where «our» is everyone

OUR STATEMENT

The Warehouse is a transformative architectural project inspired by the bodegas found in Lisbon's waterfront.

The project seeks to create sustainable and modern spaces that integrate the community, culture, and nature of the city. It will repurpose three distinct buildings, designed to promote social interactions, cultural activities, and sustainable living for the community of Lisbon.

The space intends to be welcoming and comfortable, providing visitors the freedom to explore and discover the amenities it has to offer. The project is an exciting and innovative estate that seeks to strengthen the sustainable developments of Lisbon.

The Warehouse functions as a dynamic living system that employs multiple mechanisms tailored to each individual user's needs

THETEAM

Universidad Iberoamericana
Presentation: 26

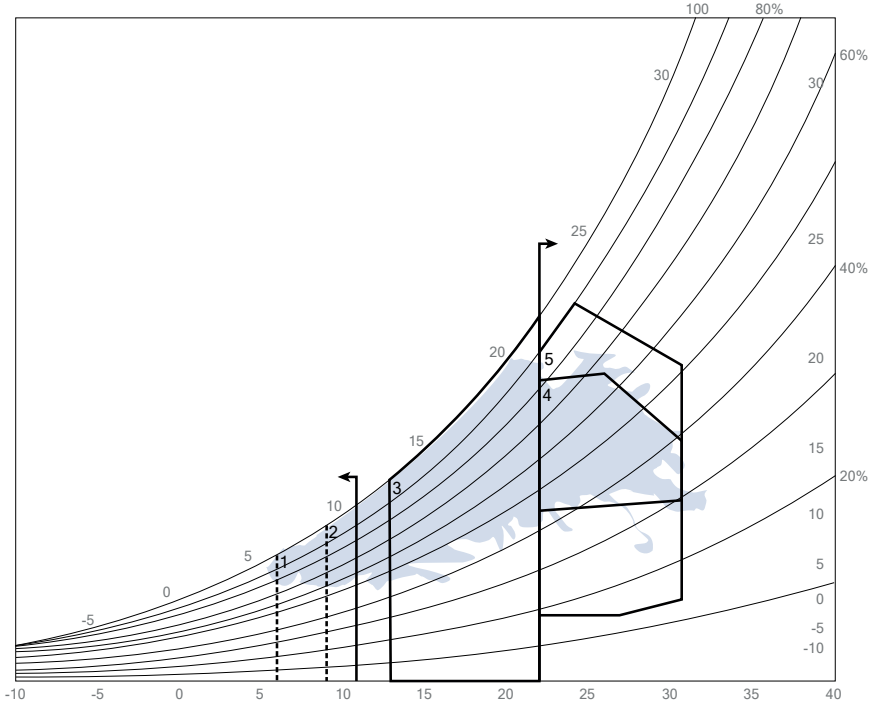
Instructors
Arq. Gerardo Velazquez
Arq. Victor Arvizu

Iñigo Artigas

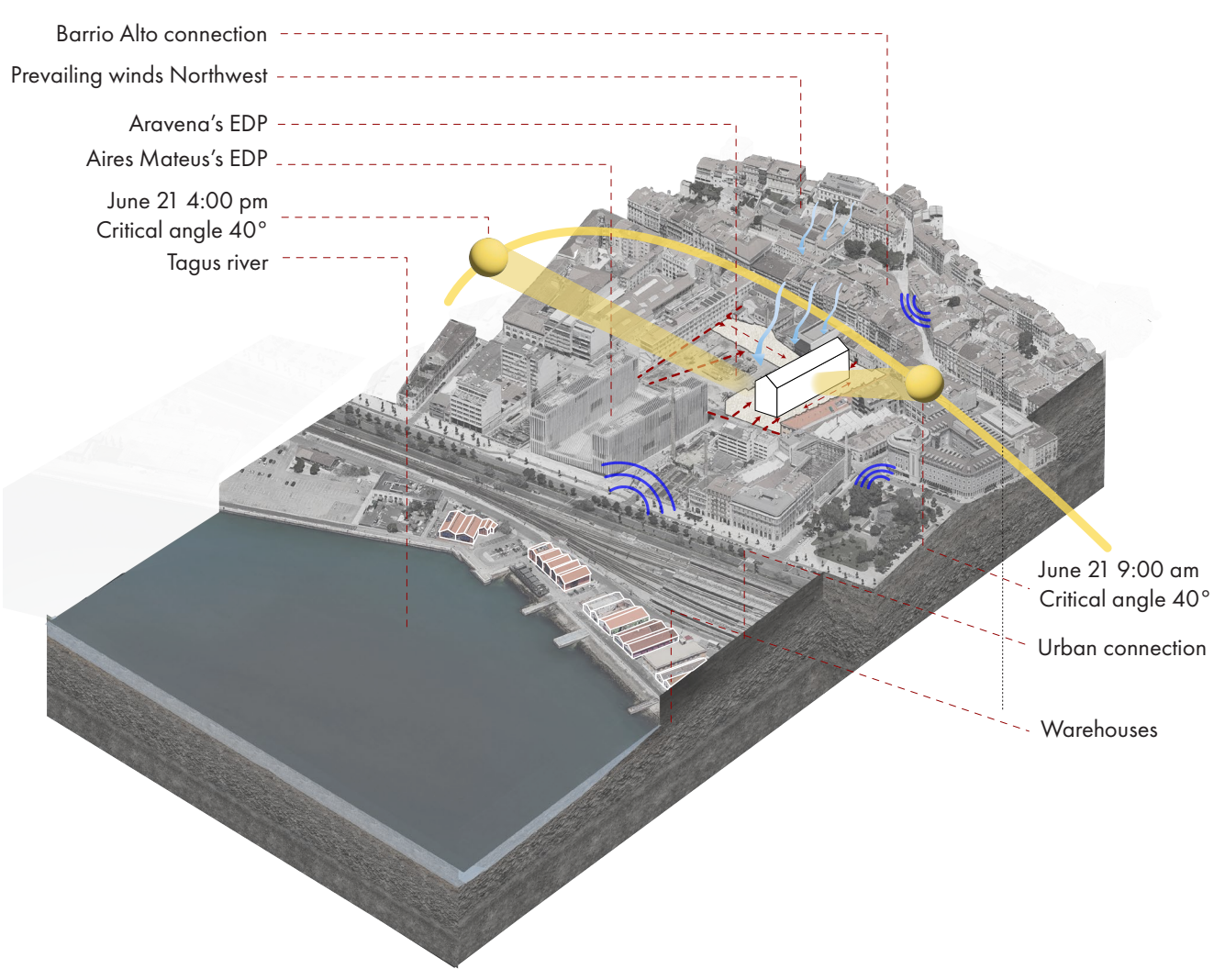
Alejandro Gutiérrez

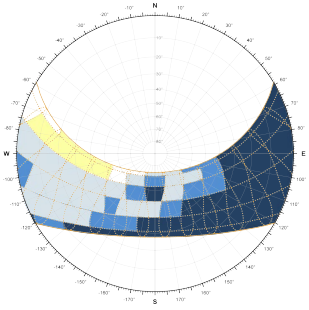
OUR ANALYSIS

Psychometric chart: main bioclimatic strategies to achieve thermal confort

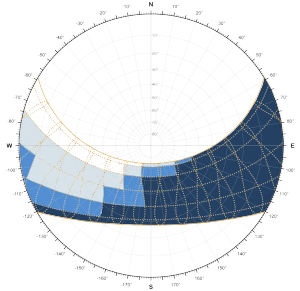


	Generic Bioclimatic strategies	The_Warehouse strategies
1	Passive Solar Gain Low Mass 20.5%	(Greenhouse)
2	Passive Solar Gain High Mass	(Greenhouse)
3	Internal Heat Gain 62.7%	(Insulations)
4	Fan Forced Ventilation 3.5%	(Air renovation)
5	Natural Ventilation 3.5%	(Crossed Vent.)
	Total comfort 90.50%	

