

COHOUSING HOPTILLE



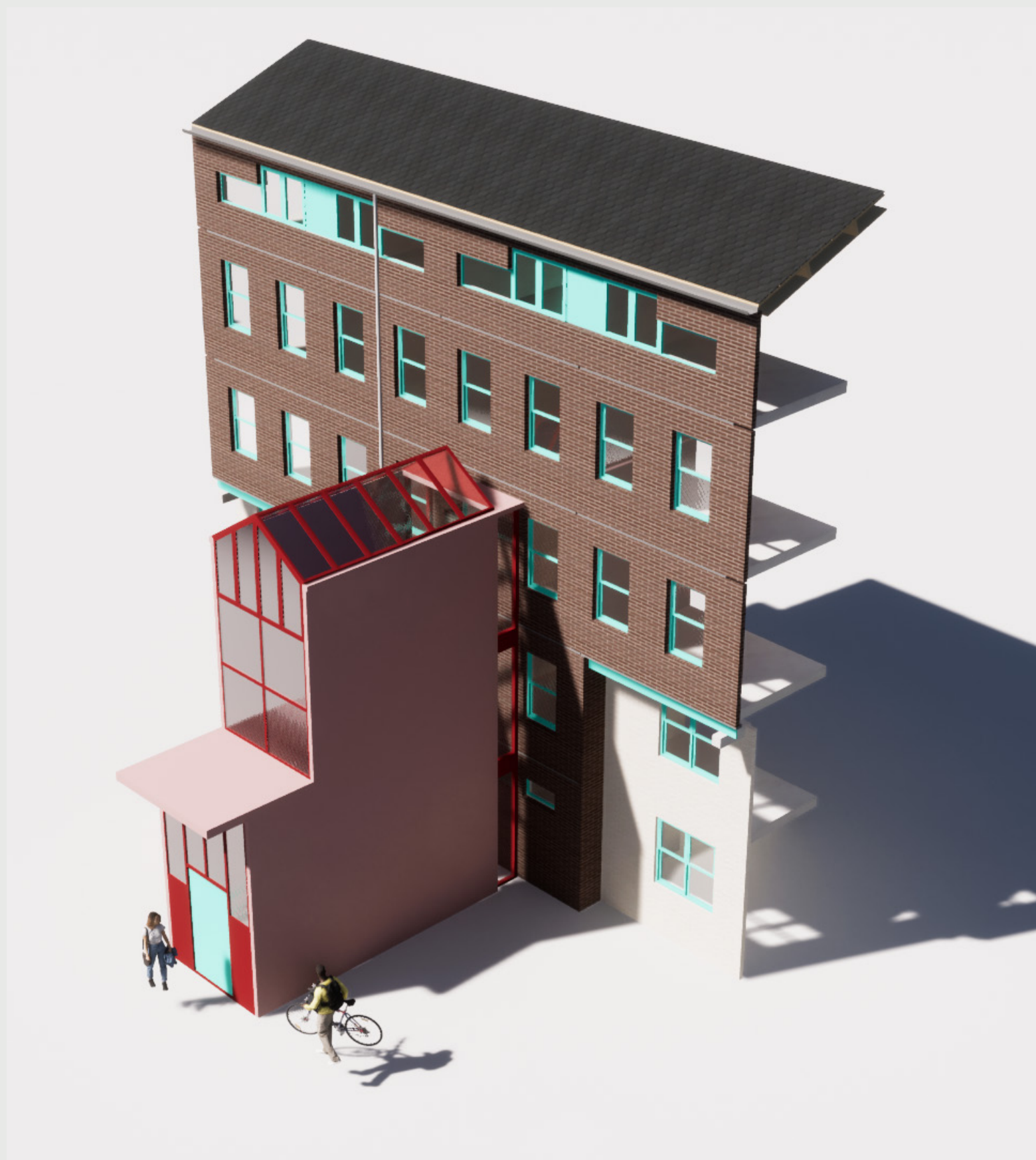
P5 16th APRIL '24

by Jonathan Verhoef
tutors:
Roel van de Pas
Pierre Jennen
Lidwine Spoormans

NEW HERITAGE STUDIO

2

FROM ...



TO ...



