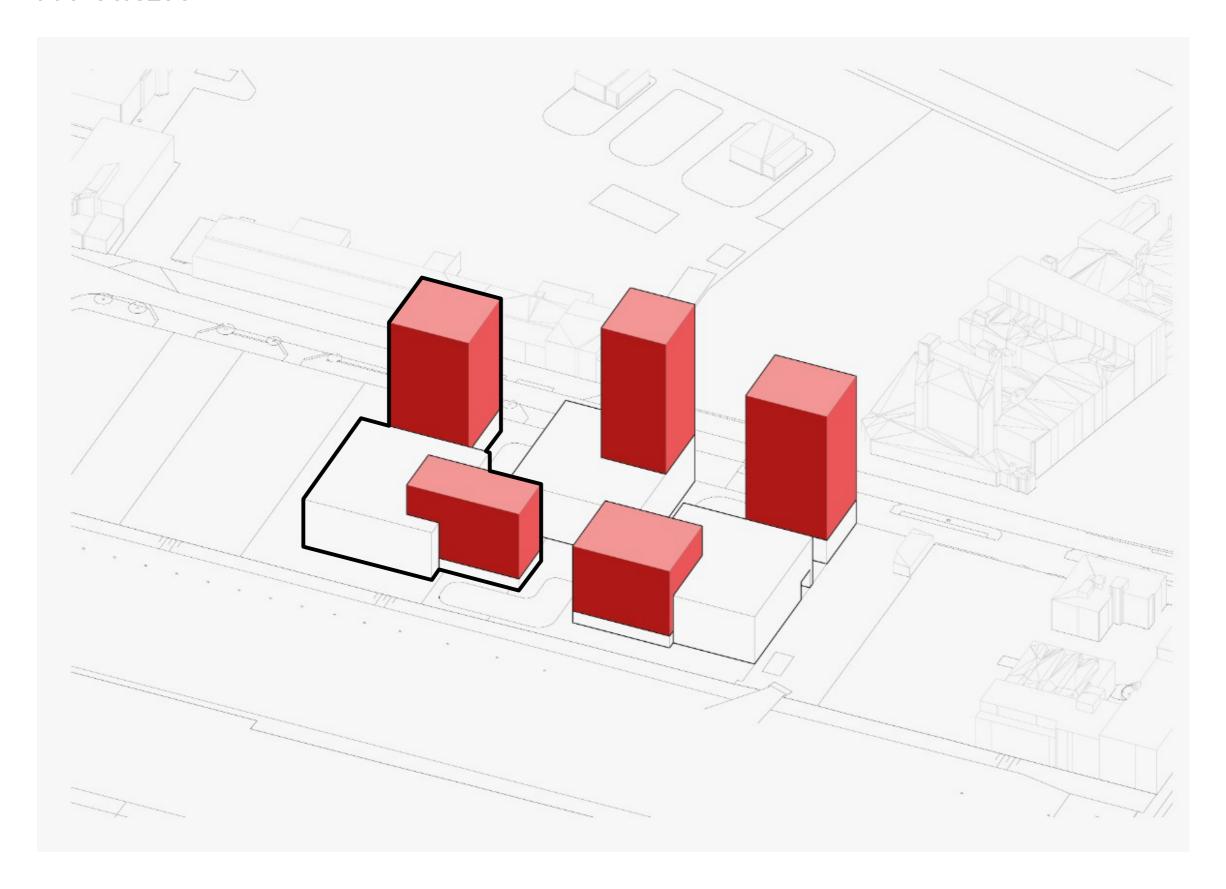
STEP 3: CHESSBOARD PATTERN



STEP 4: TOWERS



MY AREA



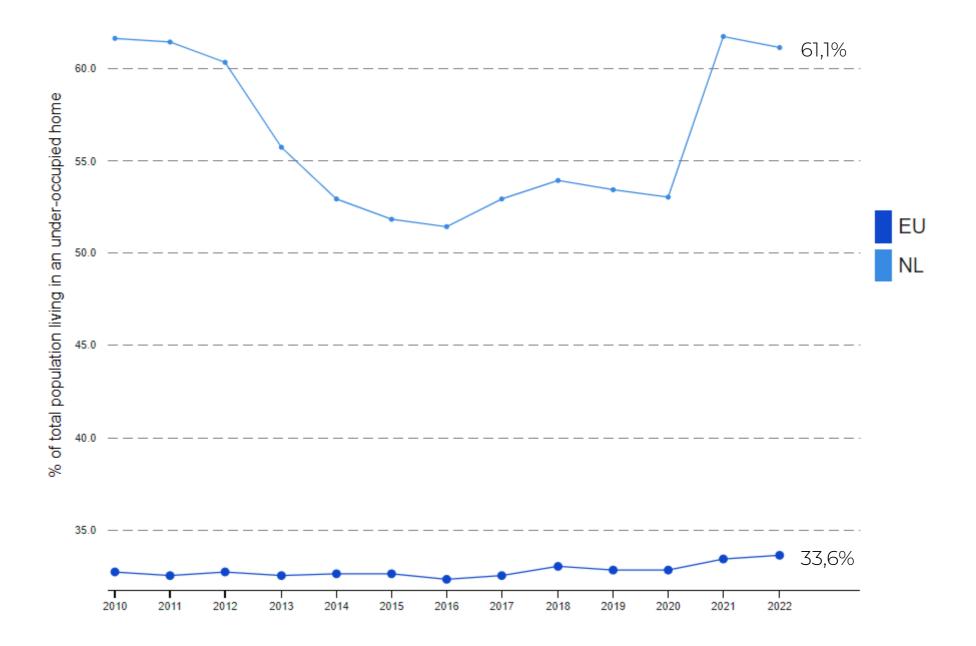
RESEARCH

PROBLEM STATEMENT

Under-occupied homes

Share of people living in under-occupied homes (as % of the total population)

- Rise of solo dwellers
- Low household sizes
- Large dwelling sizes



PROBLEM STATEMENT

Age segregation

Causes

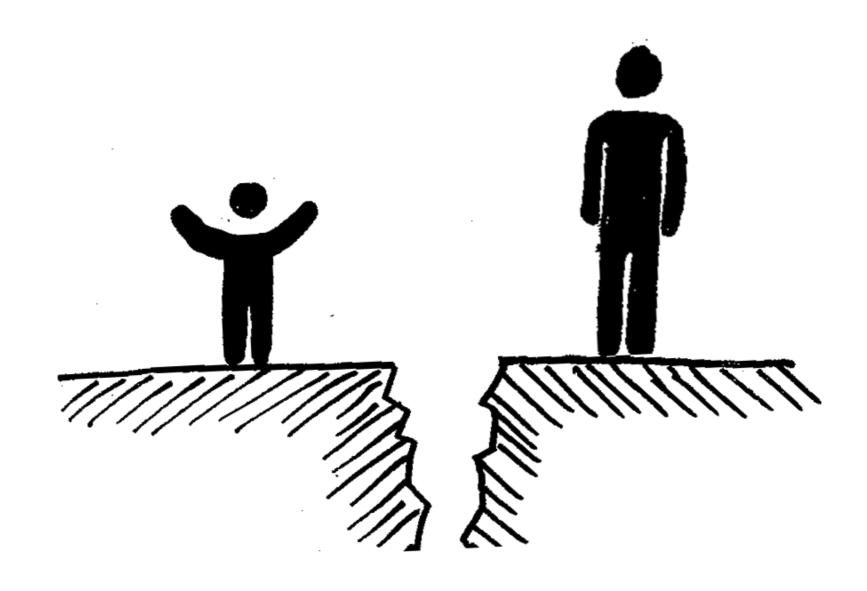
- Rise of solo dwellers
- Increase importance privacy
- => Shift responsibility elderly

Problems

- Life in 3 boxes
- Stereotypes & prejudices
- Restricts productivity elderly

Change

• Elderly living at home longer



PROBLEM STATEMENT

Loneliness

- Rise of solo dwellers
- Physically more fragileSmaller social network
- Longevity

14/74 RESEARCH

RESEARCH QUESTION

"How can communal living between different age groups, help to fight loneliness under the elderly and create a socially robust landscape?"

15/74 RESEARCH

CASE STUDIES

VINDMØLLEBAKKEN

General info

Coliving

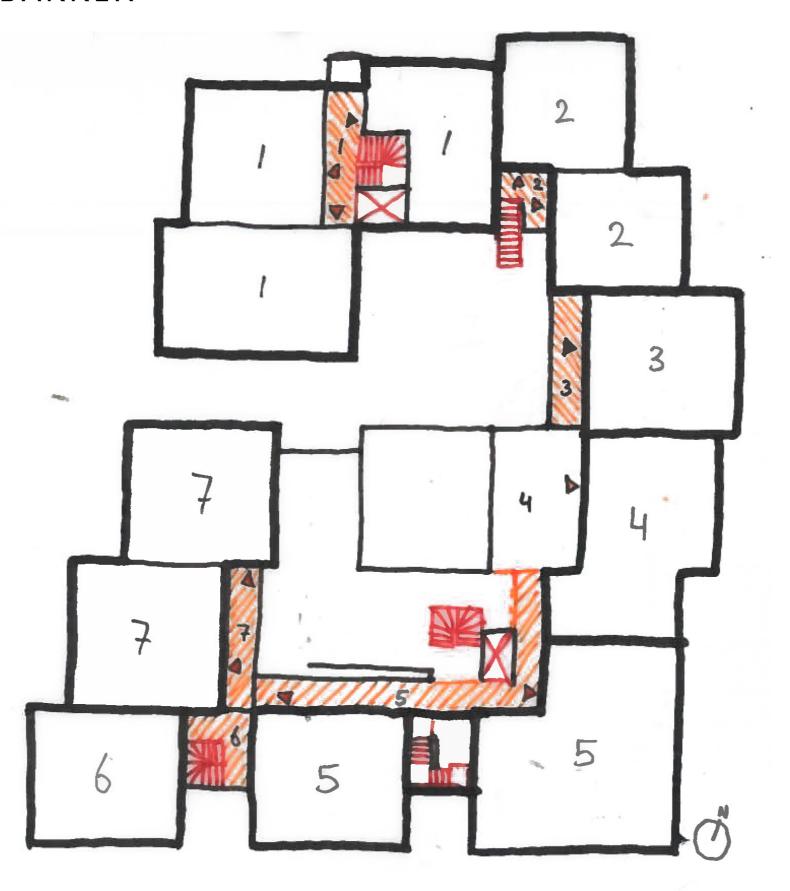
Location: Stavanger, Norway **Architects:** Helen & Hard

