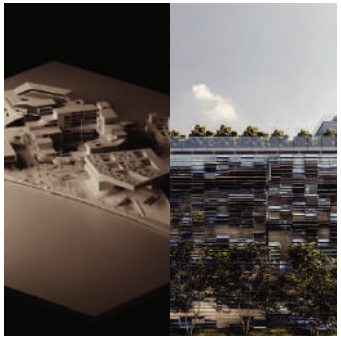
Portfolio 2025

Fabiana Semprun

Aquanix



The Nodal City

Forests&Fields

TMS Office

Tetriskase

Other Interior projects

Aquanix

Floating city

Location
New York, United States

Scope
Urban design & Architecture

Status
Conceptual Design

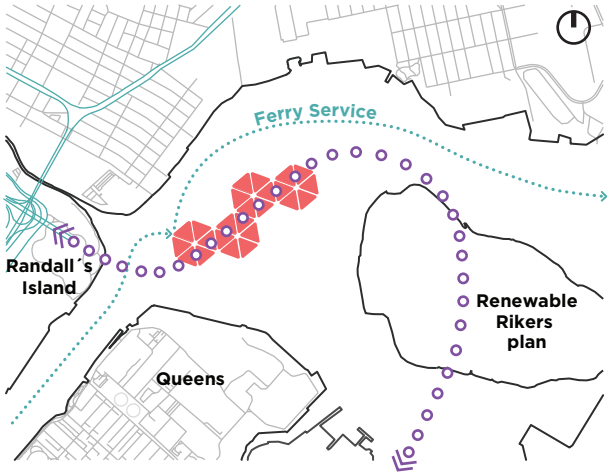
Size
18600 square feet

Year
2024

Collaboration on
Bridge and SkyPark Platform

Guided by mentors from BIG, Zaha Hadid Architects, Foster + Partners, and Gensler, Aquanix was conceived as a visionary response to rising sea levels in New York City. Rooted in sustainable design principles and human-centered approaches, the project integrates innovative solutions to create a resilient and adaptive urban environment, redefining the relationship between architecture and water.

THE PERFECT LOCATION FOR INNOVATION



Automobile and Pedestrian connection with Manhattan and Queens

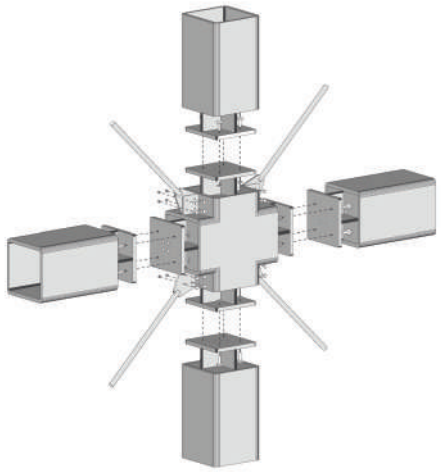
Ferry Connection with Manhattan, Queens and Bronx

Air Taxi from LaGuardia Airport

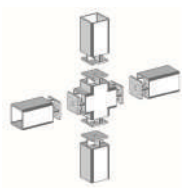
Promoting Randall´s and Rikers Island economic and sustainable development

BUILDABILITY - BRIDGE AND PLATFORM STRUCTURE

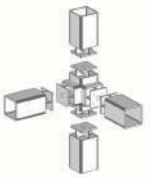
Buildings and Bridge demountable joint
Material: Recycled Steel