**HOPTILLE
RESEARCH QUESTION
RESEARCH**

**COHOUSING
STRATEGY**

**TRANSFORMATION
A LIVING UNIT
B COHOUSING
C EVENT
D SPORTS**

**STRUCTURE
CLIMATE**

REFLECTION

5



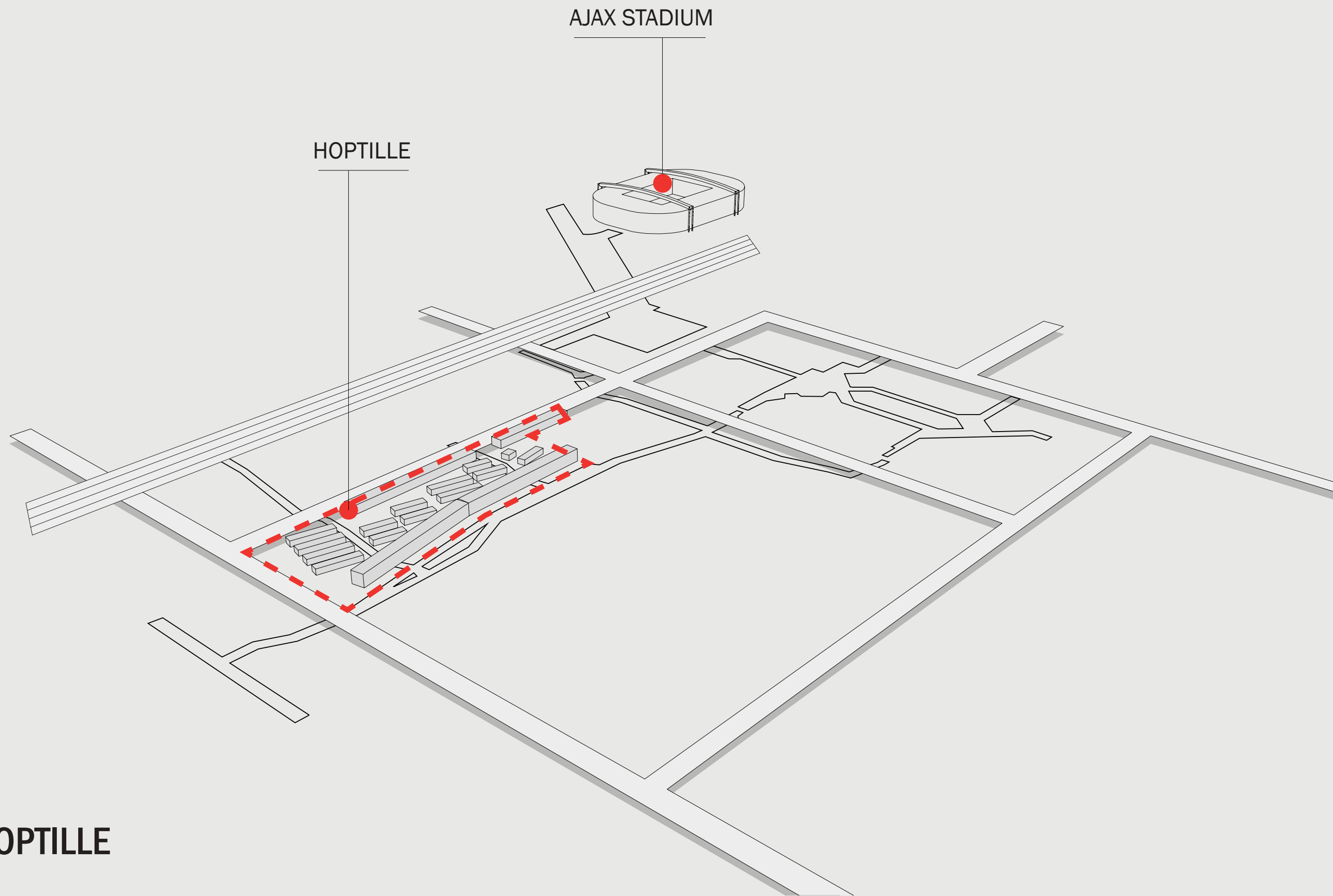
TRANSFORMATION PROJECT

**HOPTILLE AMSTERDAM,
ZUIDOOST**

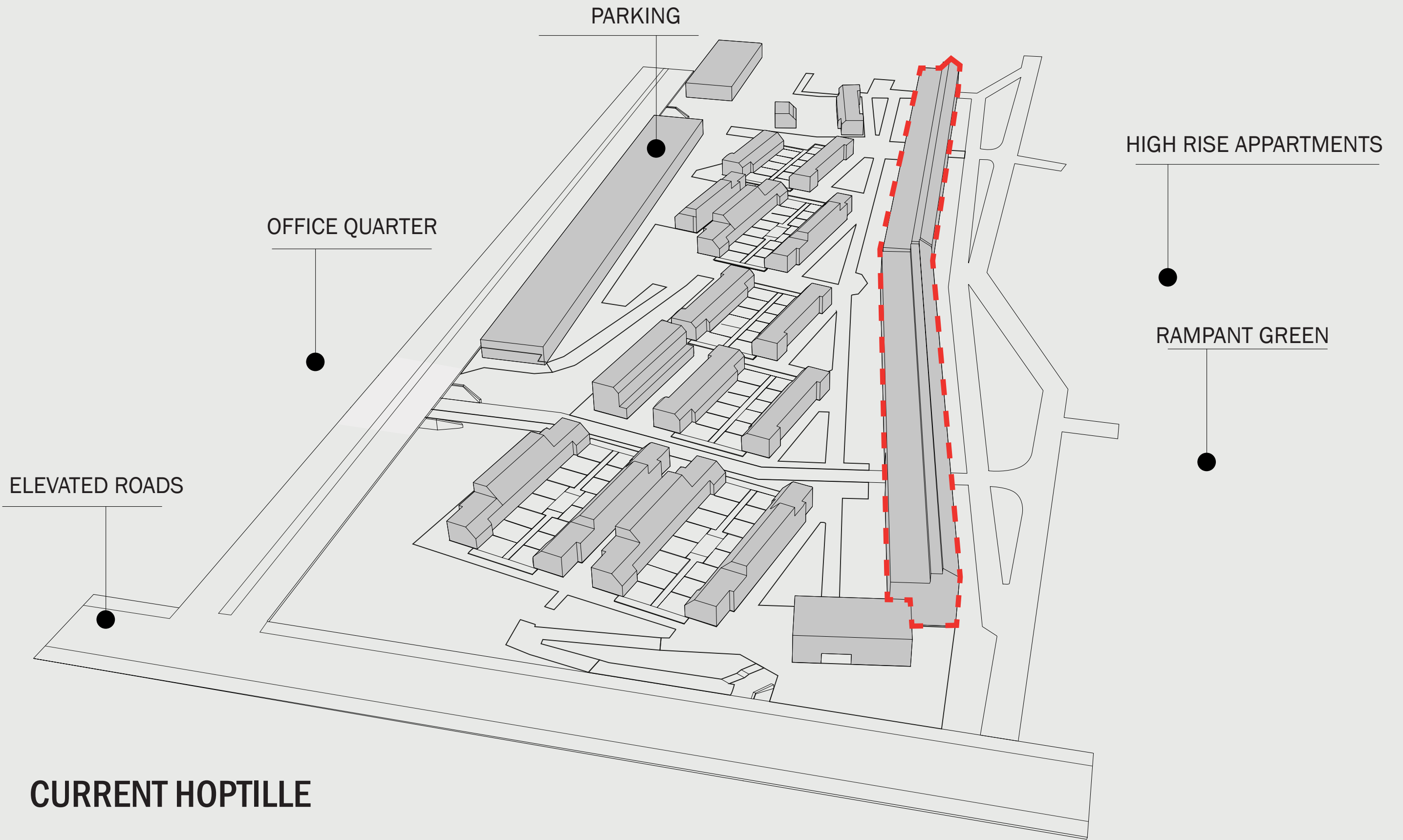
IMAGE:NEW HERITAGE GROUP



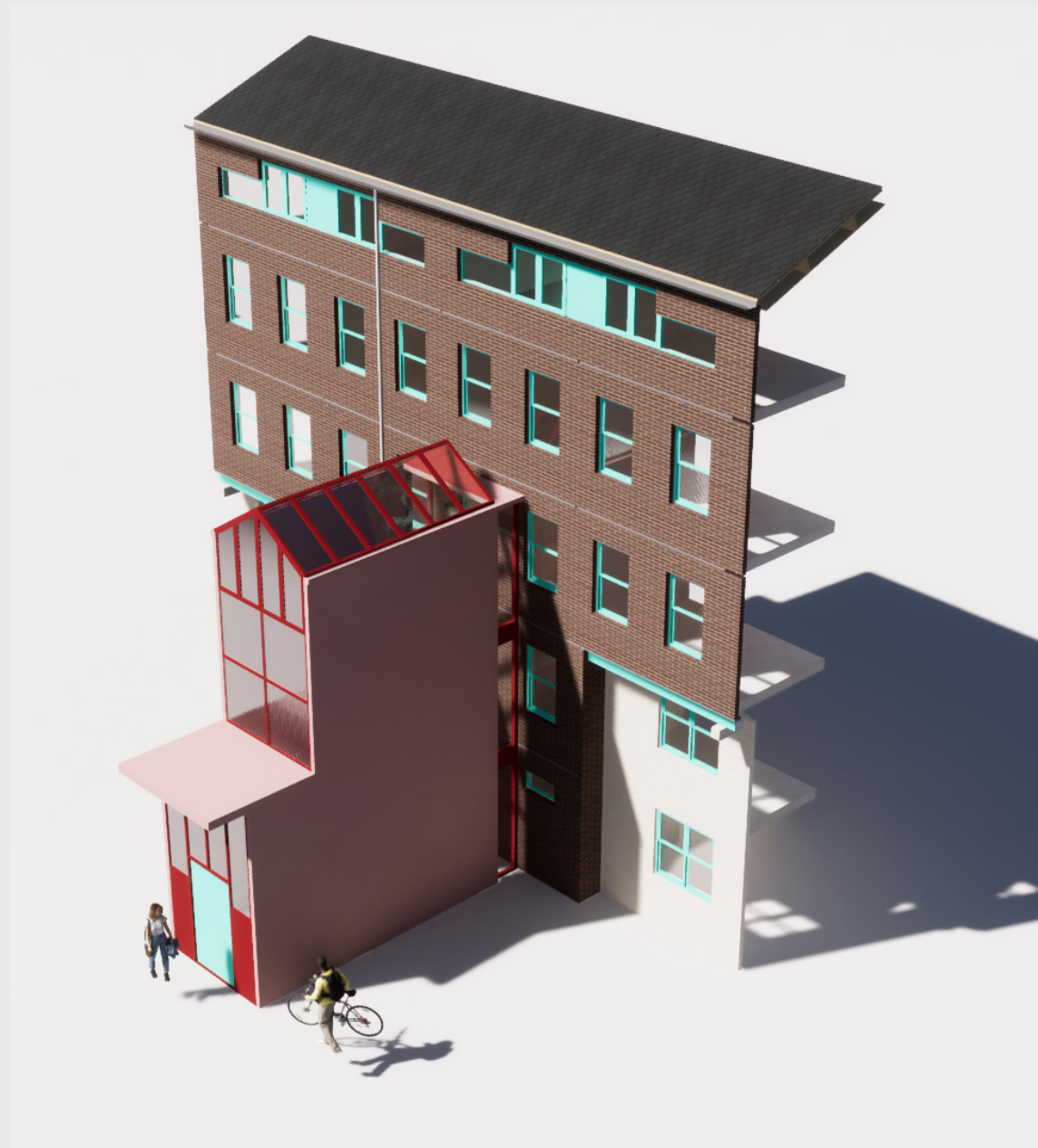
SOUTH EAST AMSTERDAM



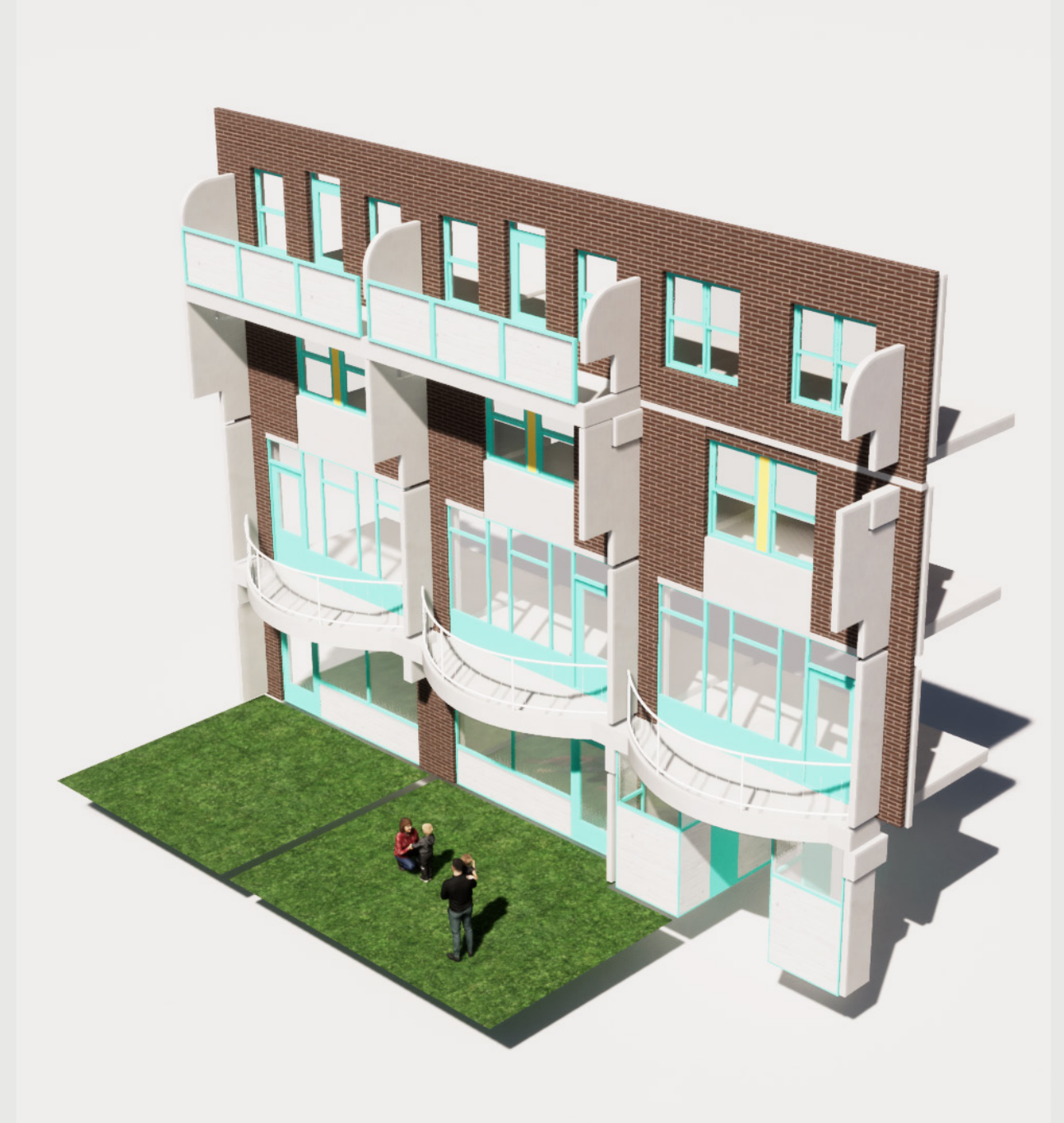
HOPTILLE



NORTH-EAST

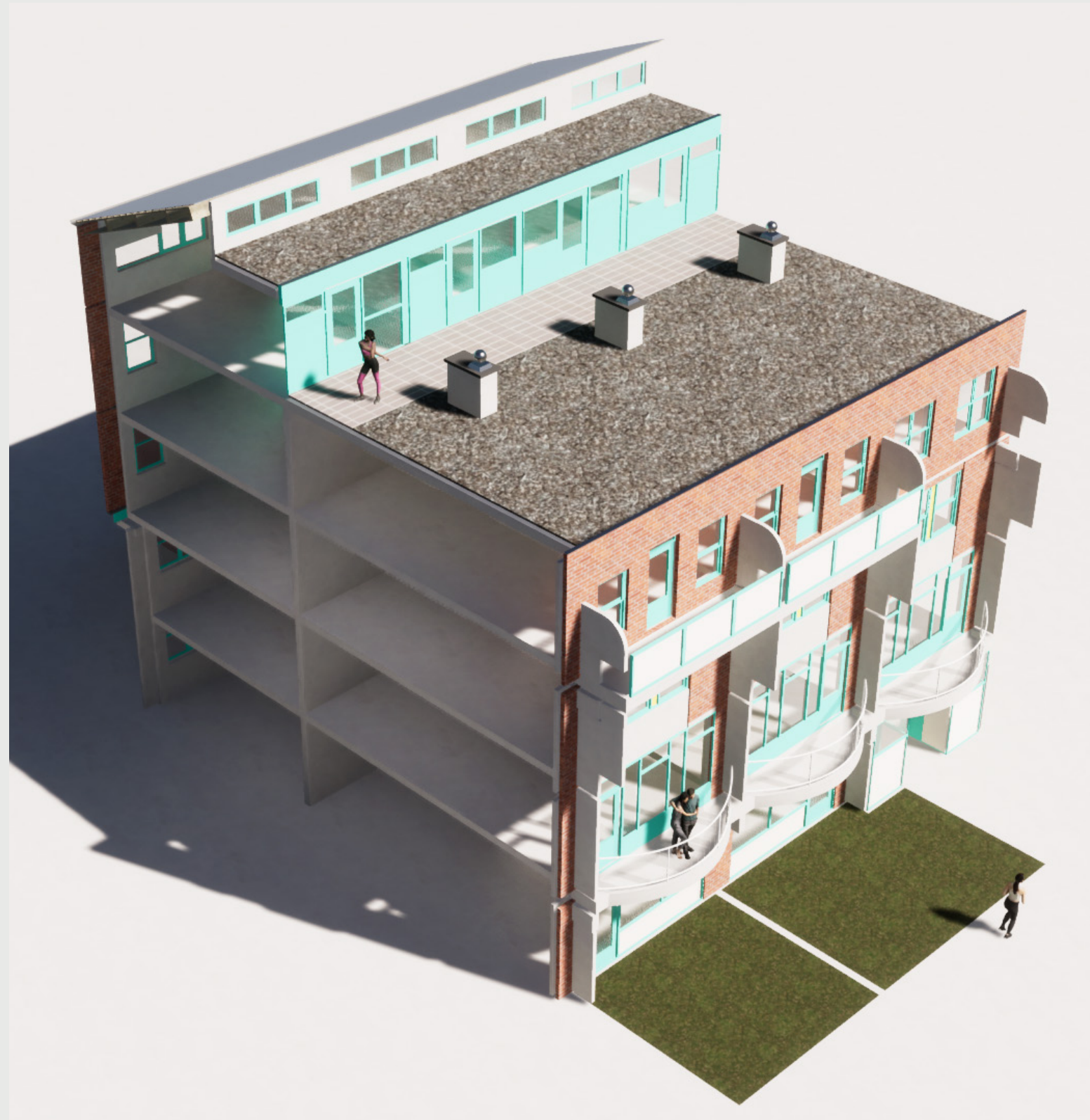


SOUTH-WEST



FACADE COMPARISON

UNIT

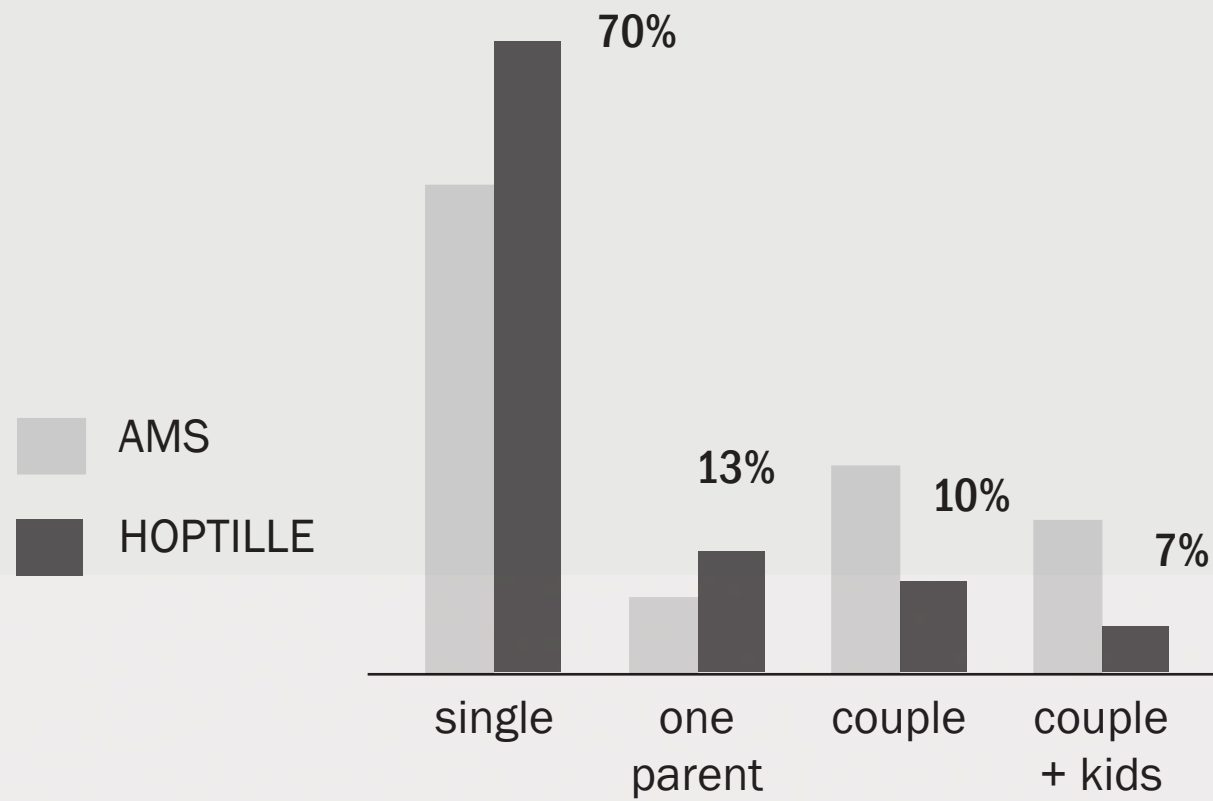


REPEATING UNITS

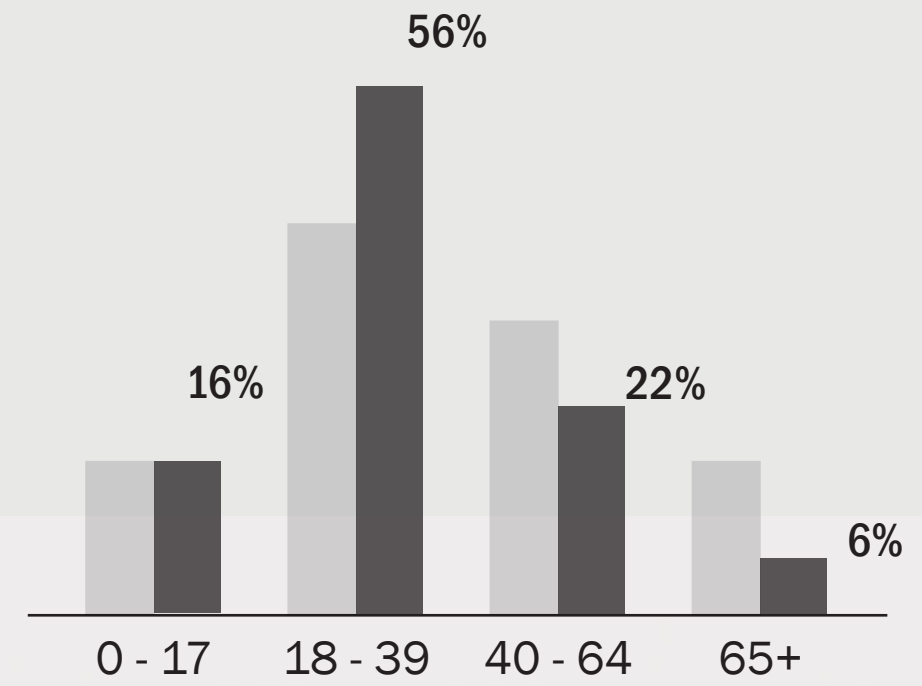


RENOVATION

HOUSEHOLDS

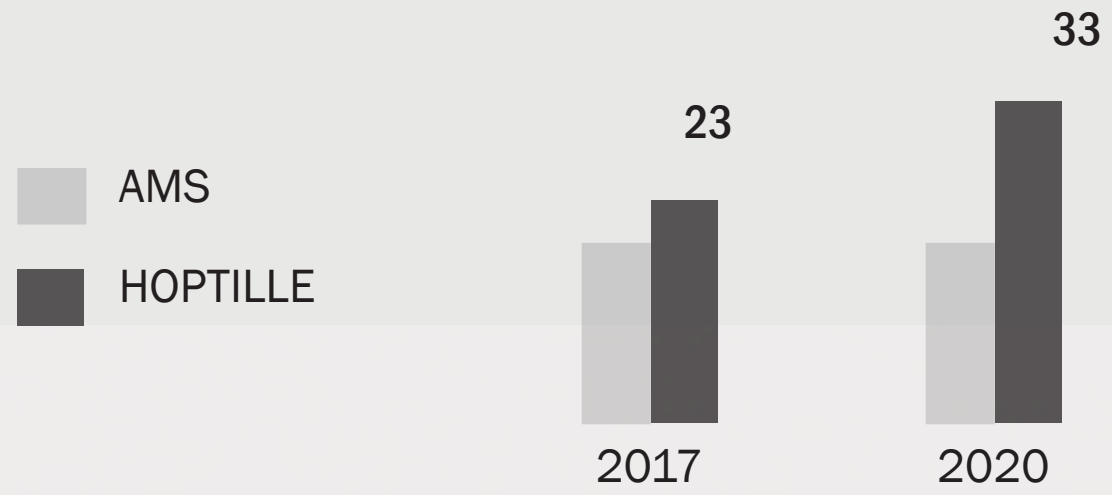


AGE

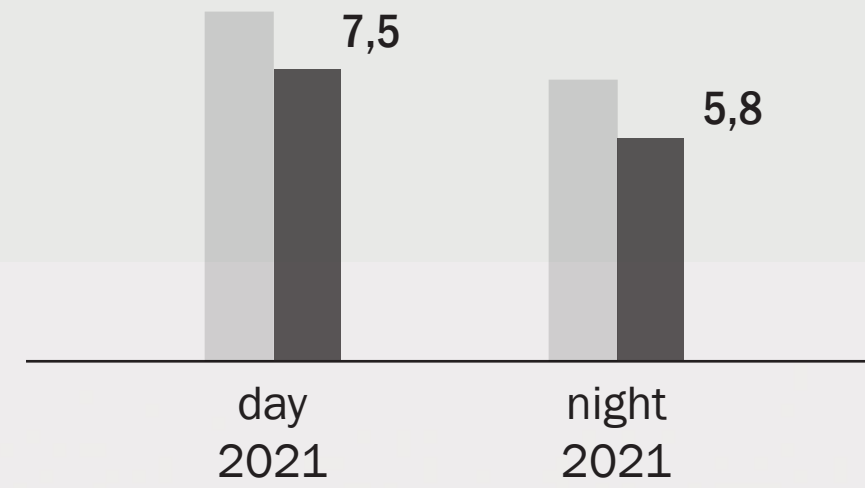


PEOPLE

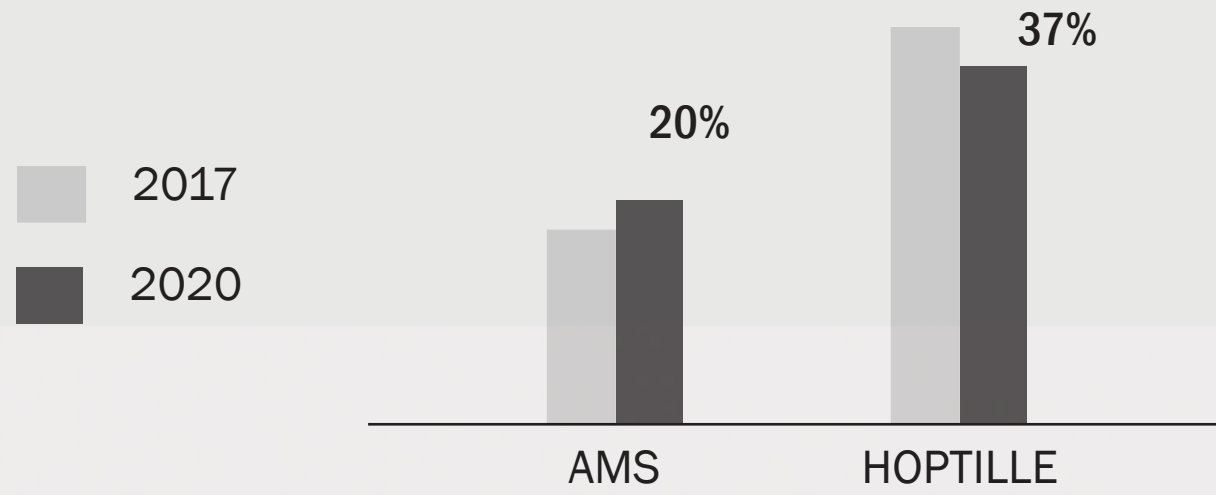
MUTATION RATE



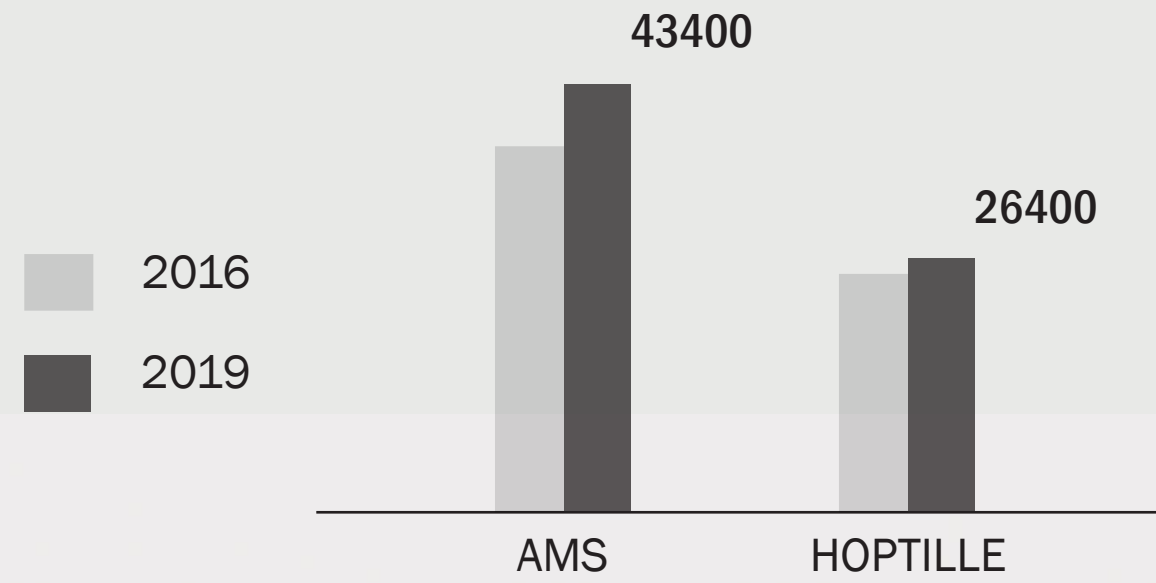
SAFETY INDEX

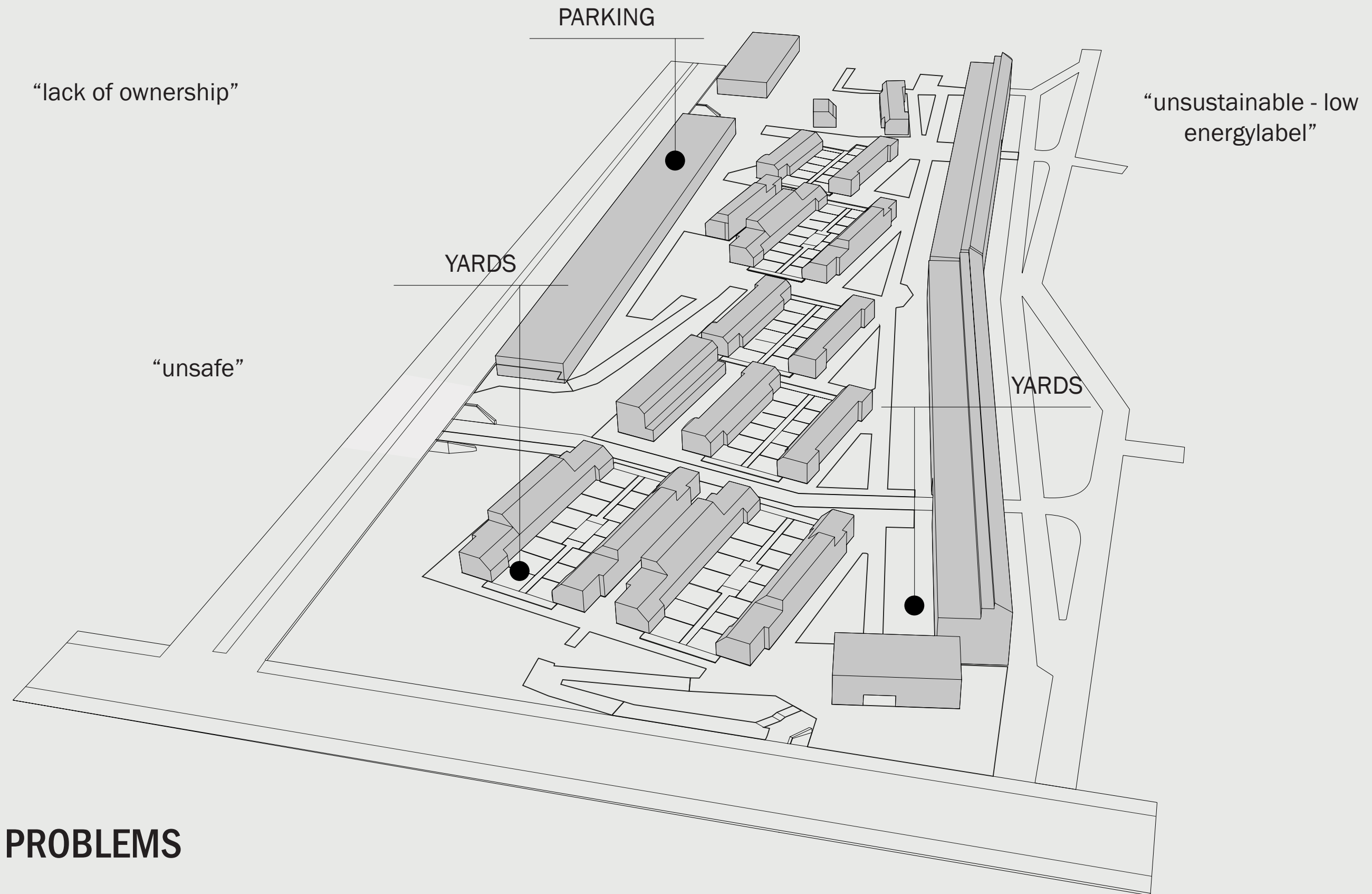


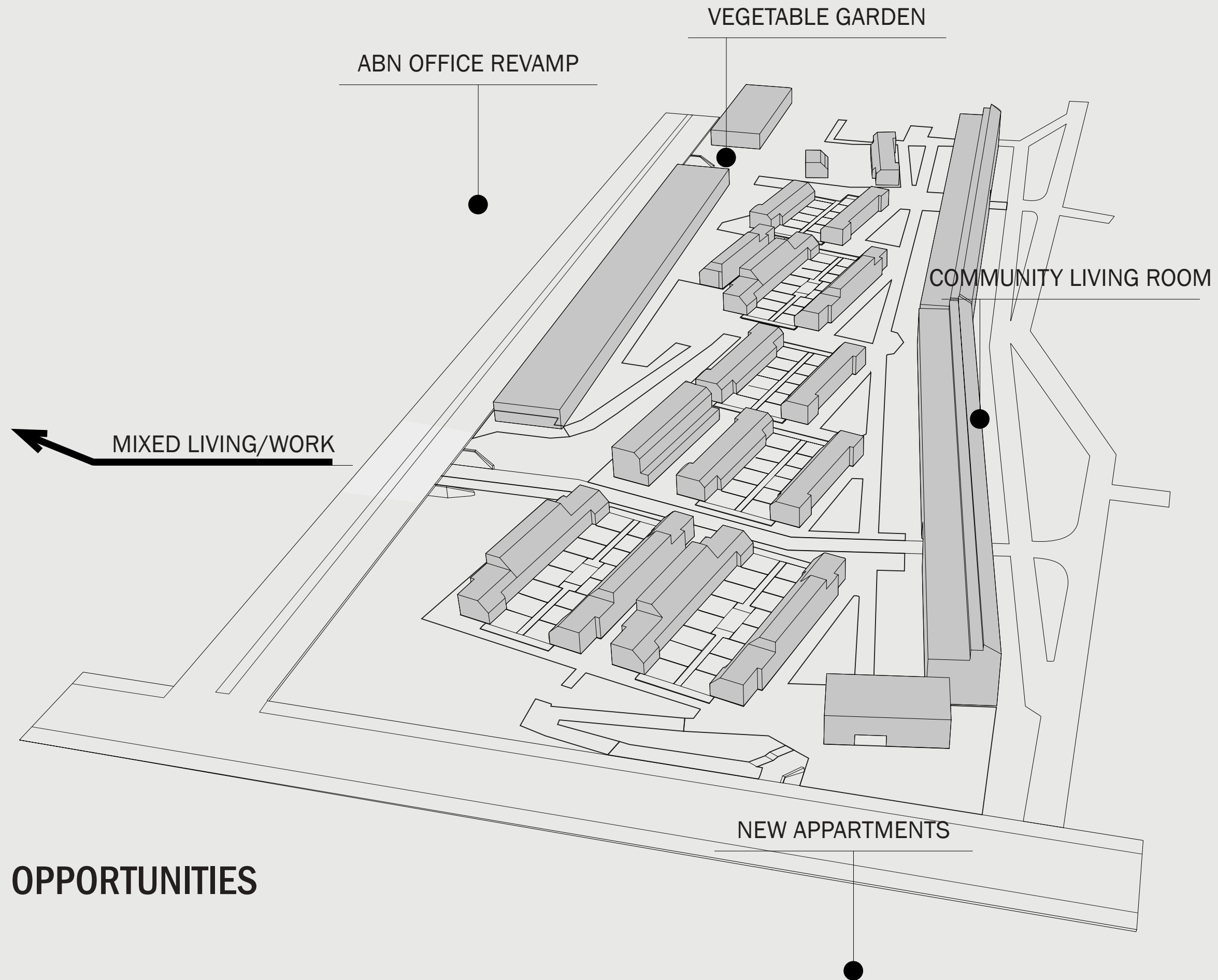
ILLITERACY

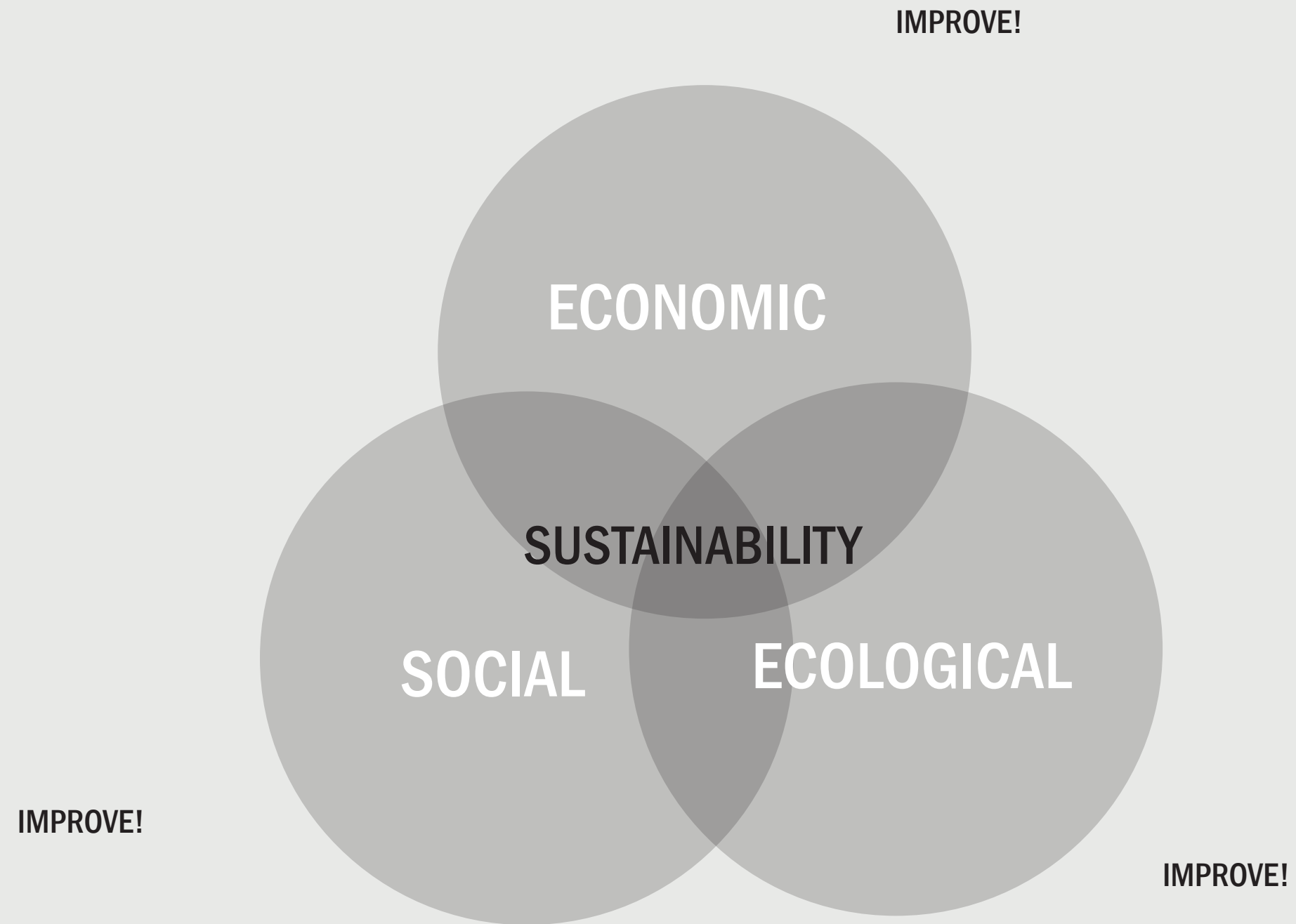


INCOME

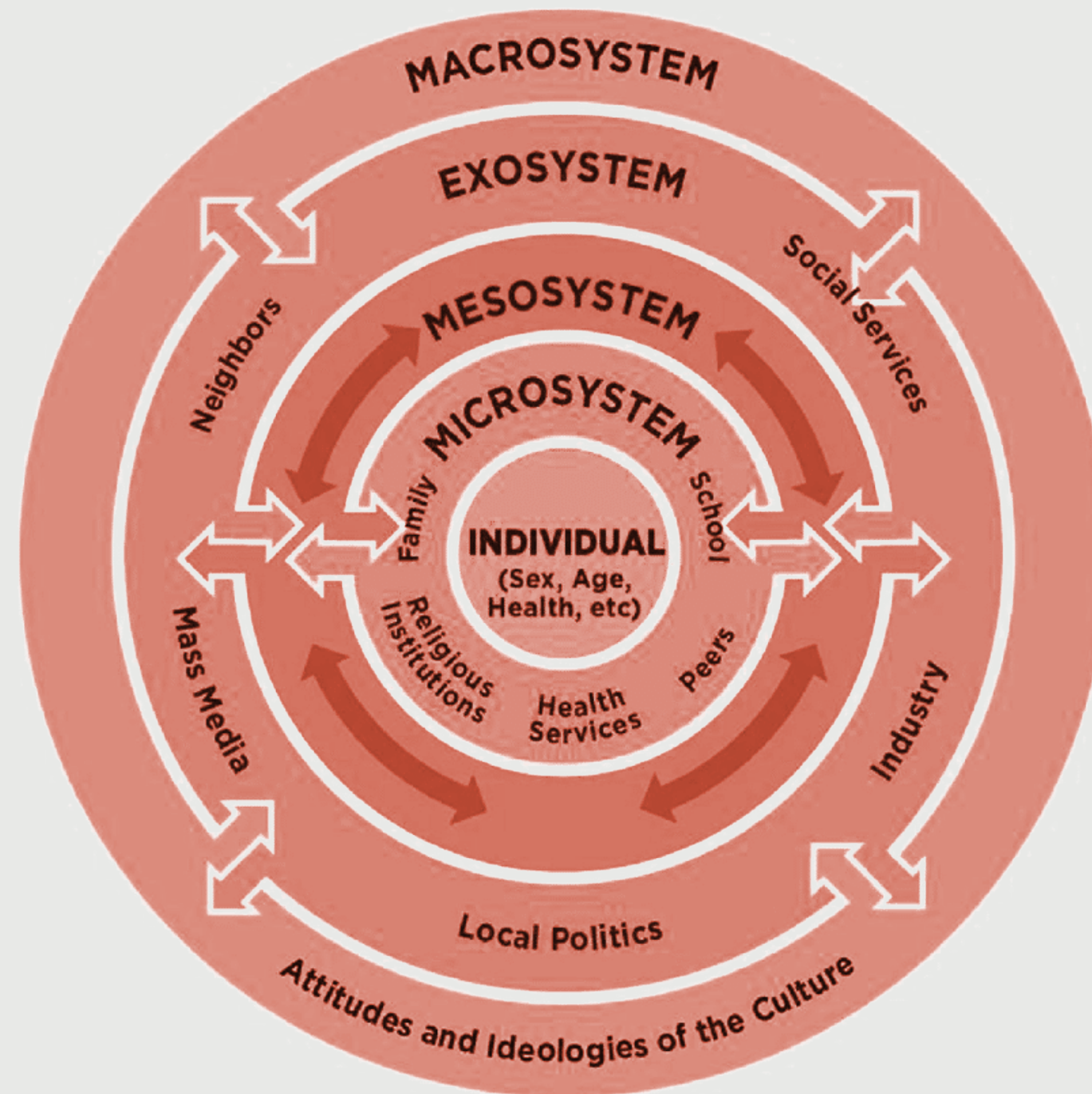








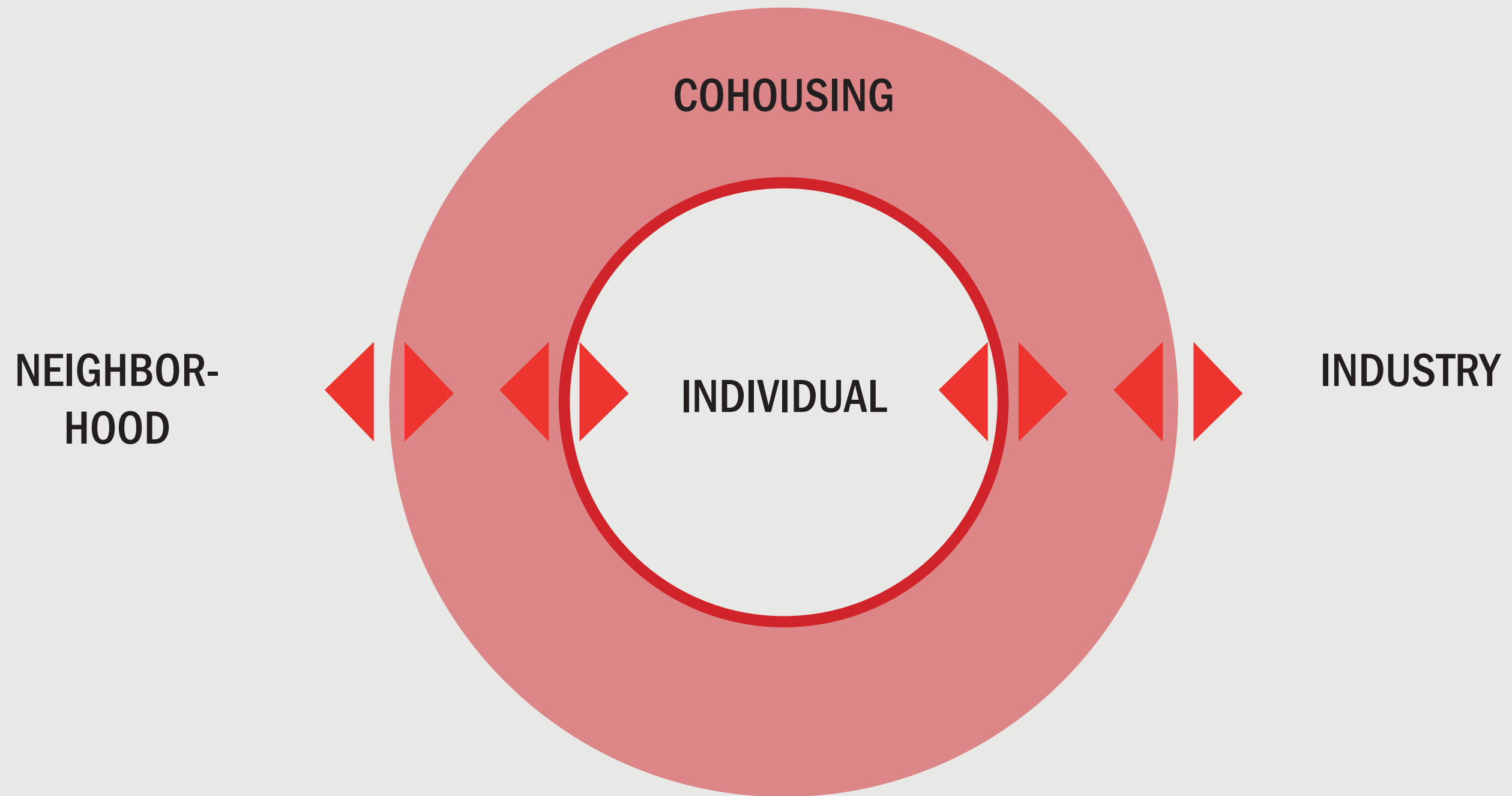
SYSTEM OF BEHAVIOURAL CHANGE



"Where the systems meet"

INTERCONNECTIVITY

HOW TO ESTABLISH INTERCONNECTIVITY IN HOPTILLE?