Year: 2019



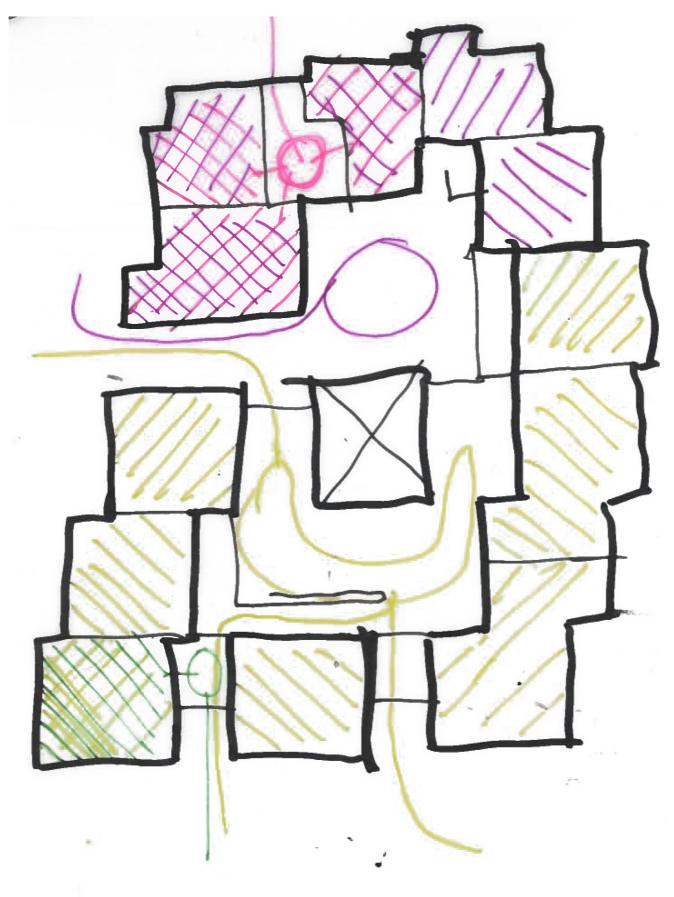
VINDMØLLEBAKKEN

Access



VINDMØLLEBAKKEN

Courtyards



19/74

VINDMØLLEBAKKEN Shared facilities gorden

20/74

CASE STUDIES

General info

Intergenerational housing

Location: Wien, Austria **Architects:** trans_city TC

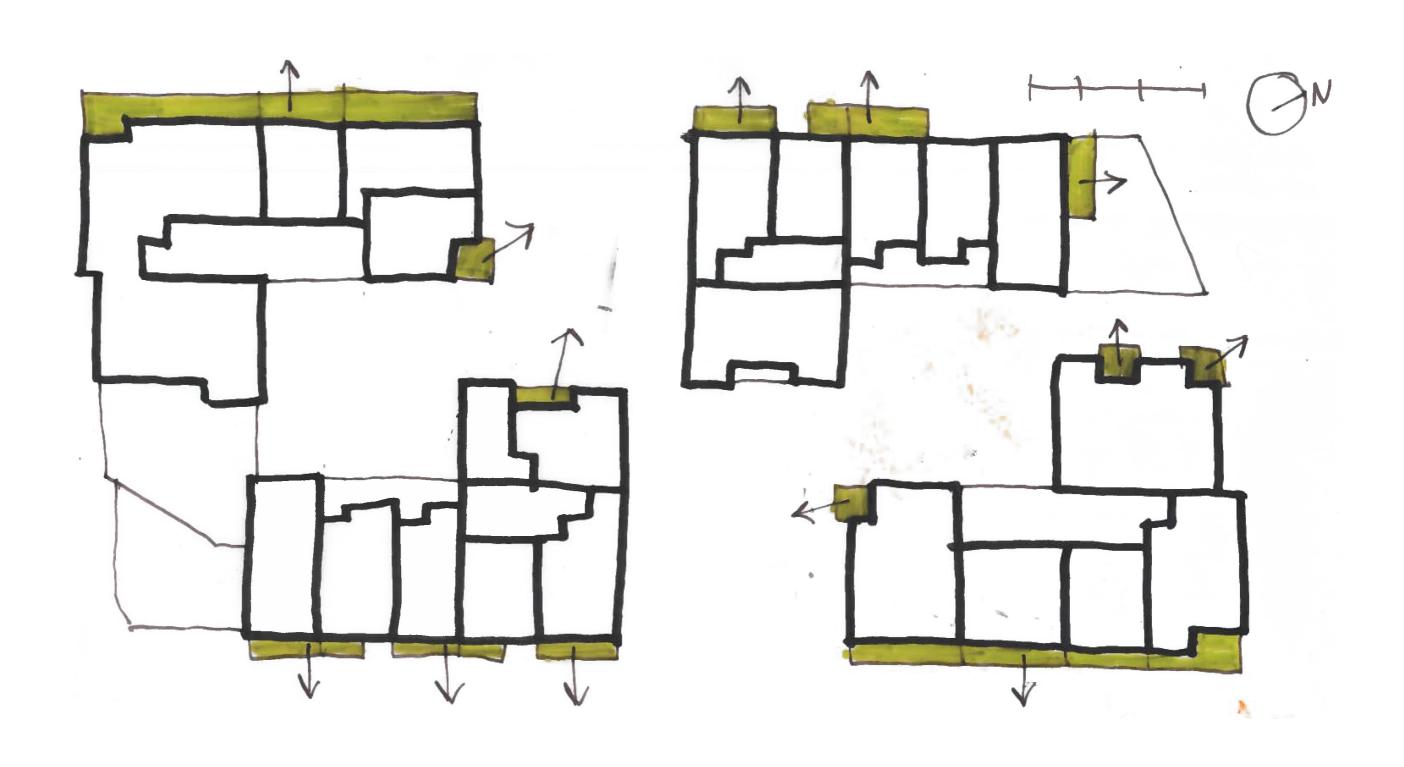
Year: 2018



Shared balconies



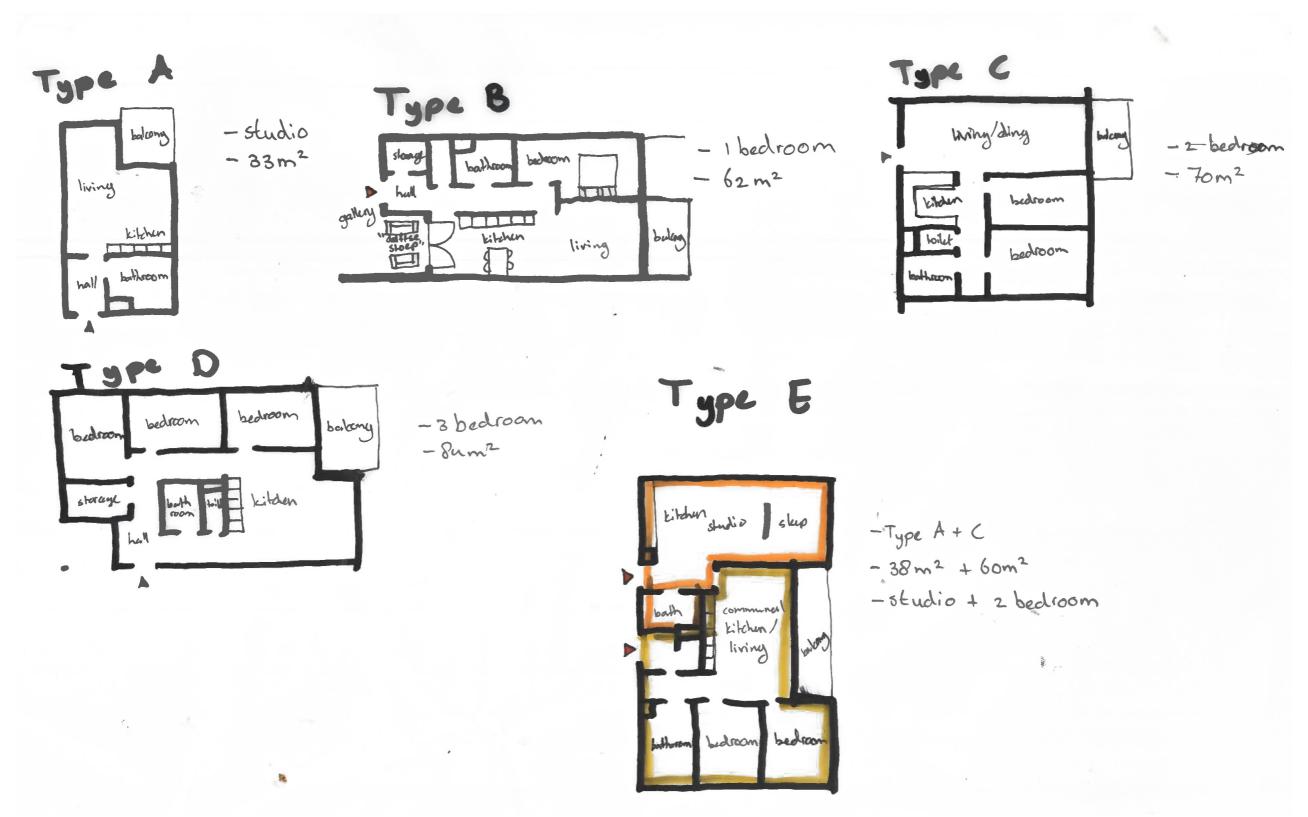
Private balconies



Dwelling types



Kangaroo dwelling