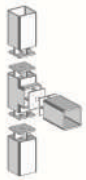
Column Base



2 Beams 180°



2 Beams 90°



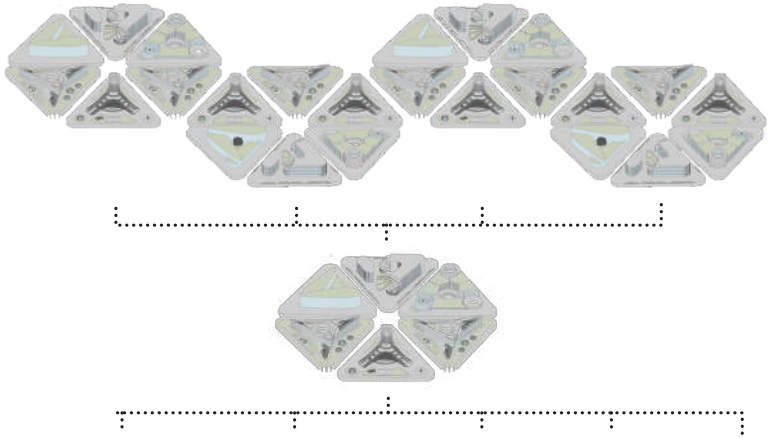
1 Beam

MASTERPLAN COMPOSITION

1
Innovation District

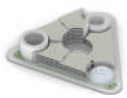
4
Villages

5
Platform Types



CascadeCity

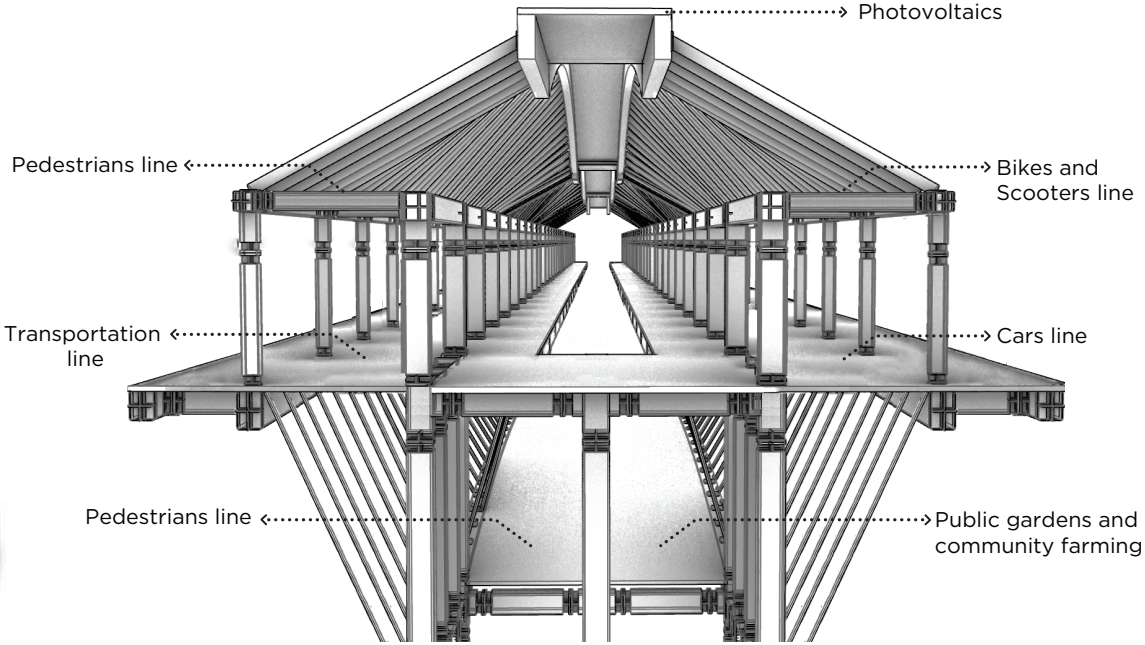
SkyPark



SkyPark

SkyPark

SkyPark



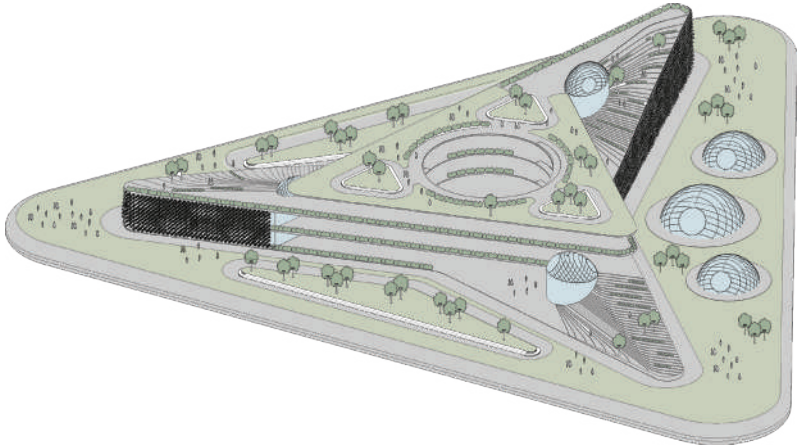
SKYPARK PLATFORM

SkyPark
Corporative and Commercial
32,000 sqm

Technology and Innovation Centers
4,000 sqm

Retail / Commercial
5,000 sqm

Office spaces
7,000 sqm



BUILDING SUSTAINABLE MATERIALS

STUFF
Mycelium, Bamboo, Cork, Recycled Wood, Recycled Plastic, Hemp, Organic fabrics