**HOW CAN CO-HOUSING HELP TO ACTIVATE HOPTILLE, SOCIALLY,
ECONOMICALLY AND ECOLOGICALLY?**

COHOUSING

SOCIAL

“Social network”

“Shared responsibility”

“Healthy and safe”

“Social resilience”

“Meeting and interactive activities”

ECONOMIC

“Networks of Social and Economic activity”

“Economic diversity”

“High property value”

“Less stress on city infrastructure”

ECOLOGICAL

“Centralized energy”

“Waste reduction”

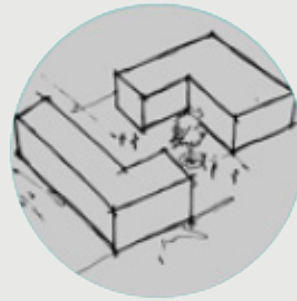
“Integrating green in shared
spaces”

“Green initiatives”

GROUP RESEARCH



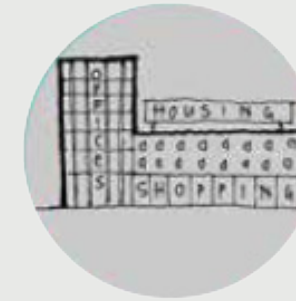
80's Aesthetics



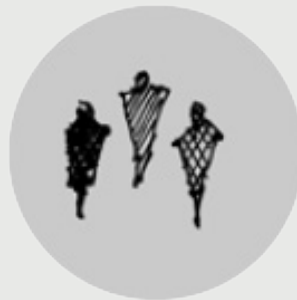
Public space



Dwelling
sizes and types



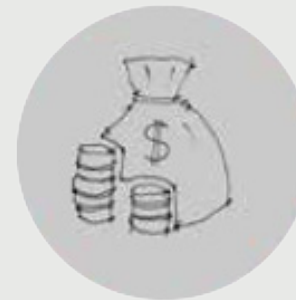
Mono-/
Multifunctionality



Cultural diversity



Elevated
roads and decks



Businesses



Greenery



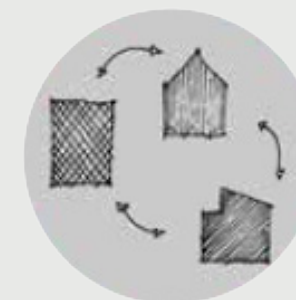
Low-/ mid-rise



Sense of ownership



Colour and art

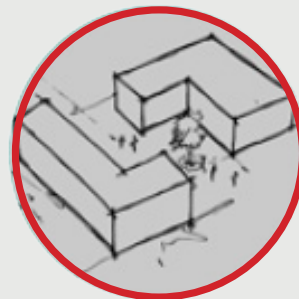


Distinctive identities

“Accessibility of outdoor space”



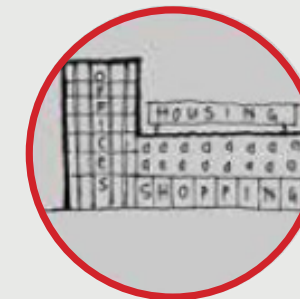
80's Aesthetics



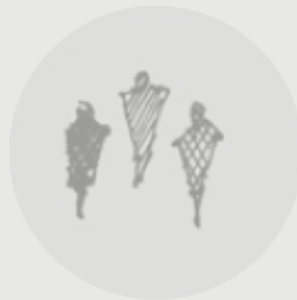
Public space



Dwelling
sizes and types



Mono-/
Multifunctionality



Cultural diversity



Elevated
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Businesses



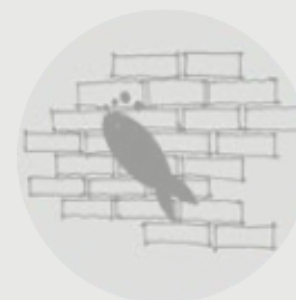
Greenery



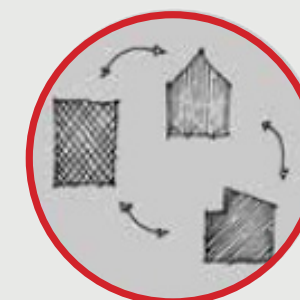
Low-/ mid-rise



Sense of ownership



Colour and art



Distinctive identities

“Activity”

“(Sensory) Experience”

“Shared responsibility and use”

“Unique”