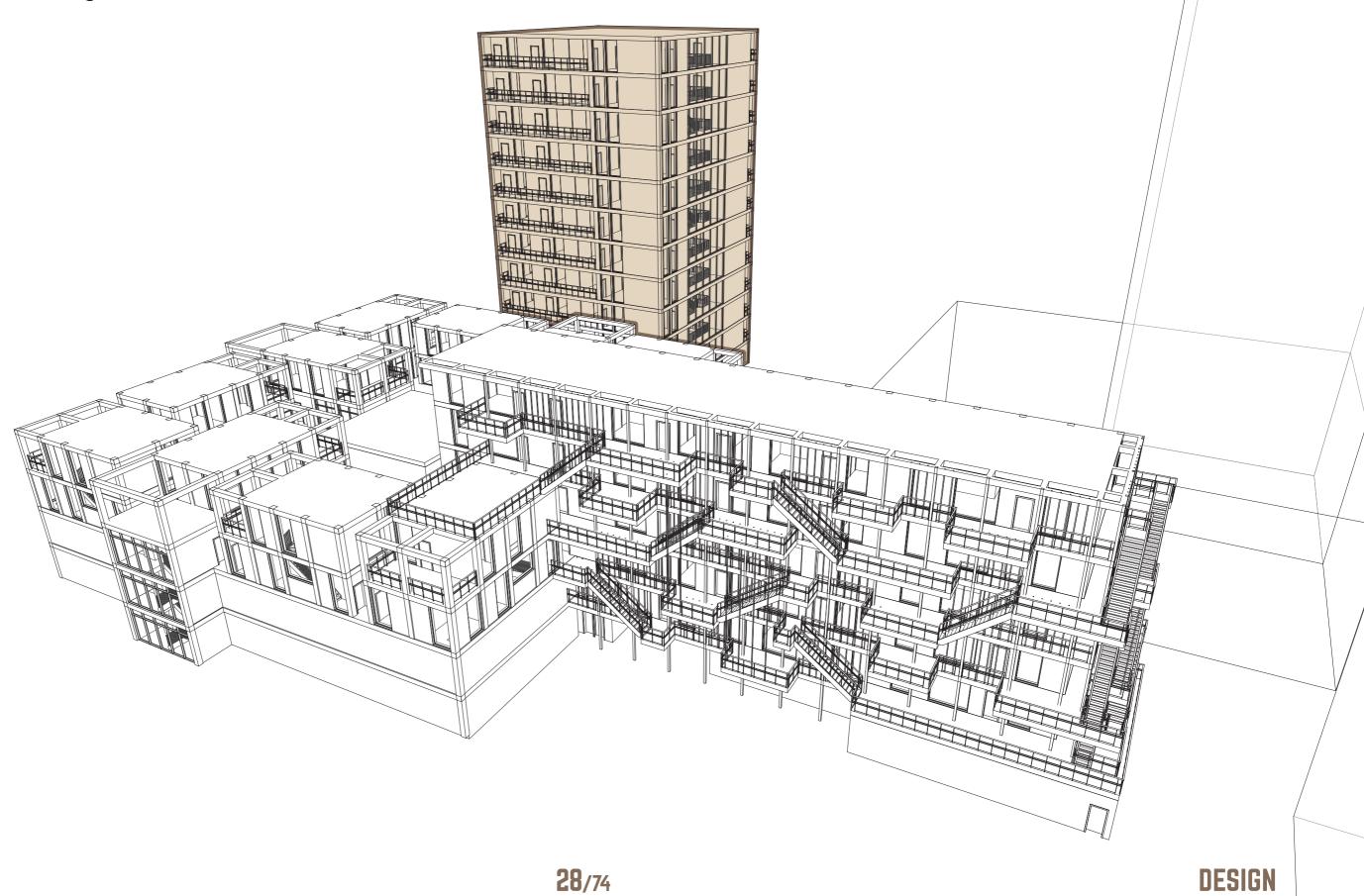
DESIGN

3 BUILDINGS



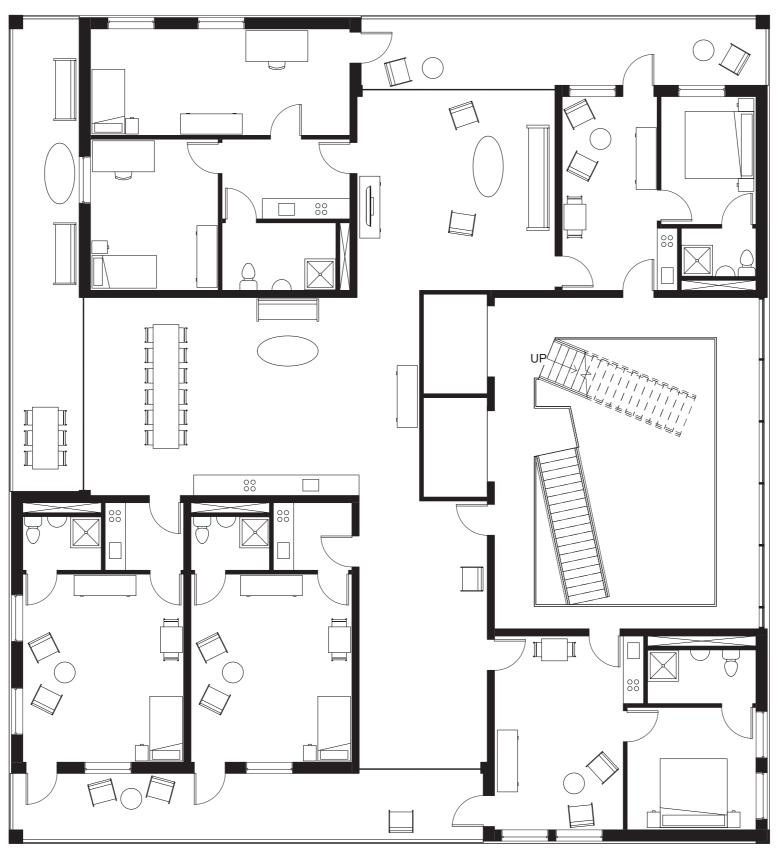
27/74

Building A



28/74

Floorplans



Shared space

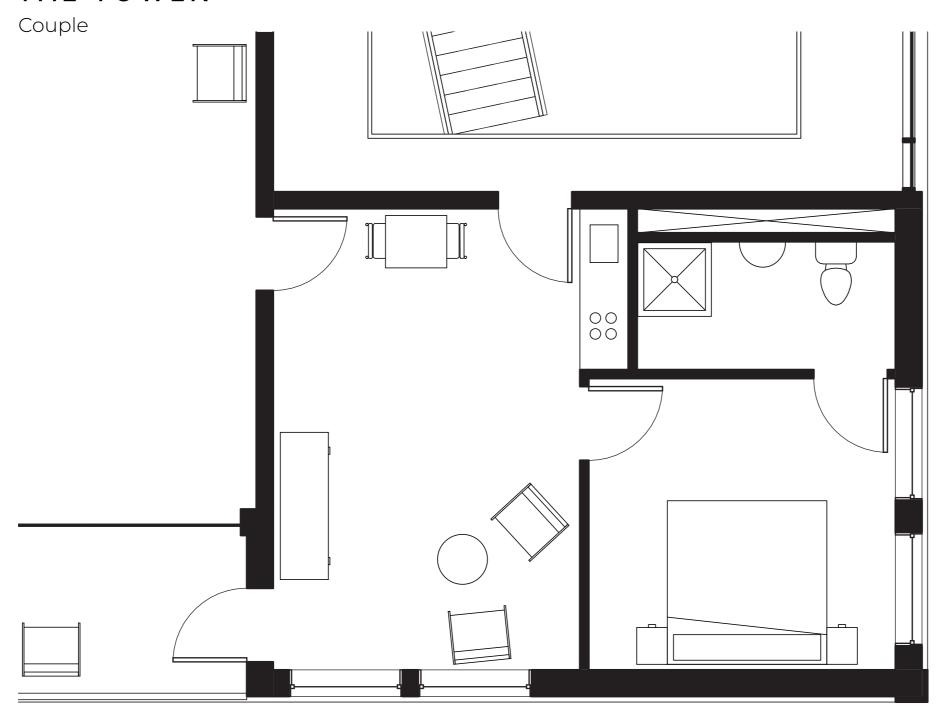


Shared living, kitchen & dining

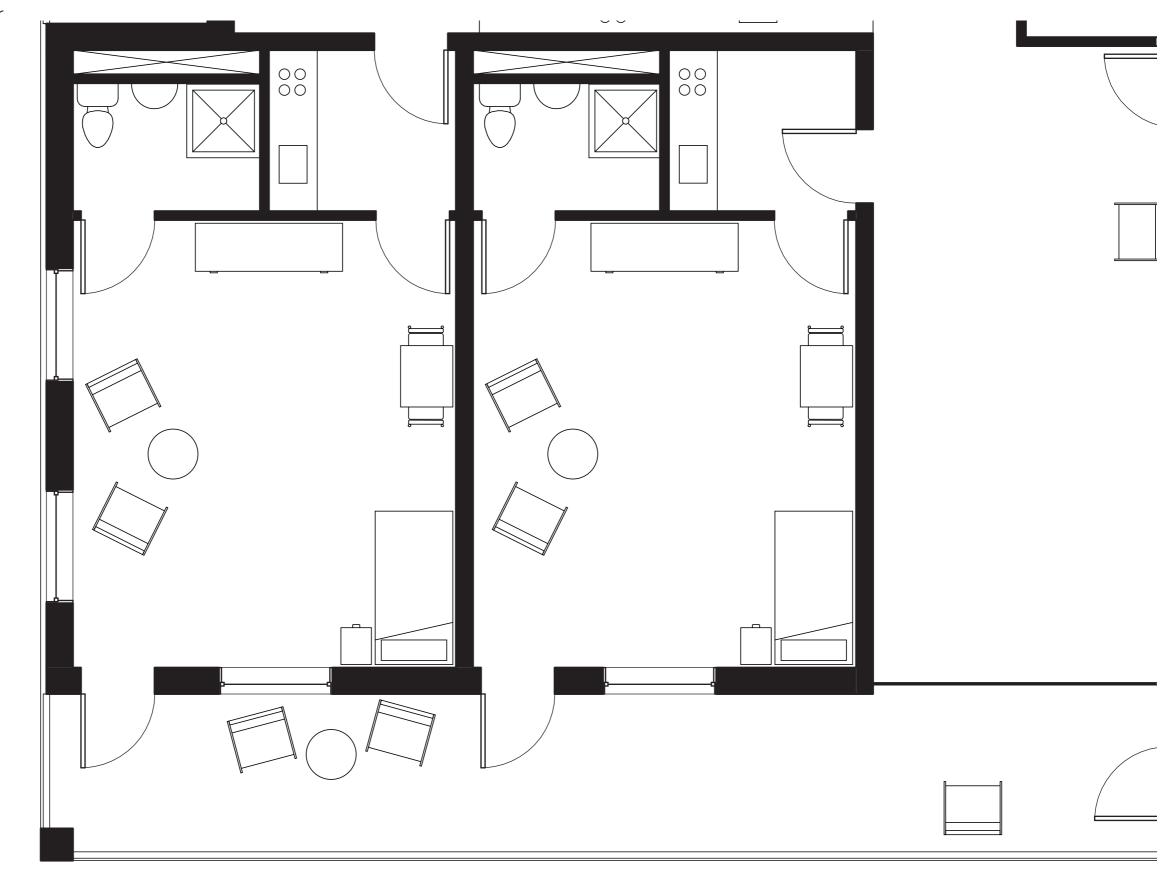


Dwelling types

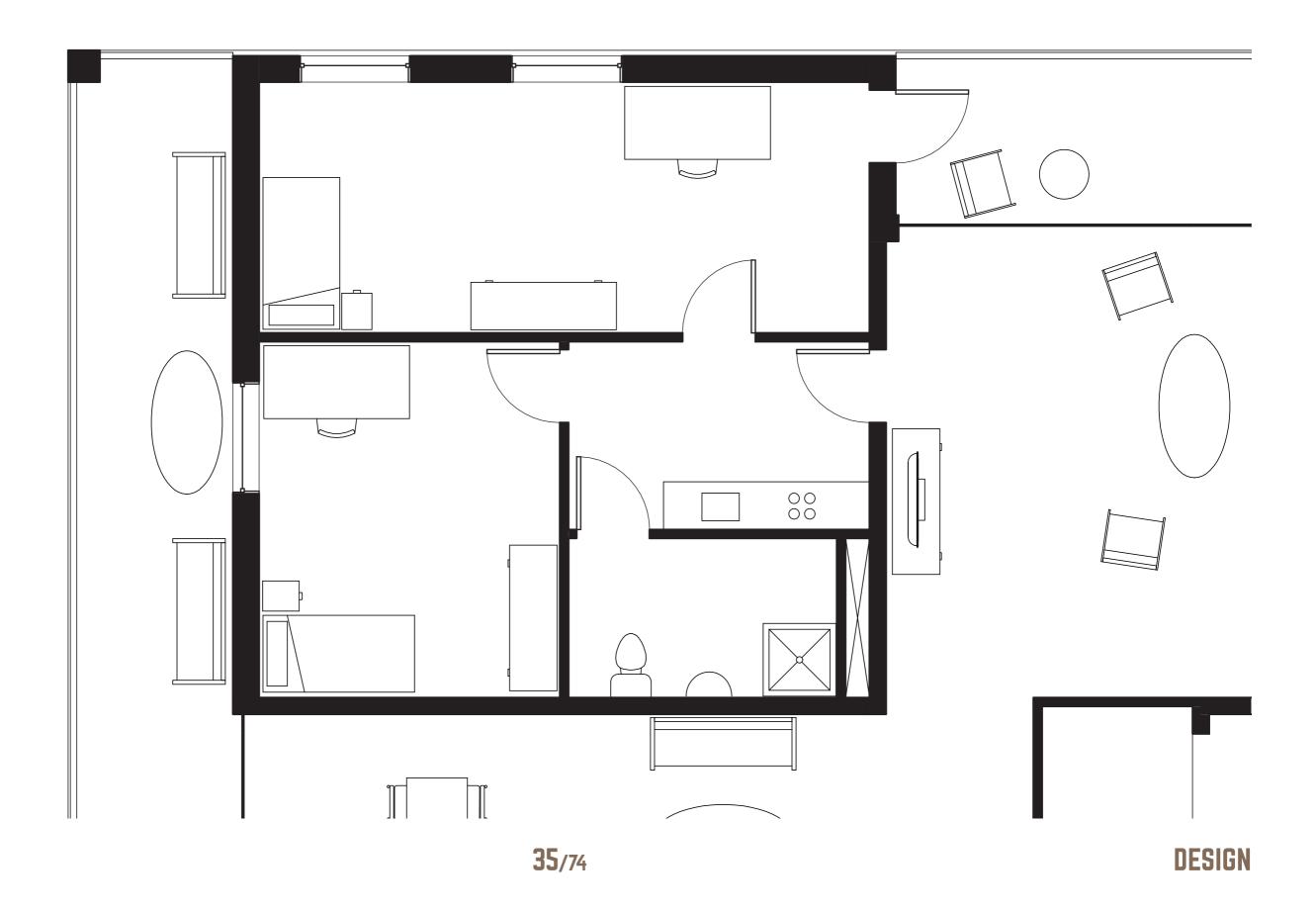




Solo-dweller

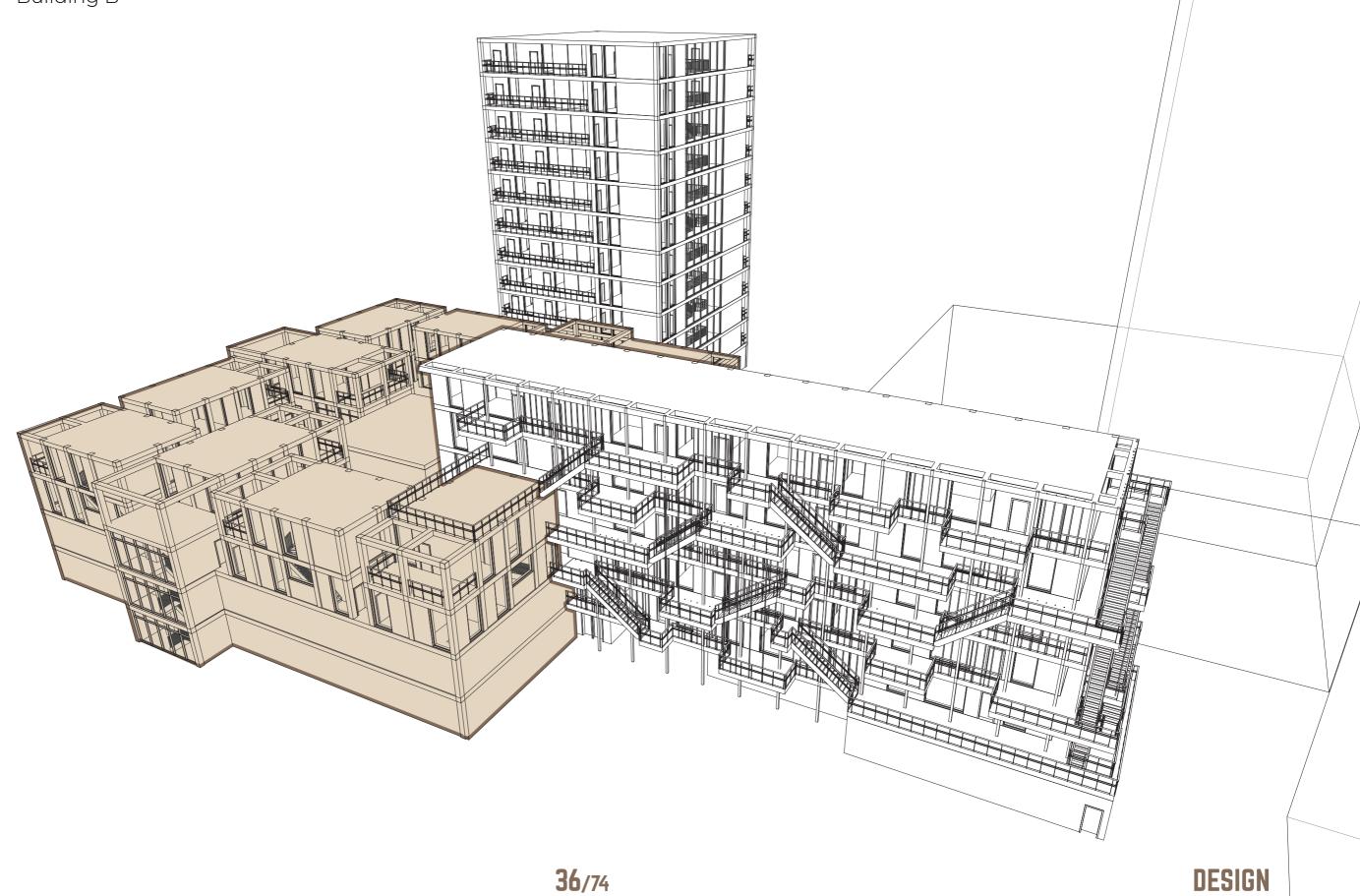


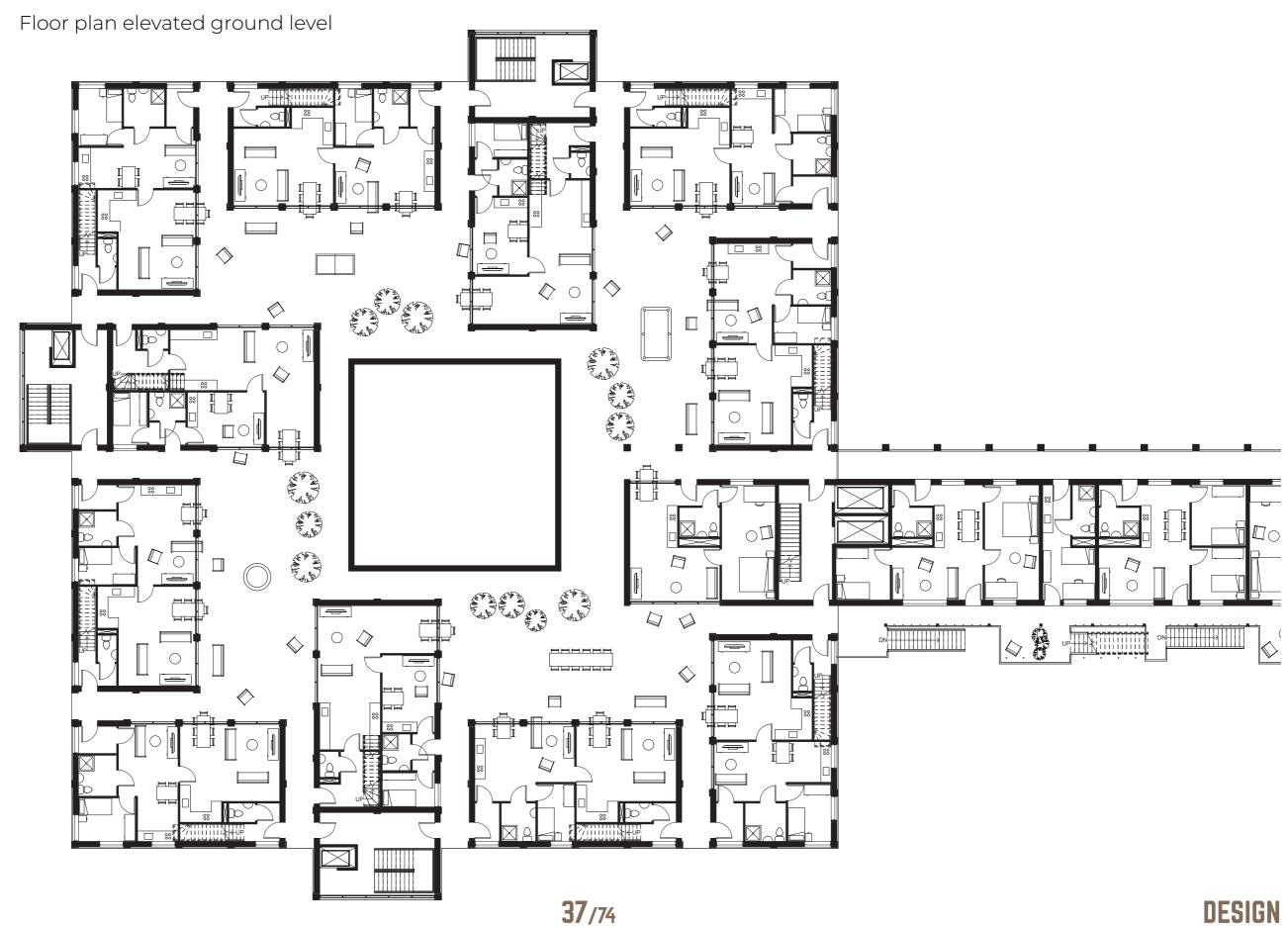