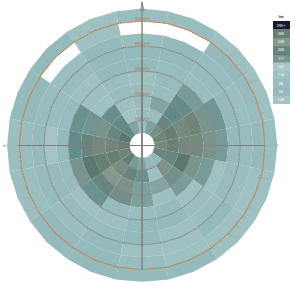




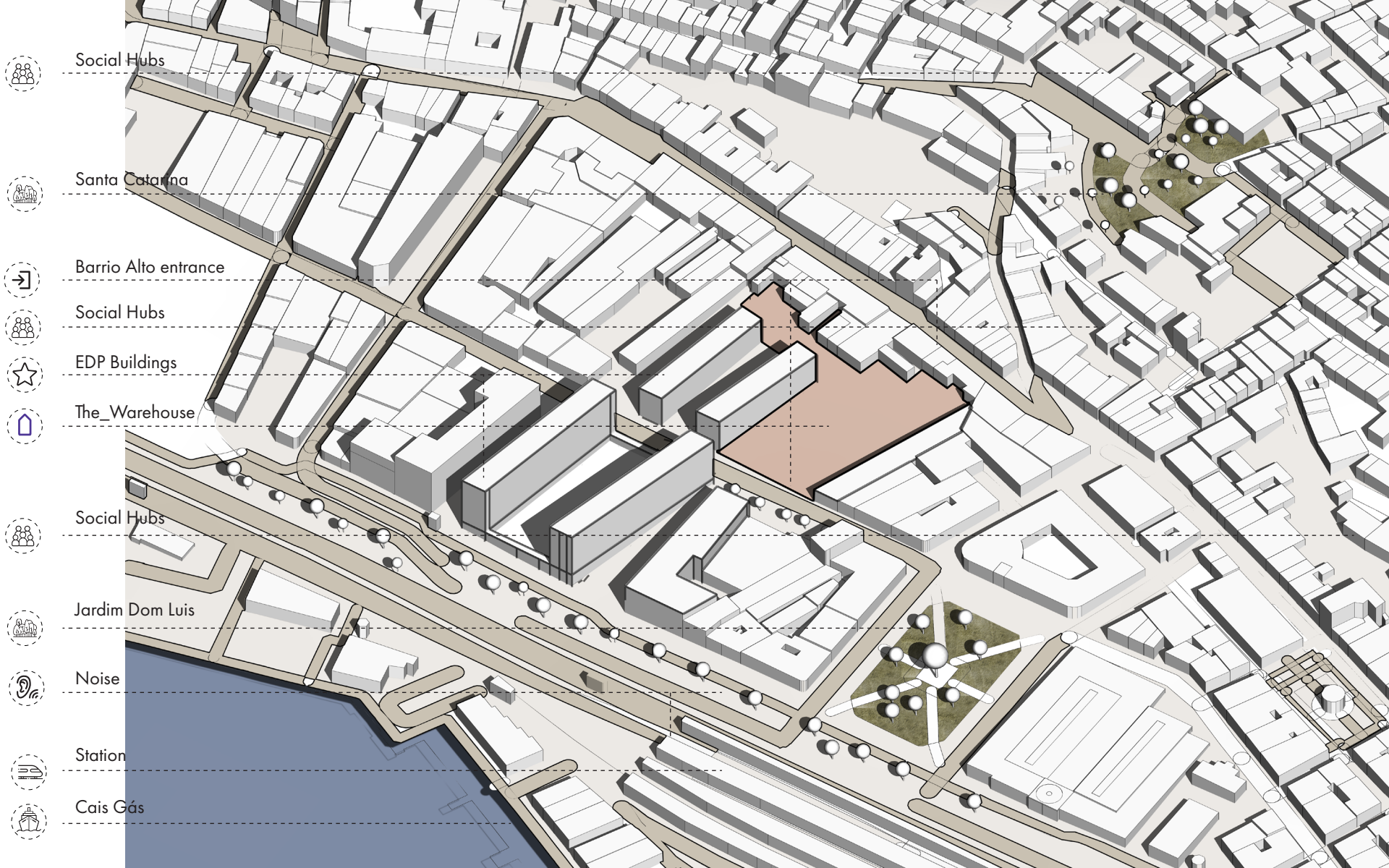
July - December

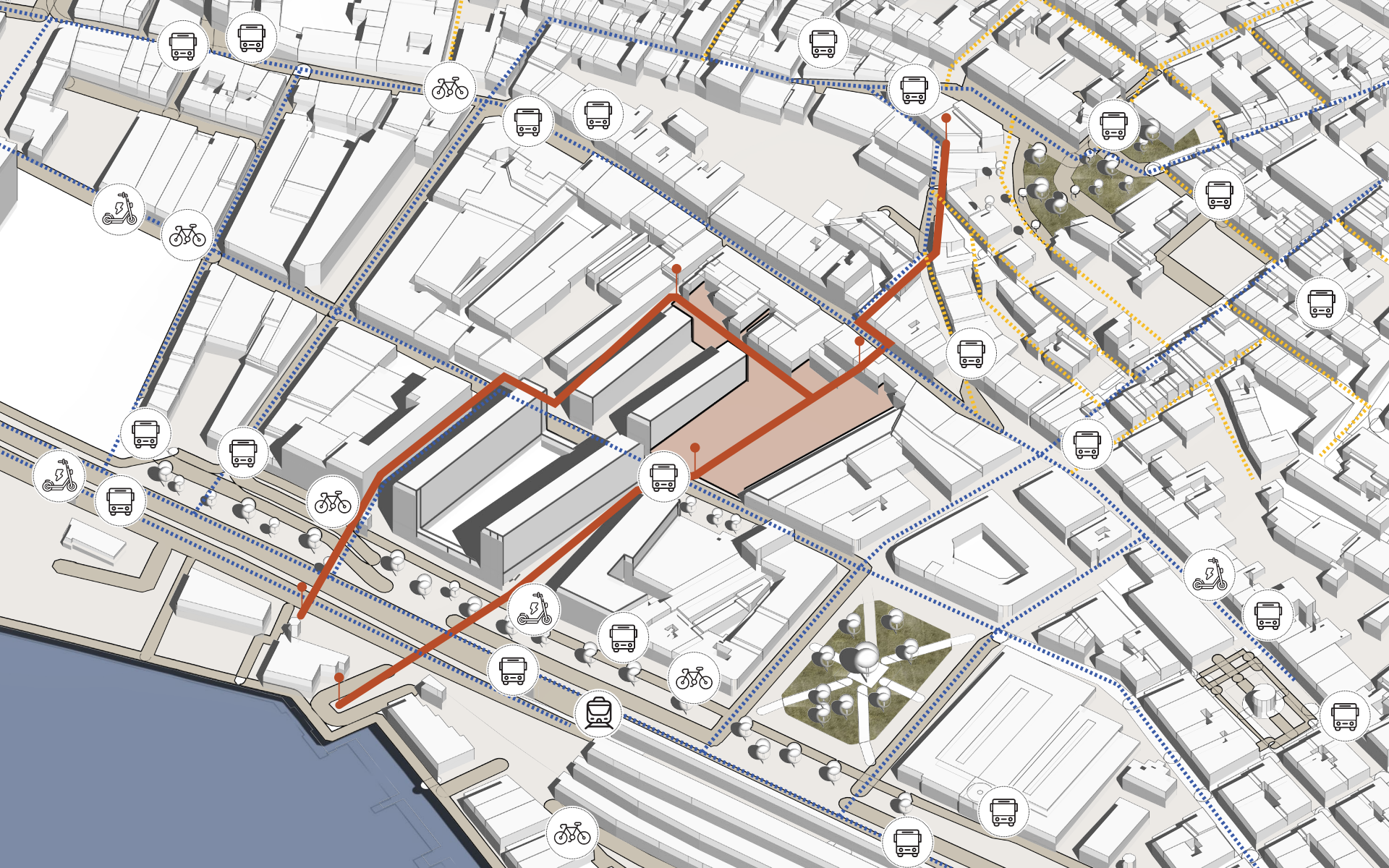


January - June

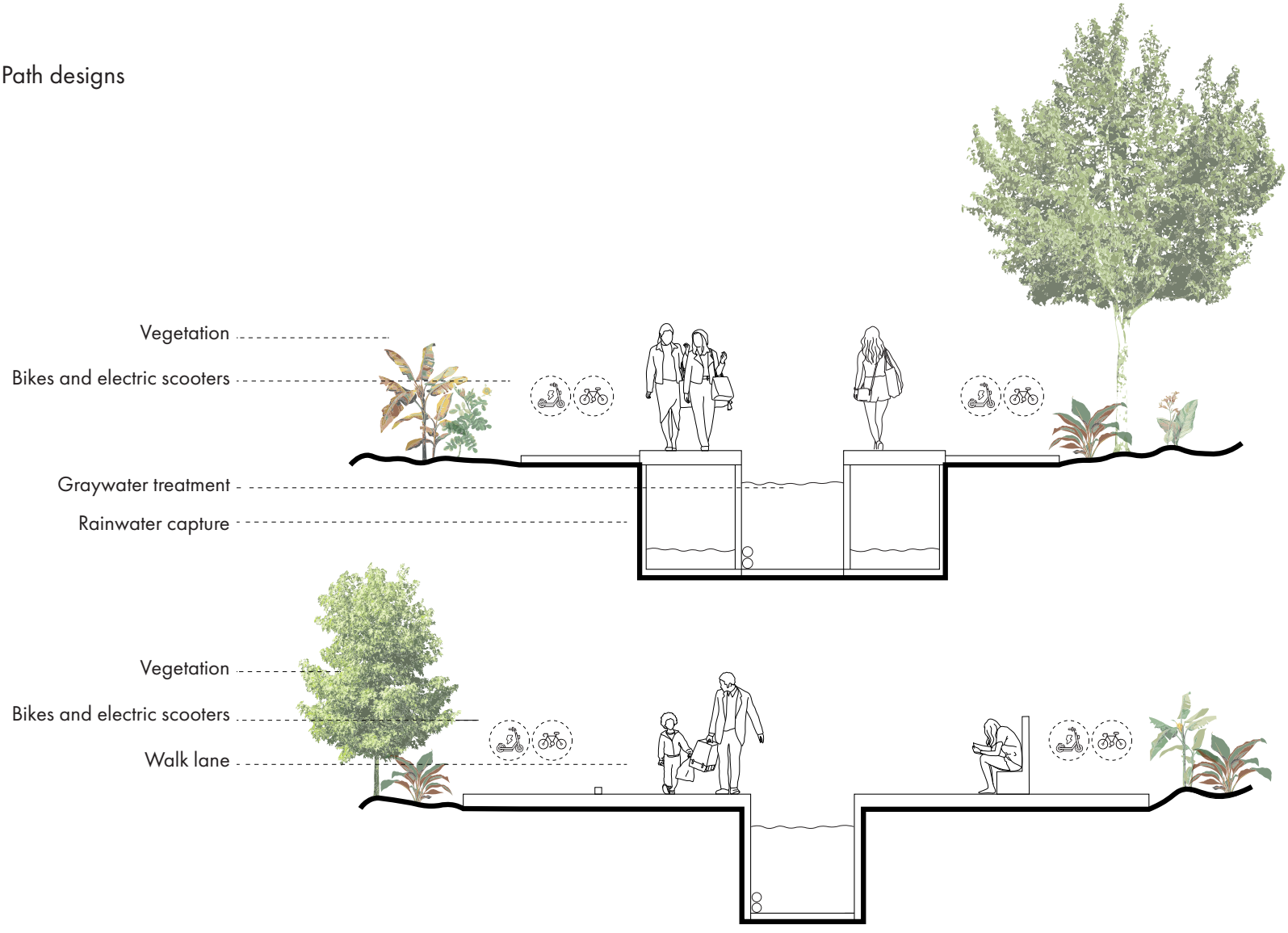


Annual Winds


Social Hubs
Santa Catarina
Barrio Alto entrance
Social Hubs
EDP Buildings
The_Warehouse
Social Hubs
Jardim Dom Luis
Noise
Station
Cais Gás



Path designs



OUR CONCEPT

Warehouse

"The warehouses in Lisbon embody the spirit of innovation and progress that has shaped our modern world. Seeking to capture their essence and channel it towards a new architectural vision.

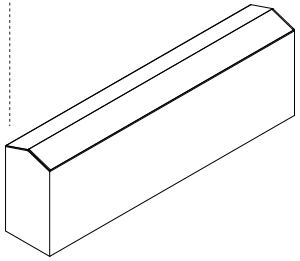
The Warehouse is a tribute to the boldness and creativity of a revolution. By fusing timeless elegance with cutting-edge technology, we hope to create a space that inspires and empowers, one that will stand the test of time and leave a lasting legacy for generations to come."

Lisbon 1910s

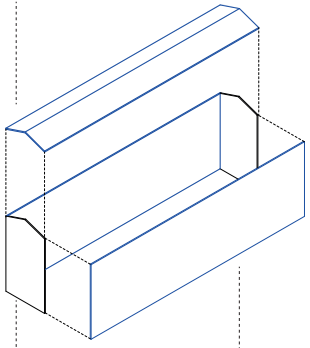
OUR DEVELOPMENT

PLAZAS
REFERENCIAS
materiales
vegetation
urban garden
apartments
coliving
work shops
sheds abandonados
Replanteo volumen concepto
Usar el shed como envolvente y una bodega protectora