STRATEGY

ACTIVATING THE
BORDER

FORMING BUILDING
BLOCKS

PARK INBETWEEN
SHARED SPACE

BUSINESSES

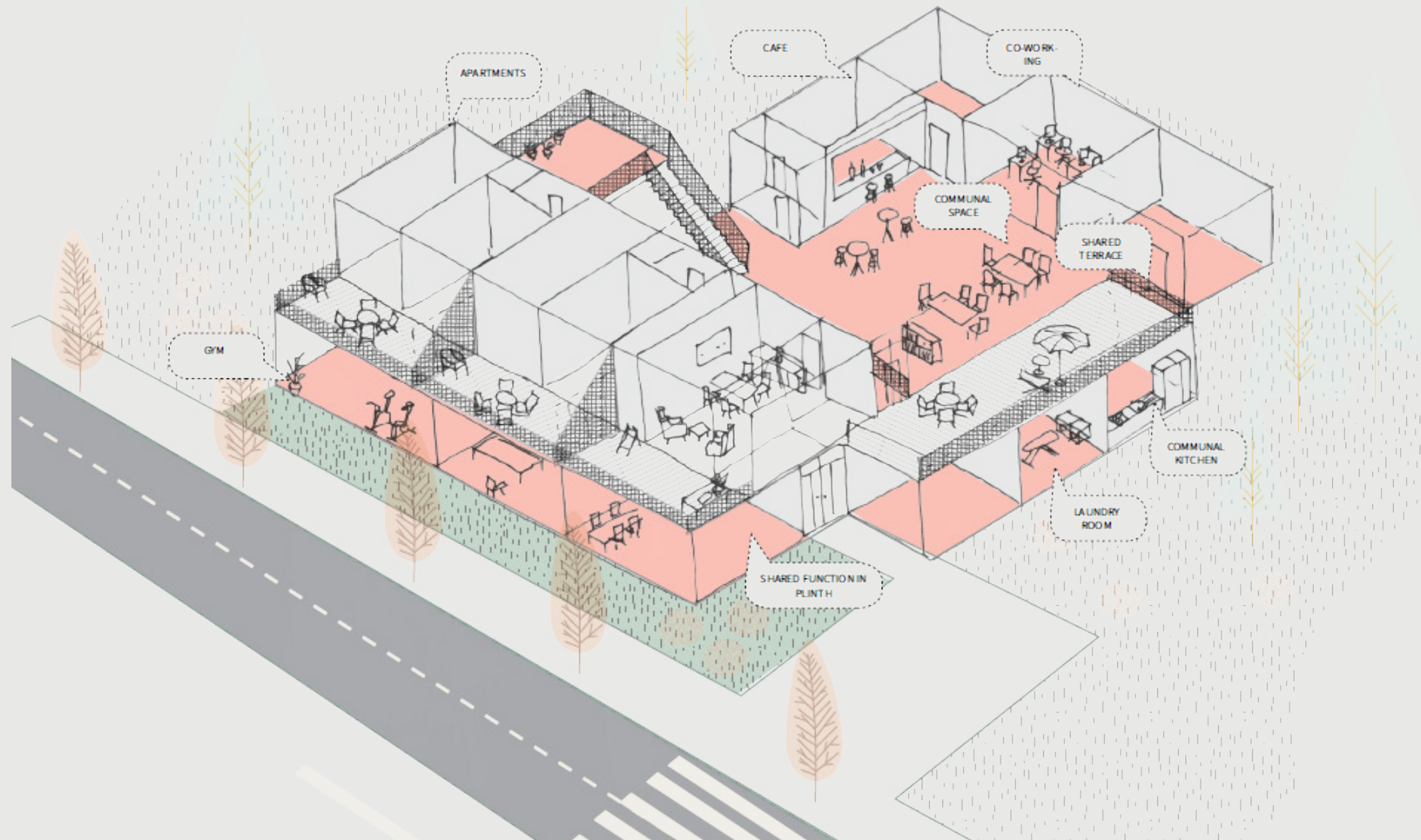
SAVING RAIN WATER

ROOF ACTIVATION
FOOD & ENERGY

VERTICAL EXTENSION
OF BLOCKS

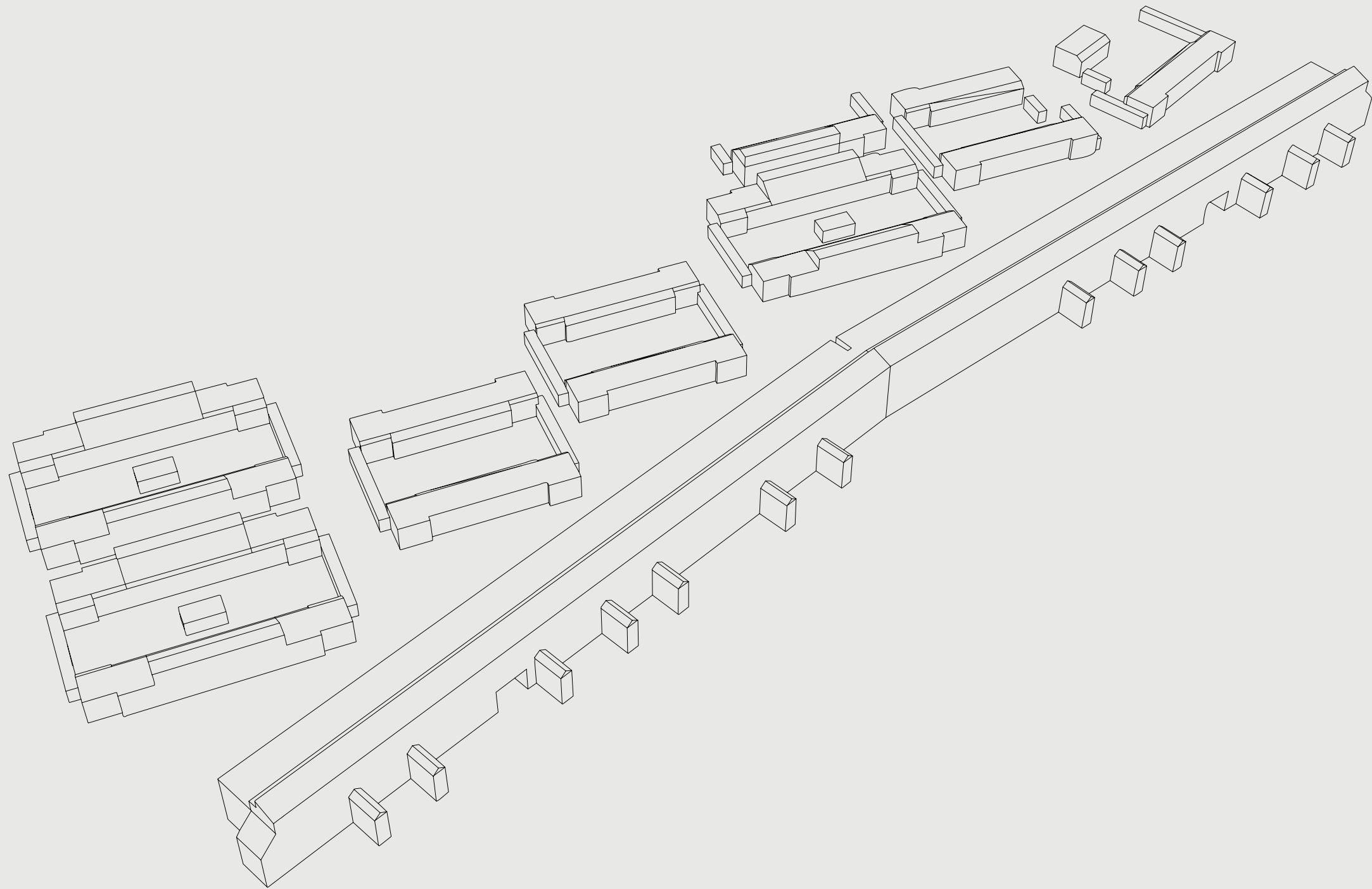
INTERCONNECTIVITY





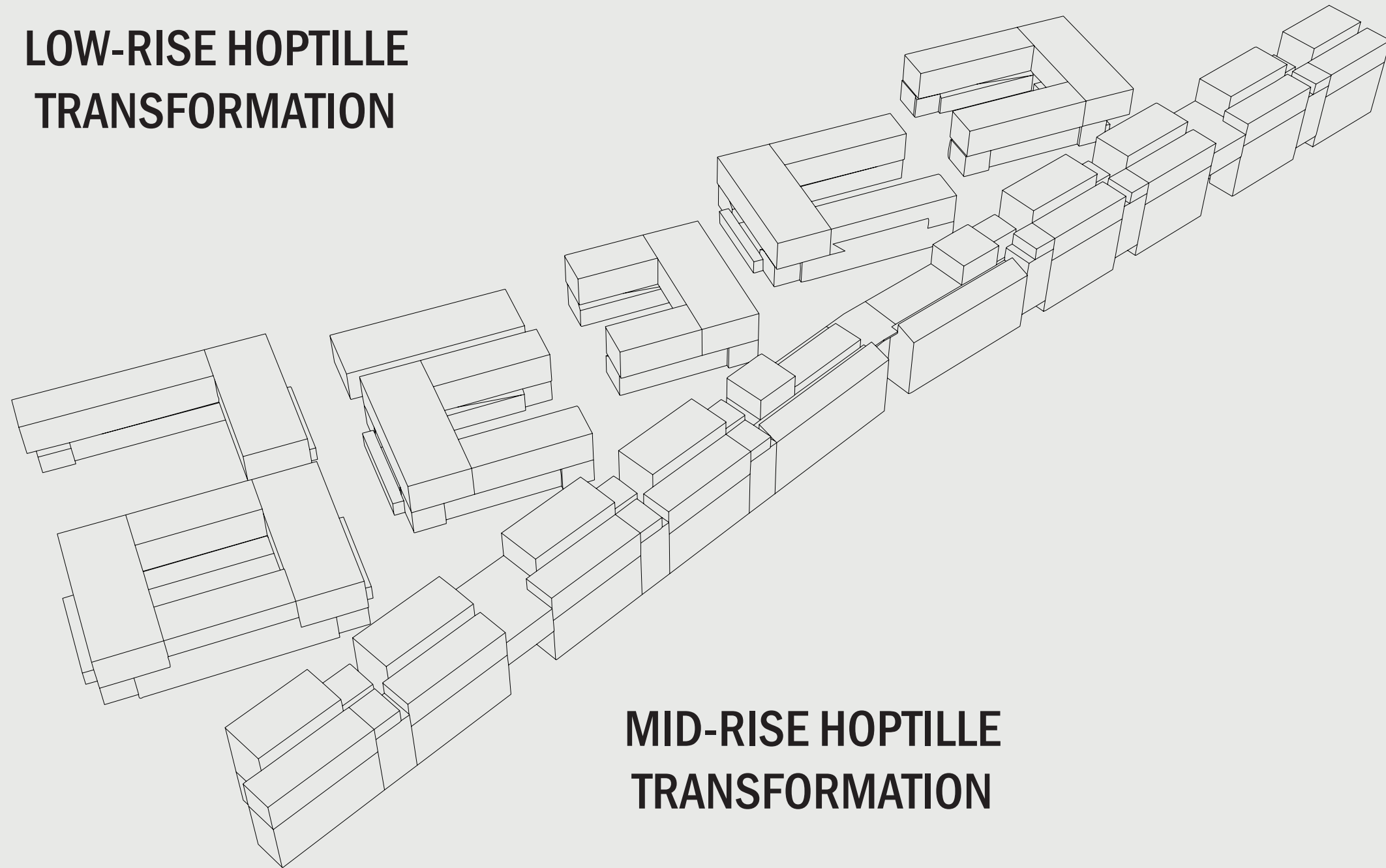
STARTER CLUSTER

SOURCE: ADVANCED HOUSING DESIGN
DENSIFICATION STRATEGIES by LAZSLO BARZ



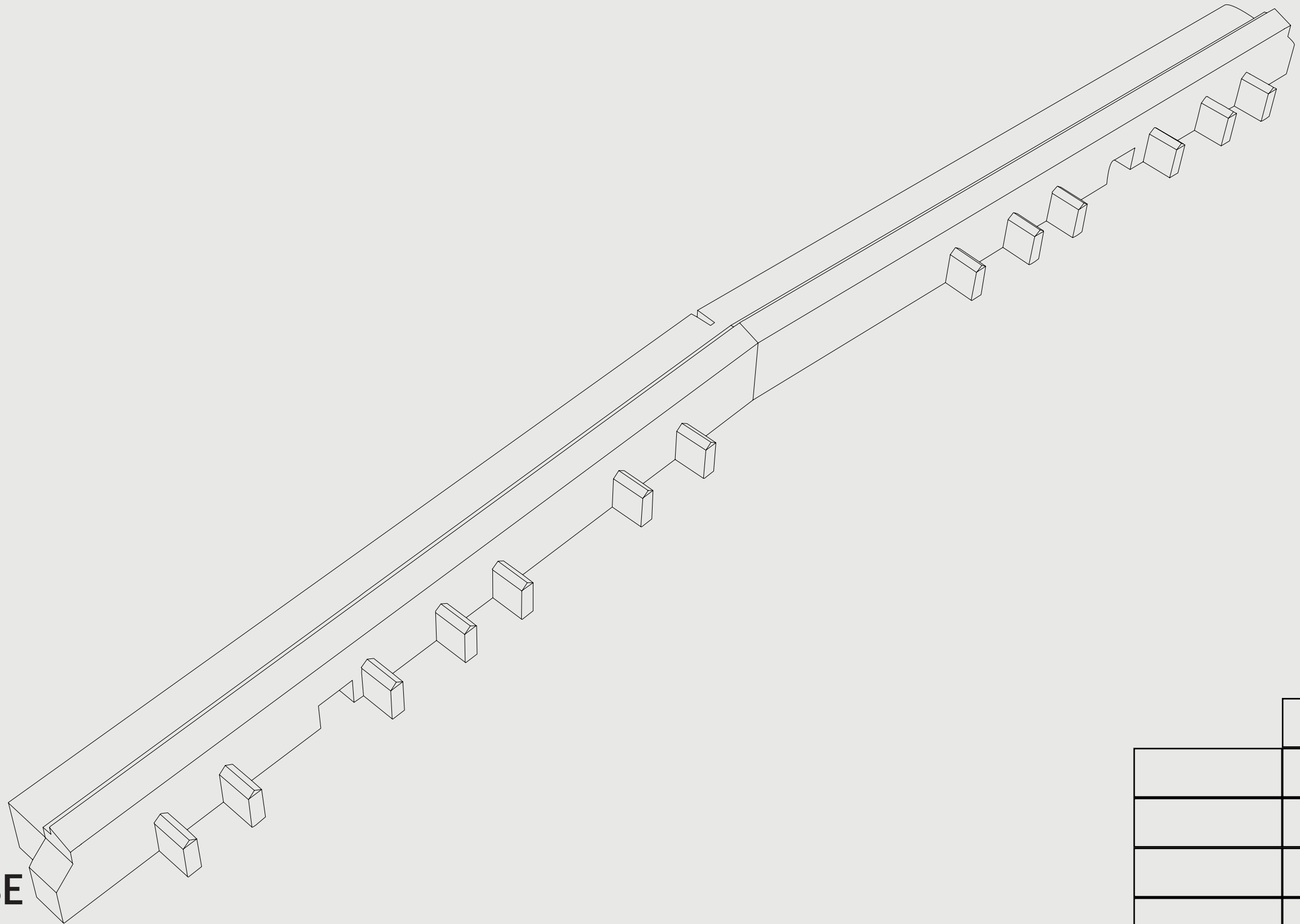
**CURRENT MID-RISE
AND LOW-RISE**

LOW-RISE HOPTILLE TRANSFORMATION



MID-RISE HOPTILLE TRANSFORMATION

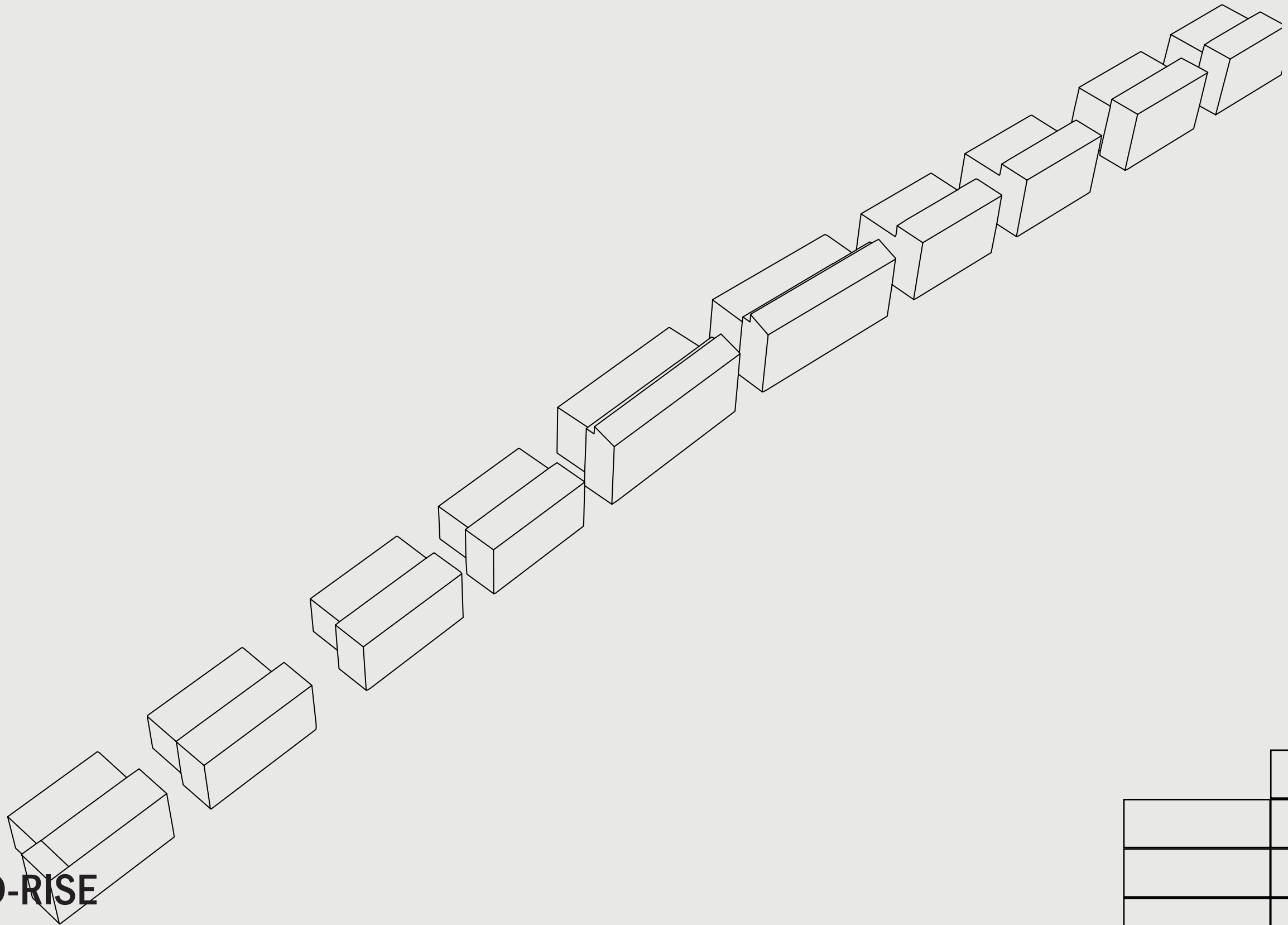
MID-RISE



100%

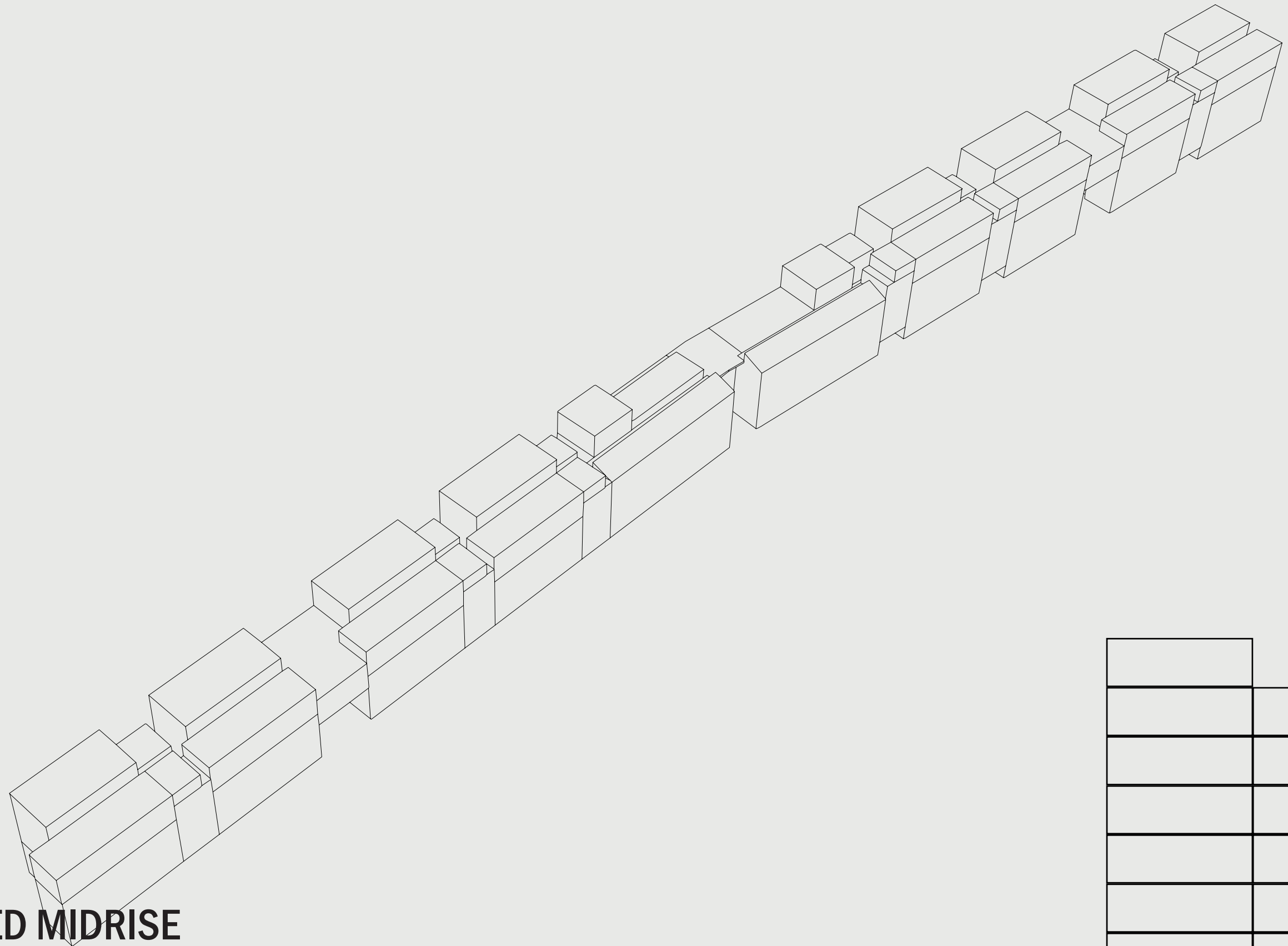
100%

CUT MID-RISE



60%

67%



EXTENDED MIDRISE

+59% 111% 89% +17%



LIVING BLOCK

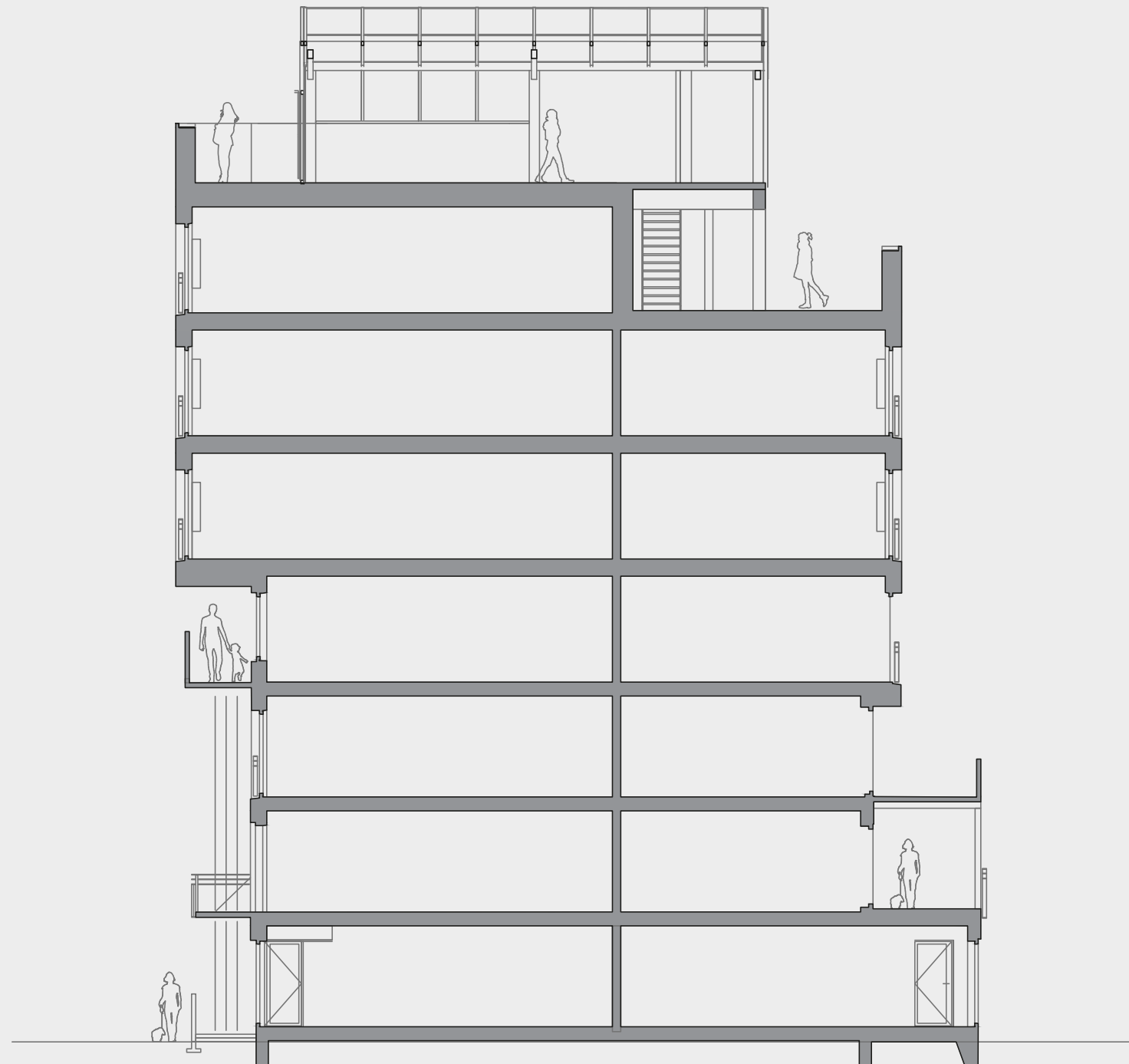




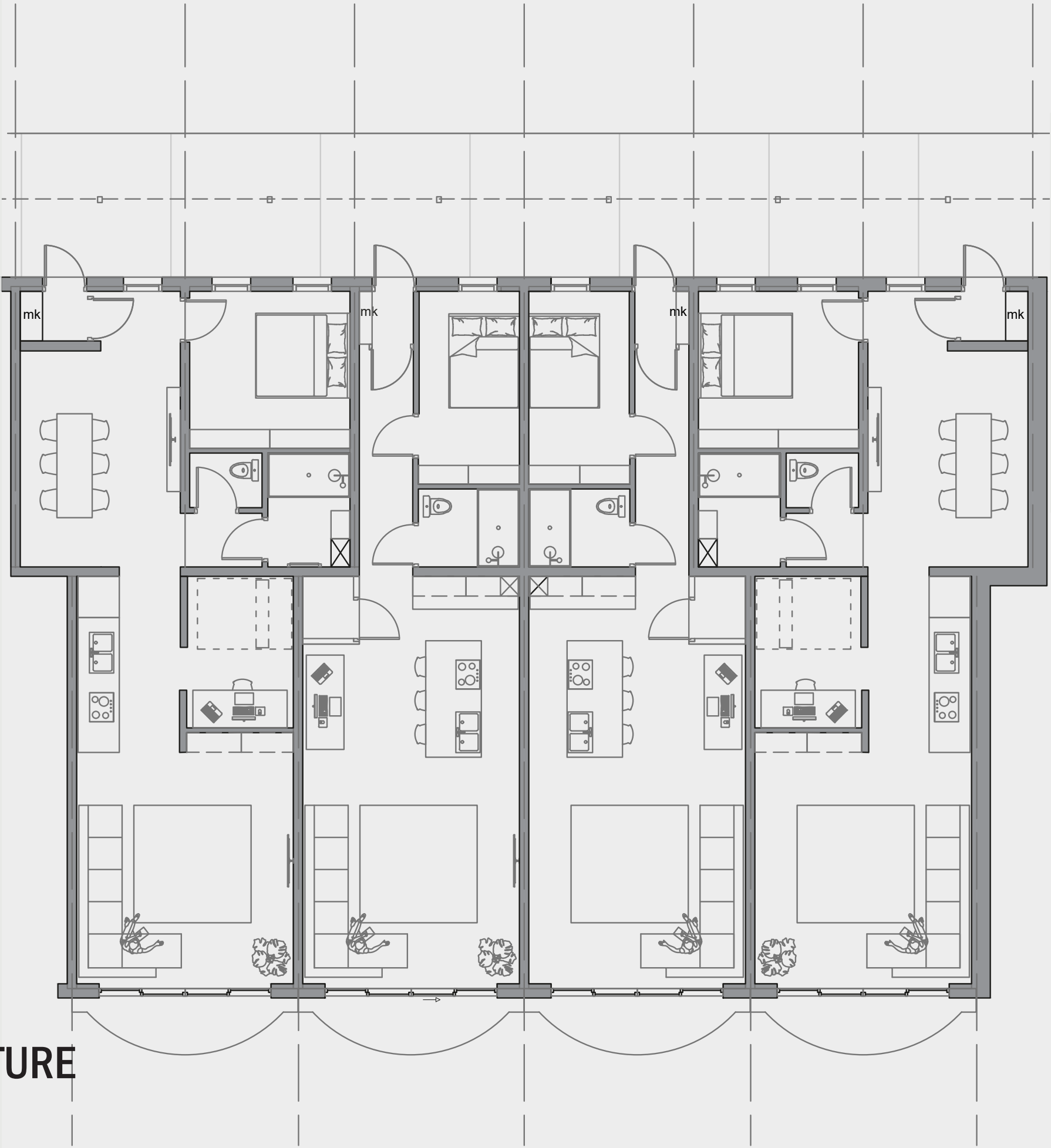
SOUTH FACADE



NORTH FACADE