Assisted living

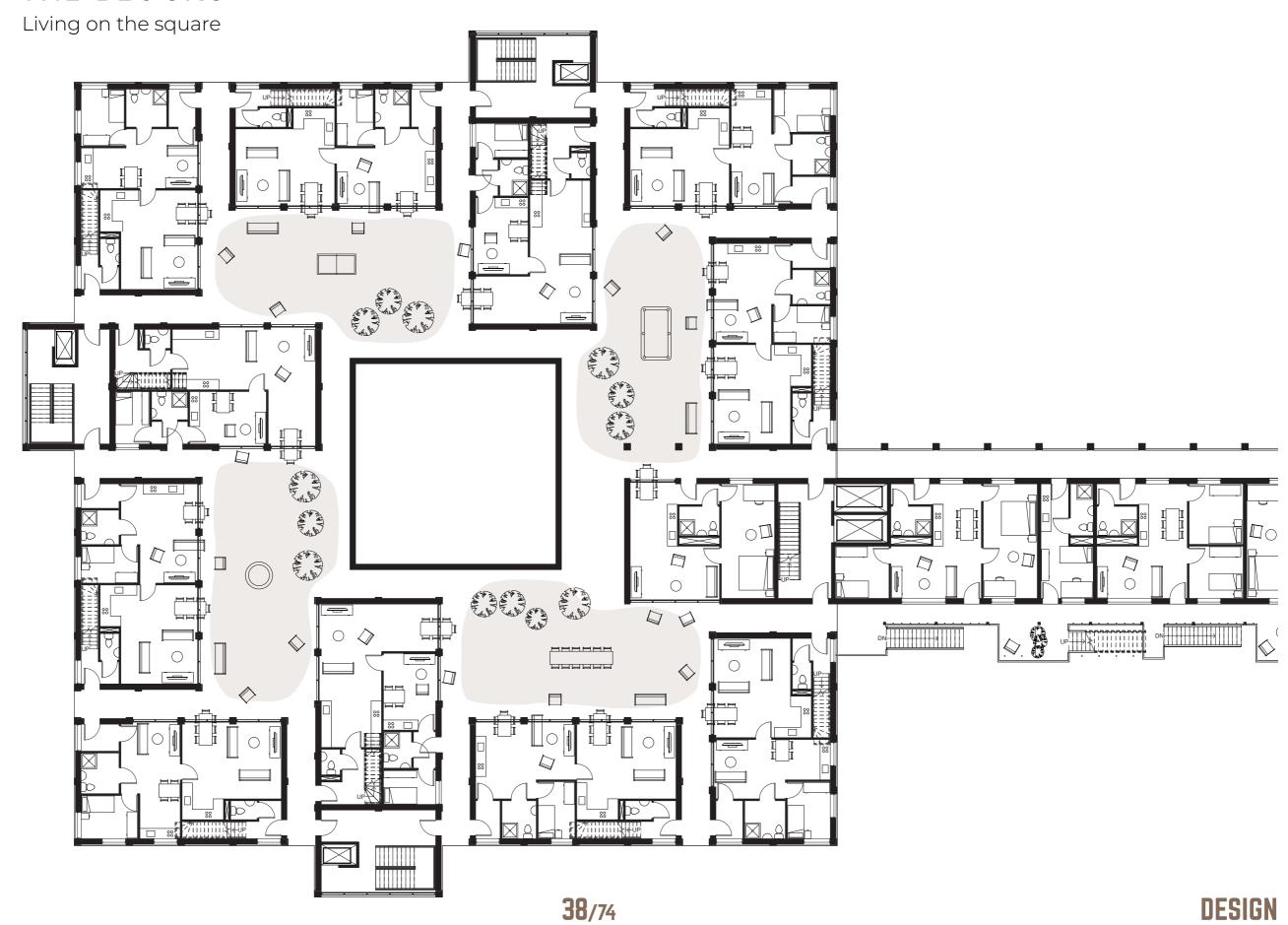


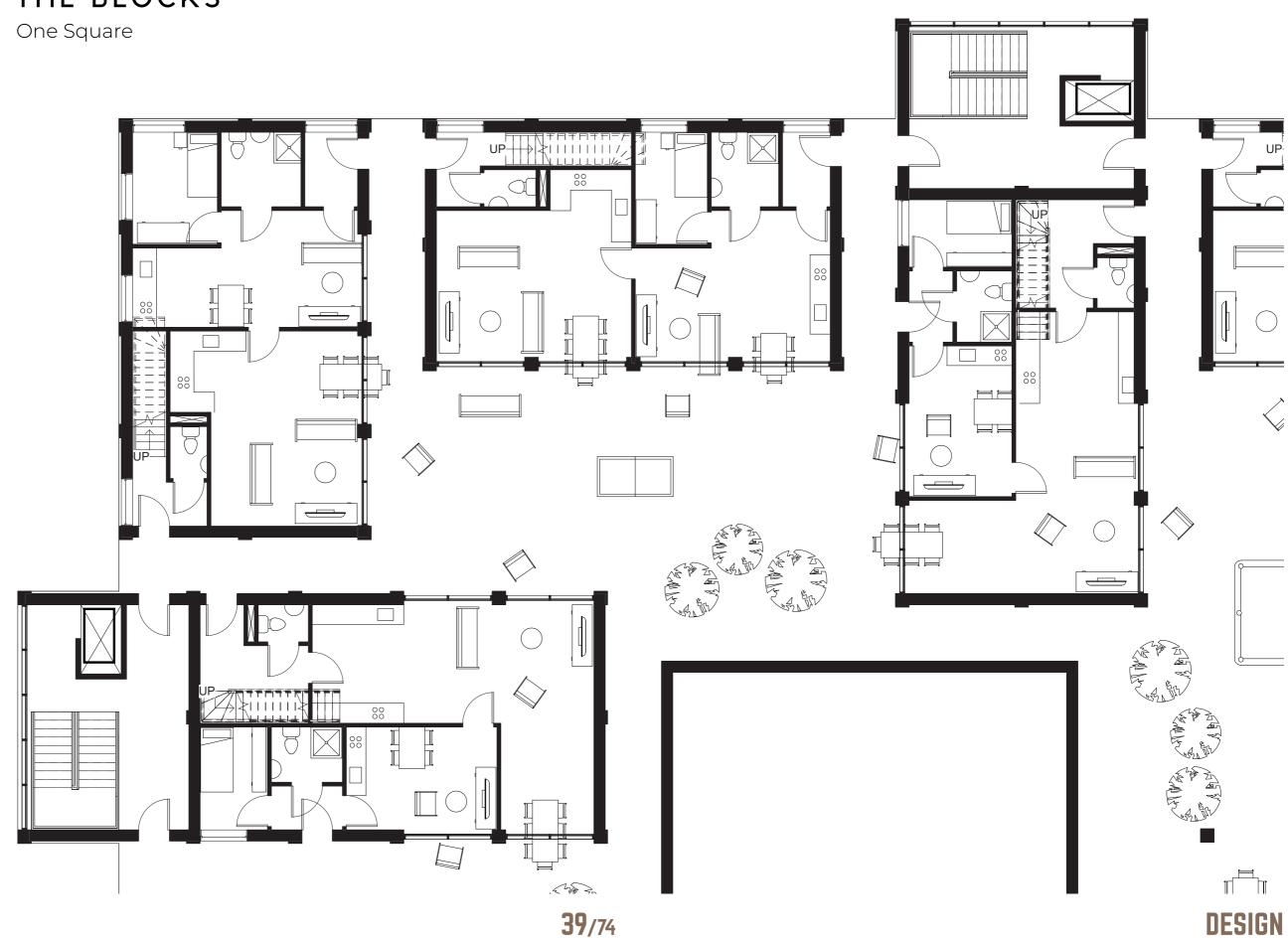
THE BLOCKS

Building B



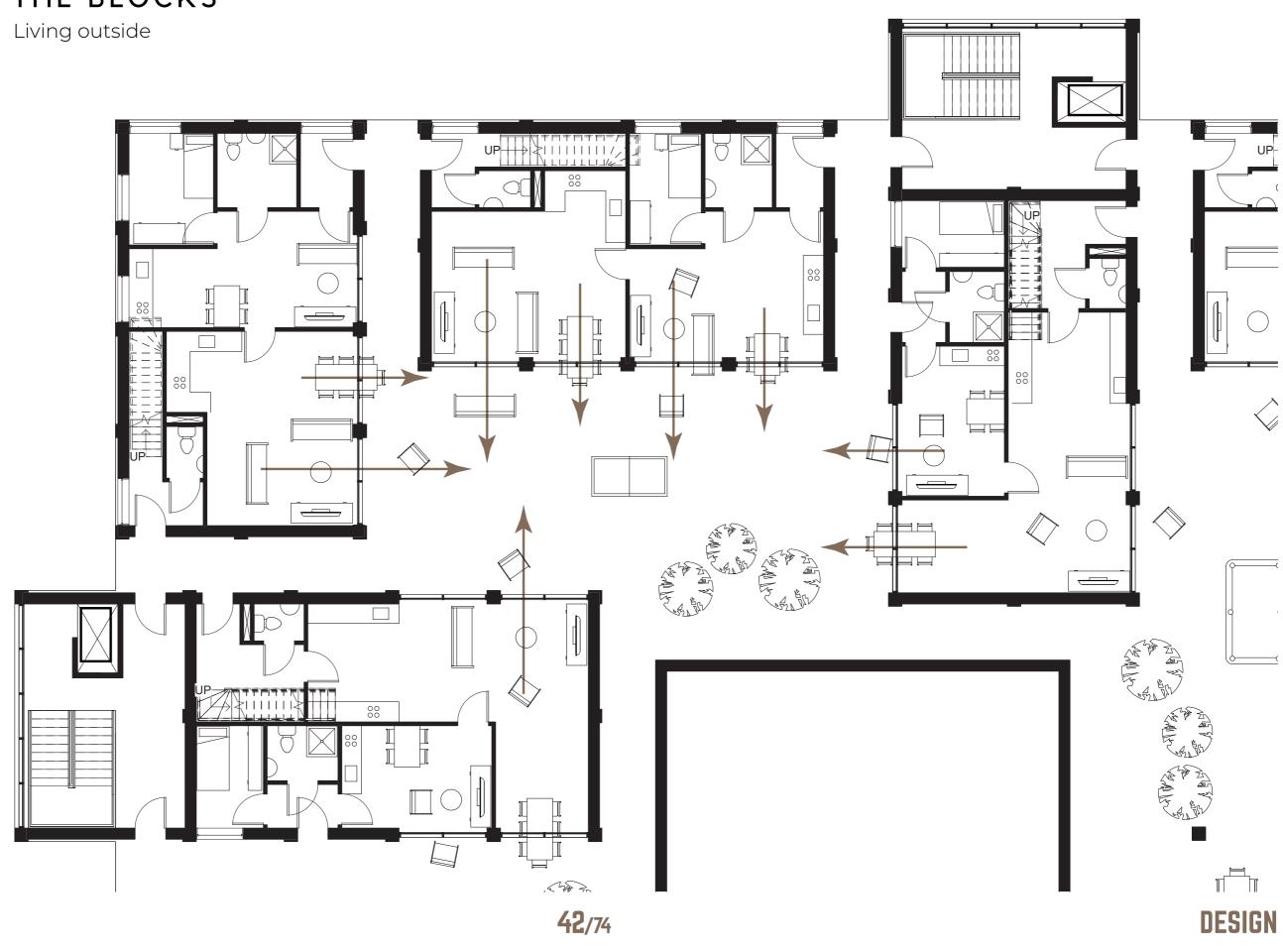










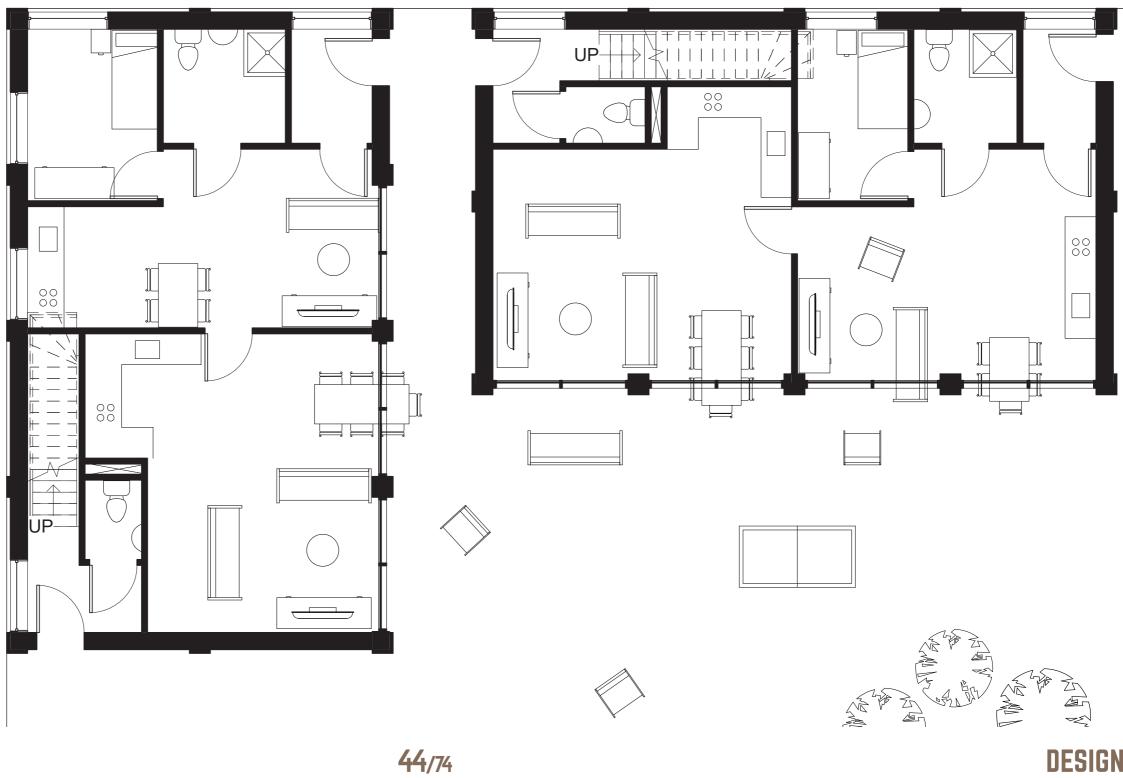


Impression living outside



43/74 DESIGN

Dwelling type



DESIGN

Kangaroo dwelling



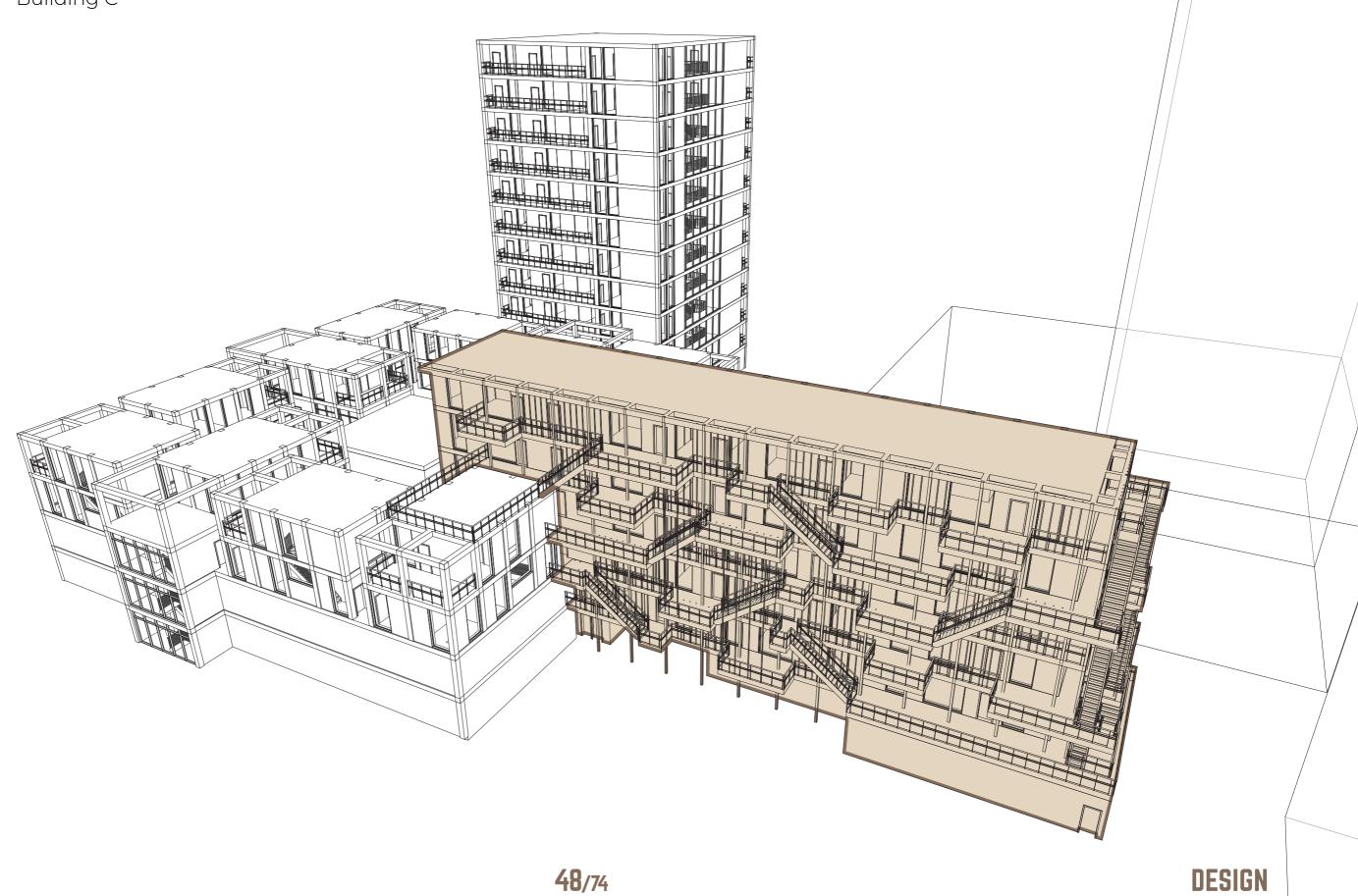
Living area



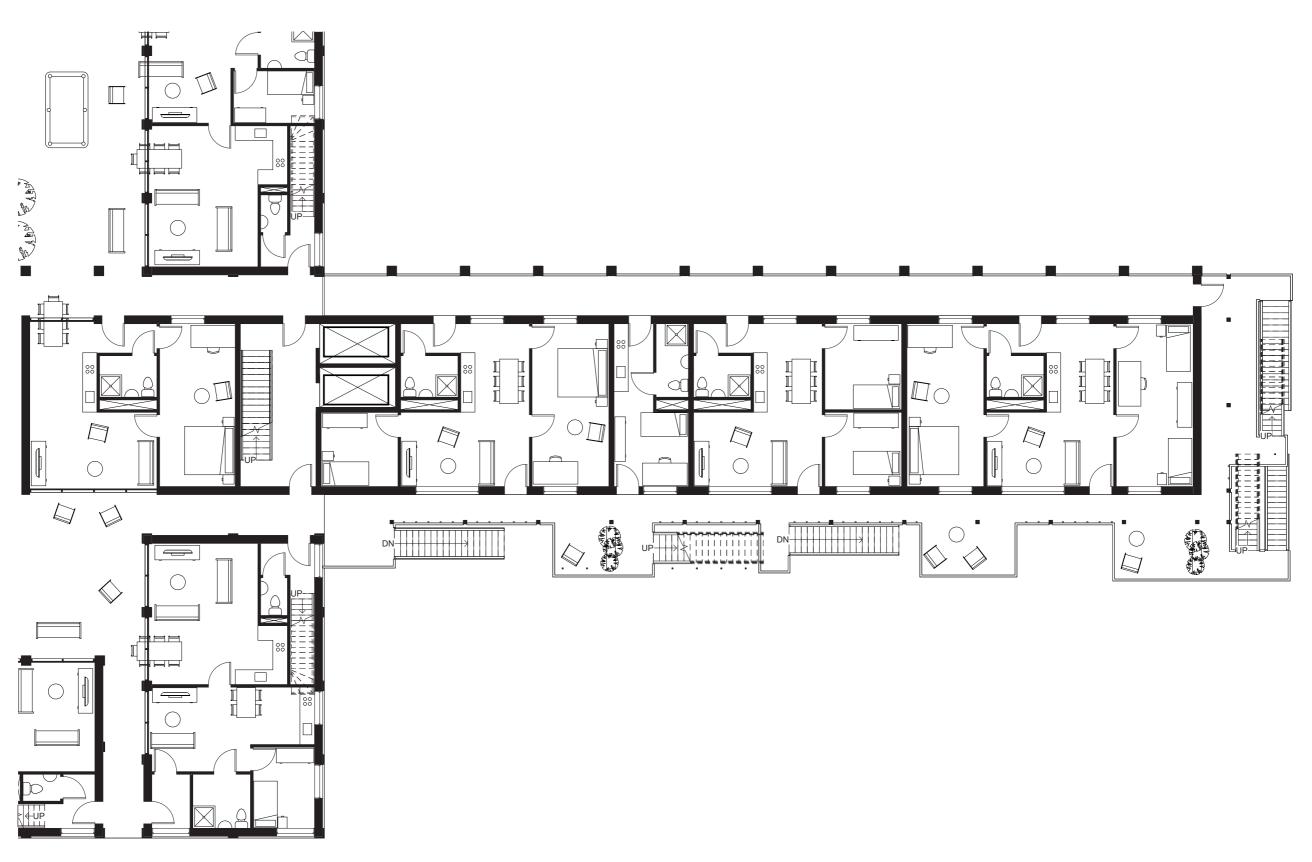
Upstairs



Building C