Generic Warehouse



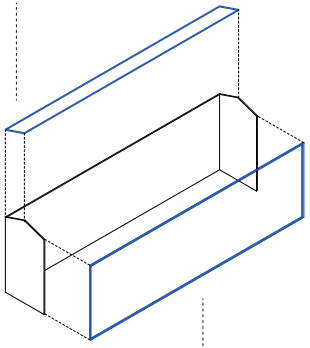
Gable roof



Repel heat

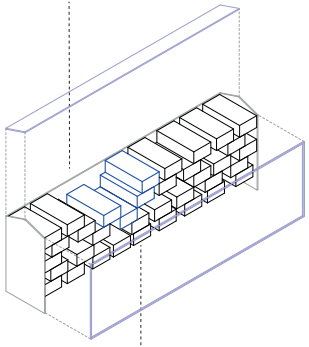
Capture heat

Solar protection



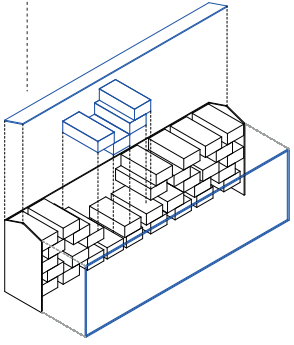
Curtain wall

Overlapping of activities

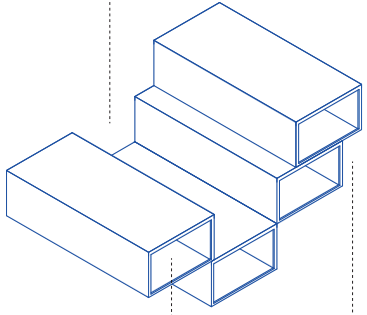


Terraces

Concept analysis

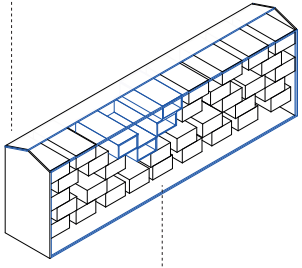


Private/Public spaces

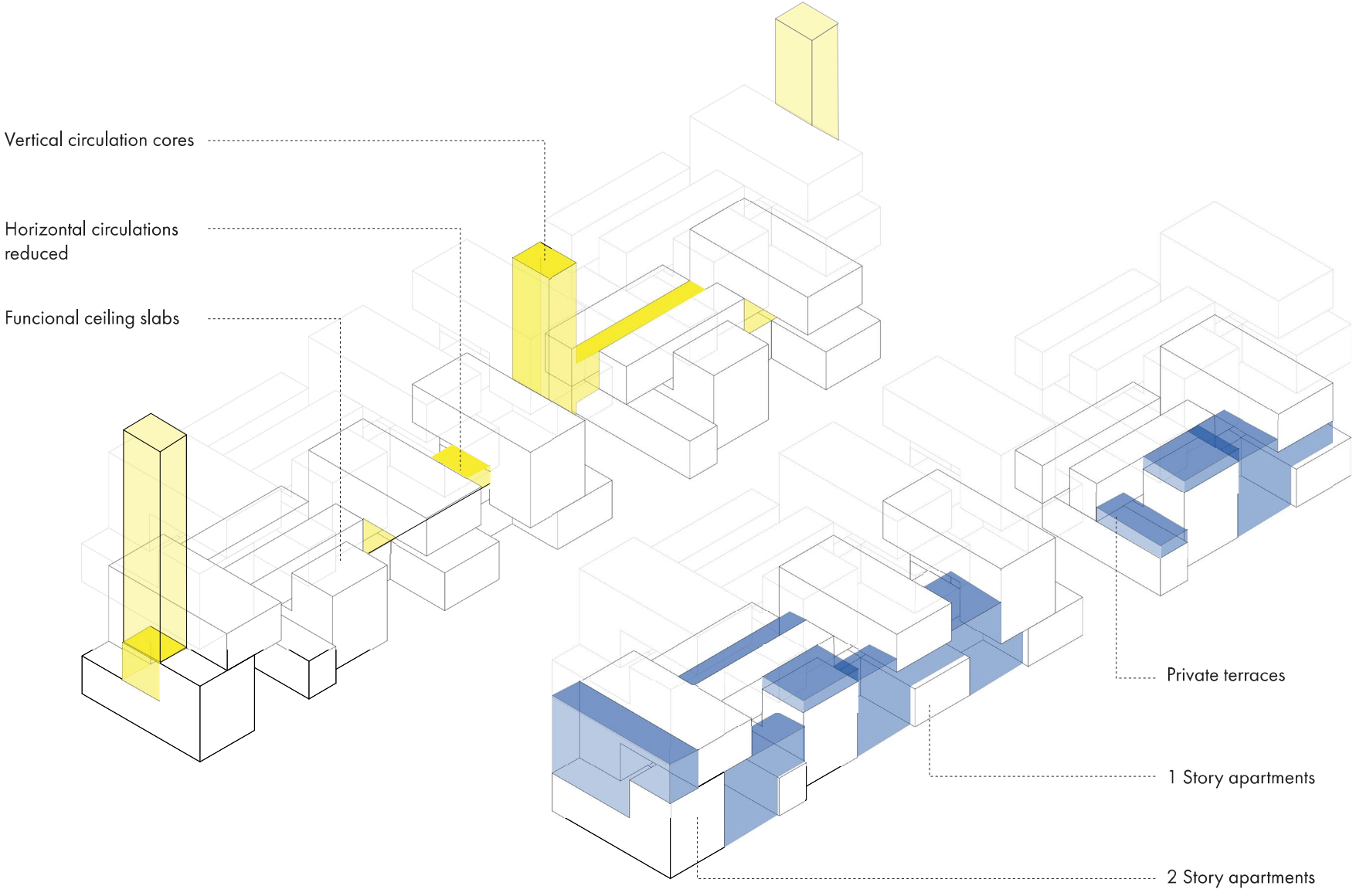


Transversal gain/Double heights

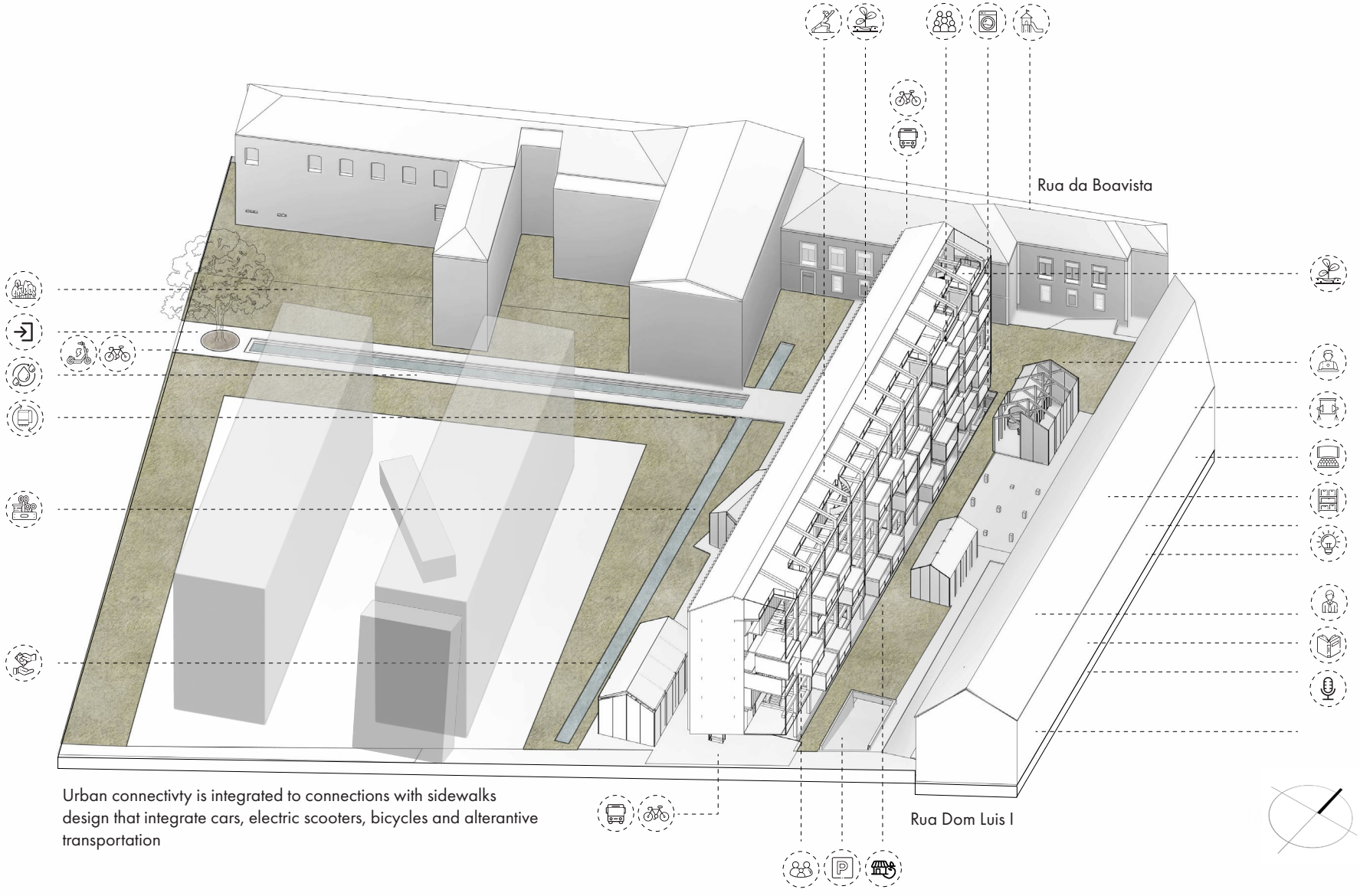
Protective envelope



Free plan ground floor


Vertical circulation cores
Horizontal circulations reduced
Funcional ceiling slabs
Private terraces
1 Story apartments
2 Story apartments

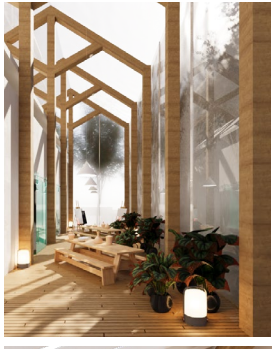
OURPLAN



Urban connectivty is integrated to connections with sidewalks design that integrate cars, electric scooters, bicycles and alterantive transportation

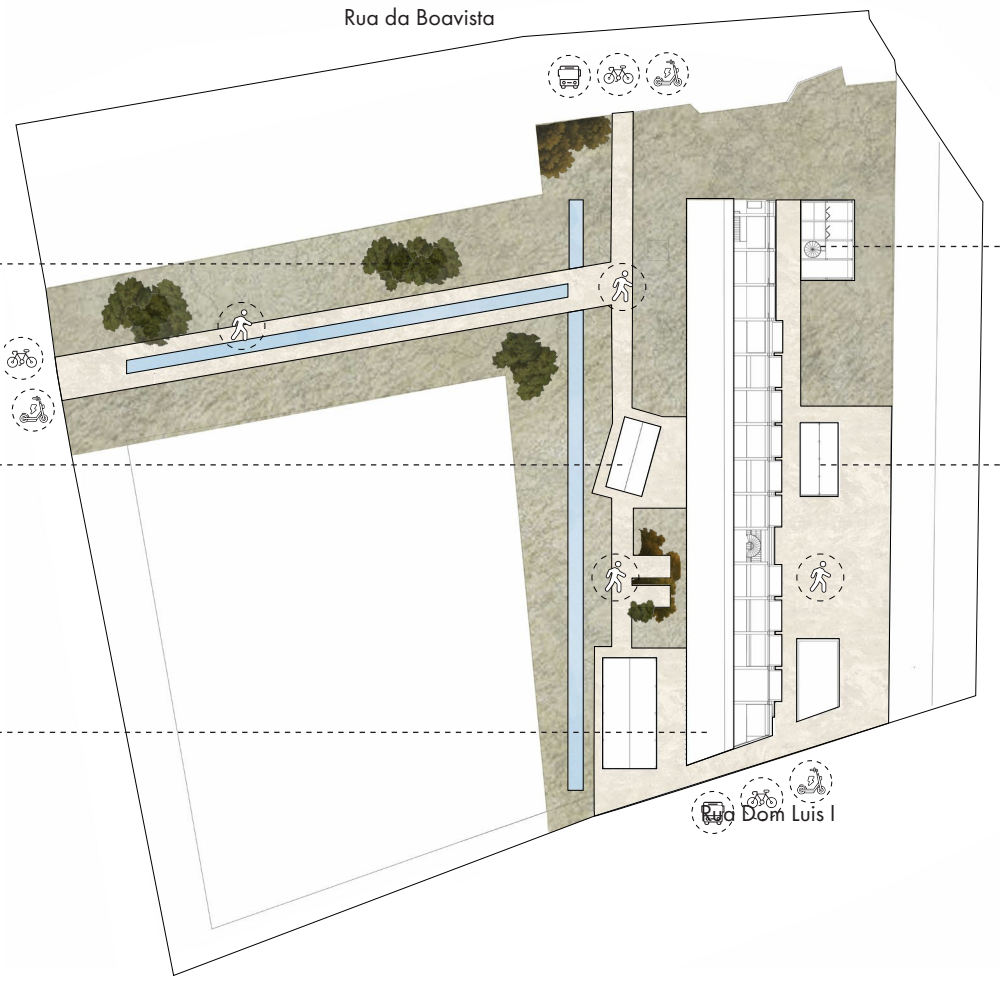
Vegetation permeability throughout the entire project that include urban orchards, gardens and endemic species