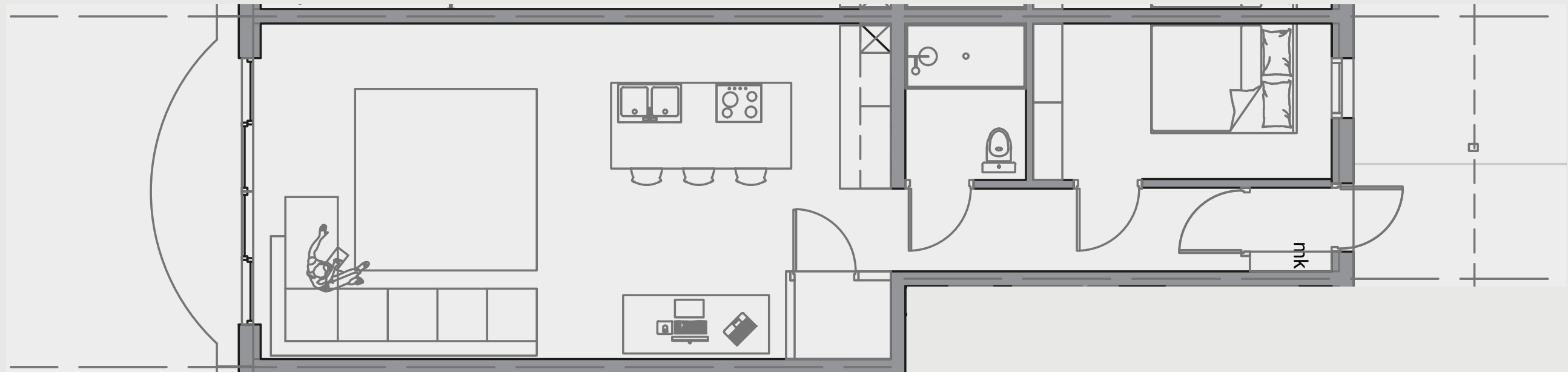


A
LIVING BLOCK



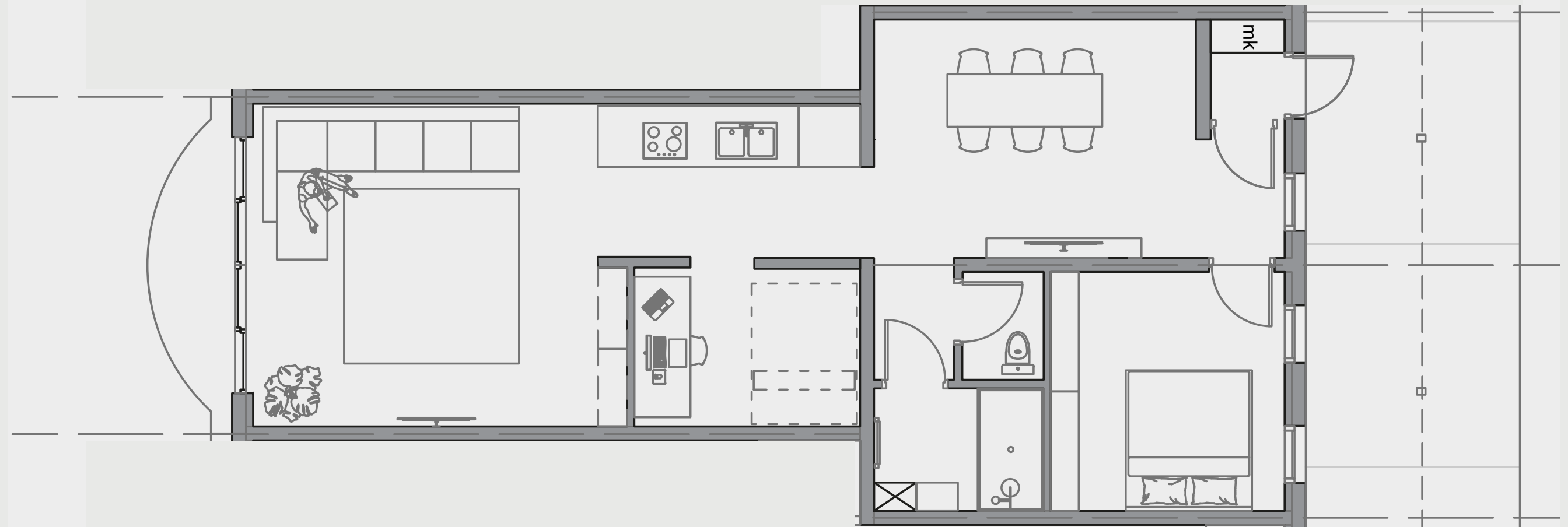
LOWER STRUCTURE





DWELLING 1

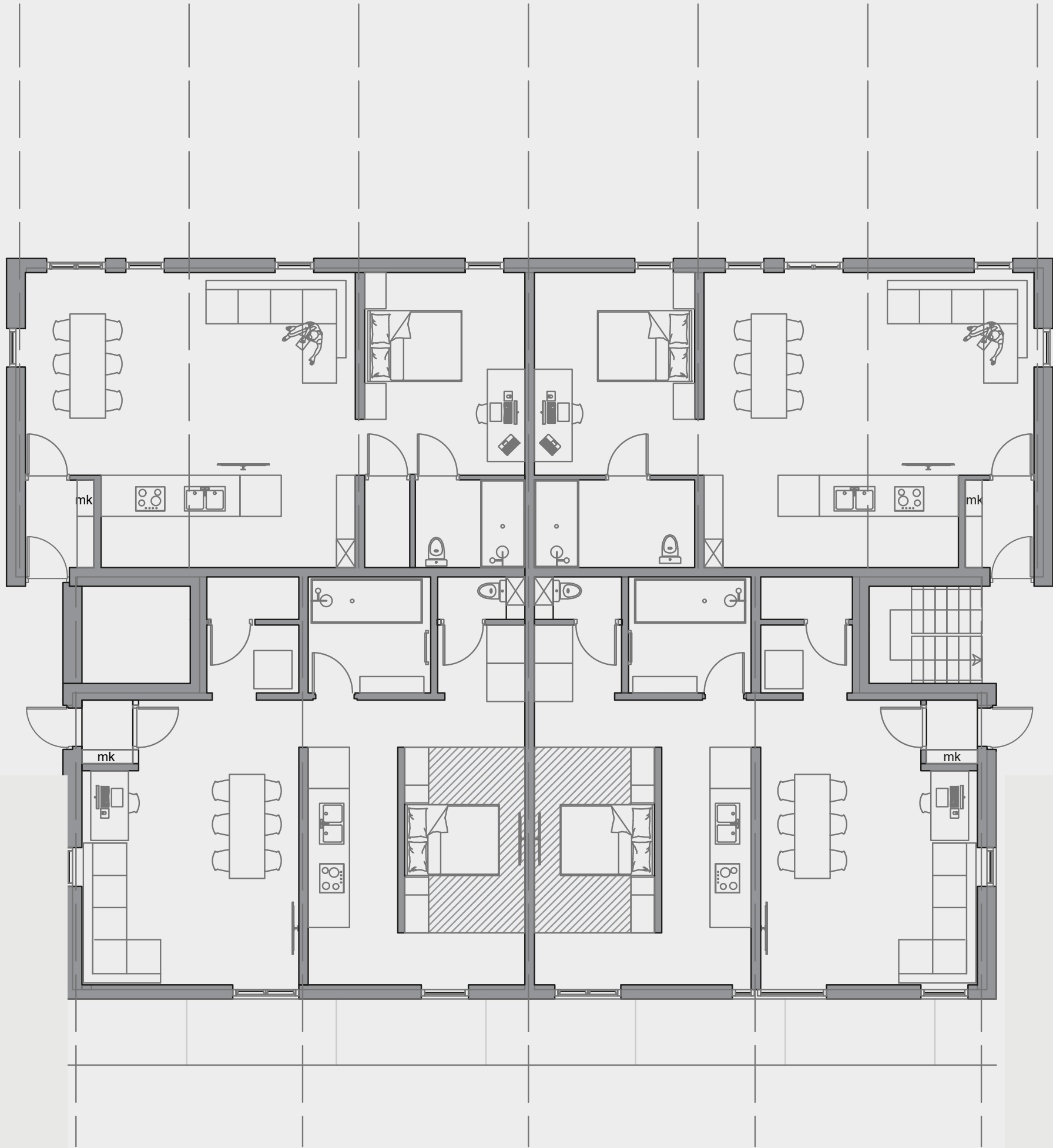


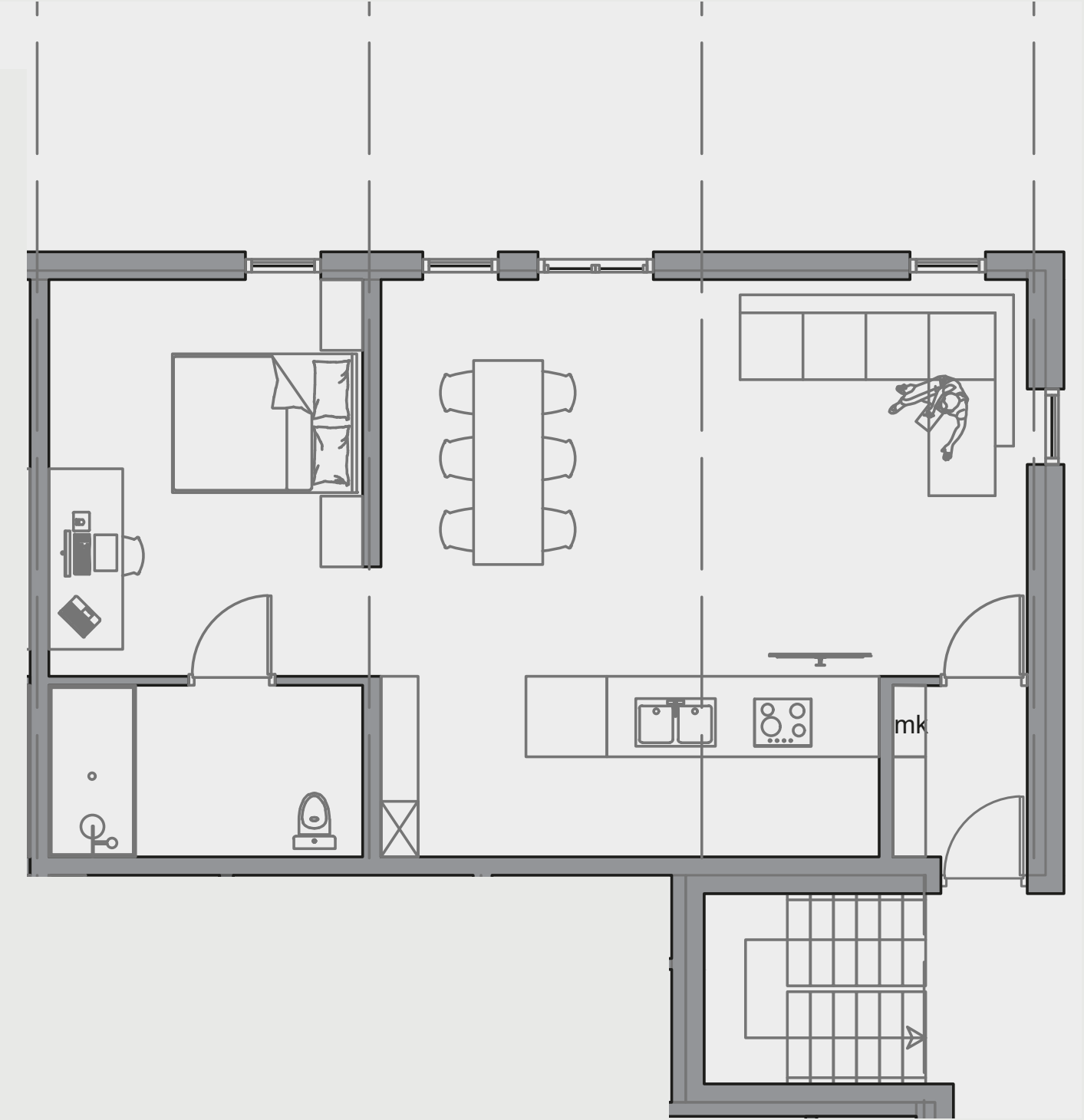


DWELLING 2



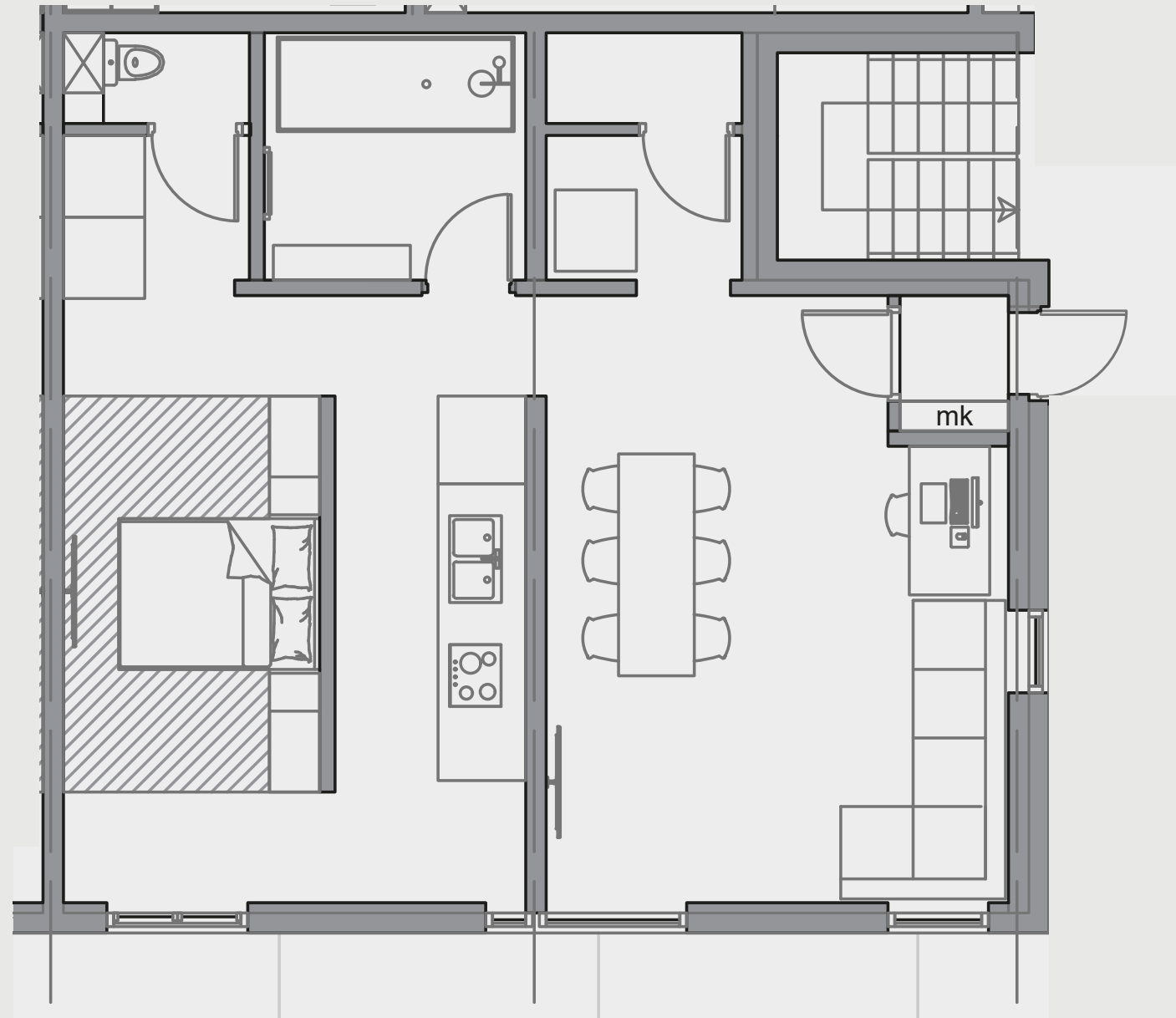
EXTENSION





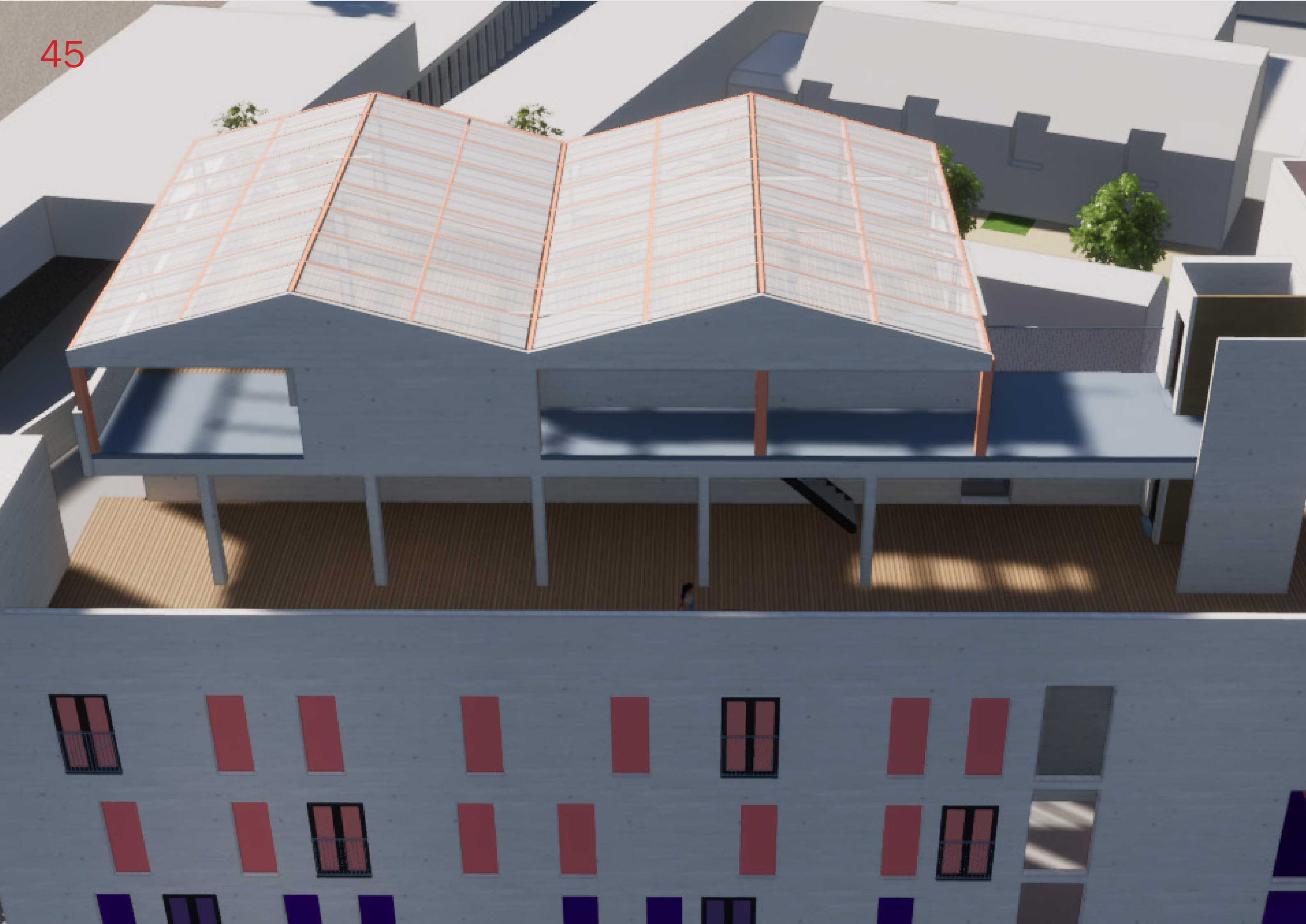
NORTH DWELLING

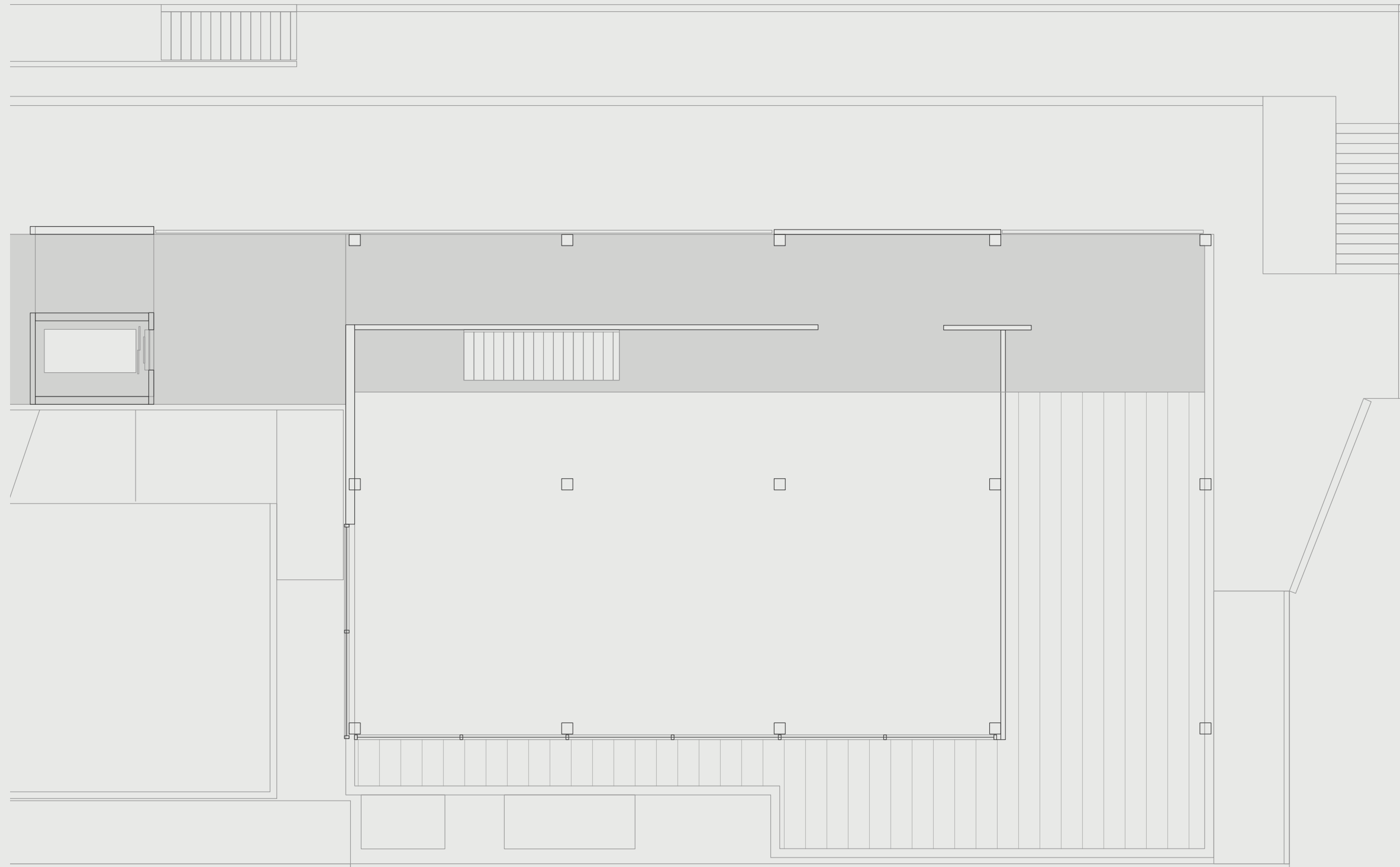




SOUTH DWELLING

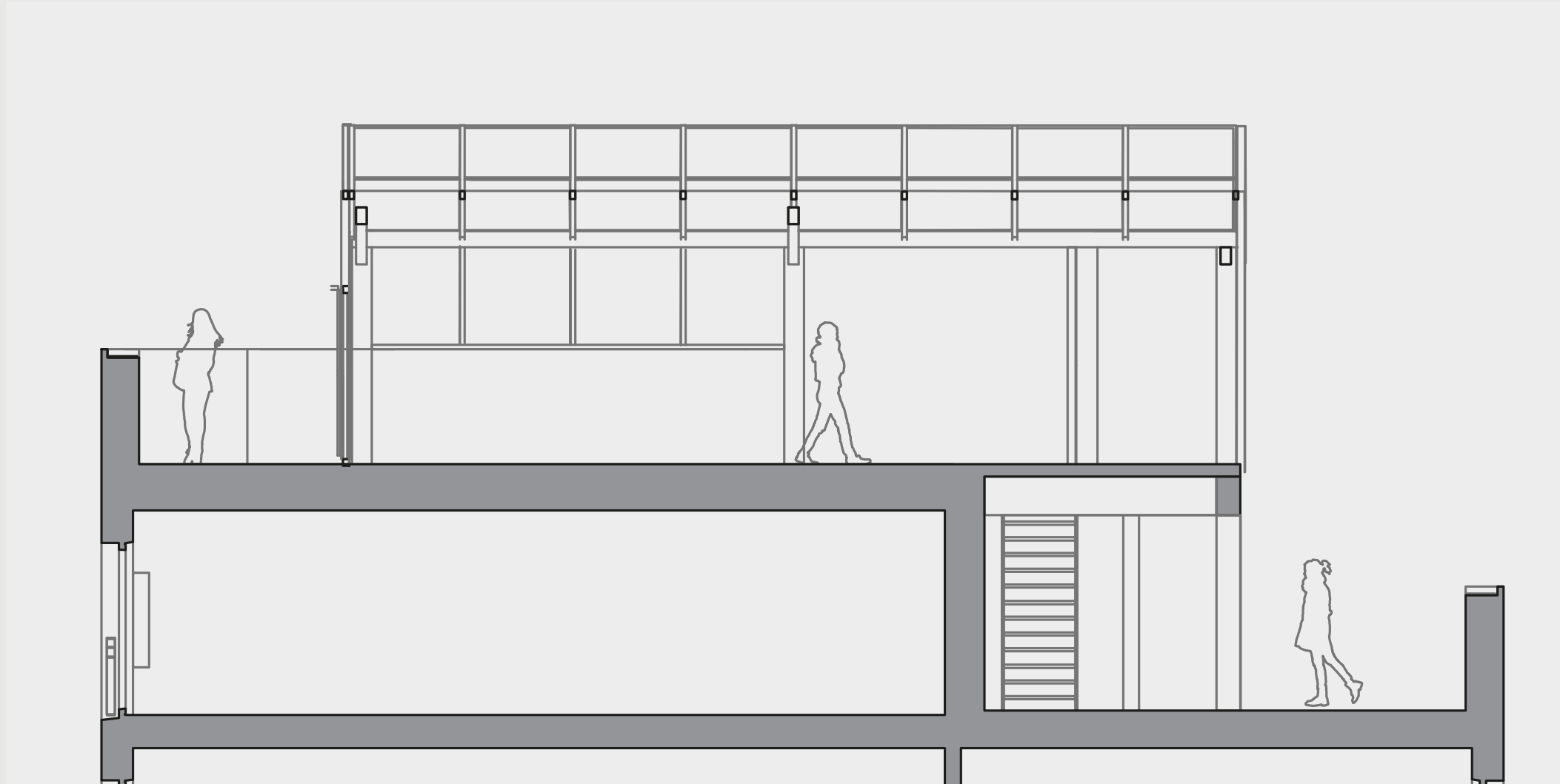






**GREENHOUSE
FLOORPAN**





GREENHOUSE SECTION

48

64% OF USED
ENERGY



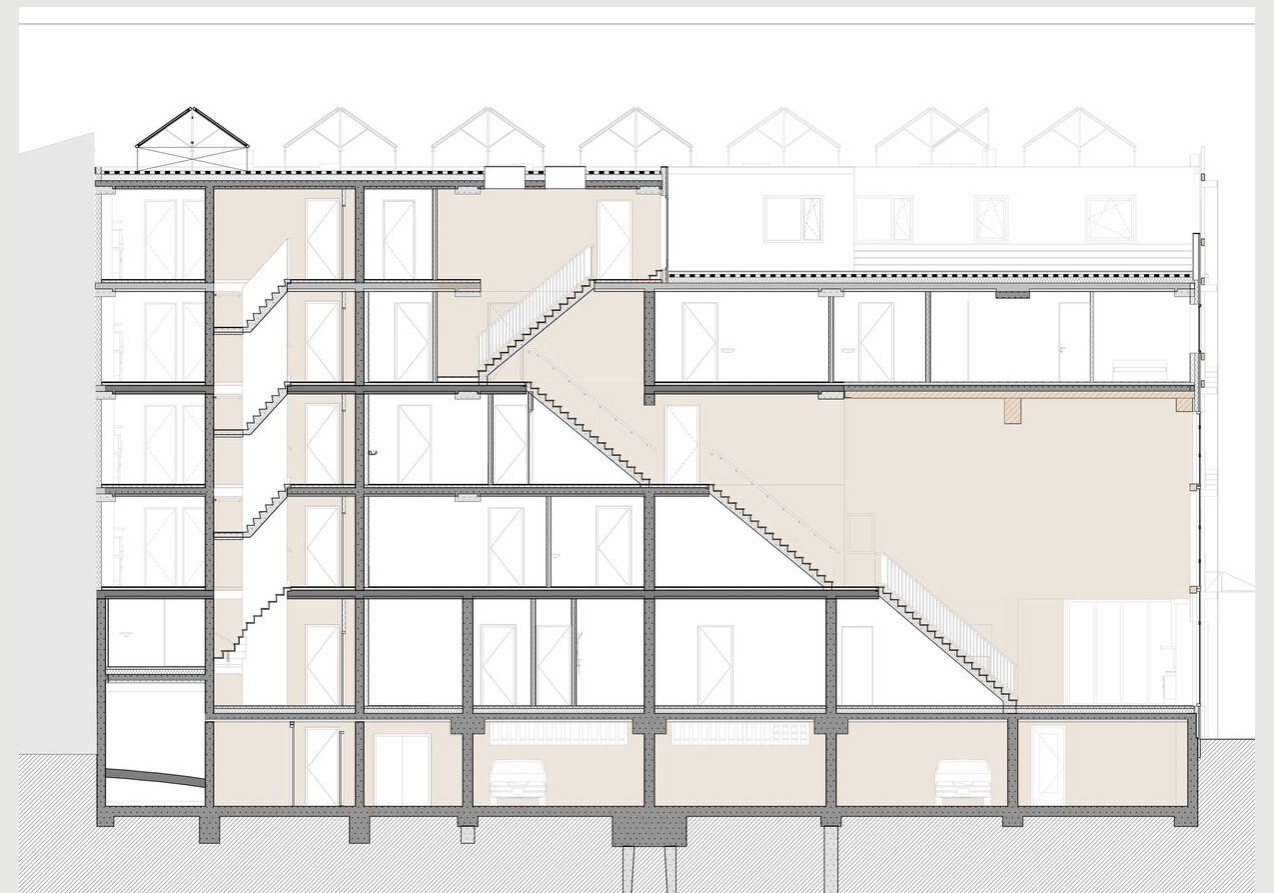
26% OF VEGETABLE
DEMAND

**PLANON INNOVATION CAMPUS
, NIJMEGEN**
by EdenParks & Gradussen Architecten



SOURCE: SMIEMANSPROJECTEN

DE WARREN HOUSING COOR- PORATION, AMSTERDAM by Natrufied Architecture



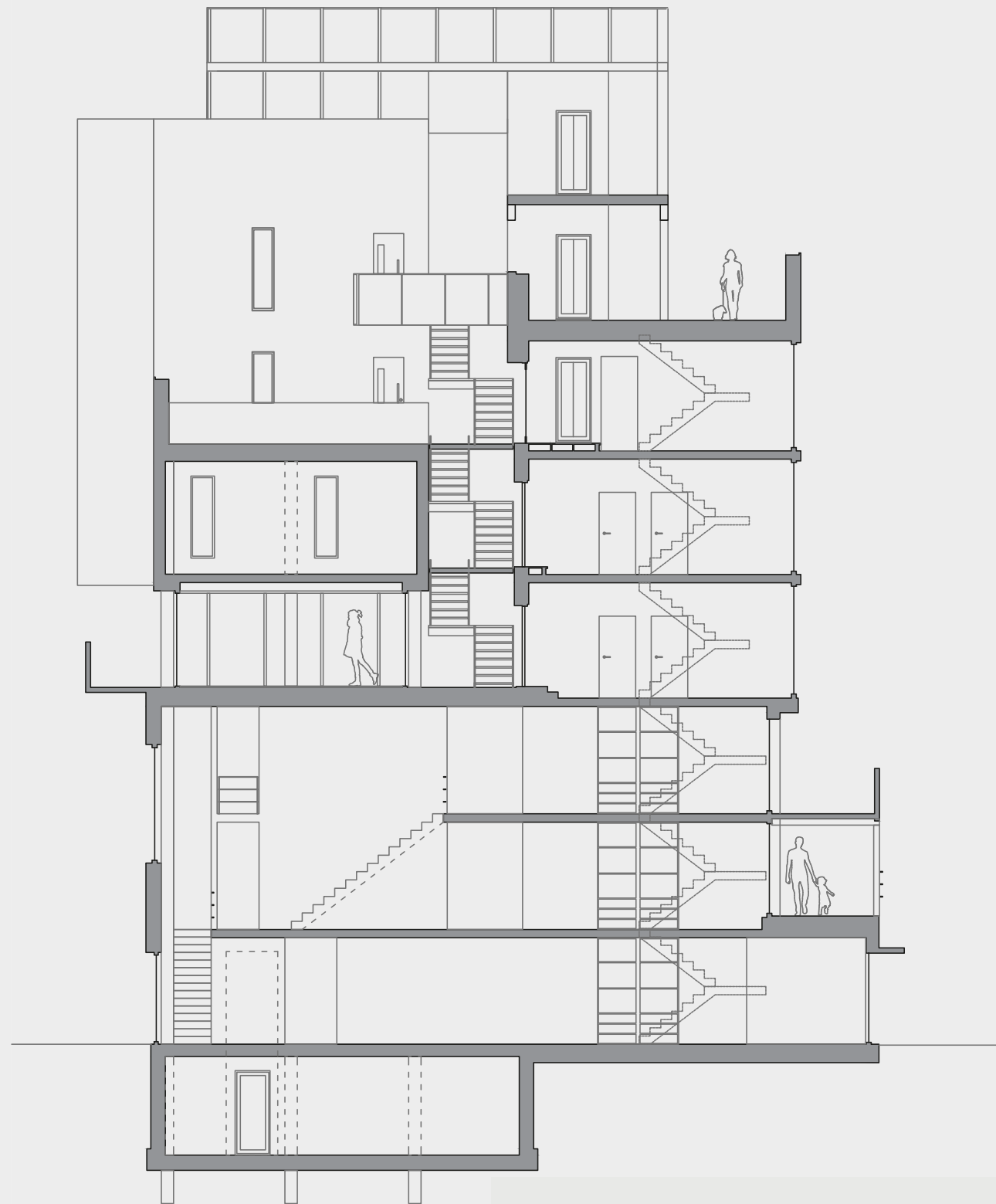
CAPITOL HILL COHOUSING , SEATTLE by Schemata Workshop