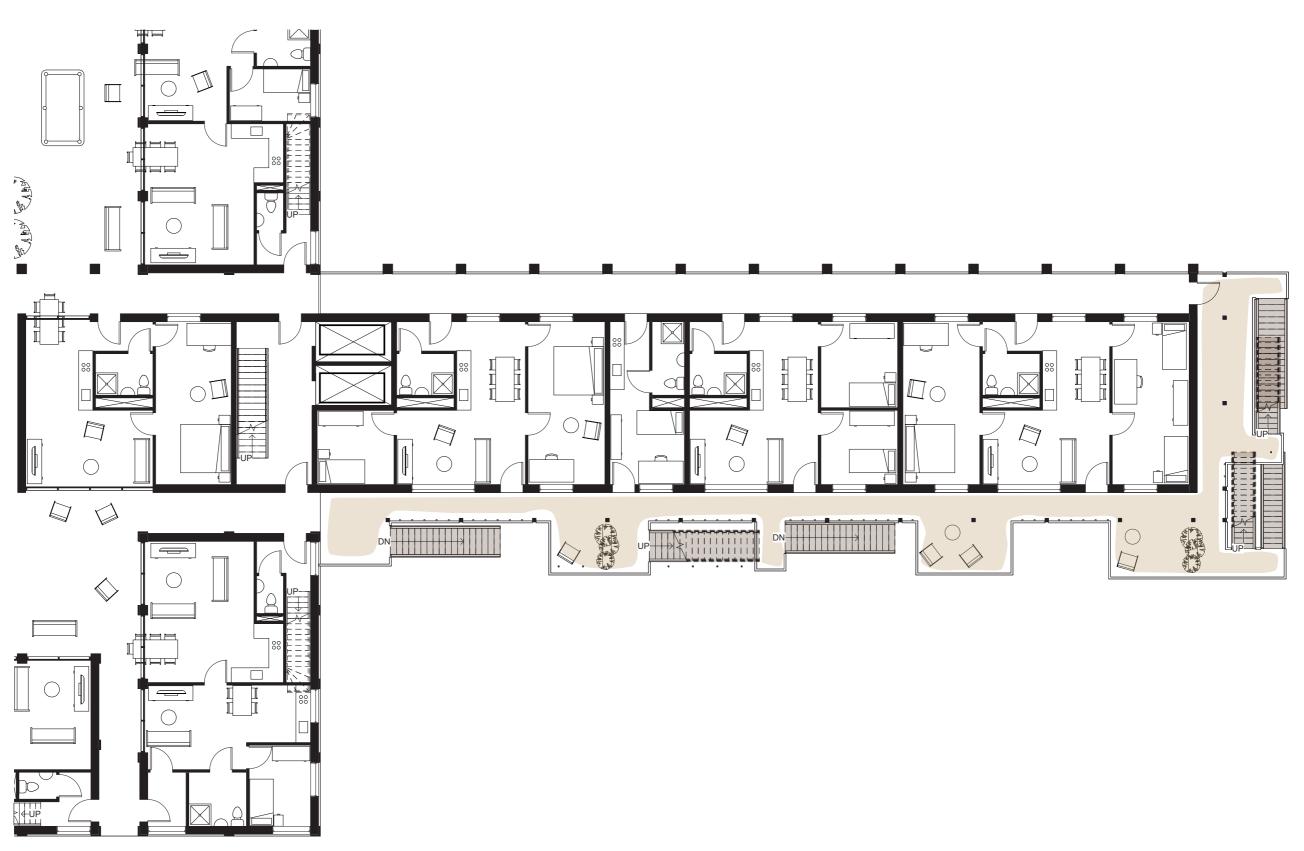


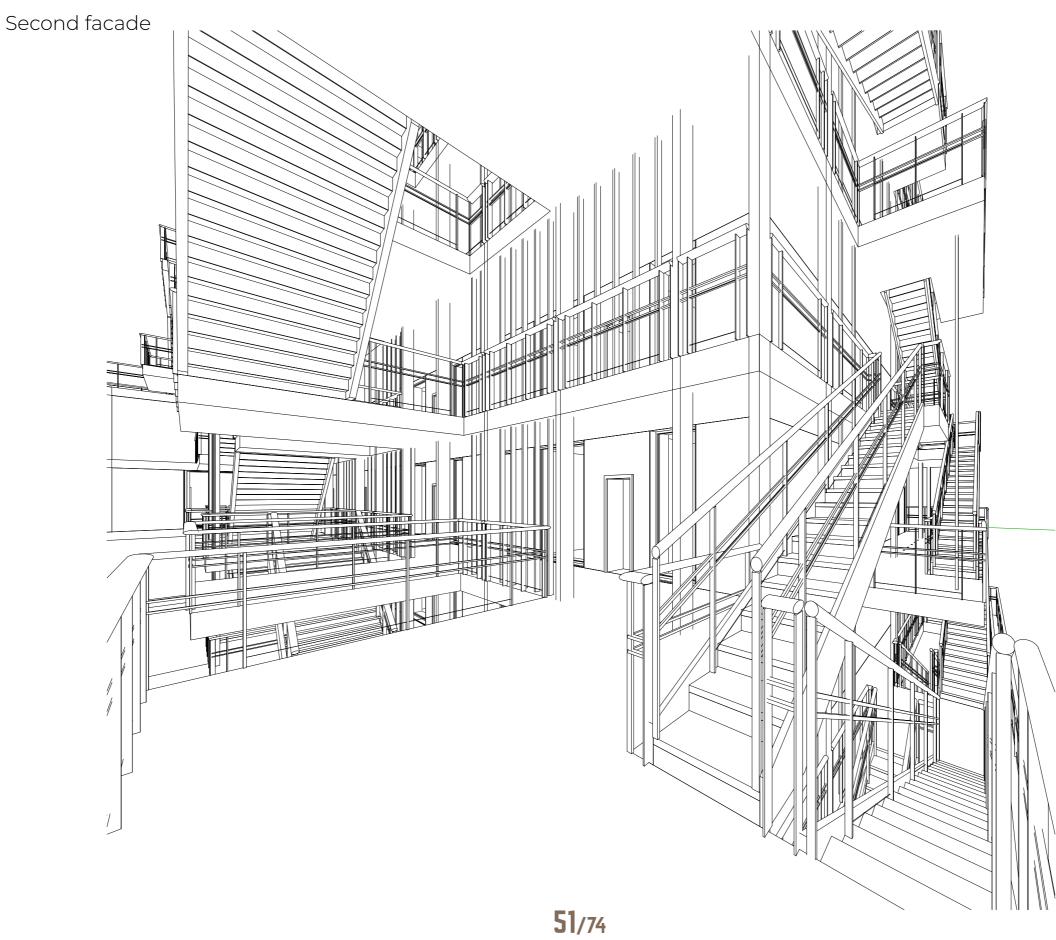
Floor plan



THE SLAB

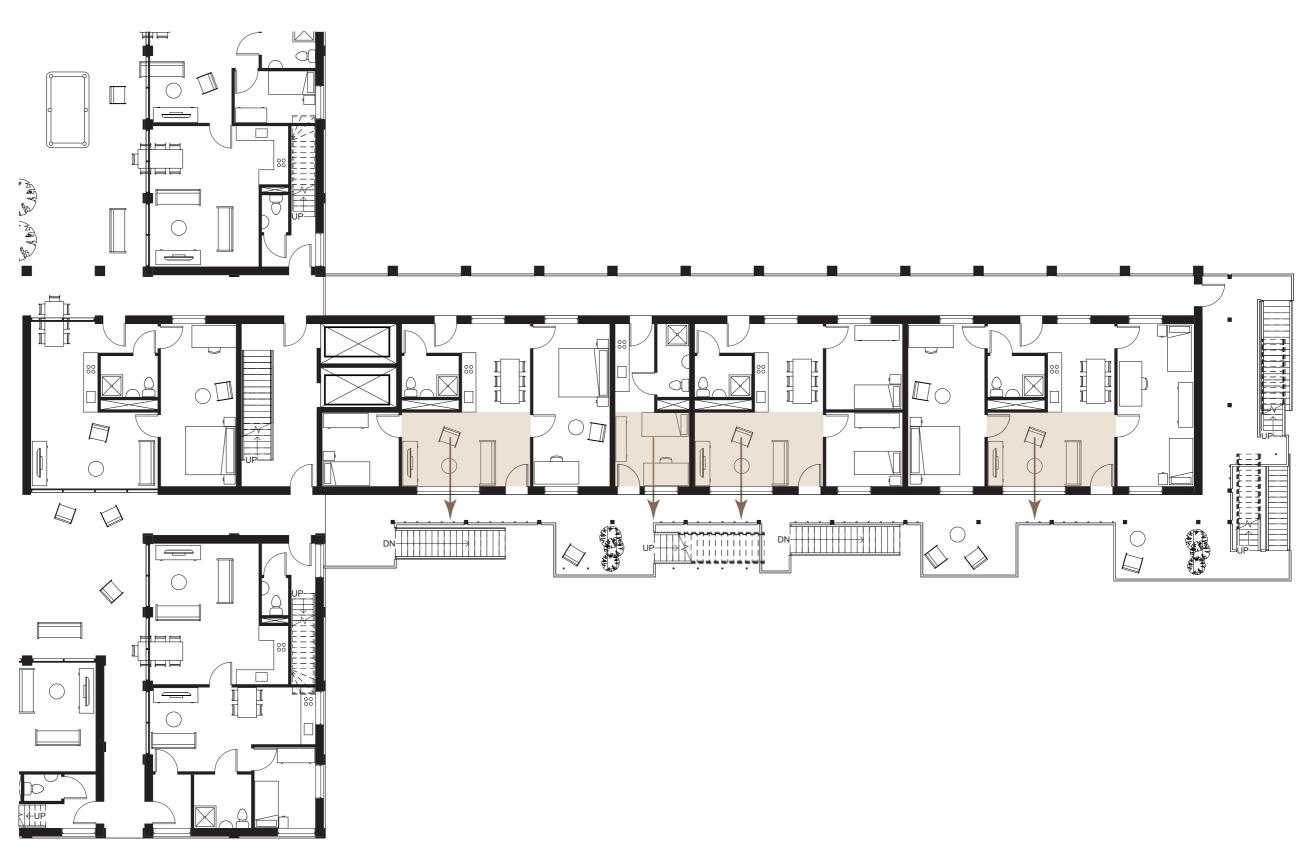
Meeting your neighbours





DESIGN

Living areas

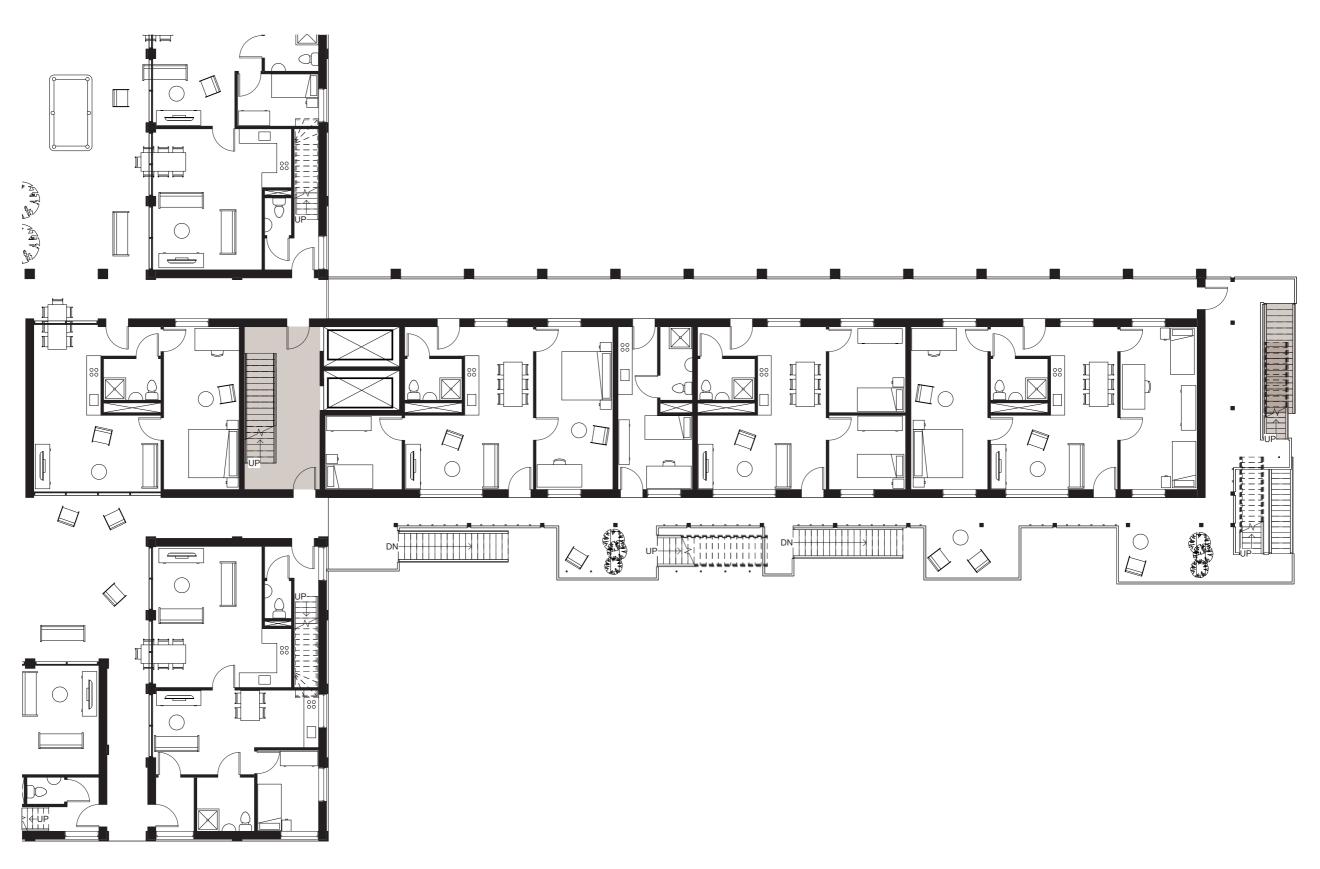


THE SLAB
Impression meeting your neighbours

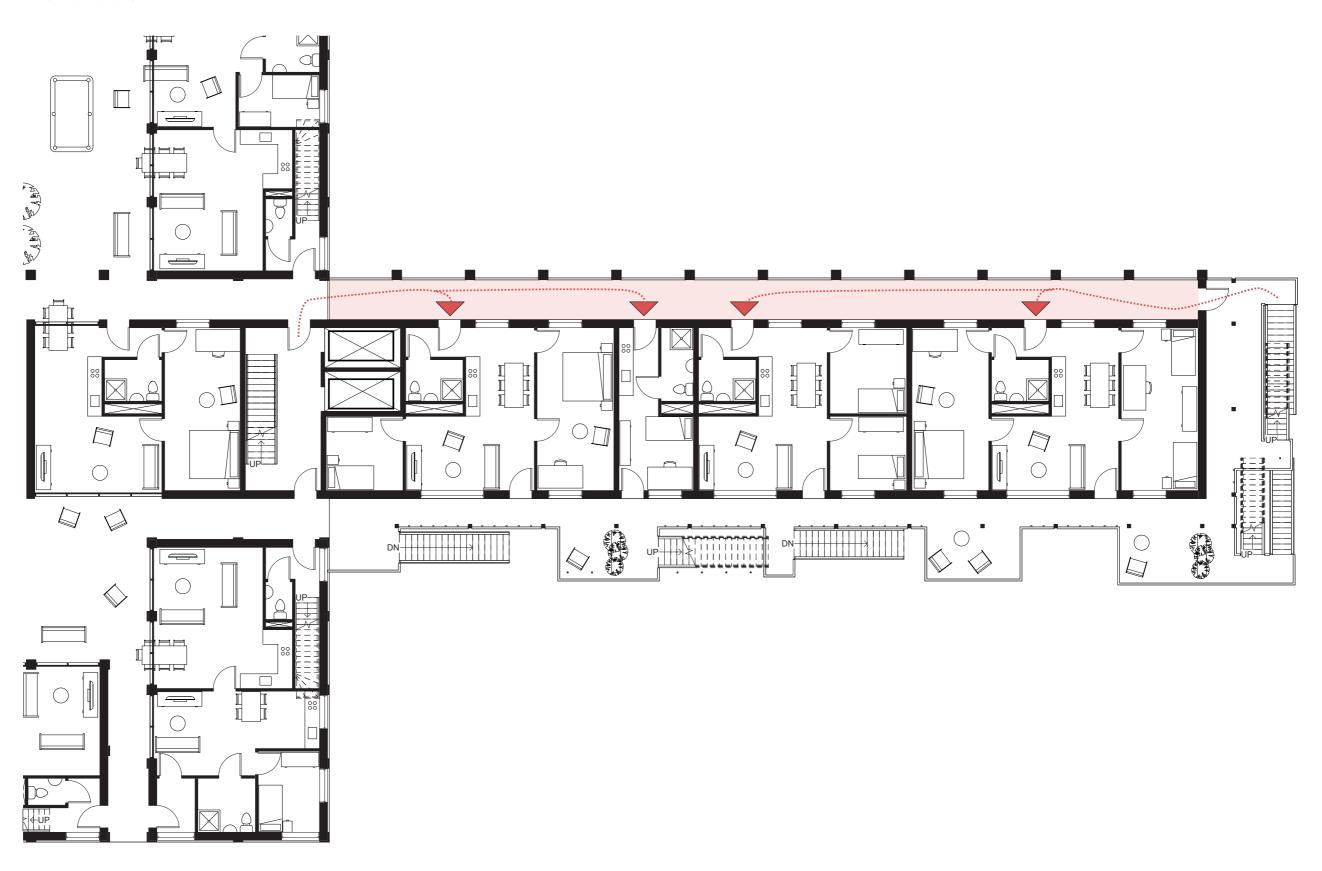


53/61 DESIGN

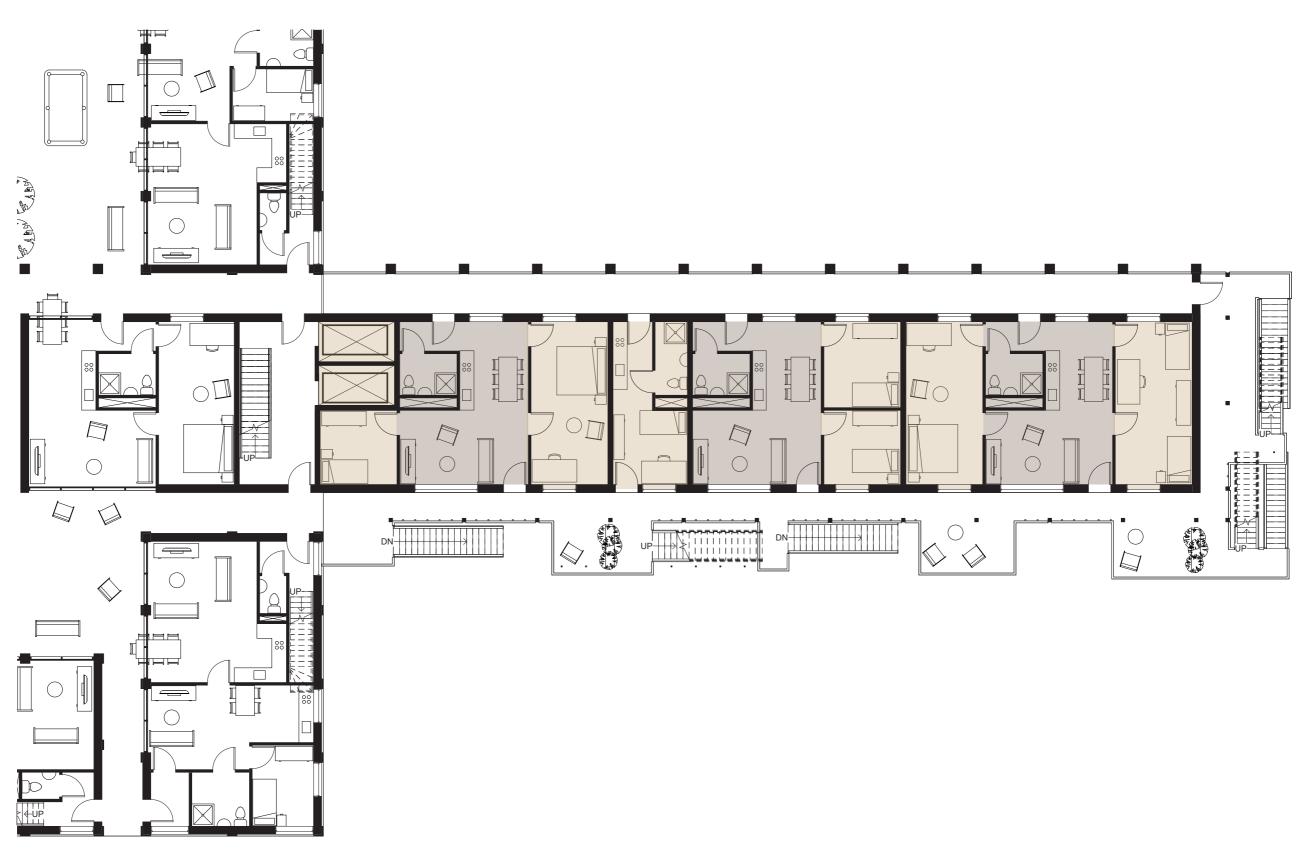
Stairs & Elevators



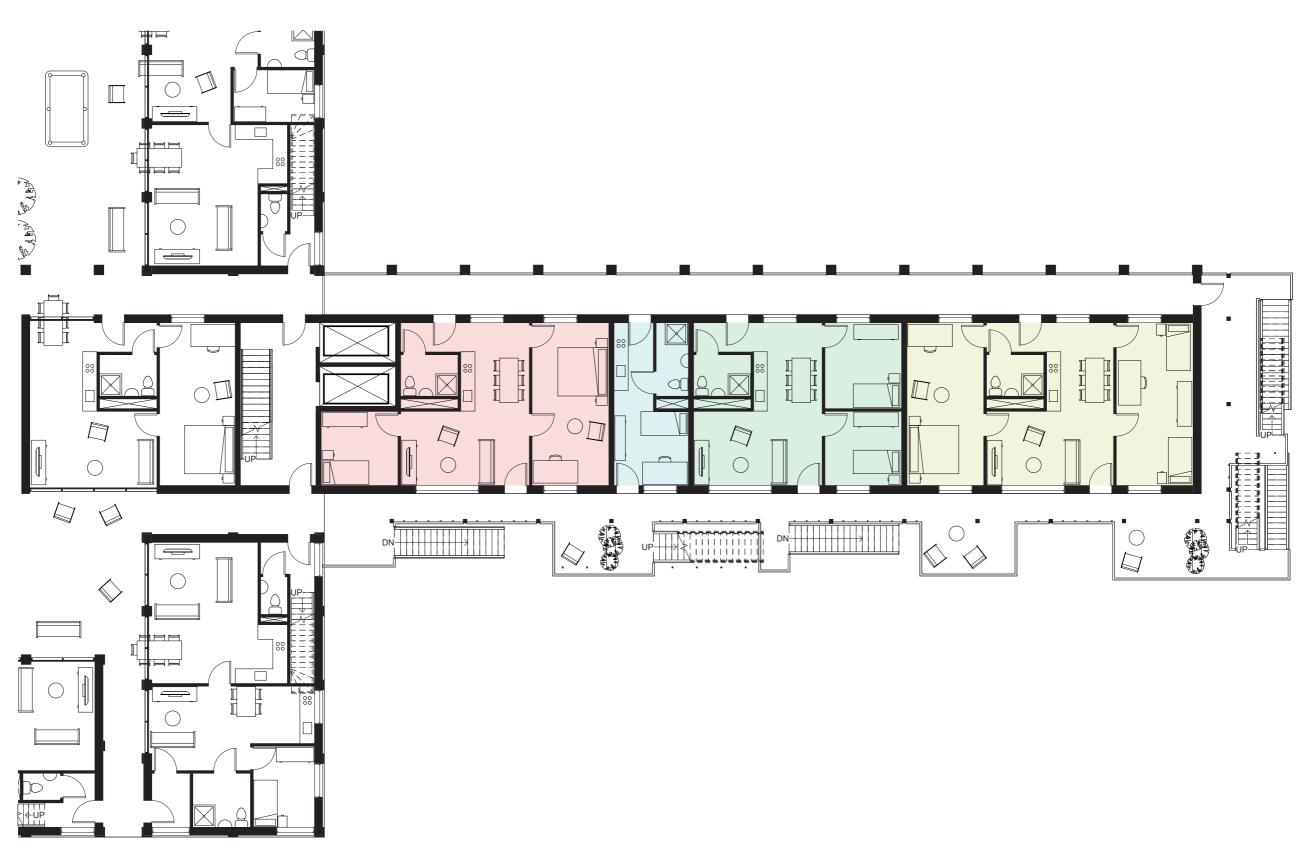
Front doors