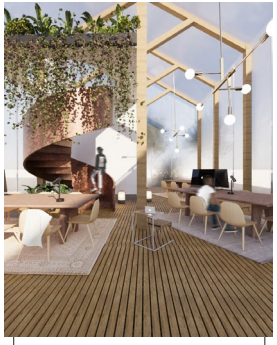
Rainwater capture



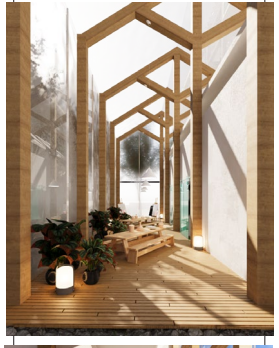
Atelier

Green terrace





Co-Working



Atelier

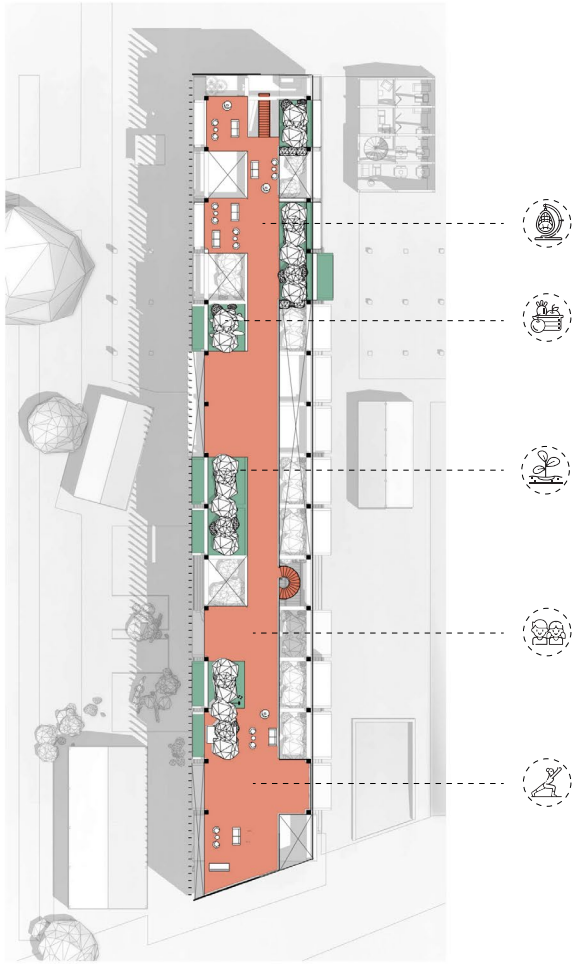
Local Market

Community spaces

OUR HOME


1. Community spaces
2. Commerce
3. Public Terrace
4. Workshops
5. Rainwater capture
6. Solar protections
3
6
1
4
2
5

Rhythm of Building A taken as own

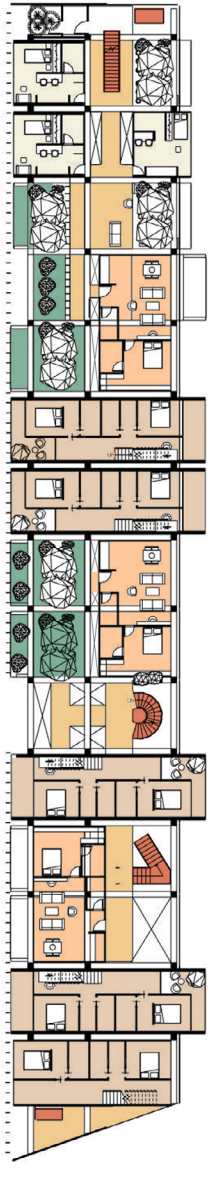


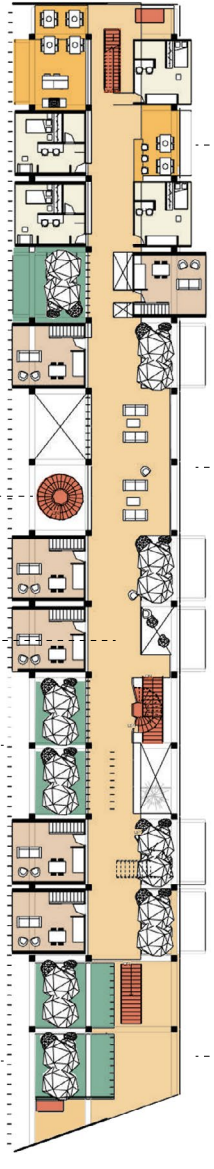
General plan

2 Story apartments

2 Bedrooms

1 Bedroom



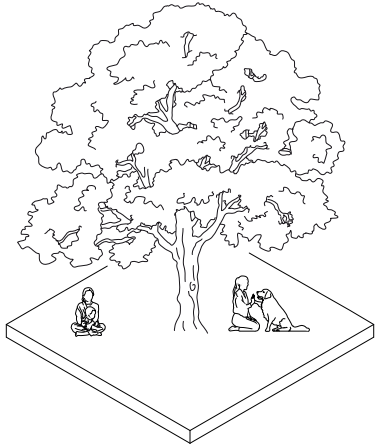


Co-livings
24

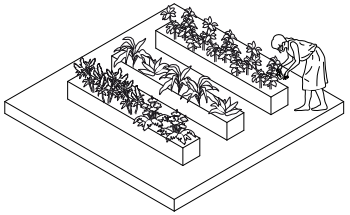
Livings
46

General floor plan

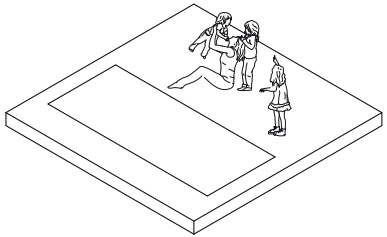
Zone C



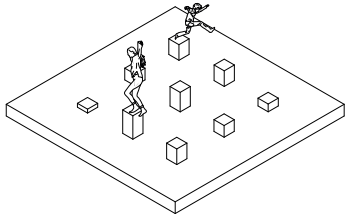
Relax



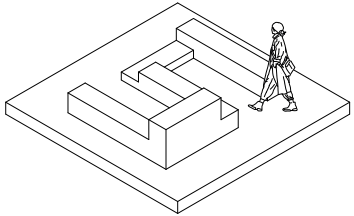
Contribute



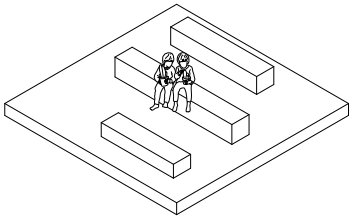
Refresh



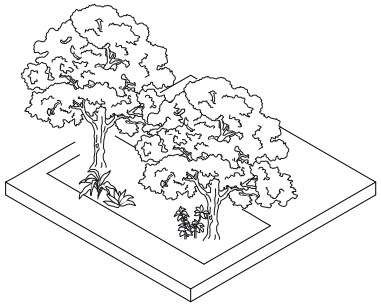
Explore



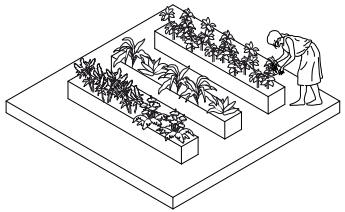
Wander



Connect



Regenerate



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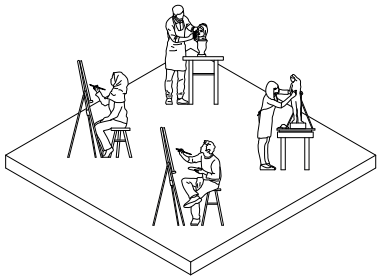
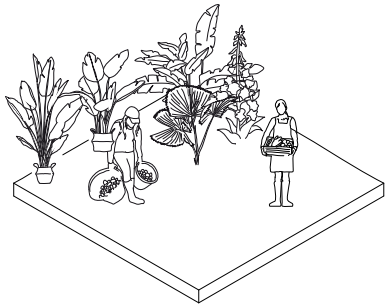
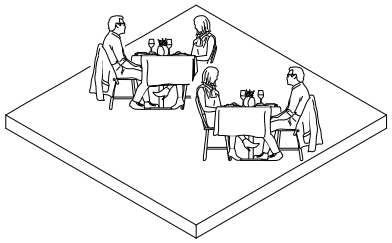


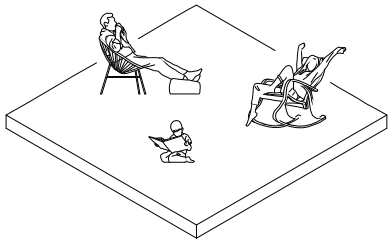
Create



Collect

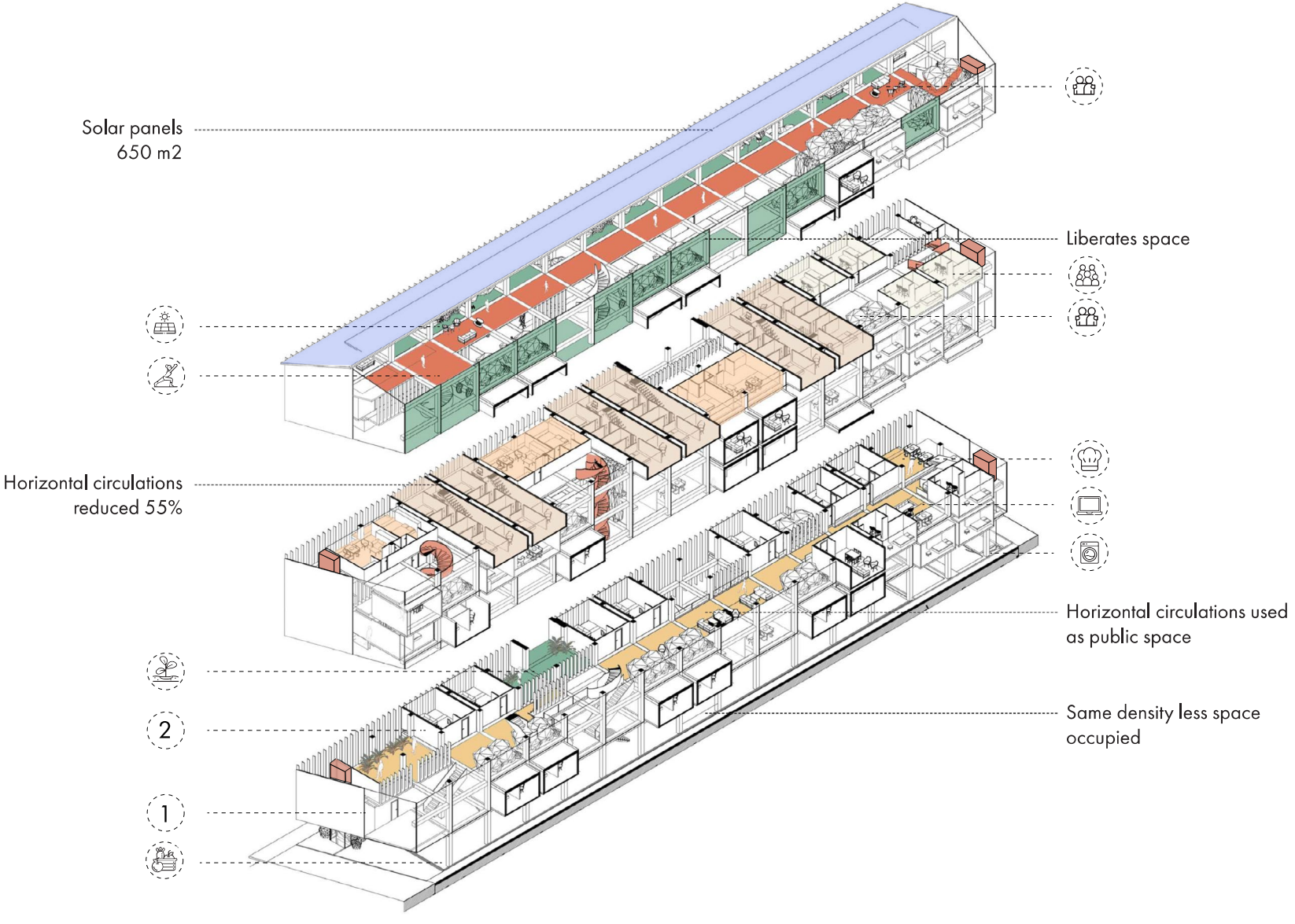


Interact

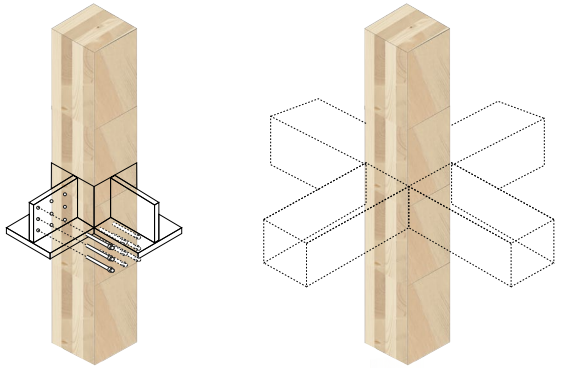


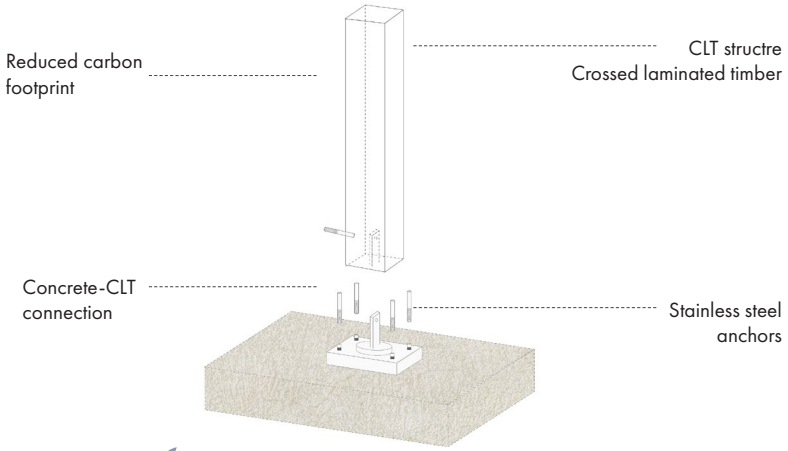
Refuge

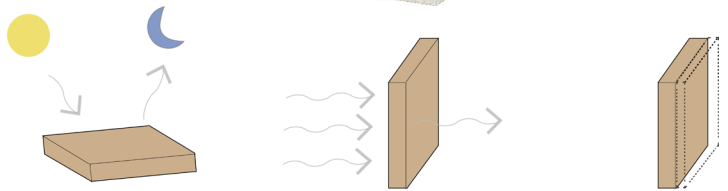
Public Terrace


Solar panels
650 m2
Liberates space
Horizontal circulations
reduced 55%
Horizontal circulations used
as public space
Same density less space
occupied
2
1