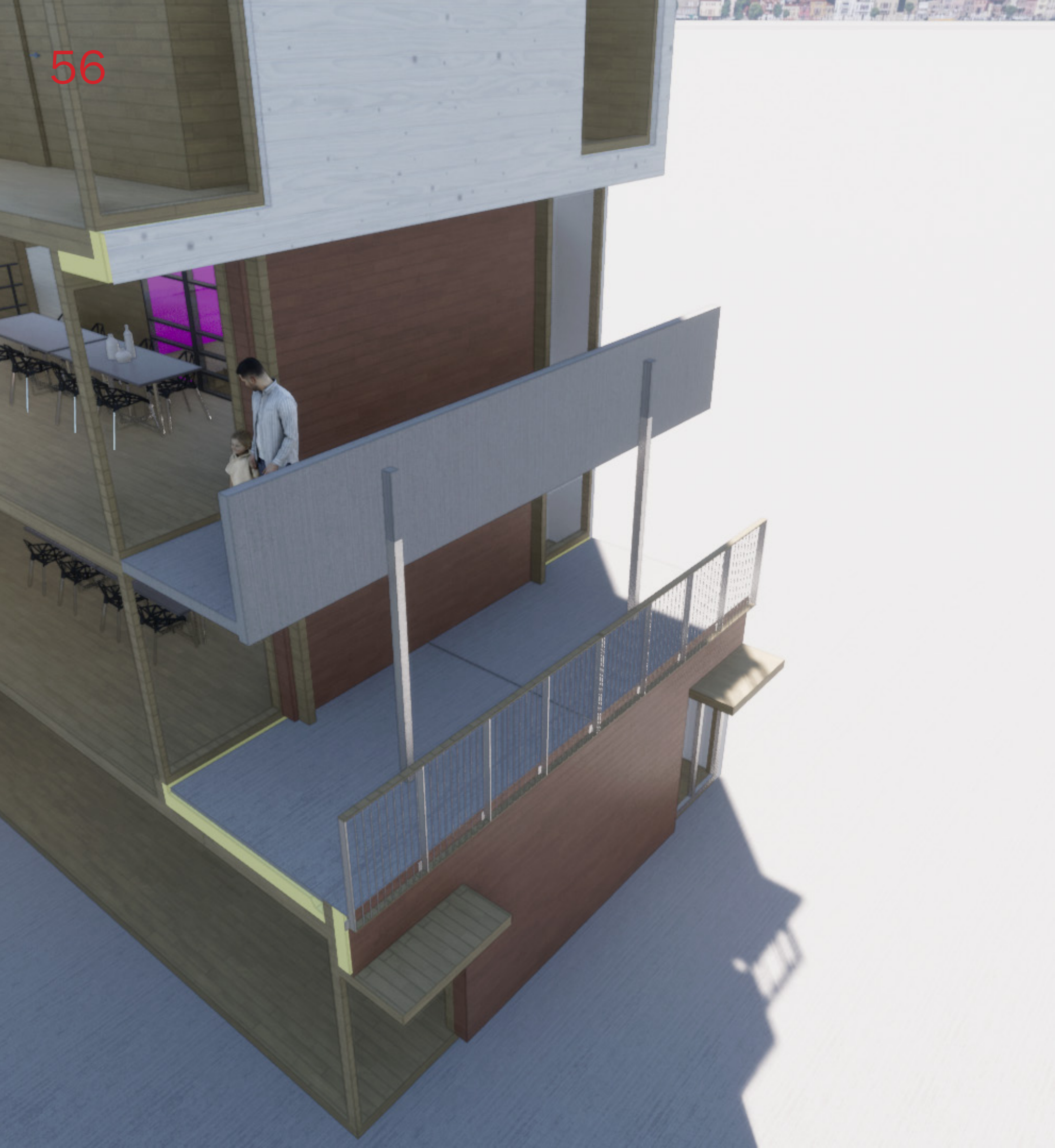


B COHOUSING



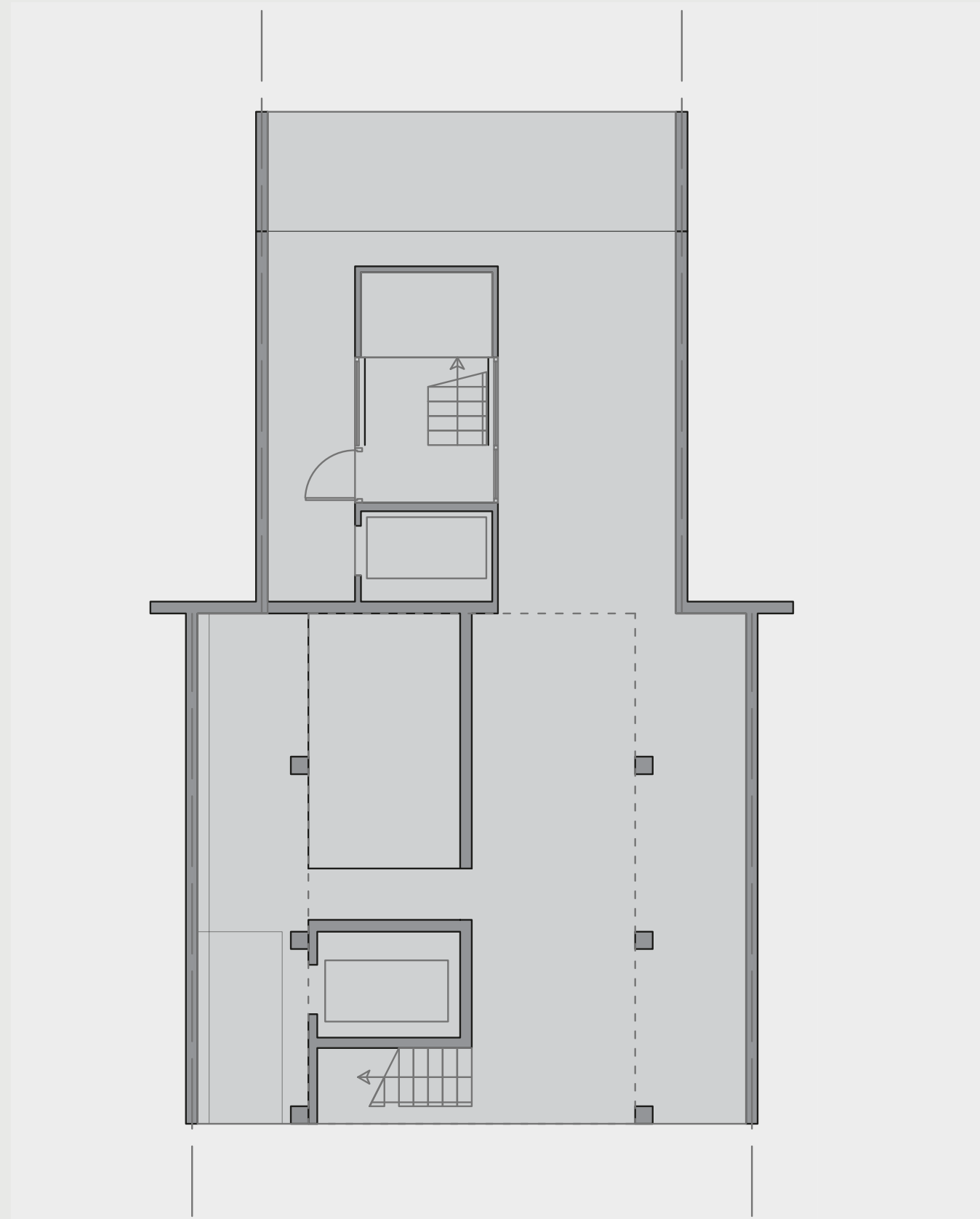
**SOUTH
ENTRANCE**





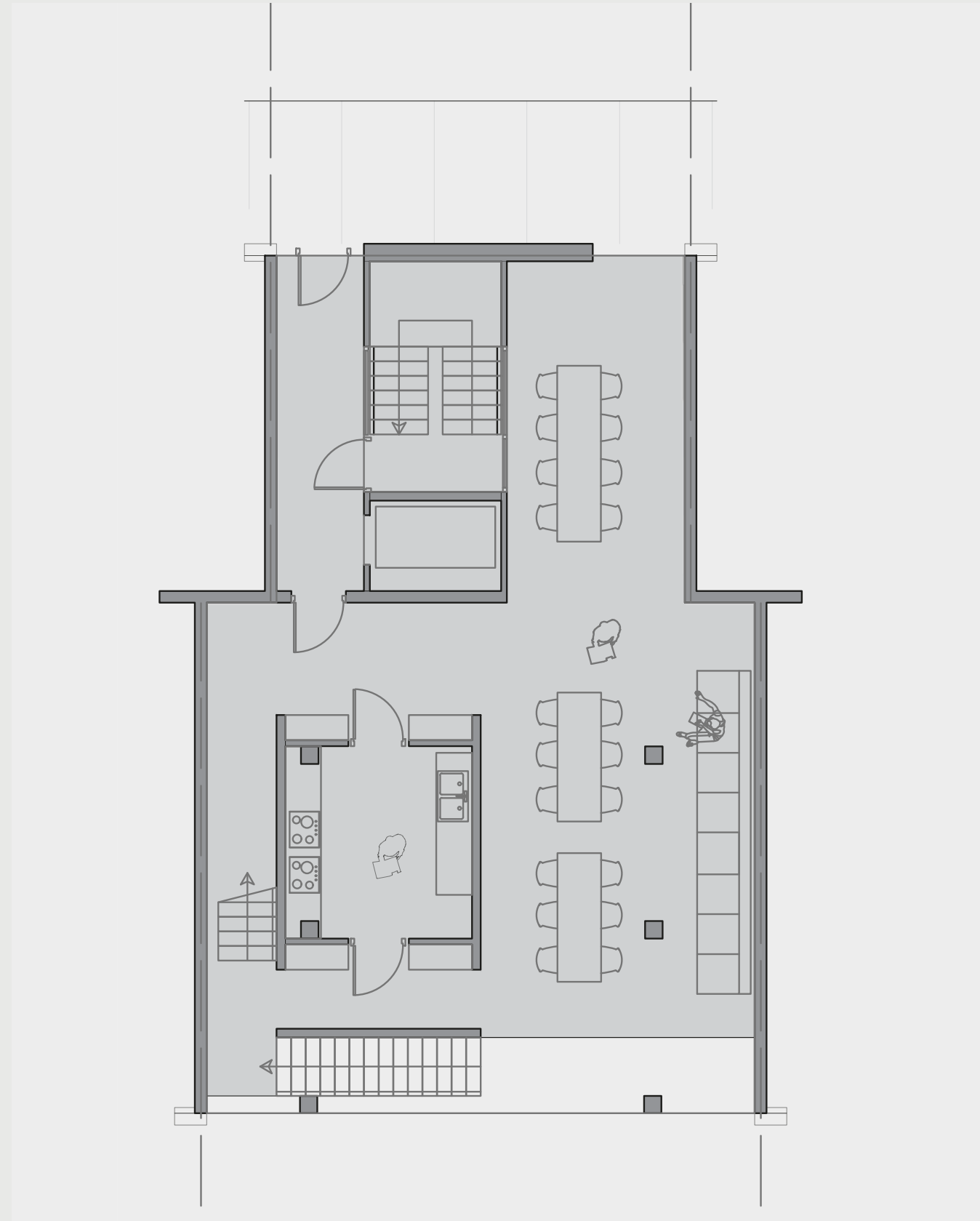
**NORTH
ENTRANCE**

GROUND FLOOR

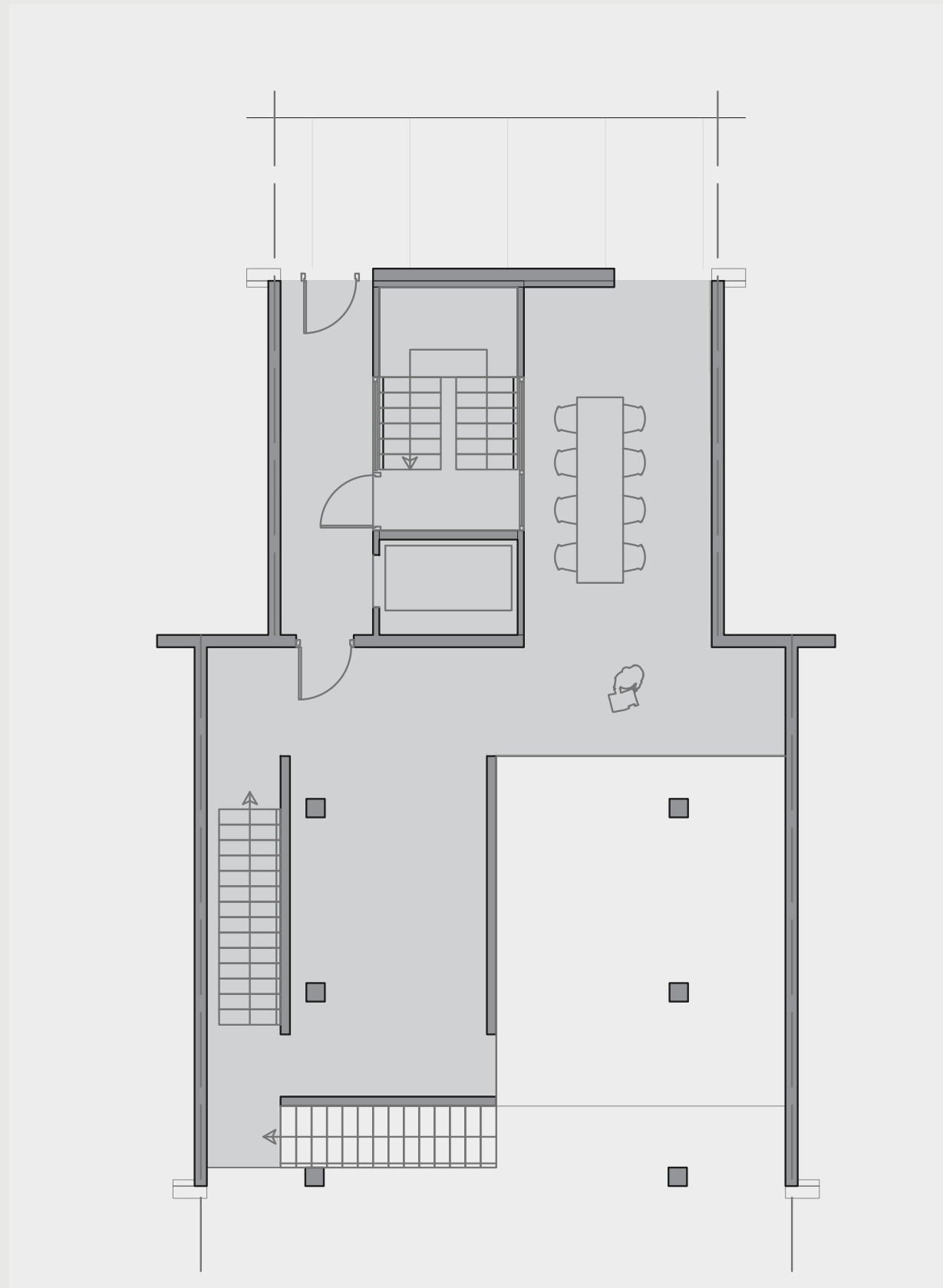




FIRST FLOOR



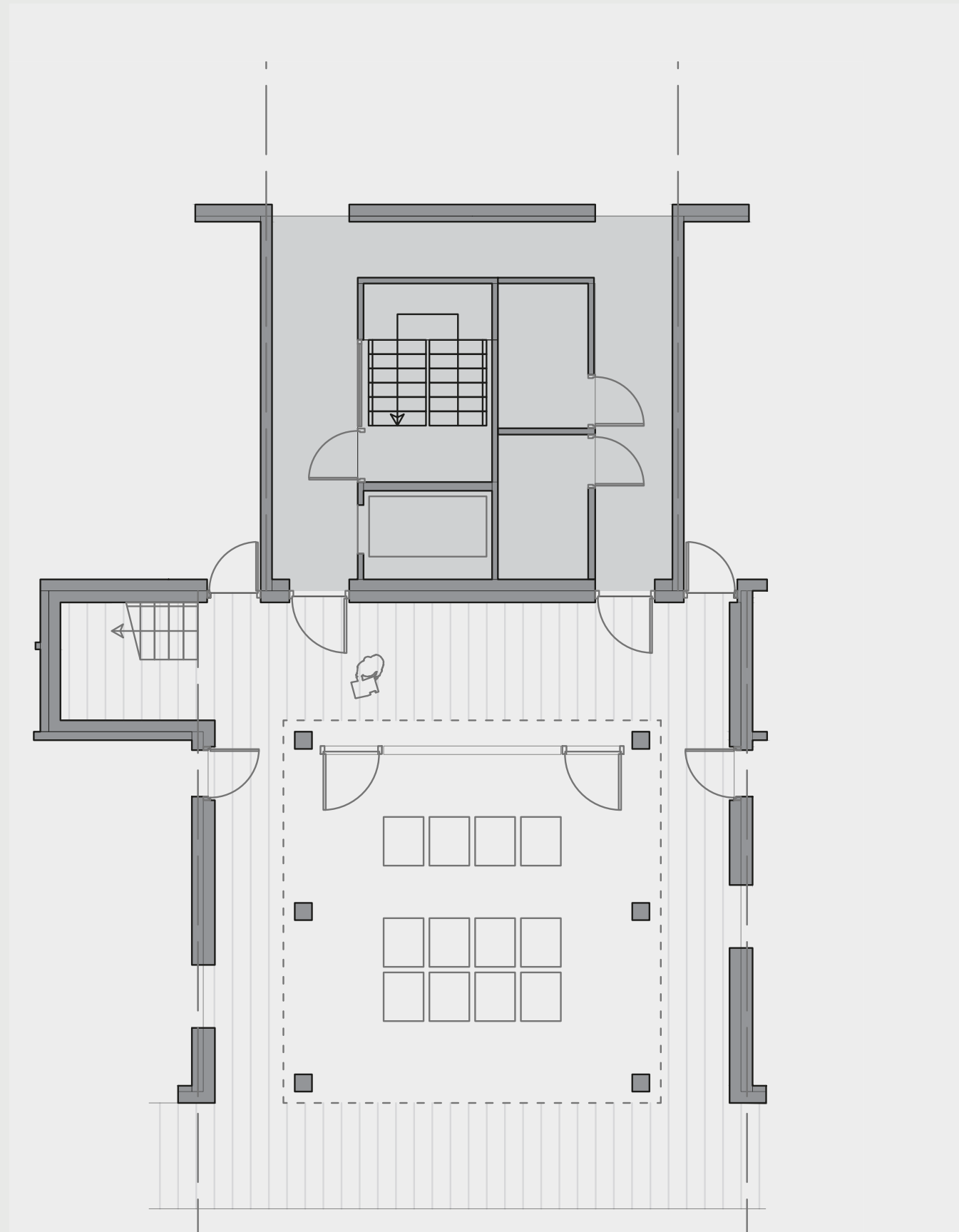
SECOND FLOOR



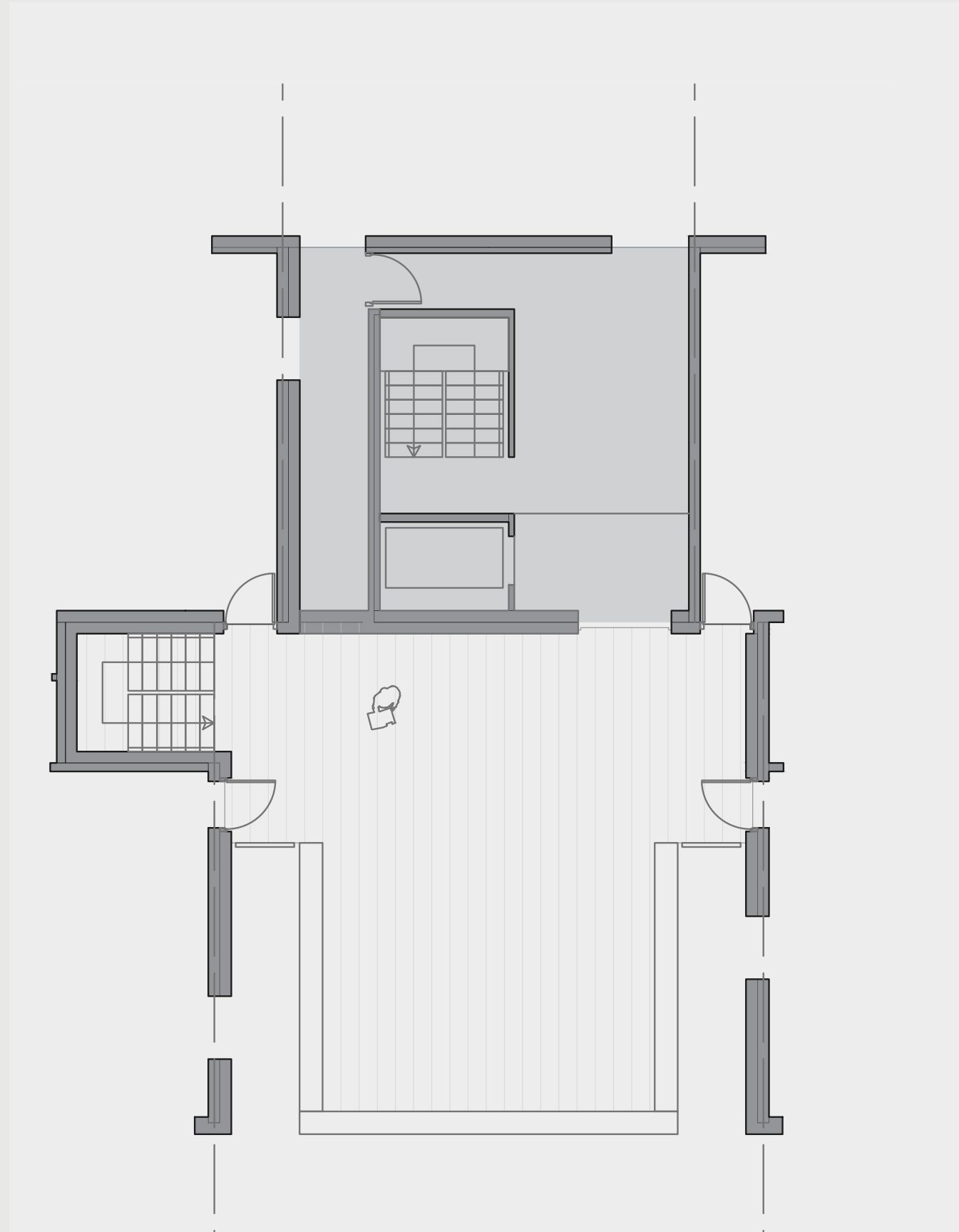




THIRD FLOOR

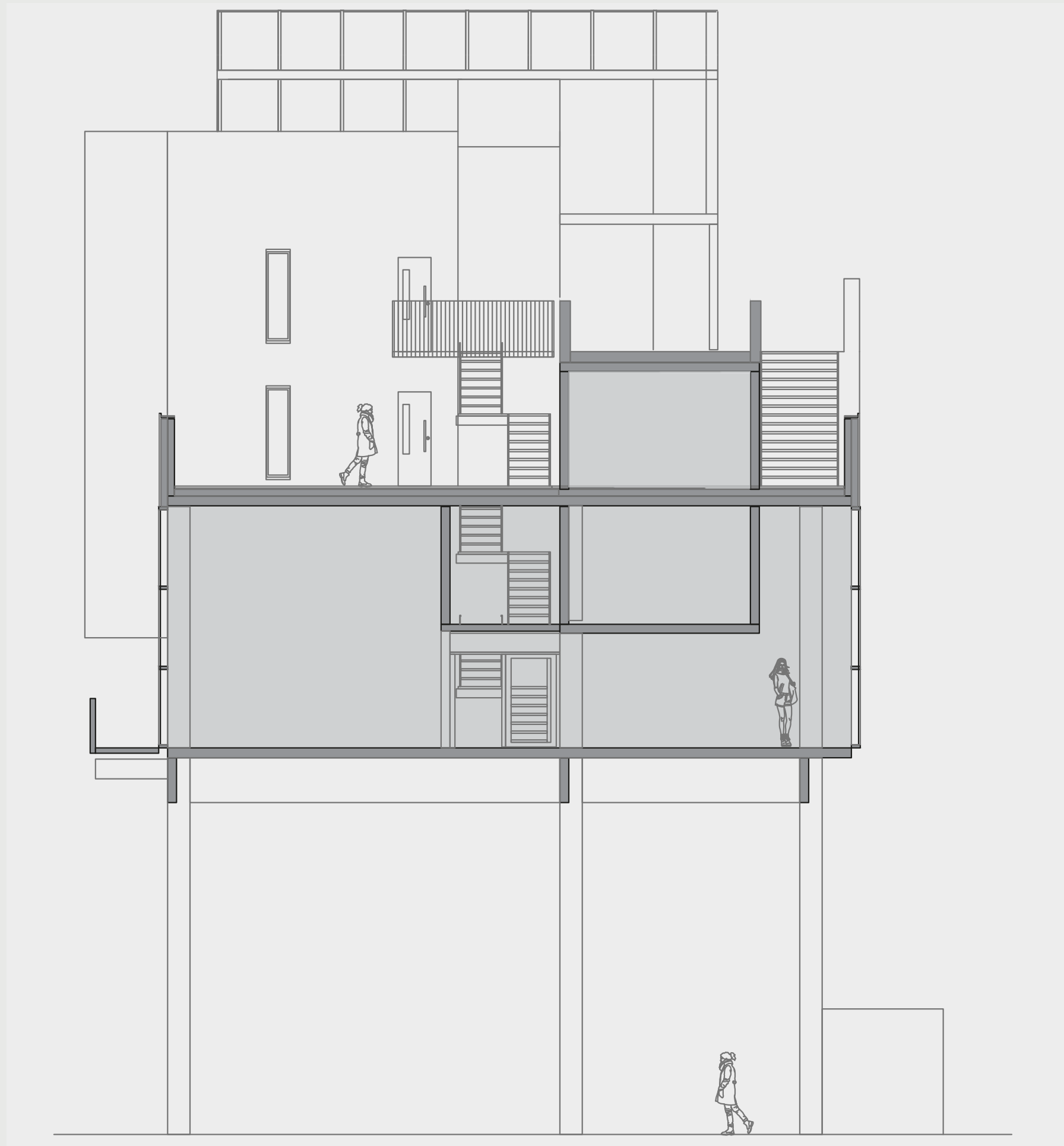


FIFTH FLOOR

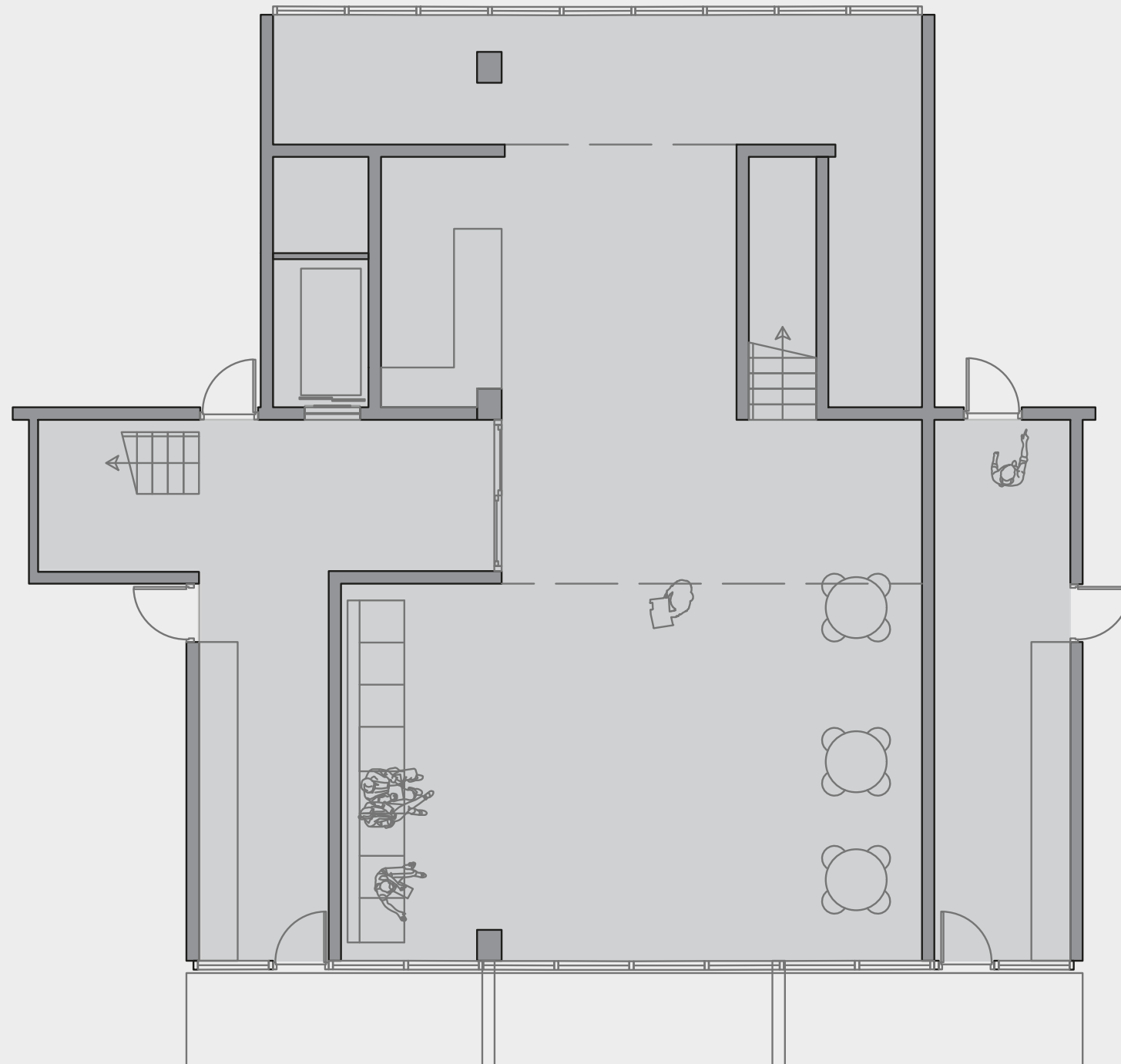


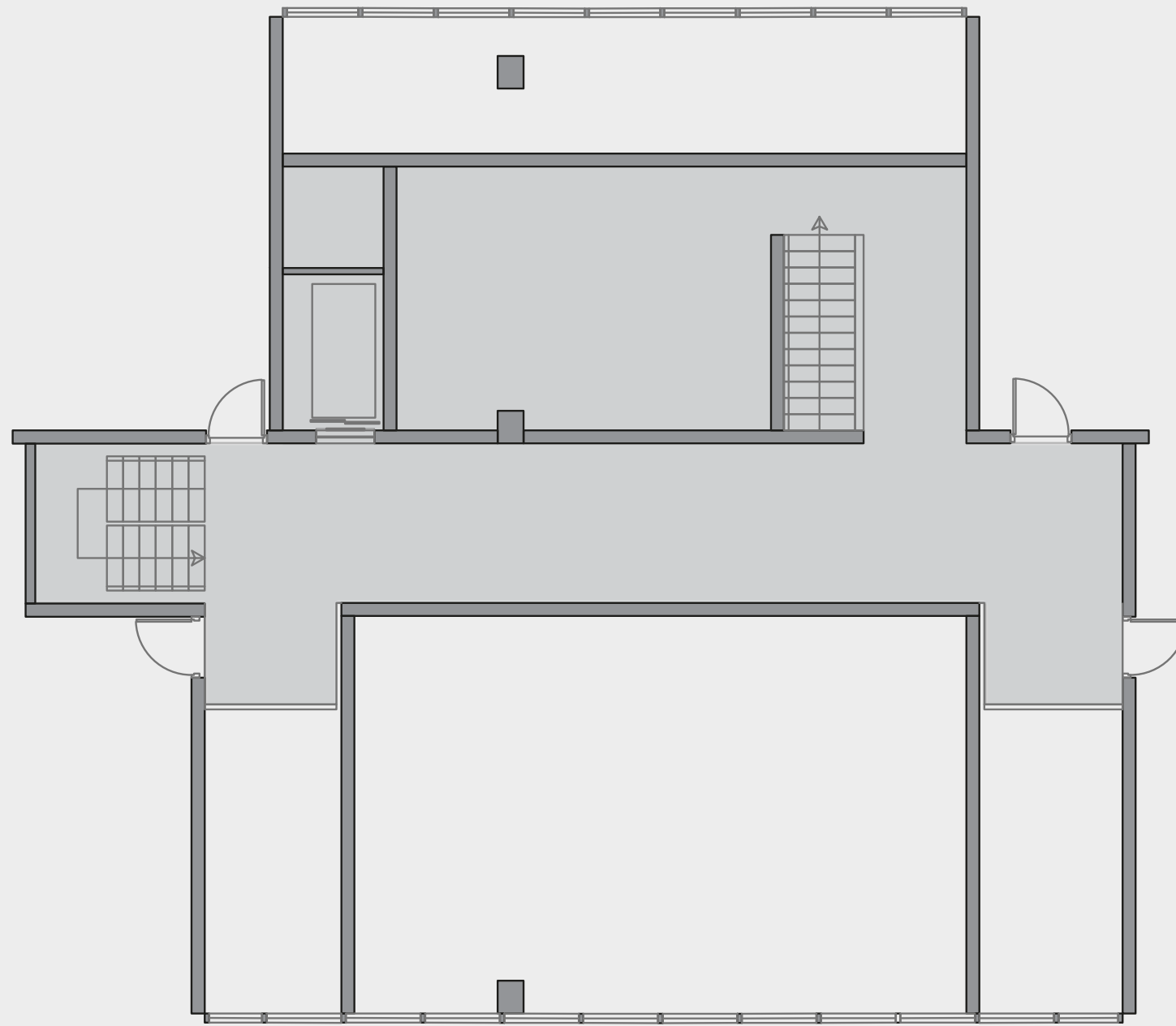


C
EVENT SPACE