SPACE
Bamboo, Cork, Reclaimed Wood, Recycled glass, Recycled Metal, Natural Stones

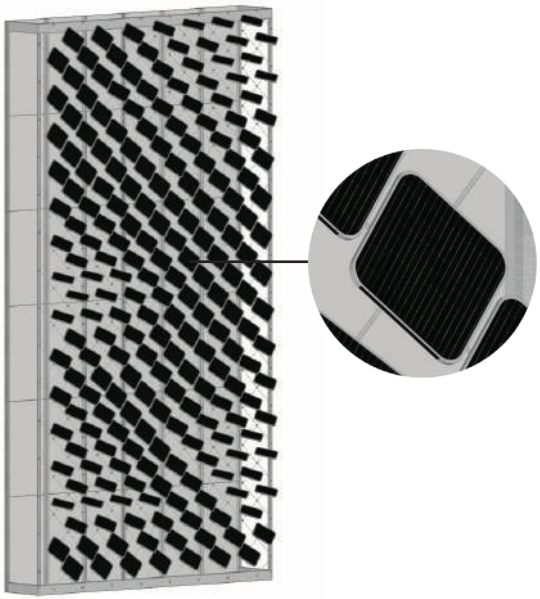
SERVICES
Renewable Energy, Water Management, Waste Management, Urban Agriculture

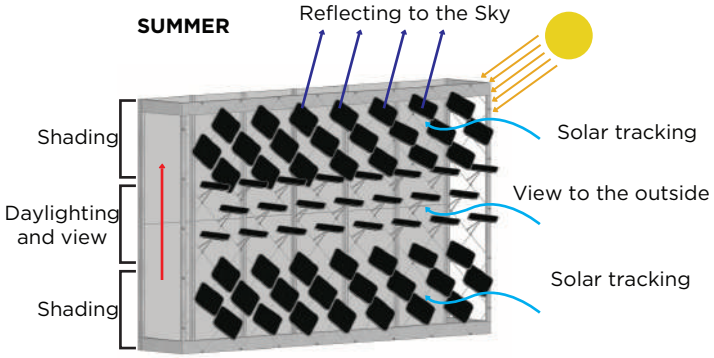
STRUCTURE
Recycled Steel, Green Concrete

SKIN
Recycled Steel, Recycled Glass, Automated Solar Panels

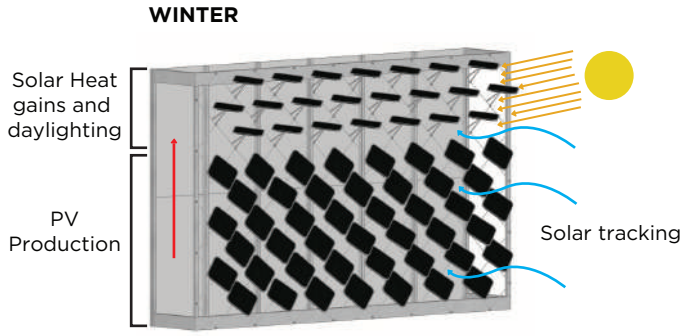
SITE
Recycled Steel, Green ConcretePlastic