Main CLT Structure





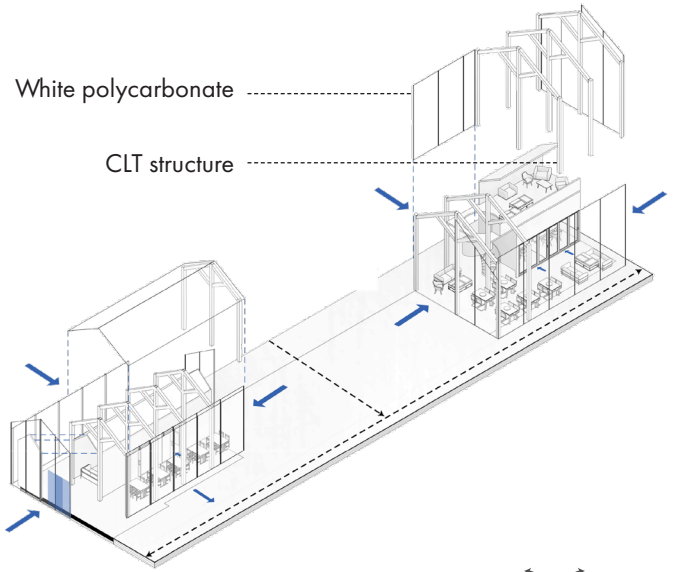


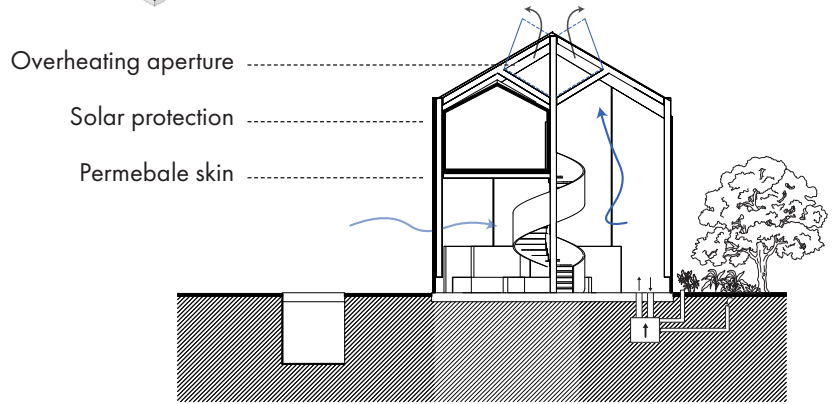
Dynamic thermal performance

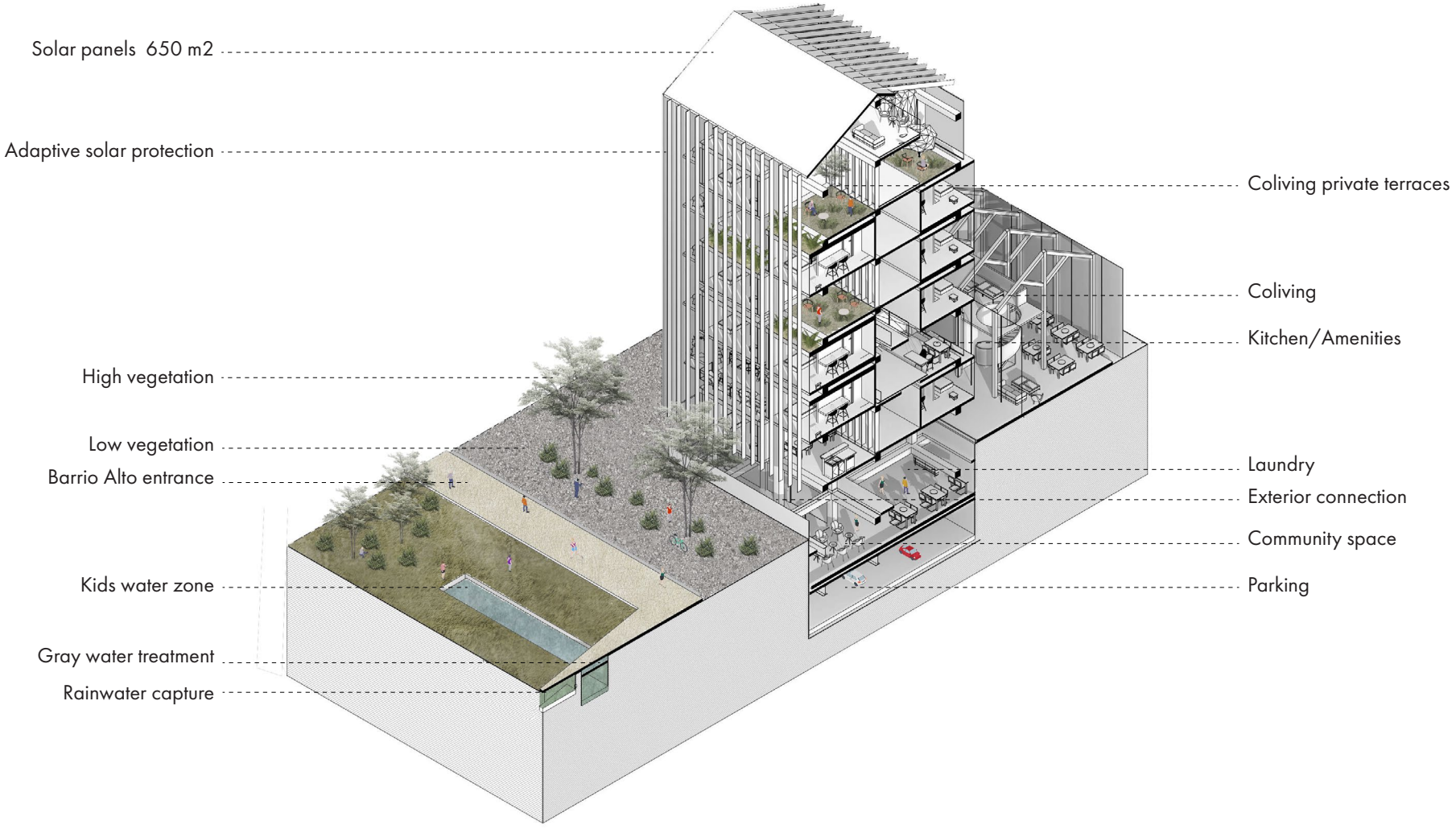
Reduced thermal bridging

Insulation amount

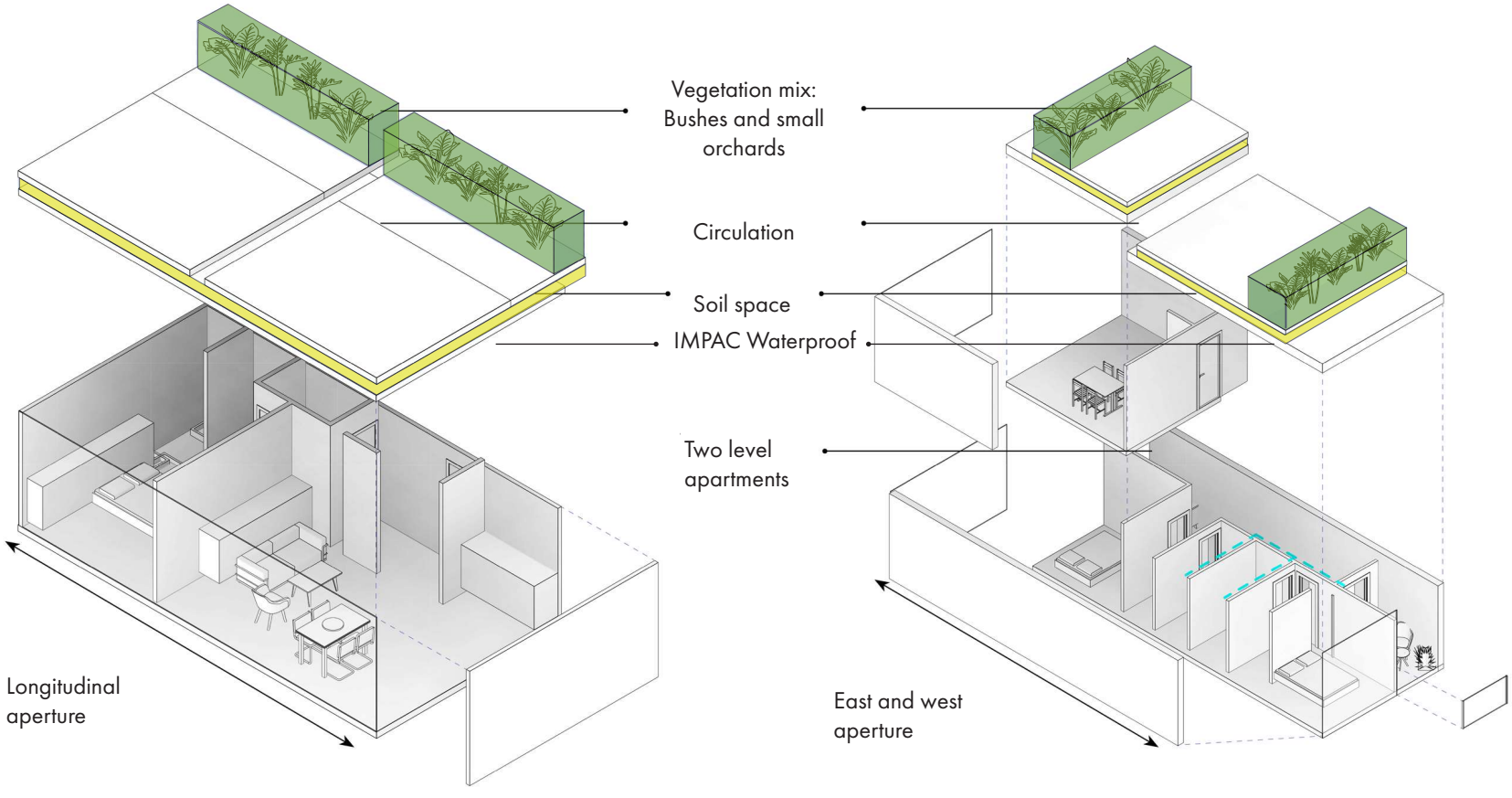
Bioclamatic public sheds

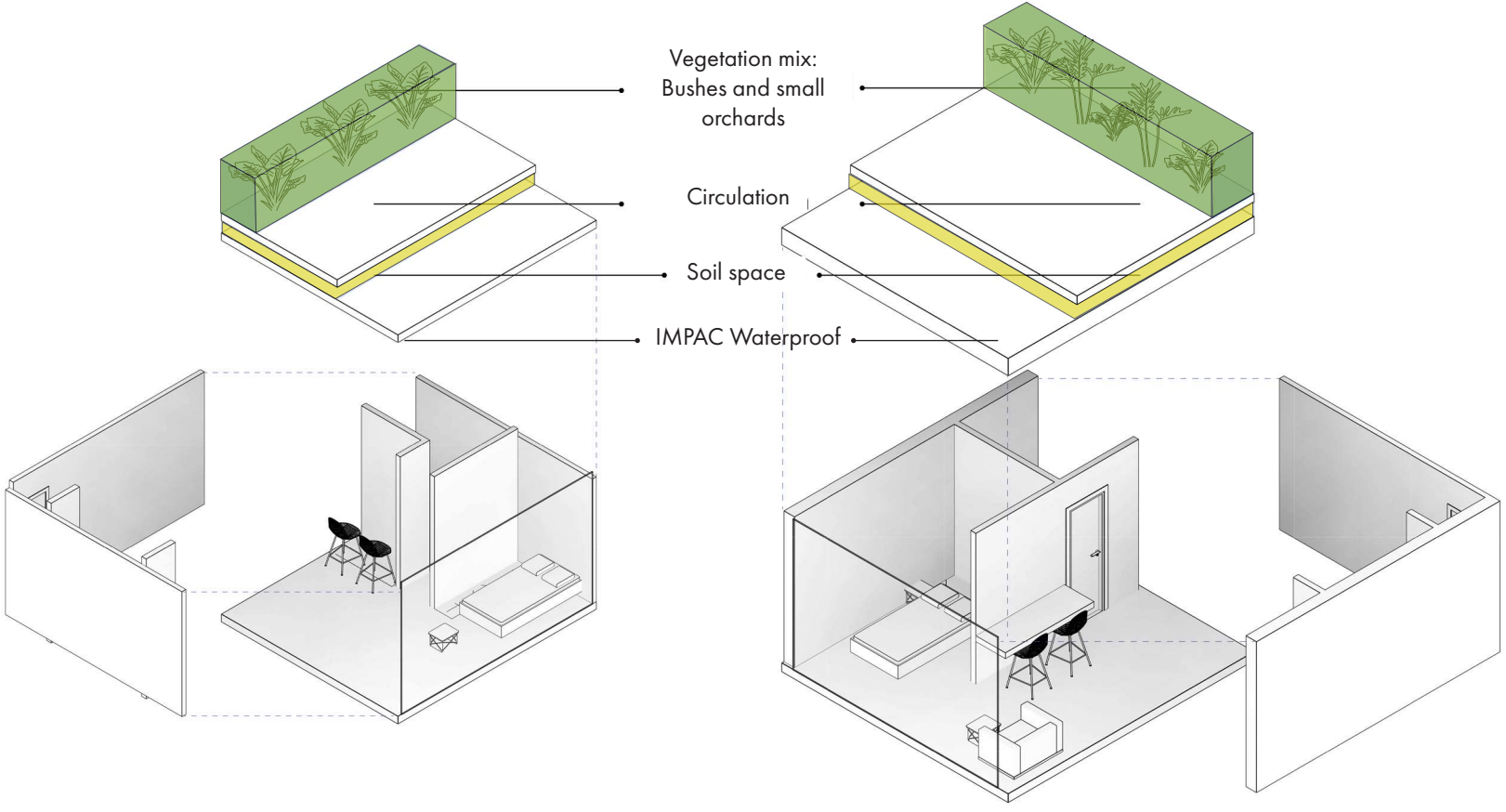




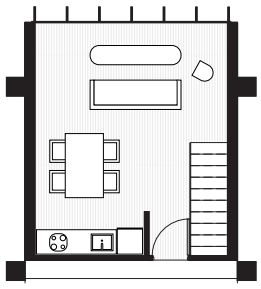

Solar panels 650 m2
Adaptive solar protection
High vegetation
Low vegetation
Barrio Alto entrance
Kids water zone
Gray water treatment
Rainwater capture
Coliving private terraces
Coliving
Kitchen/Amenities
Laundry
Exterior connection
Community space
Parking

Apartments

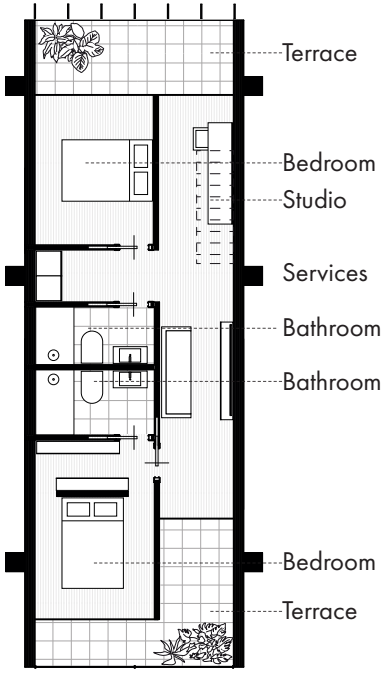