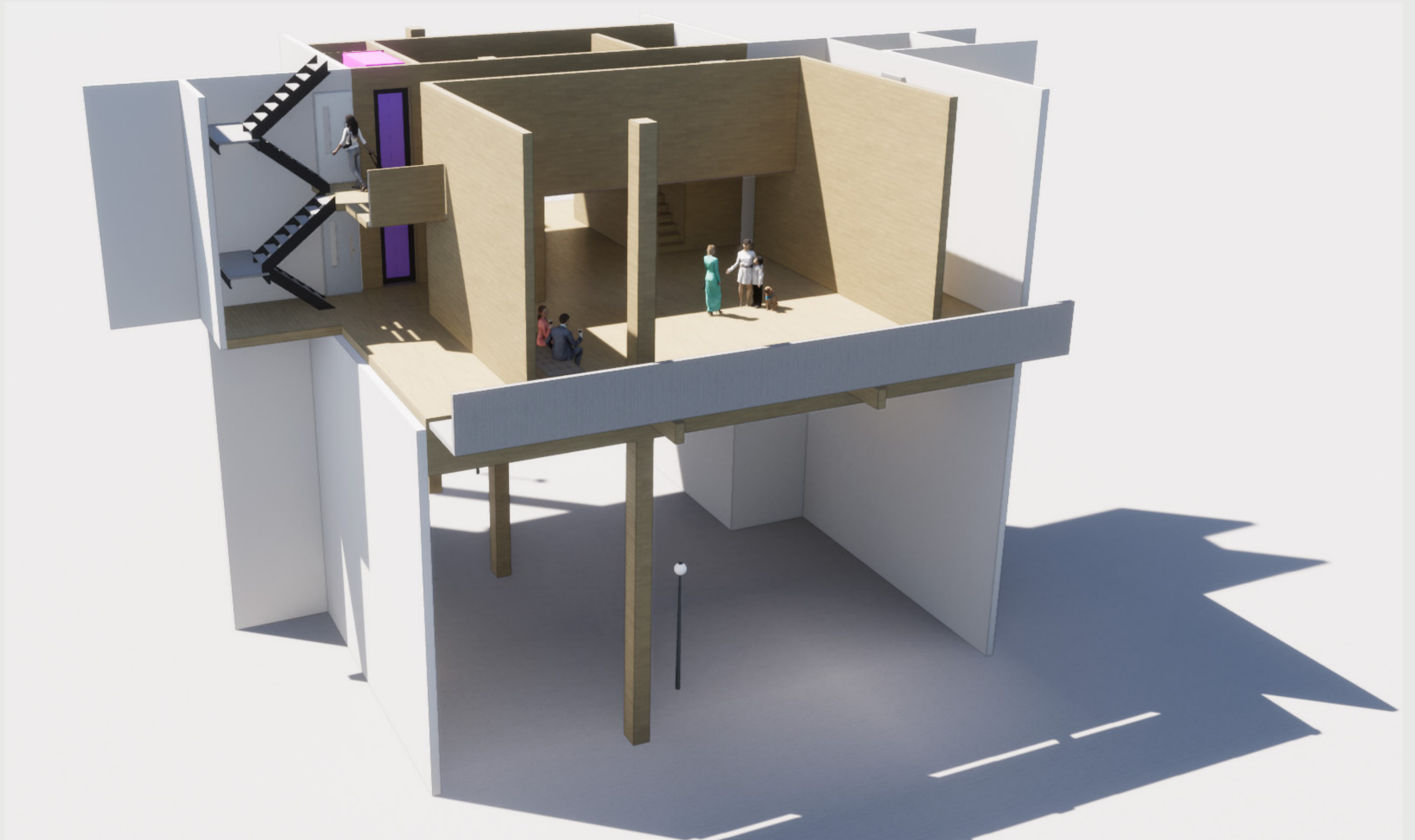
THIRD FLOOR

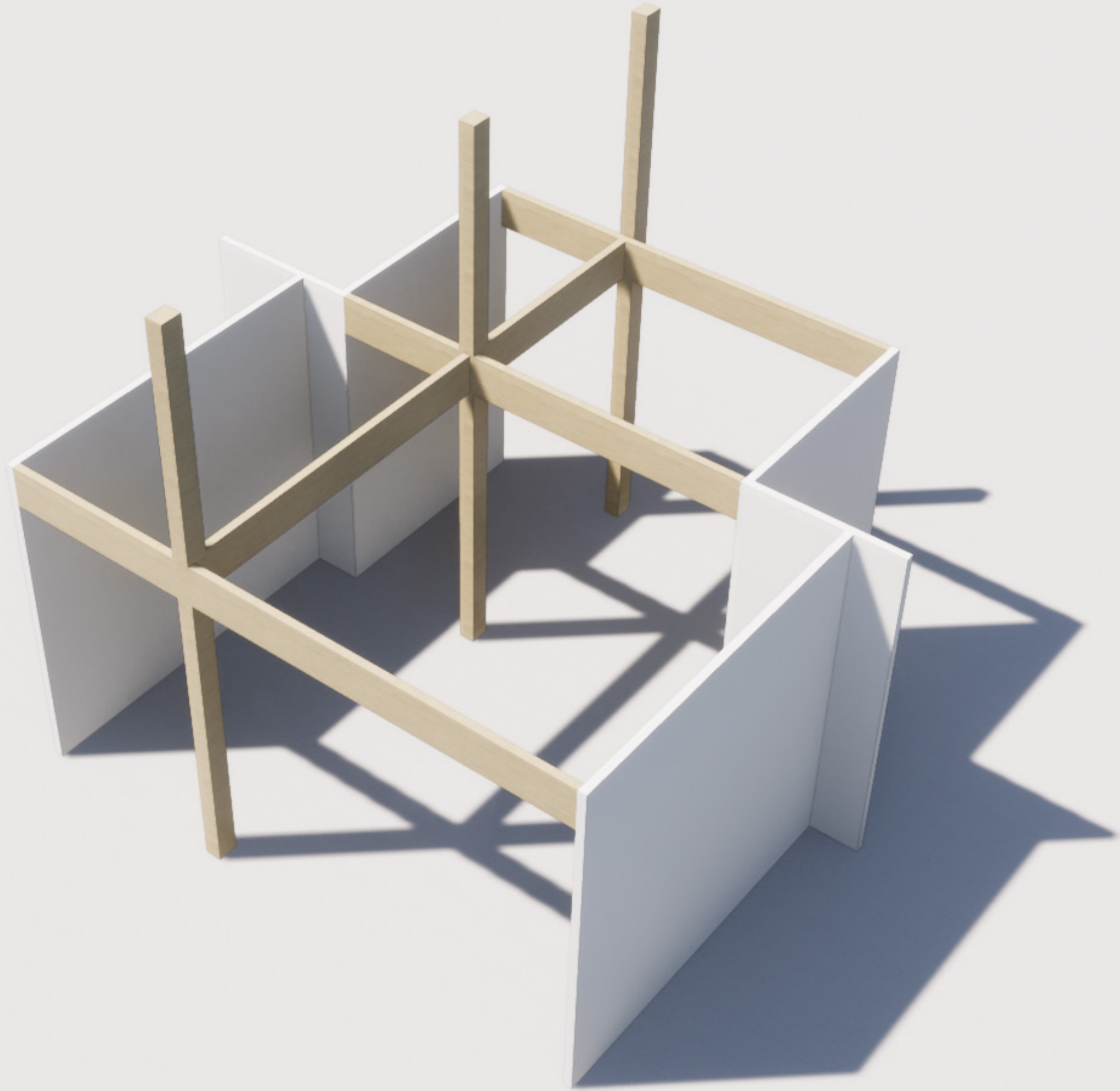




FOURTH FLOOR

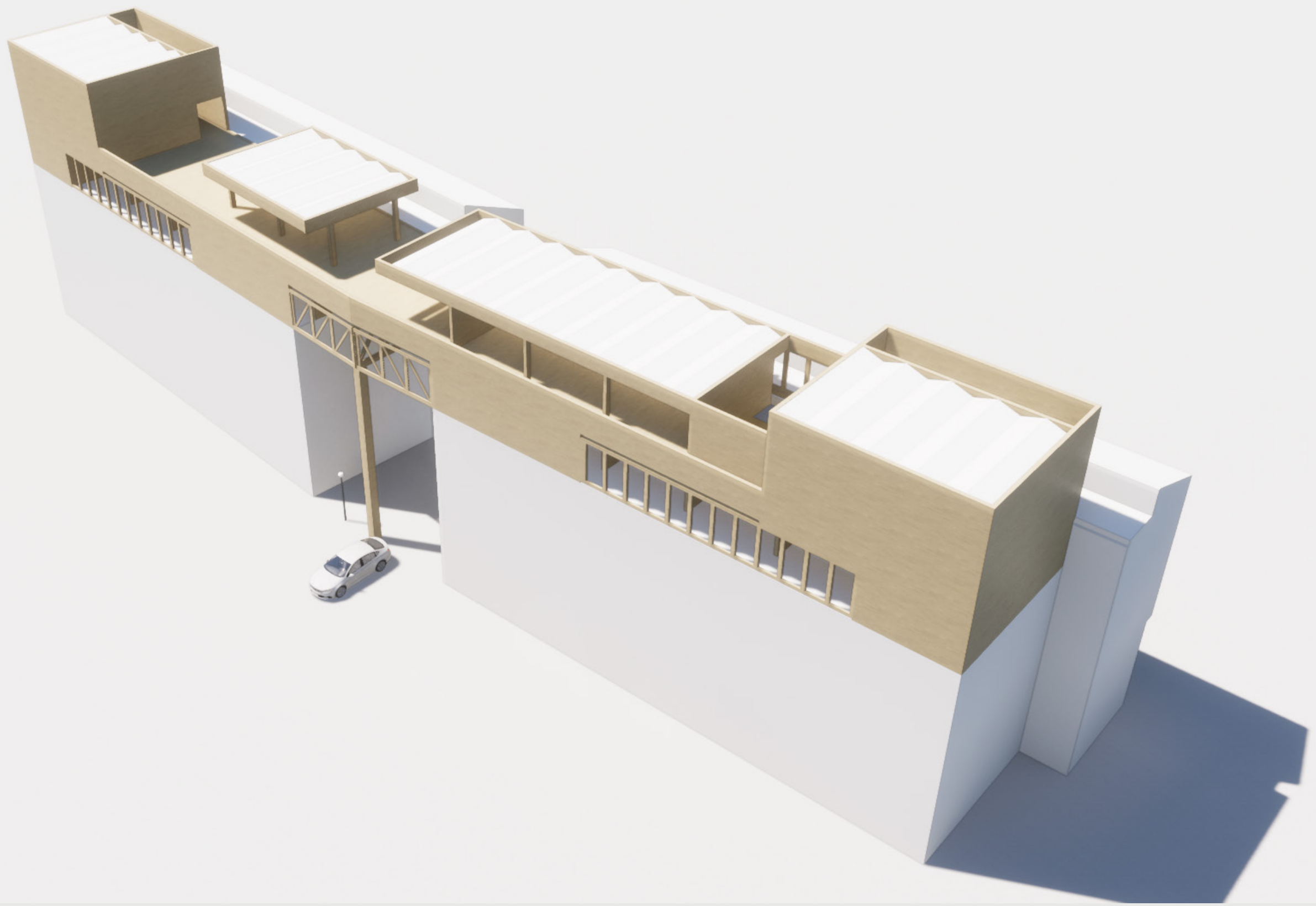


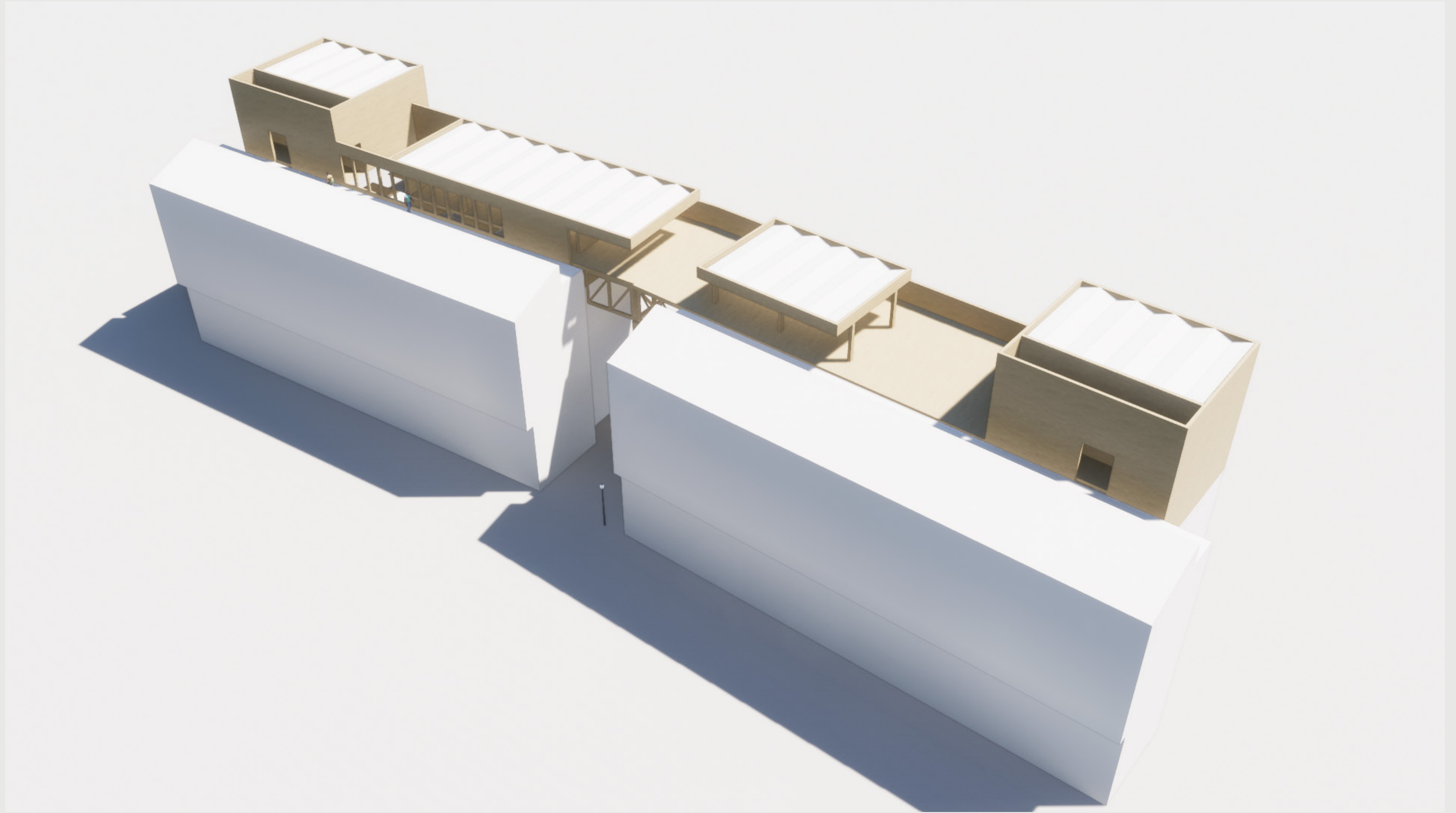


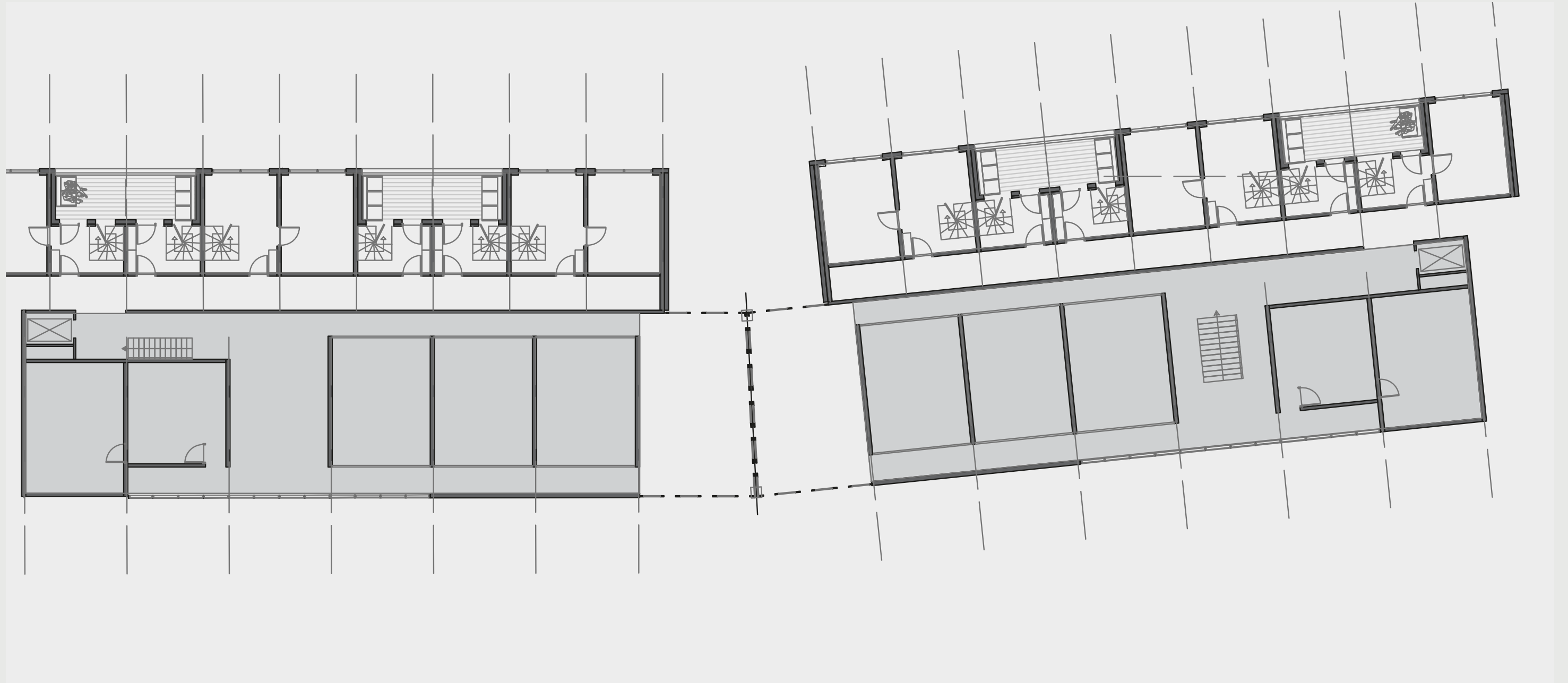




D
SPORTS

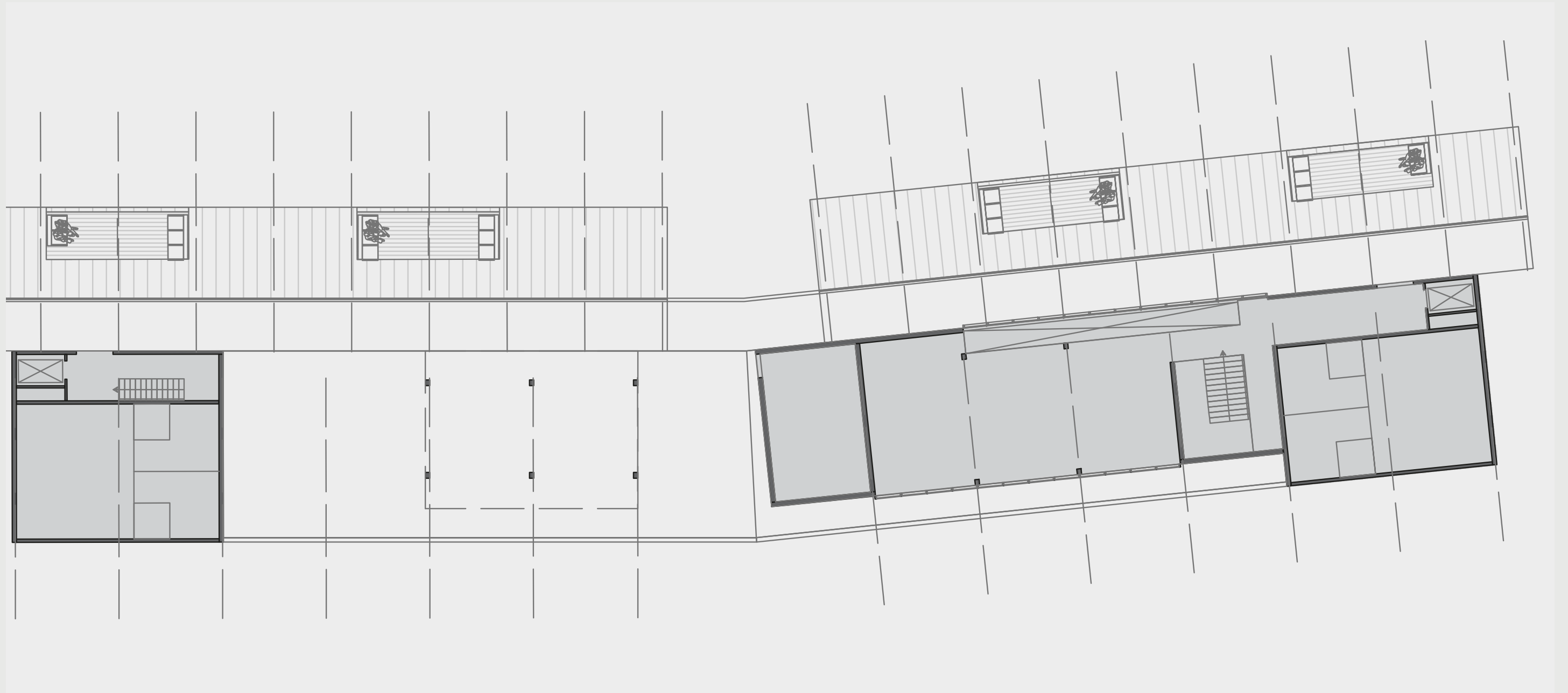






FOURTH FLOOR

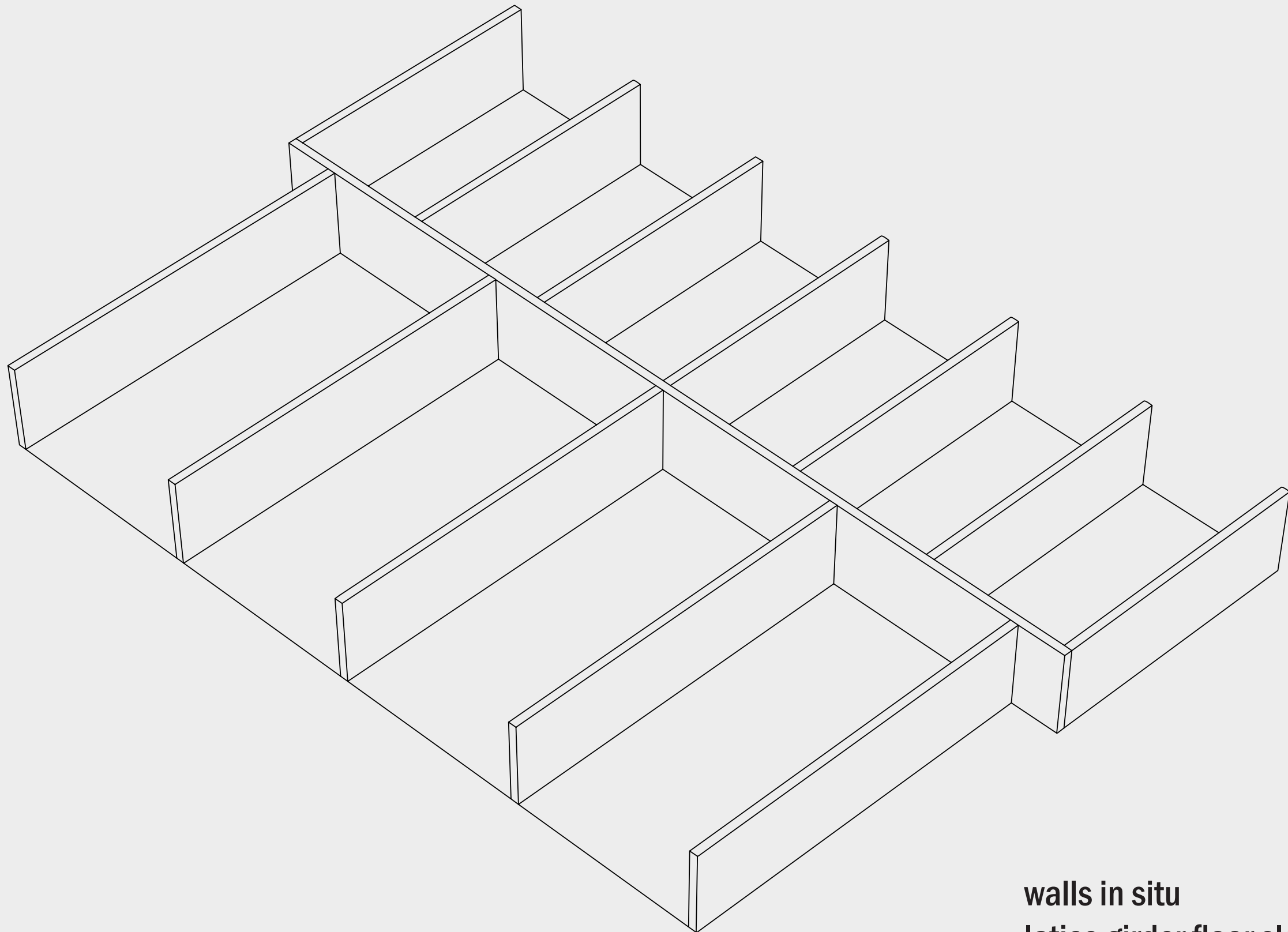




FIFTH FLOOR

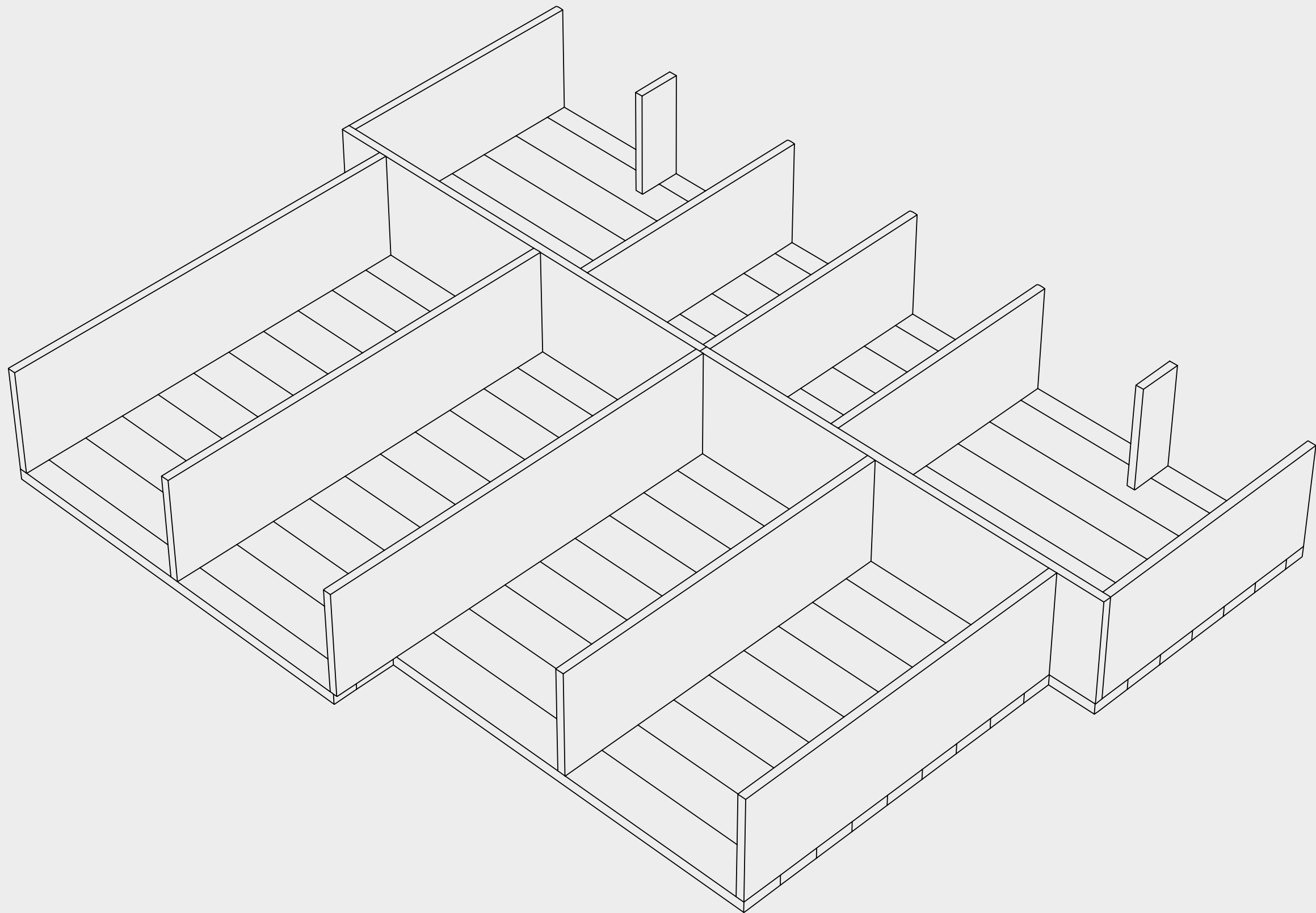


76 BOTTOM STRUCTURE



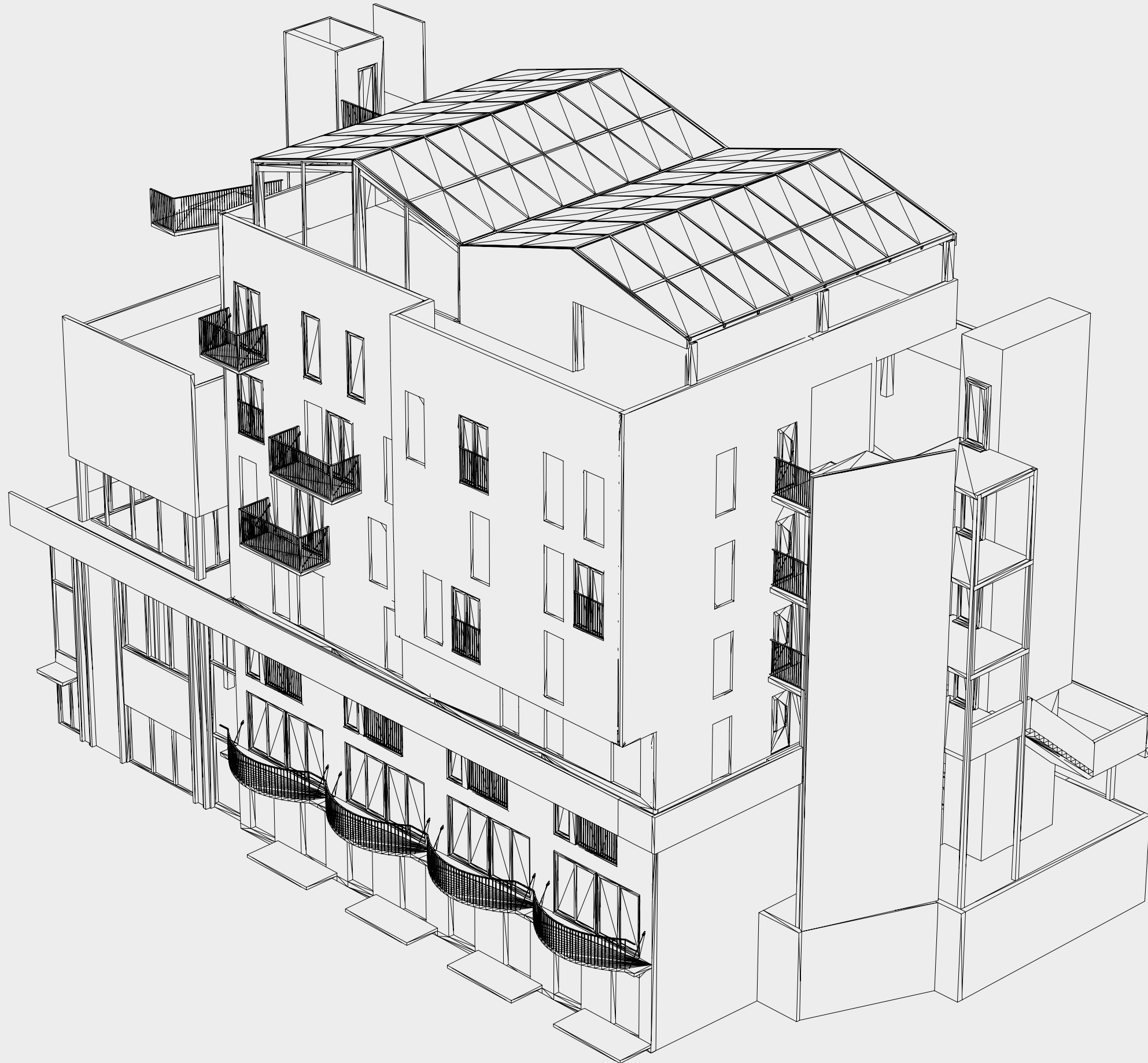
walls in situ
lattice girder floor slabs