FACADE SYSTEM



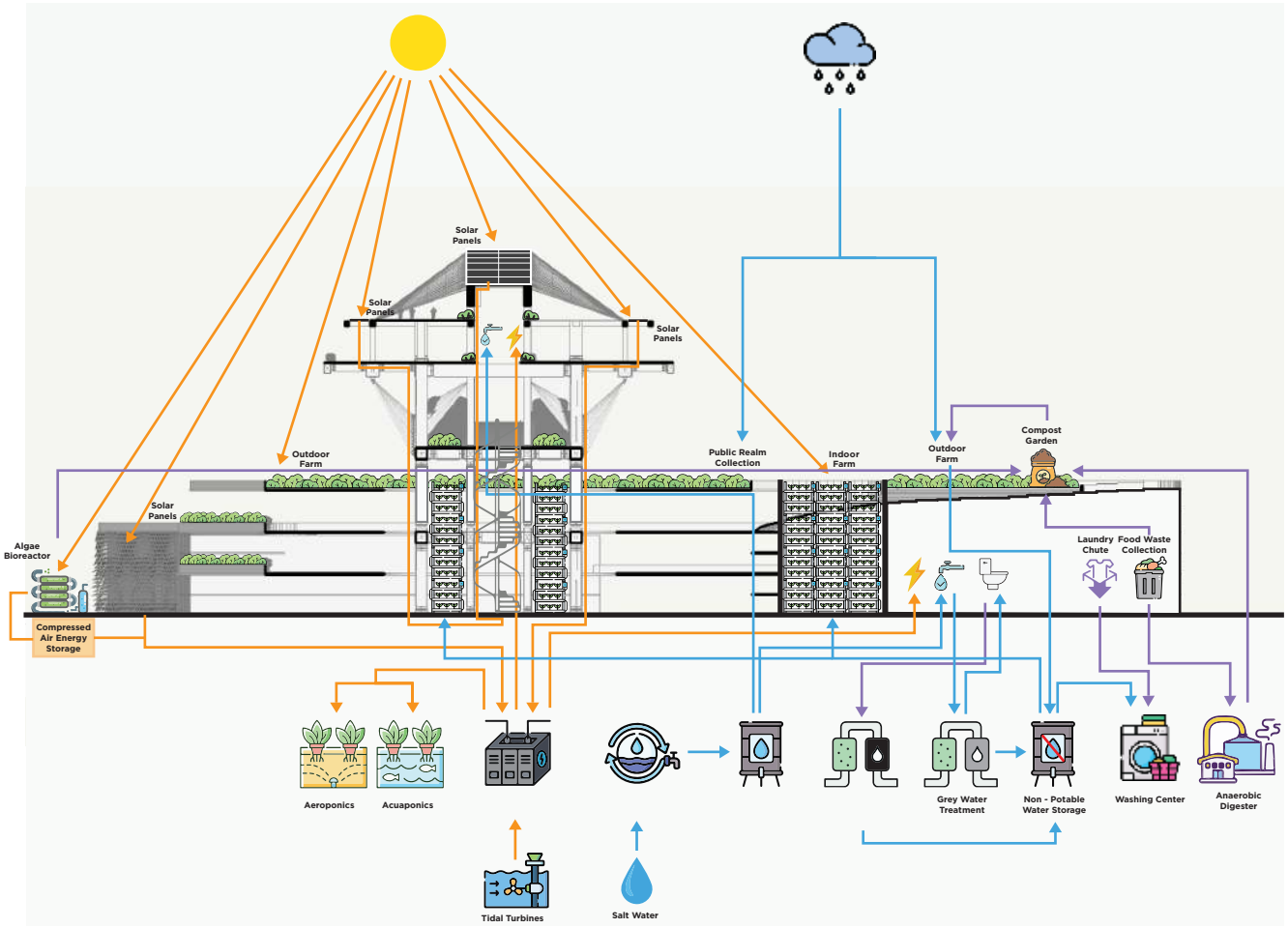


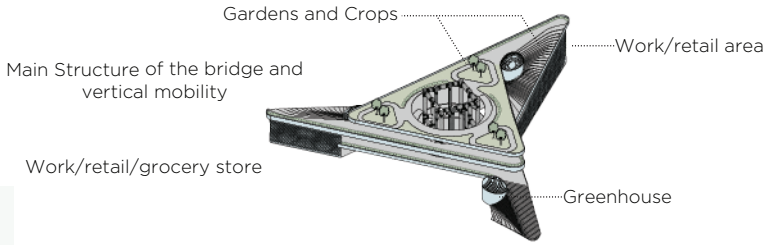
-Responsive Solar Collection
-Passive Ventilation