Vegetation mix:
Bushes and small
orchards
Circulation
Soil space
IMPAC Waterproof
Two level
apartments
Longitudinal
aperture
East and west
aperture


Vegetation mix:
Bushes and small
orchards
Circulation
Soil space
IMPAC Waterproof

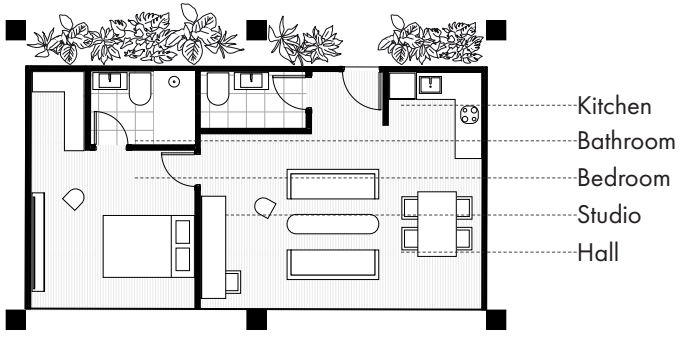
2 bedrooms



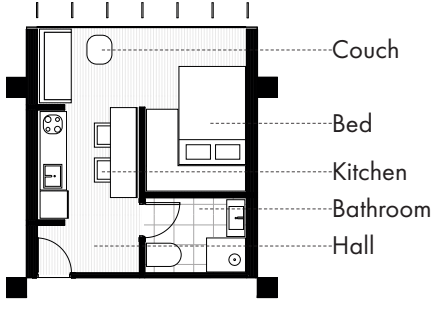
Kitchen /Hall



1 bedroom



Coliving

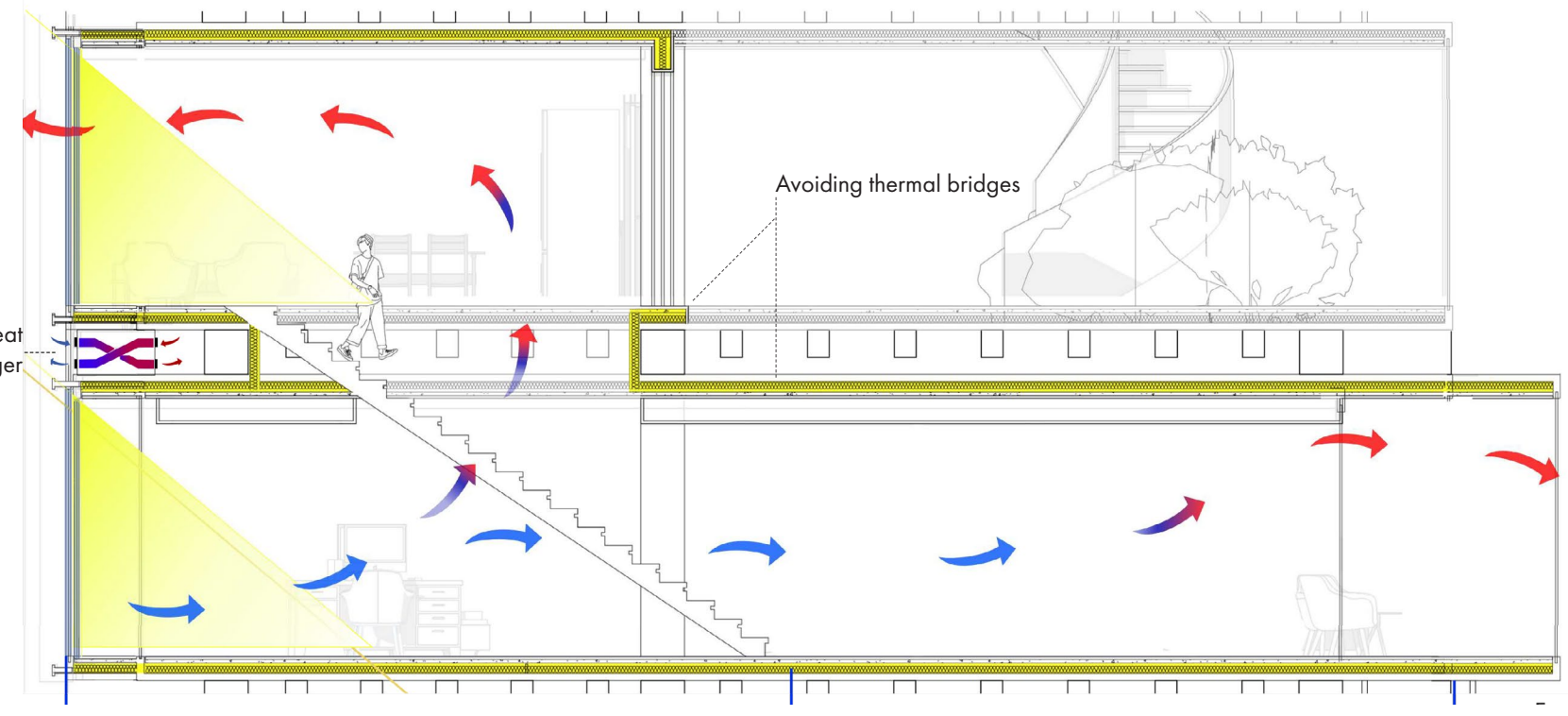


Apartment distribution


2 Story East View


2 Story West View

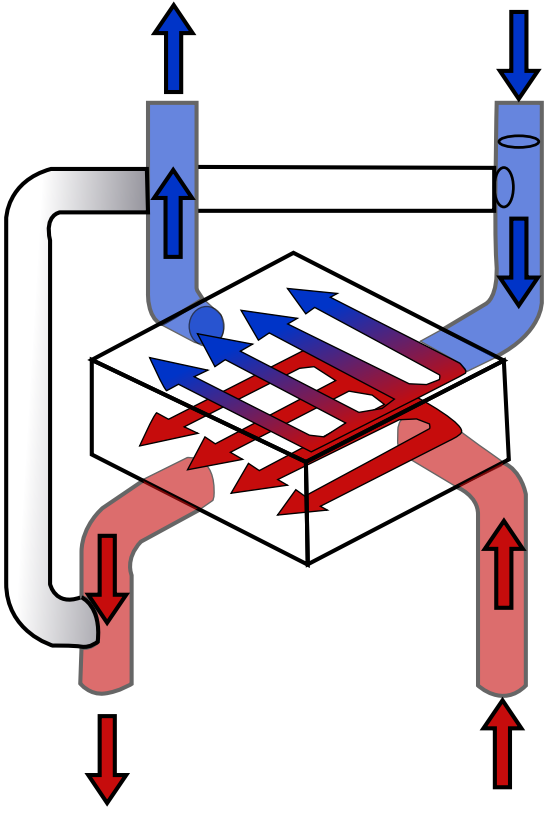
Double apartment scheme



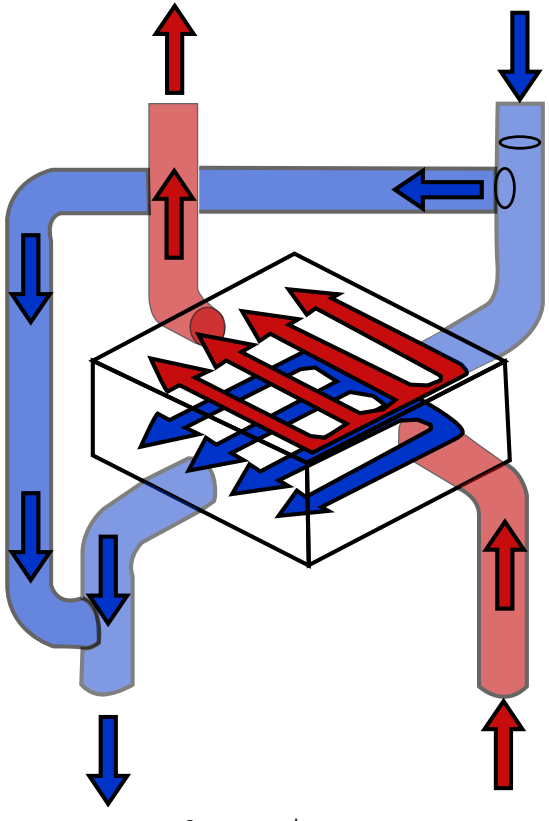
West

East

Heat exchanger:
Air renovation for apartments and passive heating in public areas