77 EXTENSION

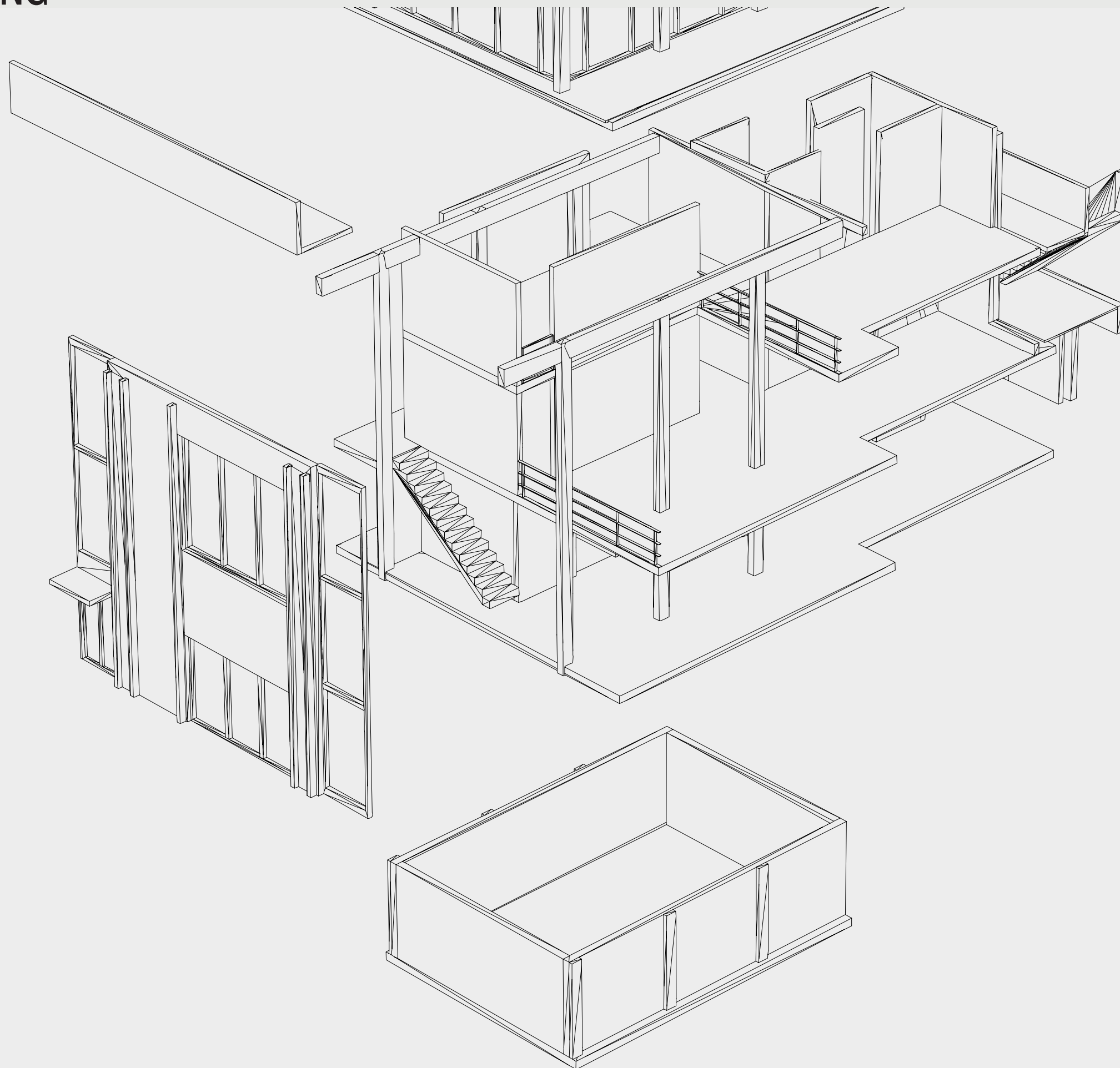


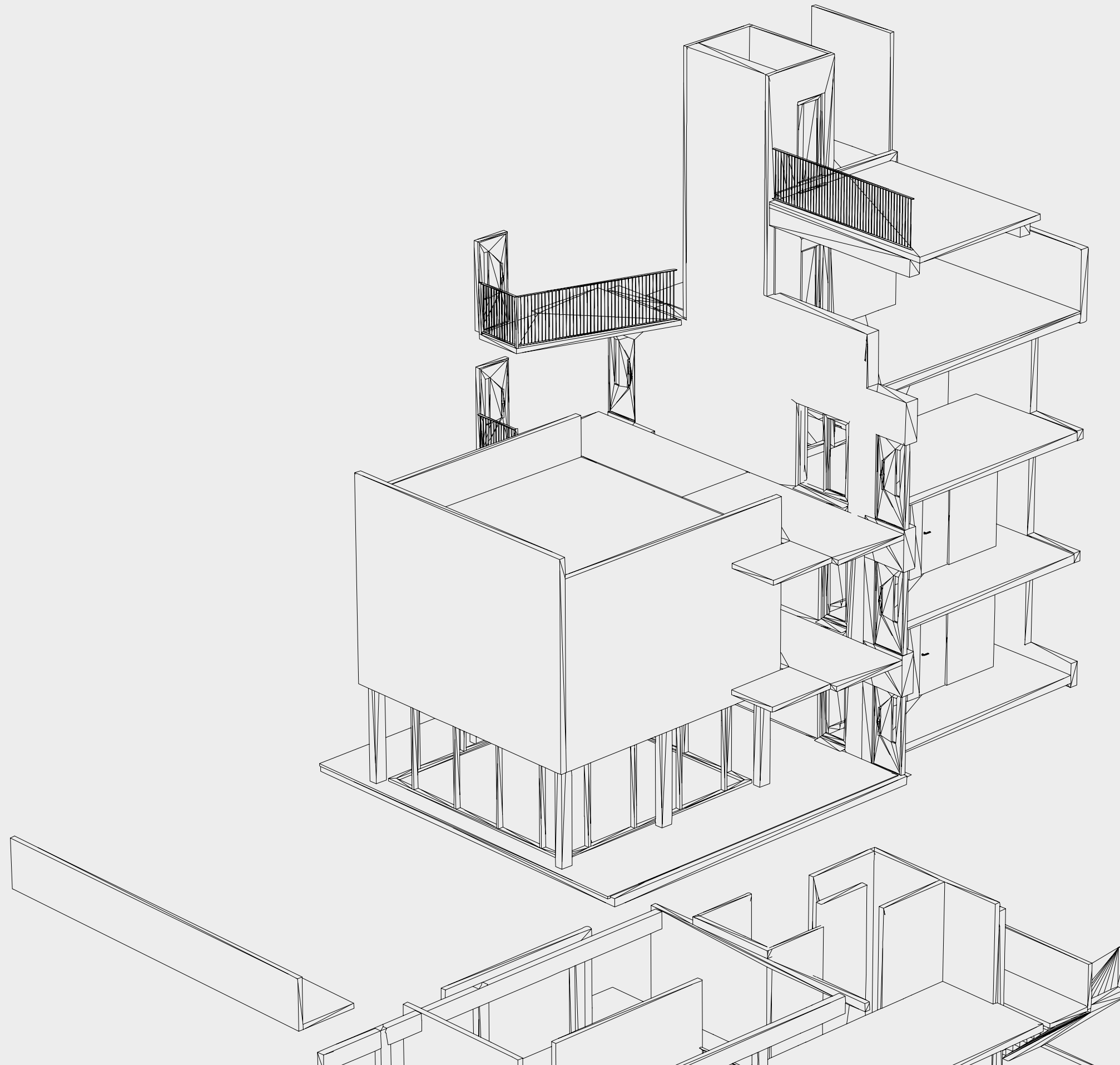
clt
lignatur

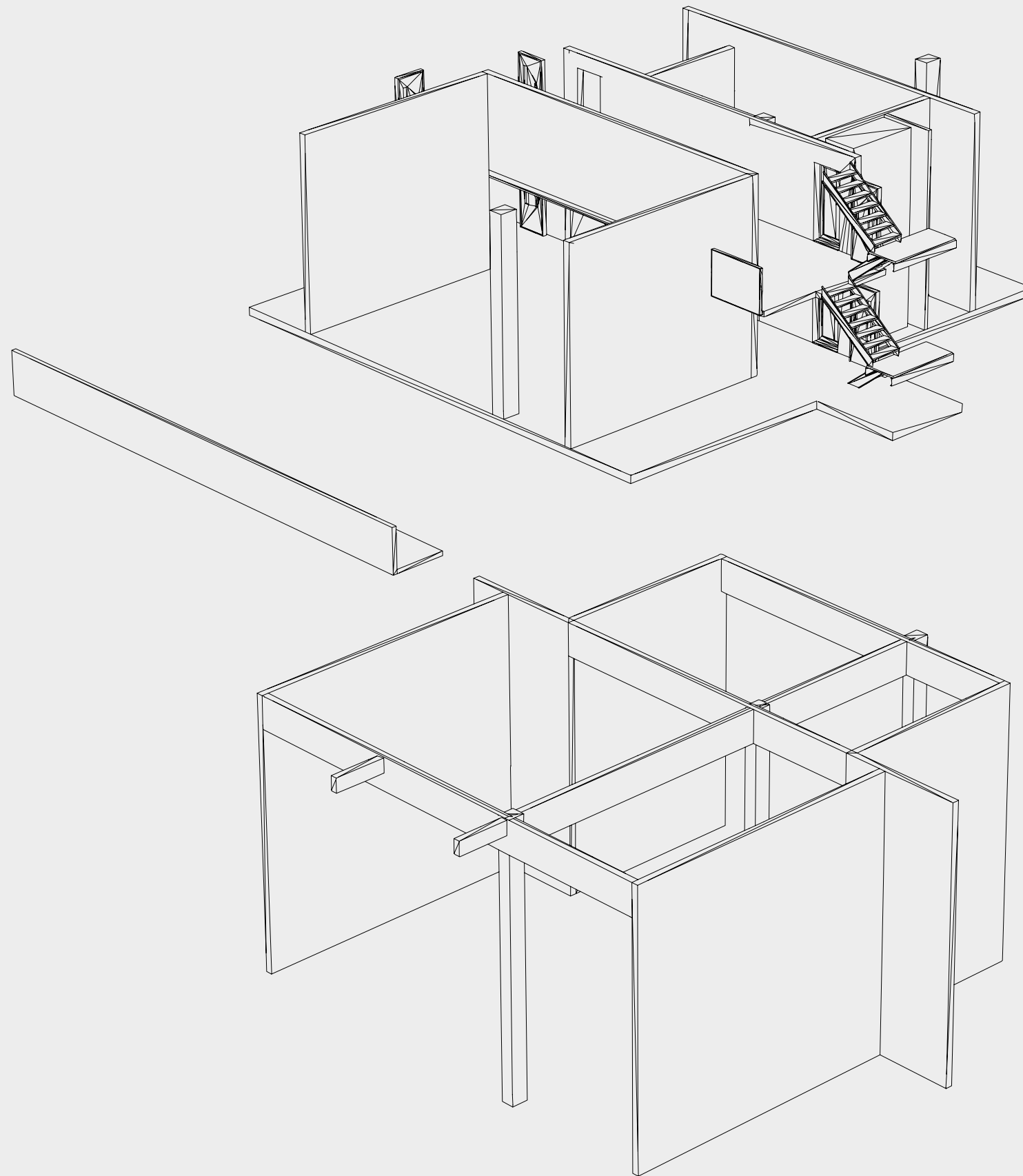
78 LIVING UNIT + COHOUSING



79 COHOUSING

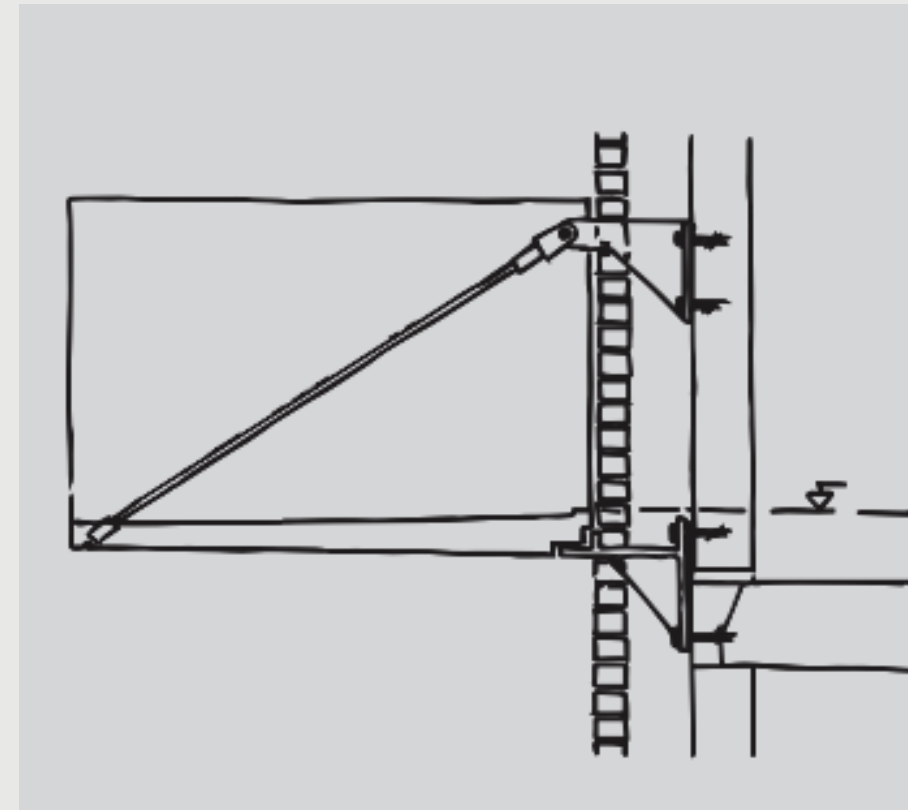
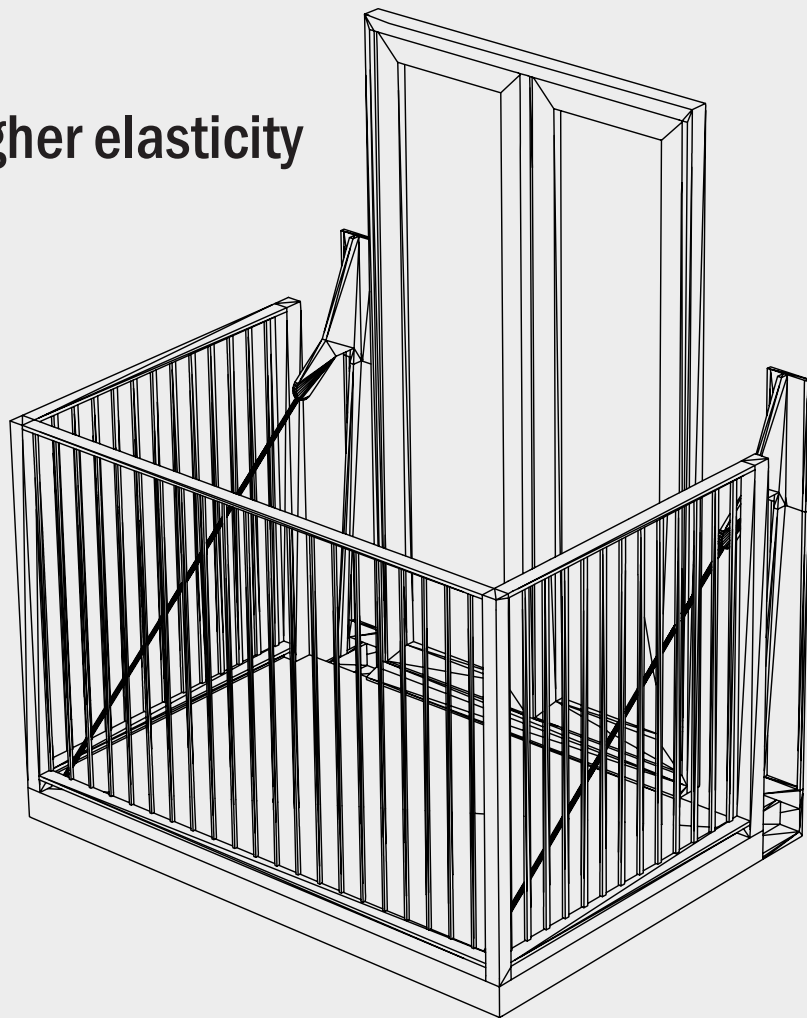






82 UHPC BALCONY

lighter and higher elasticity



braces and tension rods

83 FACADE PERFORMANCE

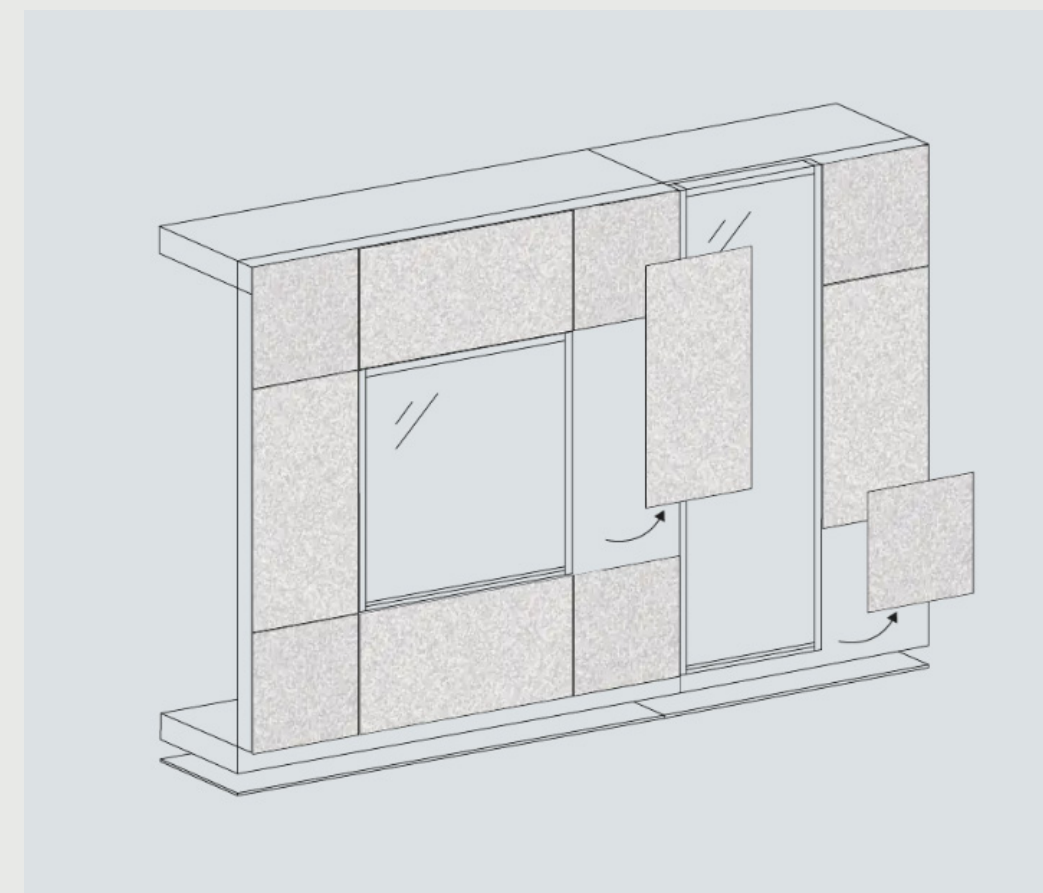


0.16 W/(m²K)
N << 0.22 minimum

84 SOLARIX

ENERGY GENERATION

Average Power:		
(reference: Helmond Solarix facade)	52.6	kWh/m ²
Surface per living Unit edge	43,3	m ²
Surface per living Unit	178	m ²
Maximum energy generation per unit	9363	kWh
only edge	2277	kWh



SOURCE: SOLARIX-SOLAR



European Standard EN 13501-1		
Euroklasse	Bijdrage aan brand	Praktijk
A1	Geen enkele bijdrage	Niet brandbaar
A2	Nauwelijks bijdrage	Praktisch niet brandbaar
B	Erg beperkte bijdrage	Heel moeilijk brandbaar
C	Bijdrage	Brandbaar
D	Hoge bijdrage	Goed brandbaar
E	Zeer hoge bijdrage	Zeer brandbaar
F	Gevaarlijke bijdrage	Uiterst brandbaar

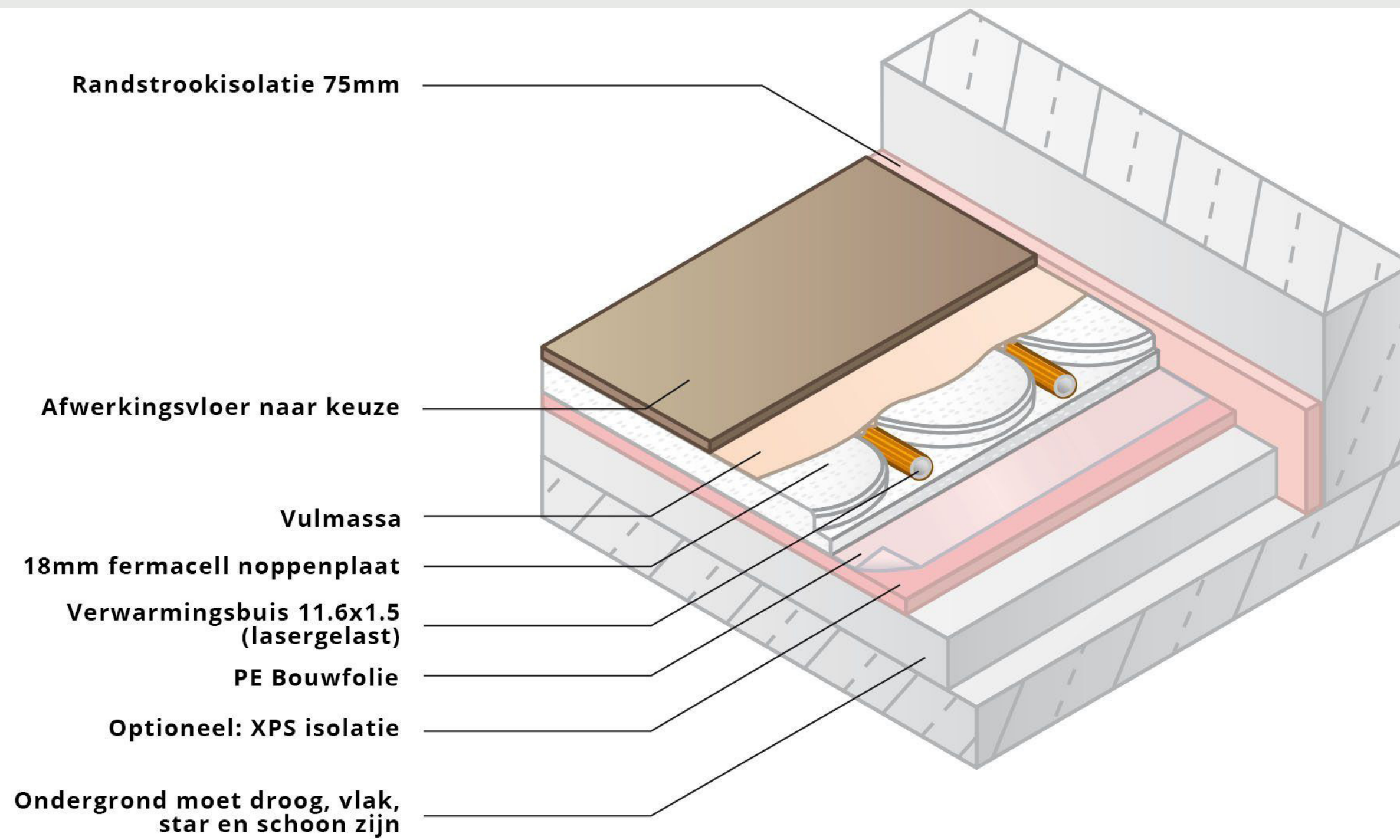


VENTILATION DWELLING

“35 m³/h pp”
“**70 m³/h sanitary**”



"35-120 m³/h"



REFLECTION

ECONOMIC

economic diversity of the city
affordability of living

ECOLOGICAL

reduced energy footprint
wood for structure

SOCIAL

shared activities
oriented on specific cluster

ASSIGNMENT, **NARRATIVE**,
STORYBOARD, expand on "2-3 CORE
SHOTS", LIVED THEME, DUMMY
VERSIONS, VISUAL LANGUAGE(HOW
ITS READ), LOG PROGRESS VIA
VISUAL AND AUDIO, PRESENT SMAL-
LER STUDIES, IMPLEMENTATION
CAPACITY/TECHNICAL REQUIRE-
MENTS, ASSIGNMENT BOUNDARIES,
RESPECTING THE ASSIGNMENT,
COMPONENTS, BUILDING PLAN
TECHNICAL READING, PROGRESSION,
SOMETIMES OKE IS GOOD ENOUGH,
CHASING CONCLUSIONS, GETTING IT
OVER WITH, EXPIRATION DATE ON
EXCITEMENT.
WEEKLY CHAPTERS, FINILISATION
STAGES, DESIGN SPECIFIC AND
NONSPECIFIC CHAPTERS, AWARDING
ATTENTION TO PROGRESS, STAN-
DARD STORY STRUCTURE, FOCAL
POINTS, UNFOLDING FROM FOCUS
POINTS, SCULPTING, INTEGRAL
SOFTWARE, EVALUATE RELEVANCE
OF DAILY WORK: GOES INTO DRAFT
PRESENTATION, LOG, MODEL, or SKIP.