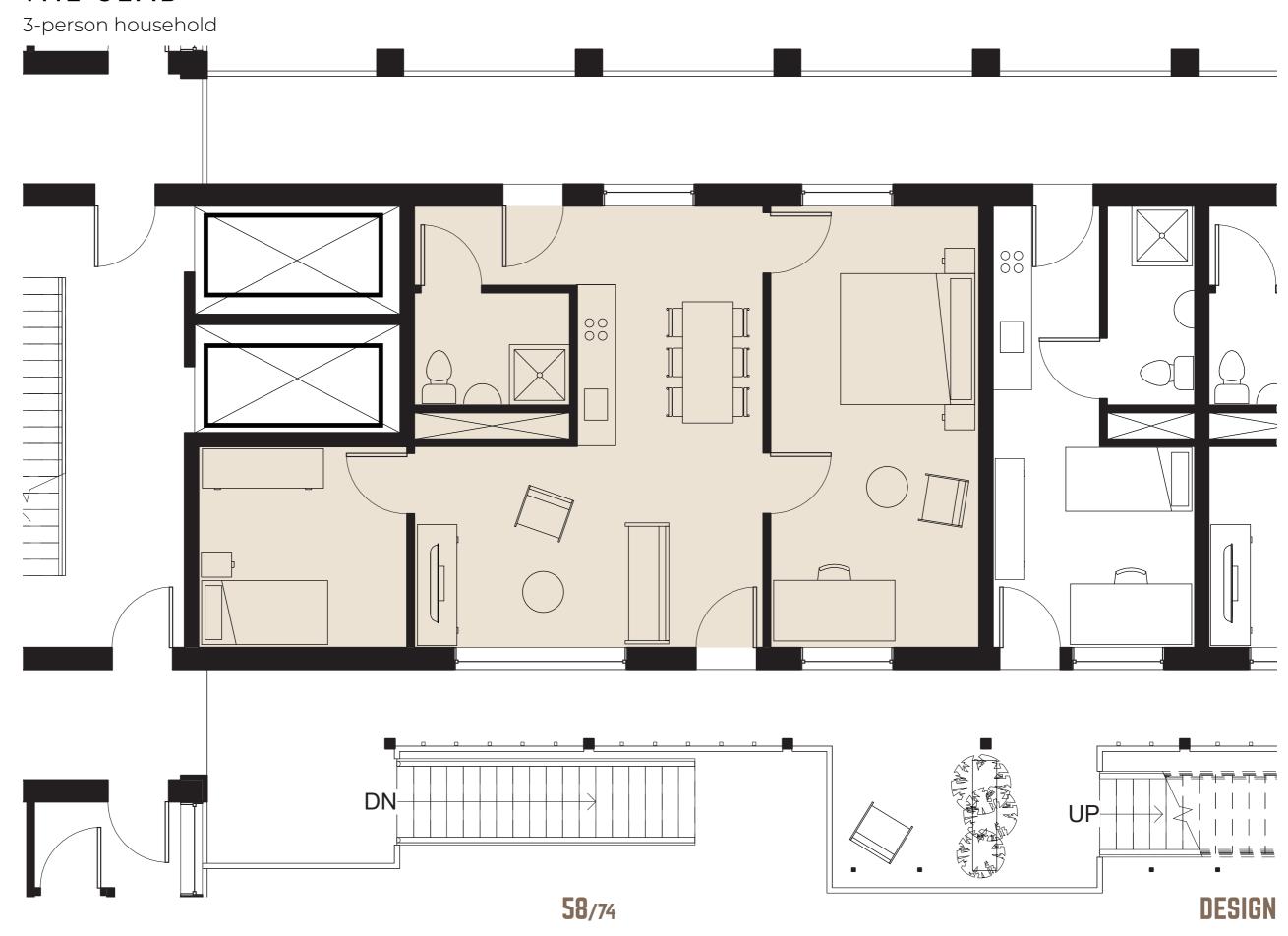
Flexible dwellings



Dwelling types



THE SLAB





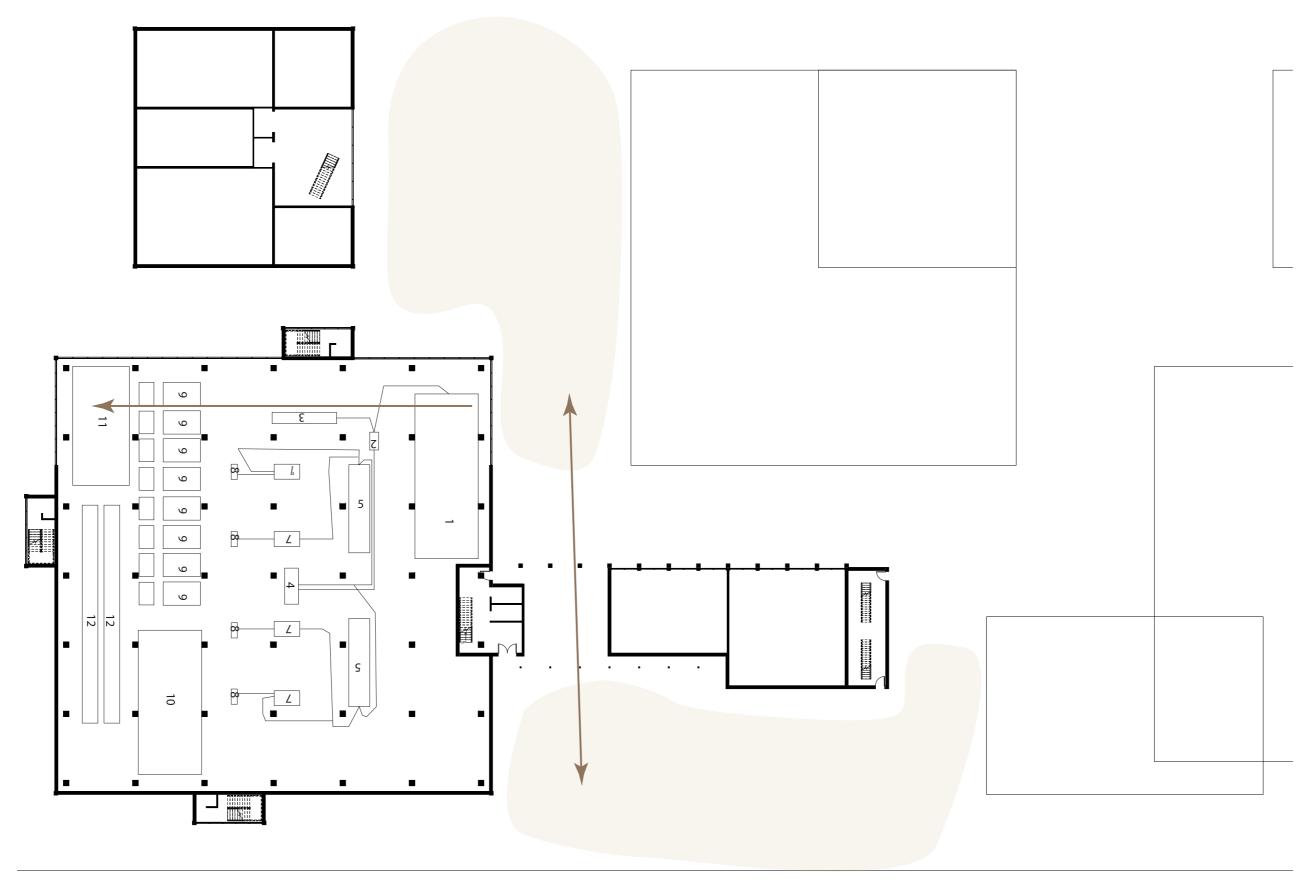


THE SLAB

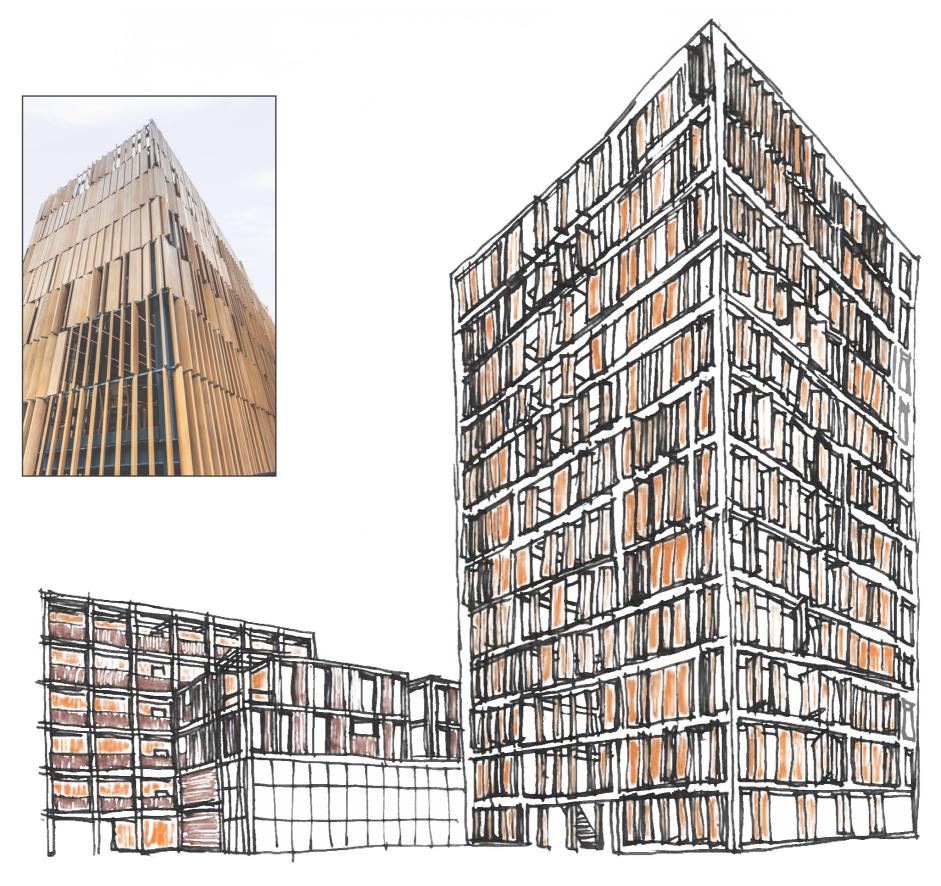
4-person household

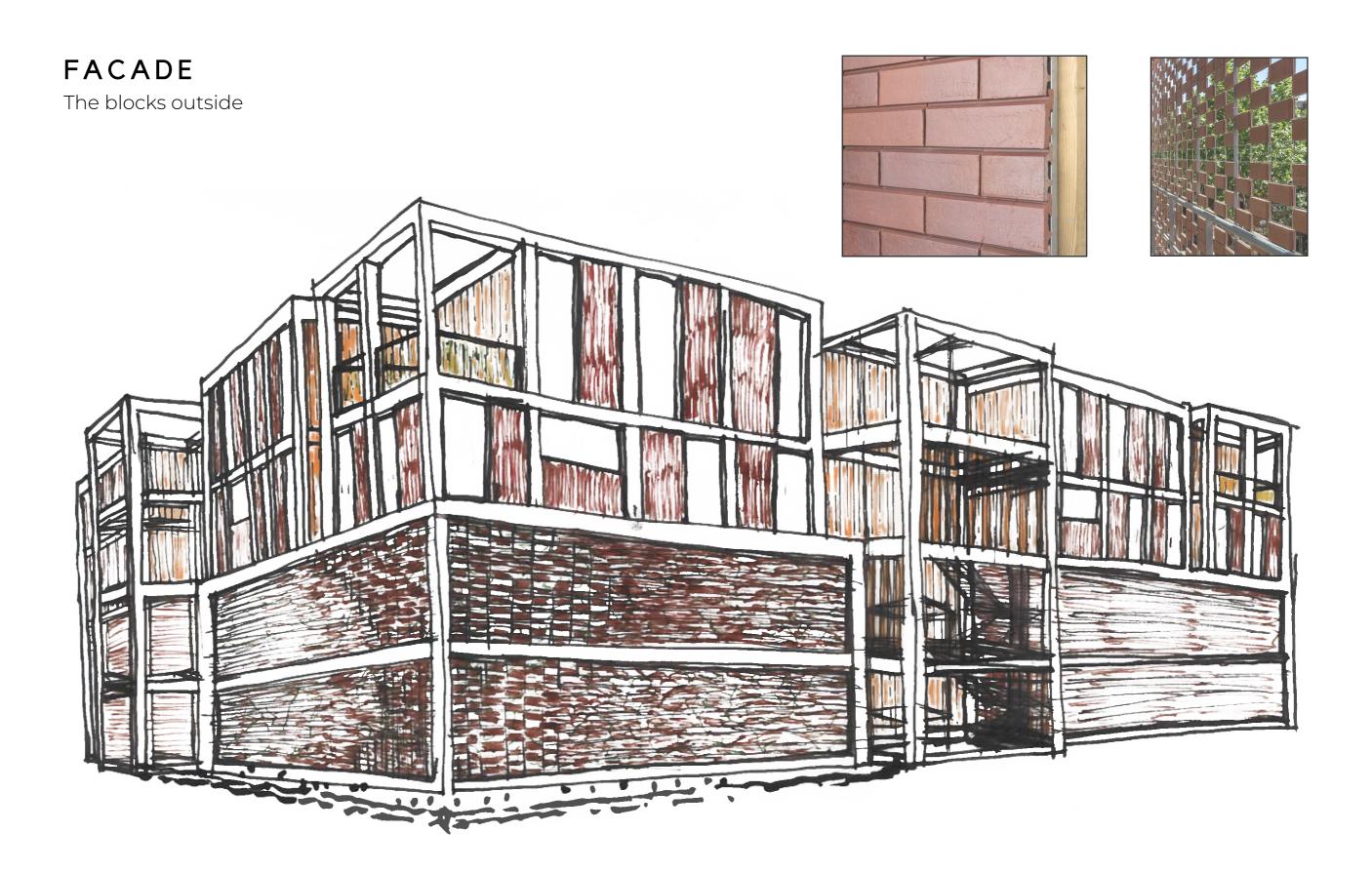


GROUND FLOOR



The tower





64/74 DESIGN

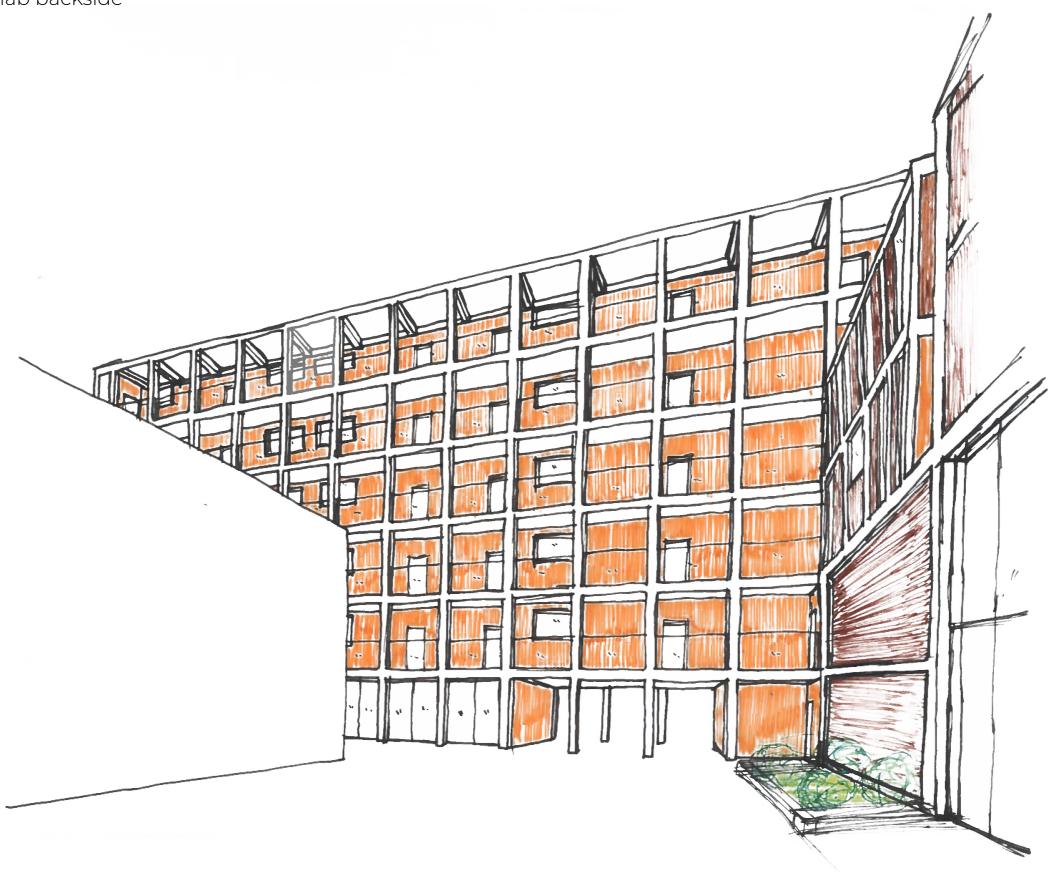


65/74 DESIGN

The slab front



The slab backside

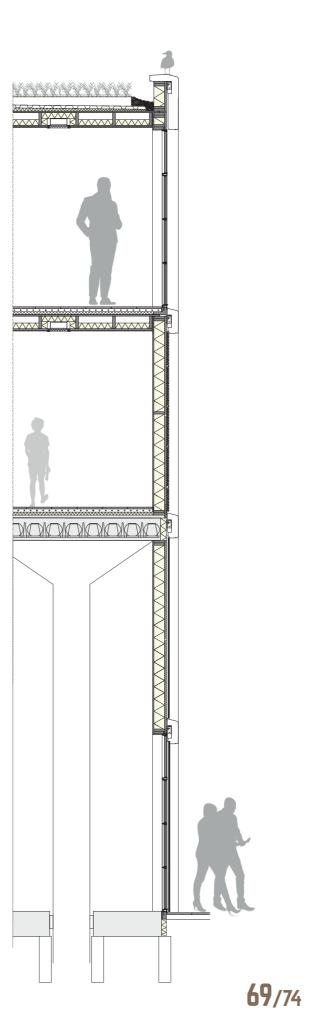