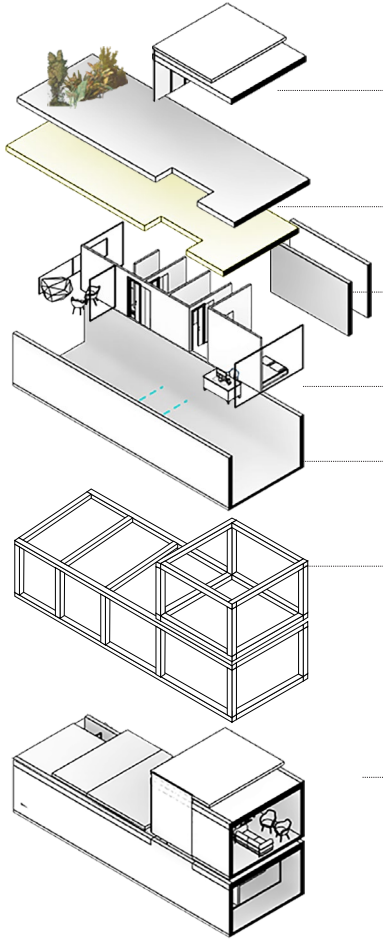


Winter scheme



Summer scheme

Lightweight prefabric modules construction off site, assembled on site



Placo SAINT-GOBAIN — Acustik Soundproof gypsum board k= .25W/ m-k with AbsorciónGlass Wool > 58 dB Between living units — Roof U 0,15 W/m2K

isover SAINT-GOBAIN — Glass Wool insulation — Roof U 0,15 W/m2K

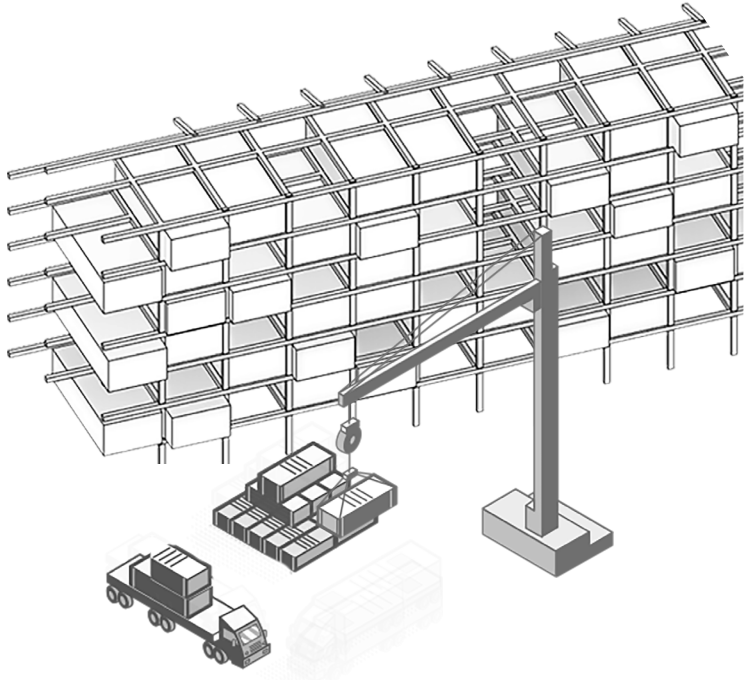
Placo SAINT-GOBAIN — Habito gypsum board with Eco 0.32 Glass Wool — Walls U 0,20 W/m2K

Placo SAINT-GOBAIN — Placo RH-Moisture resistant gypsum board with Eco0.32 <45 dB Between slabs — Slabs U 0,15 W/m2K

SAINT-GOBAIN — SSG PLANITHERM® 4S 4[16]4 — U 0,90 W/m2K

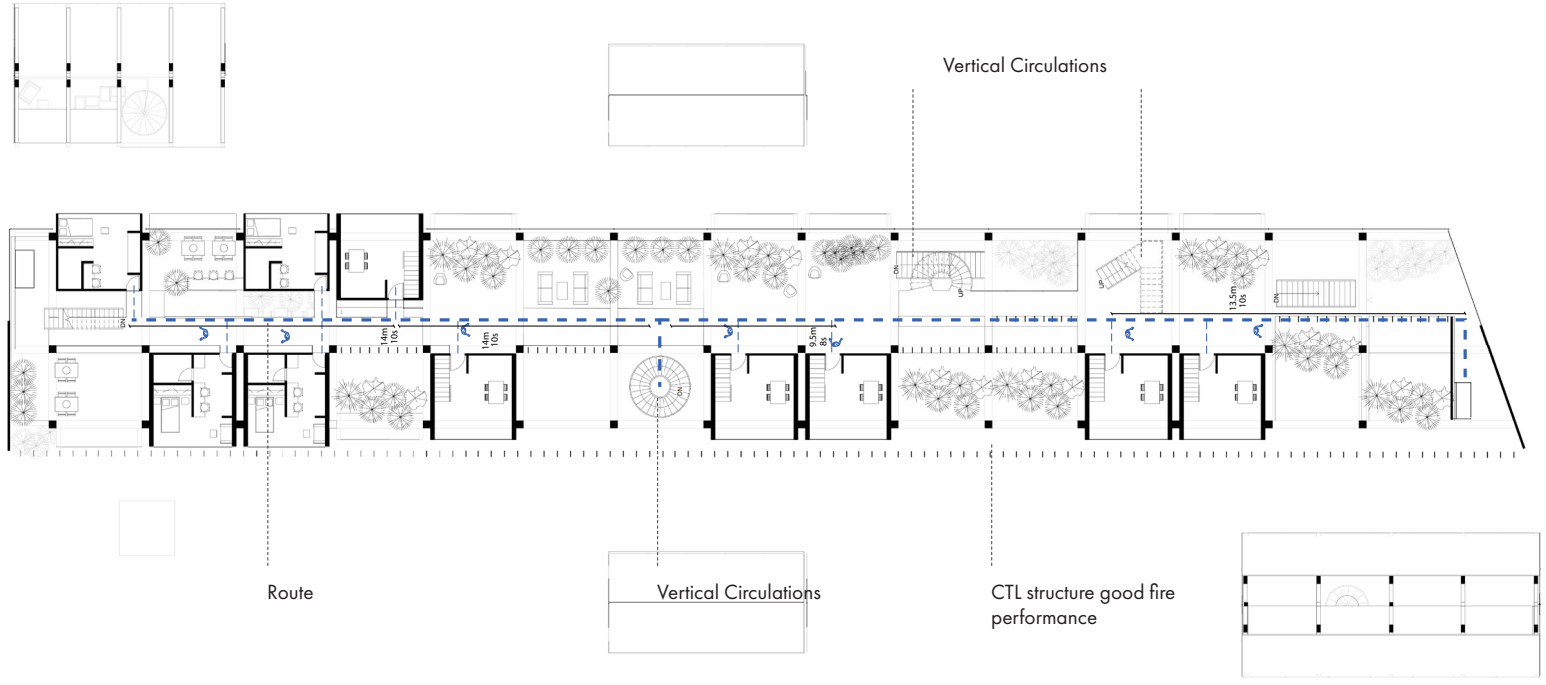
Woden frames structure

Living modules will reduce costs, time, and unnecessary wastes

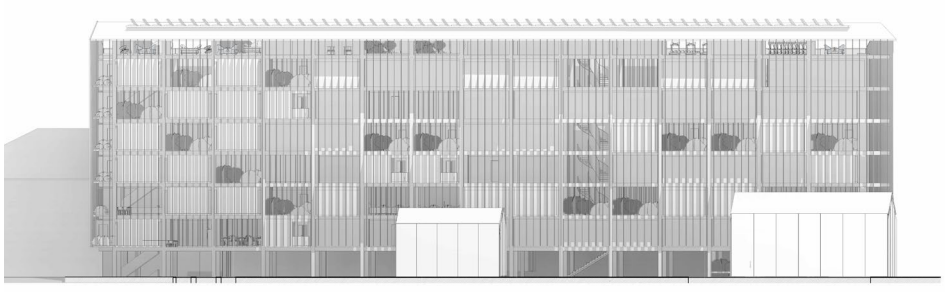


The combination of choosing high performance materials, wooden strucutre from sustainable forests, and design, help this lightweight scheme to reduce the carbon print

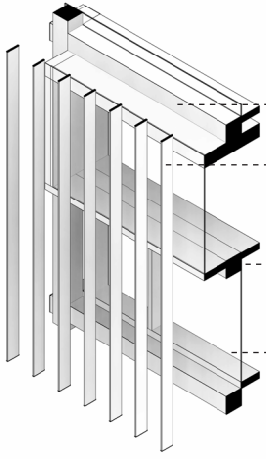
Fire safety scheme

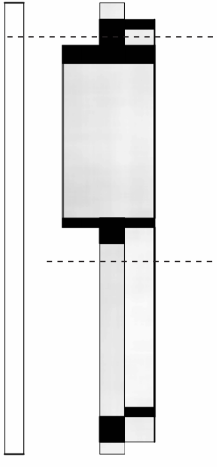


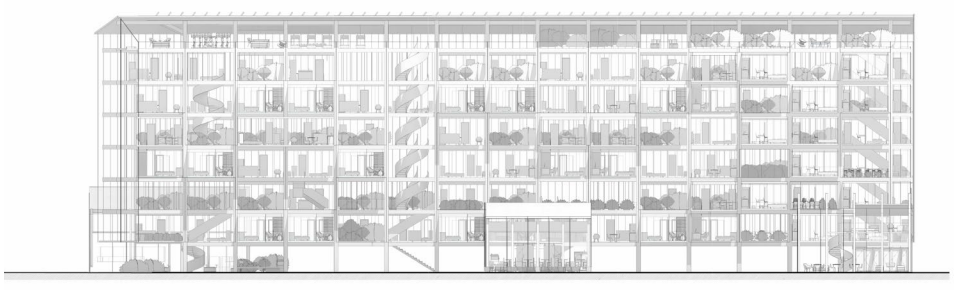

1. 2 Story apartment
2. 1 Story apartment
3. Vertical circulation
4. Private terraces
5. Free ground floor
6. Inner solar protection
7. Atelier
1
2
3
4
5
6
7



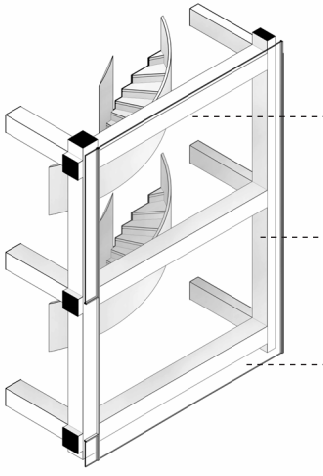
West Facade

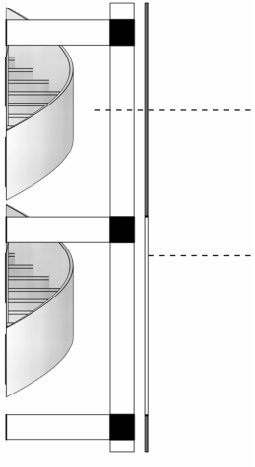

Steel connections
Polycarbonate fins 0.30x0.05 m
Sun-Shelf
Aperture for sights and cross-ventilation


Solar protection to reduce inside insolation
Space in between grants ventilation

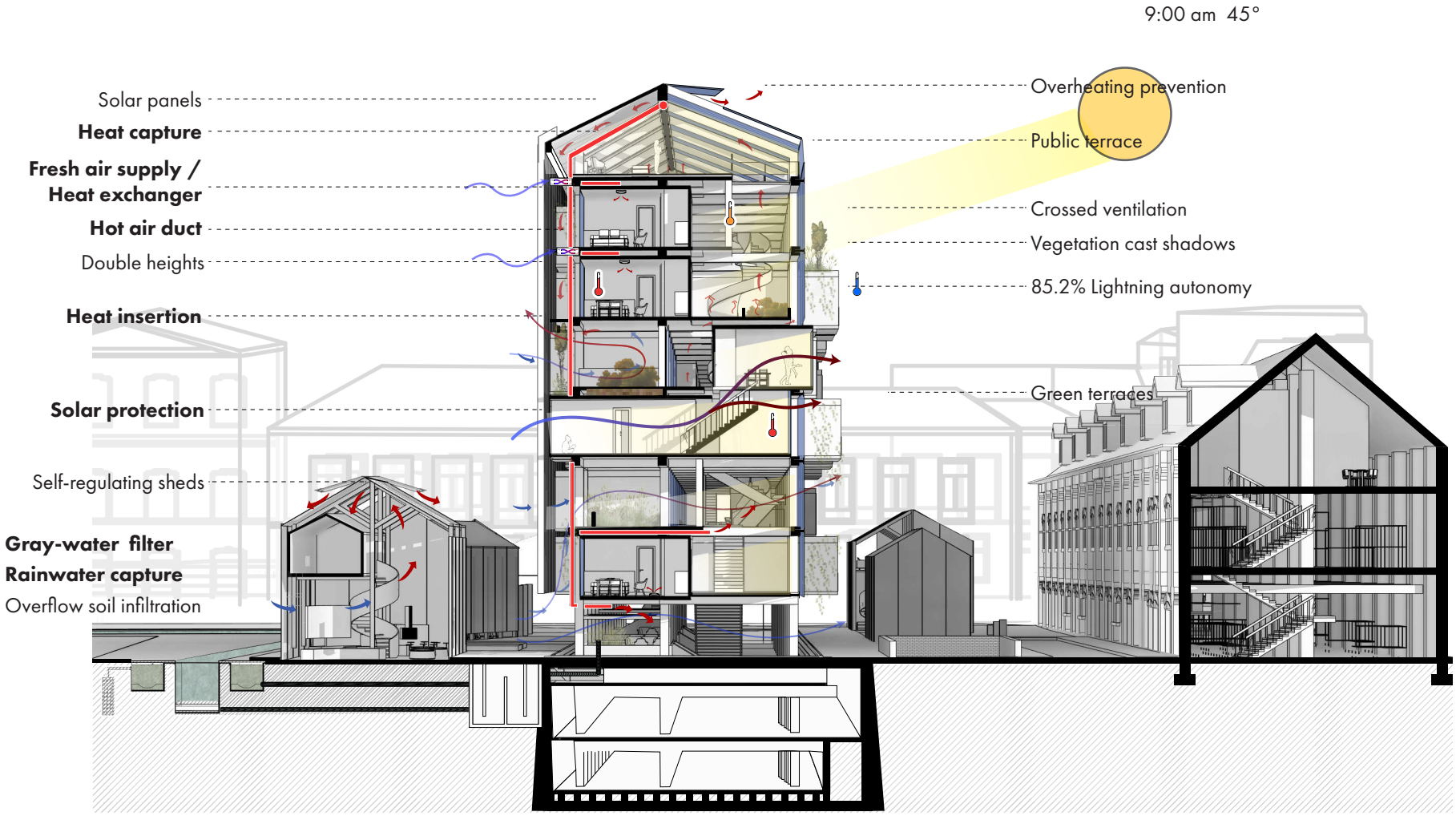


East Facade

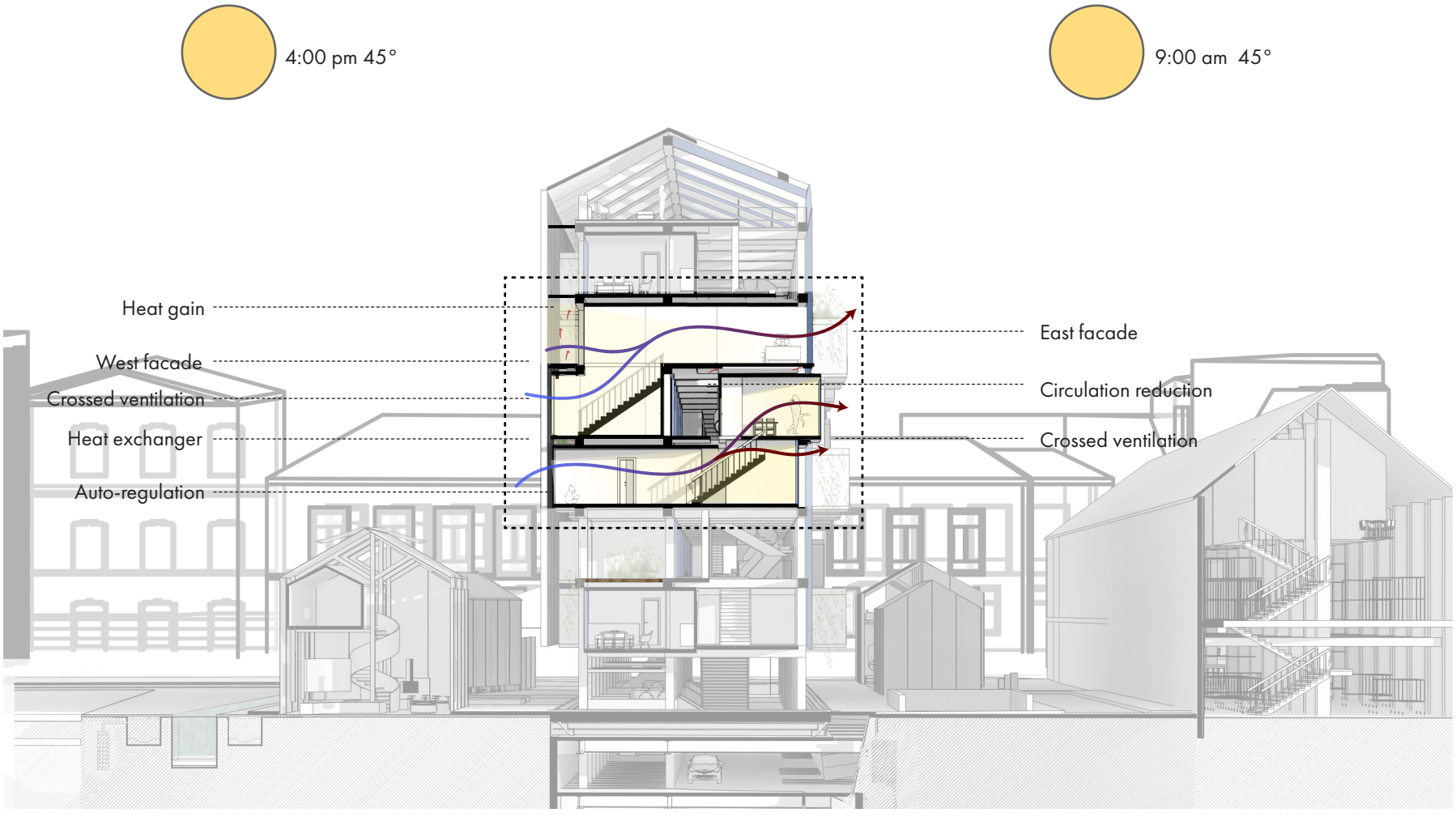

Curtain System with 0.05 m mullions
Single glazing:
Saint Gobain Planitherm with
Bioclean
Greenhouse effect to gain heat


Space in between grants ventilation
Single Glazing 5 mm
CLIMALIT PLUS®
18m x 3.5

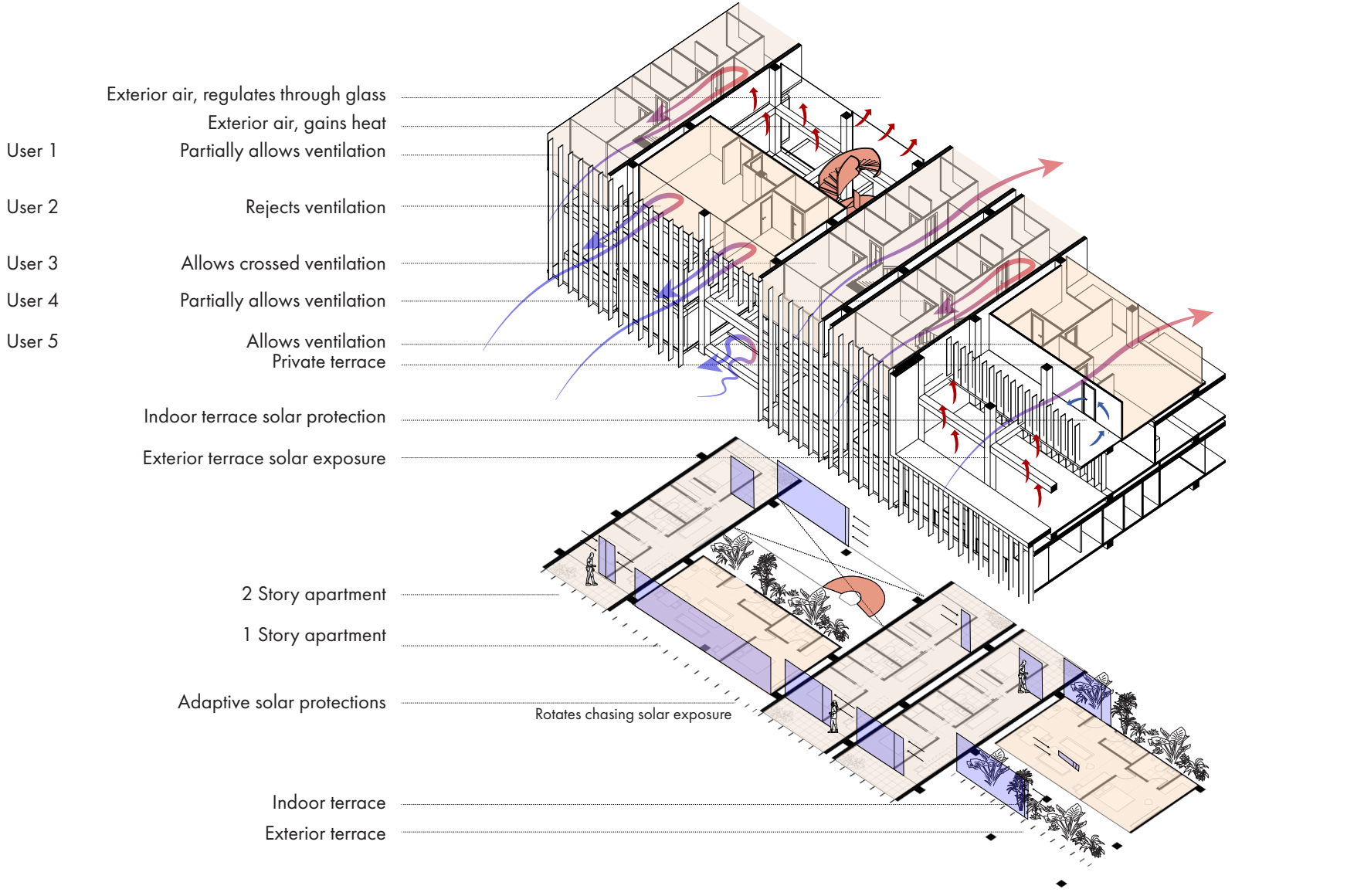
ADAPTABILITY



The Warehouse functions as a dynamic living system that employs multiple mechanisms tailored to each individual user's needs



The user is granted both facades to have their own internal control. This provides sights, airflow, and daylight autonomy.


Exterior air, regulates through glass
Exterior air, gains heat
User 1
Partially allows ventilation
User 2
Rejects ventilation
User 3
Allows crossed ventilation
User 4
Partially allows ventilation
User 5
Allows ventilation
Private terrace
Indoor terrace solar protection
Exterior terrace solar exposure
2 Story apartment
1 Story apartment
Adaptive solar protections
Rotates chasing solar exposure
Indoor terrace
Exterior terrace

OUR RESOURCES

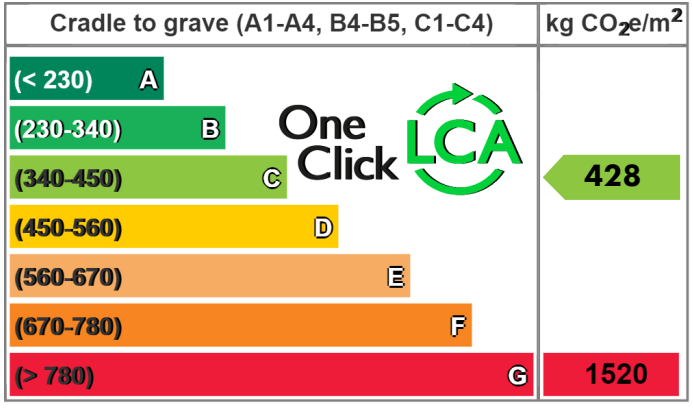
CO2 Capture /Green areas

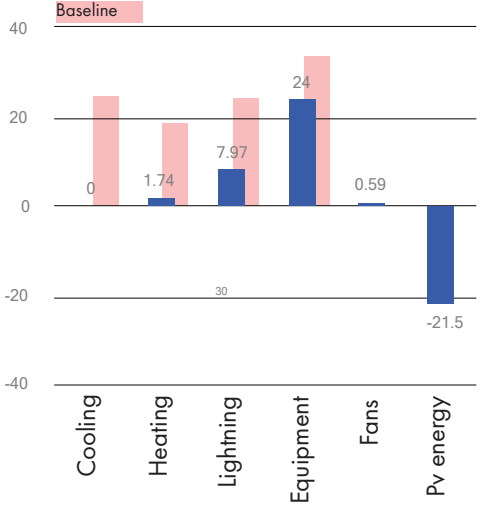
84
Ton/CO2/yr

THE_WAREHOUSE EUI

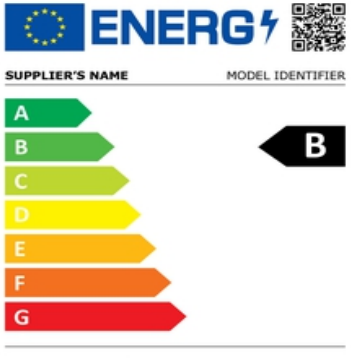
13.75
kWh/m2/yr

The warehouse compared to a traditional building





Energy consumption during operations will be managed by regulating equipment energy consumption



Propose Equipment energy consumption standarization

650 m2 Solar panels

Reducing 85% of energy consumption during operating time


1. Apartments
2. Social spaces
3. Public Terrace
4. Co working
5. Local market
6. Greenhouse as a passive heating system
3
6
1
2
4
5


THEWAREHOUSE