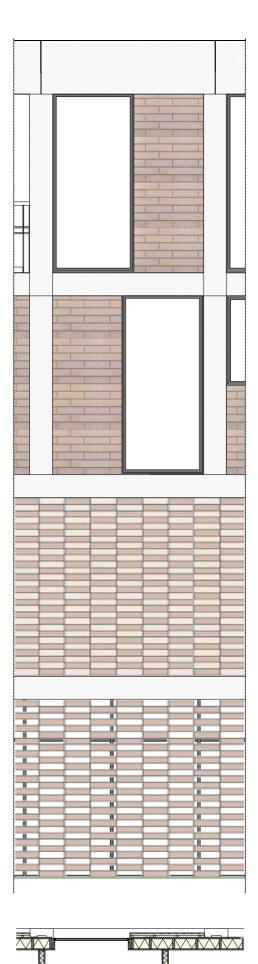
BUILDING TECHNOLOGY

Fragment



Cobiax floor
22% less energy
100% recycled plastic
35% less concrete







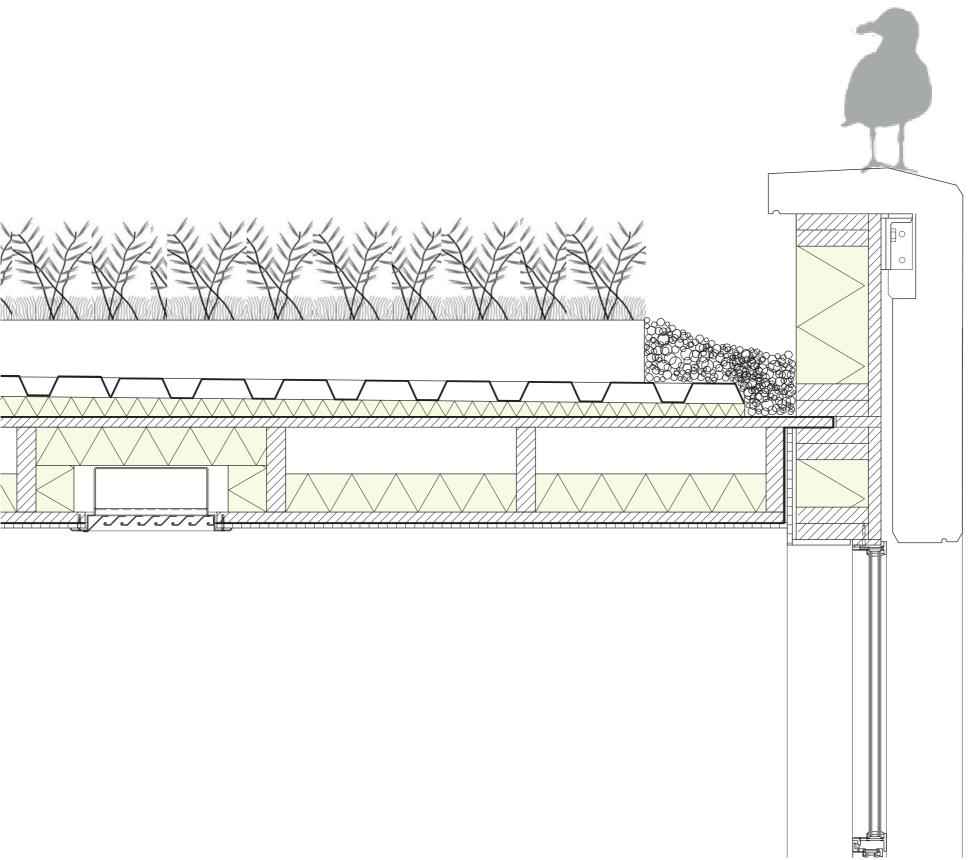
Aberson A-Brick 75% less clay

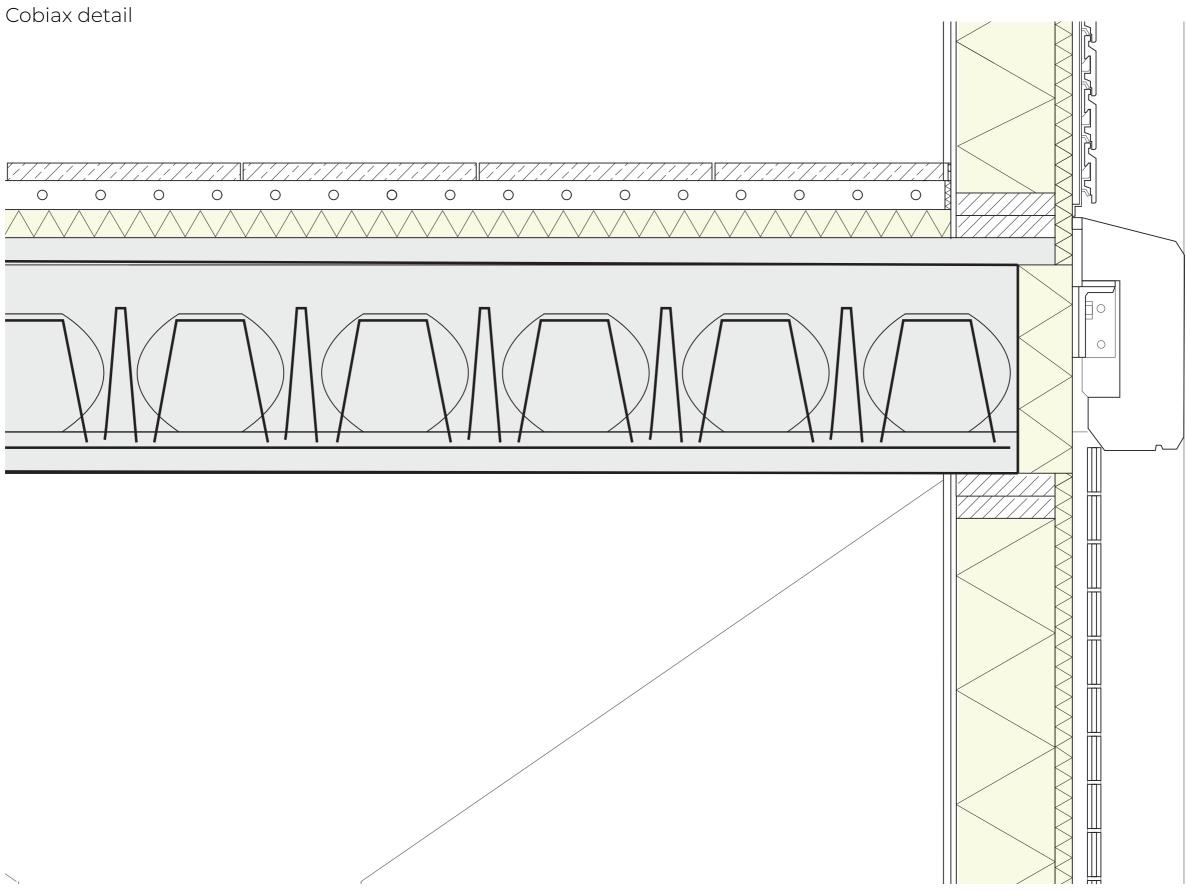


Flex brick
Demountable
Reusable

BUILDING TECHNOLOGY

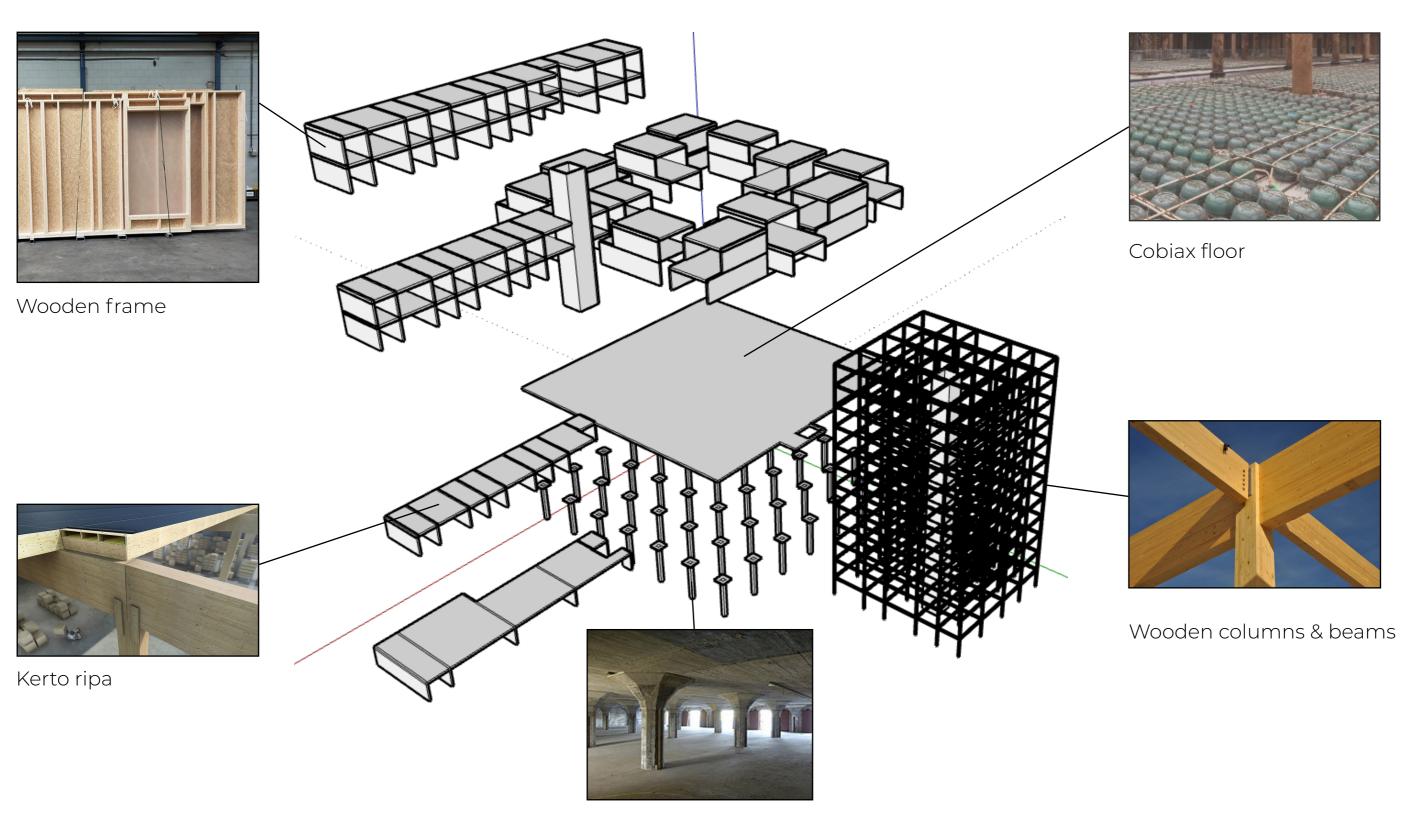
Roof detail





CONSTRUCTION

Axo

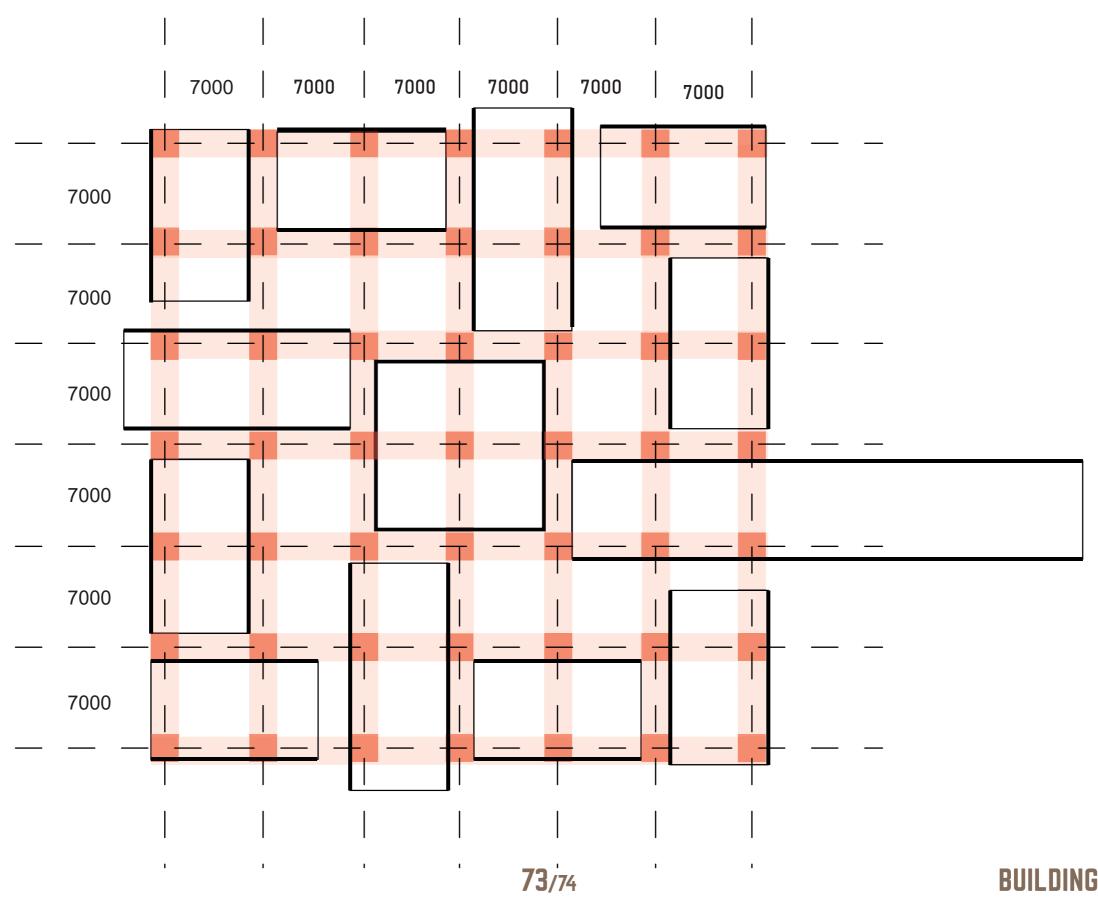


Mushroom colums **72**/74

BUILDING TECHNOLOGY

CONSTRUCTION

The blocks



CLIMATE

Section

Textile industry • 10% of global Co2 emissions • Only 1% of clothing recycled • 20% of water pollution • 1 shirt = 2700L water Evaporating water lowers the heat load Green roofs view from the tower Green roofs collecting Solar panels & Sunshading sunshading heat pump Fresh air openable windows 1 548 2 571 Heat exchanger air-water Rain water storage tank Solar energy