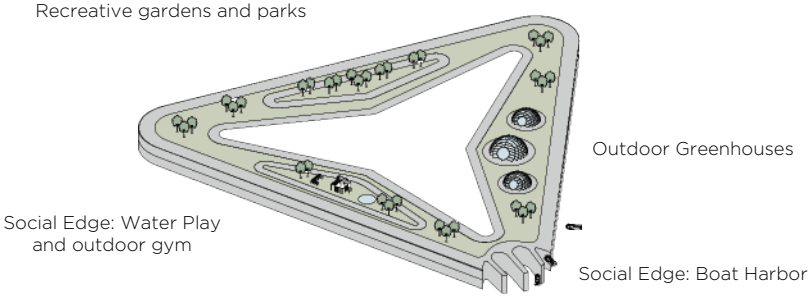


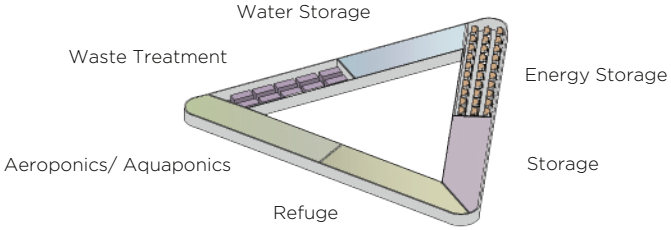
-Passive Shading
-Water-tight seal

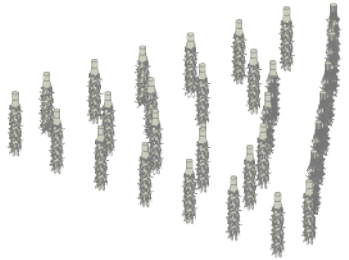
CIRCULAR ECONOMY & SUSTAINABILITY





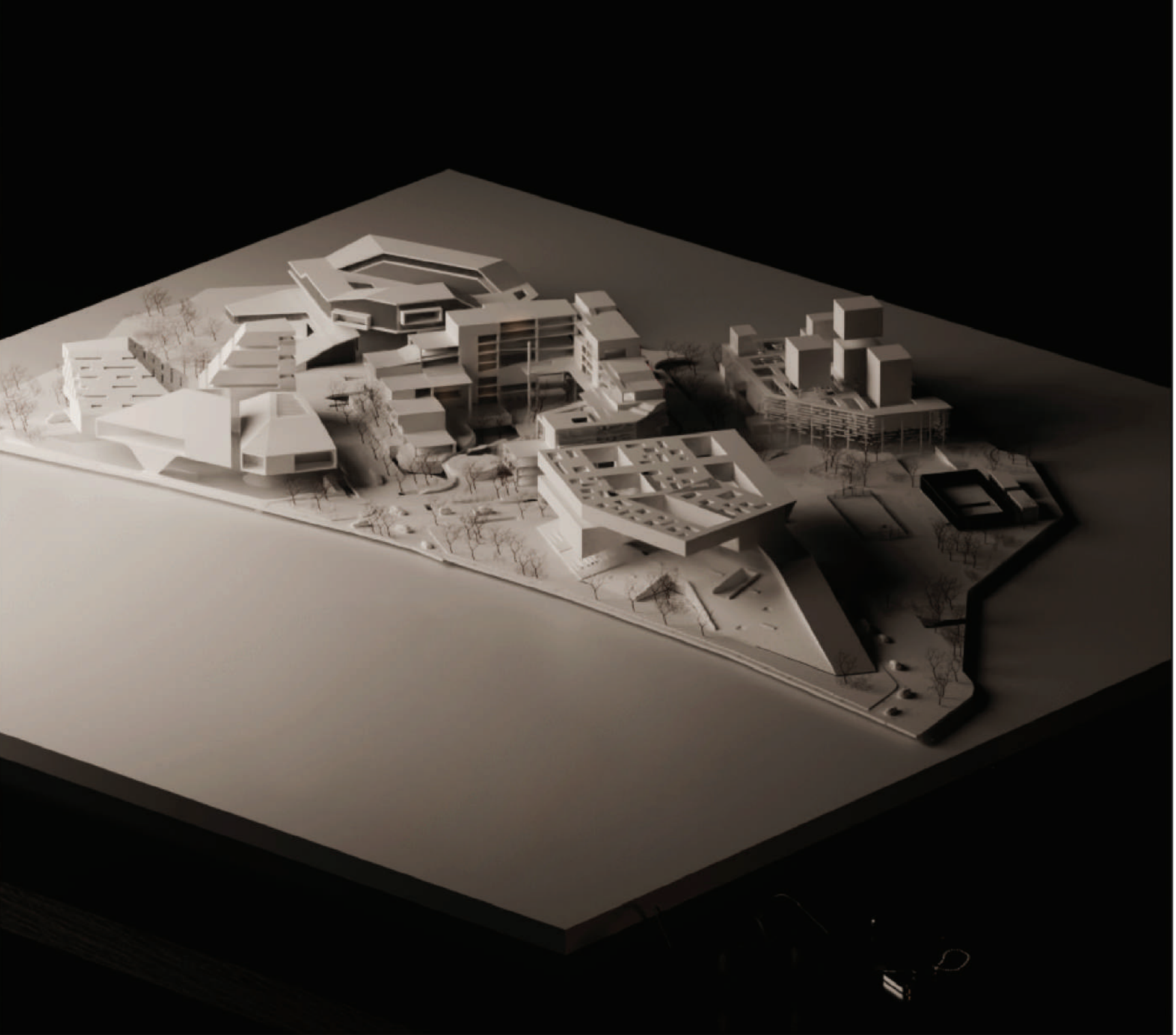






3D Ocean Farming

Tidal Turbines



The Nodal City

Prototype of the Future

Location
Maracaibo, Venezuela

Scope
Urban design & Architecture

Status
Conceptual Design

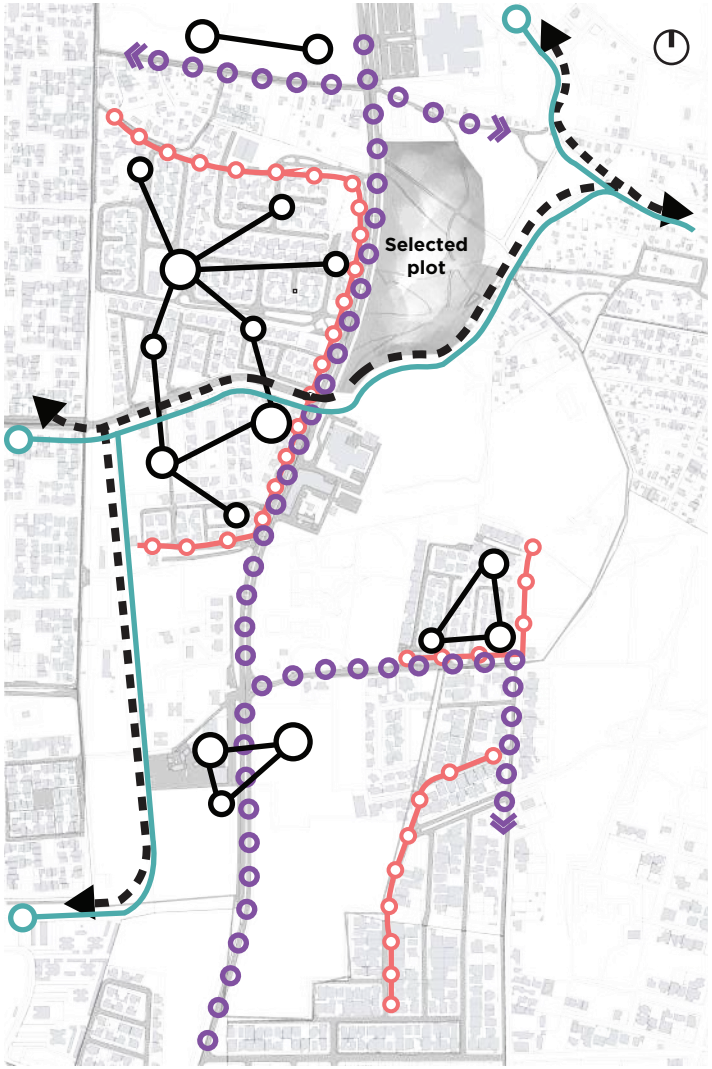
Size
Nodal city:
688890.27 sq ft
ArcuNode:
215278.21 sq ft

Year
2021

Collaboration on
Macroproposal,
The Nodal City,
ArcuNode,
Unit prototypes

Since 1990, Maracaibo has experienced a worldwide phenomenon called privatization which has led to the development of gated communities in the northern sector of the city. This proliferation has had negative impacts on the city's landscape, economy, environment, and cultural identity. The biggest challenge of the 21st century will be to democratize the benefits of these "urban islands" and to structure the city into a coherent whole while creating new housing prototypes adapted to the accelerating changes coming by 2050.

URBAN MACRO PROPOSAL



Redesigning sidewalks

Commercial activity

Interconectivity of public and recreational areas

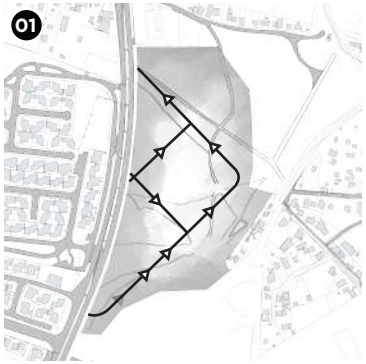
Permeability to Gated Communities

Glens

THE NODAL CITY: PROCESS

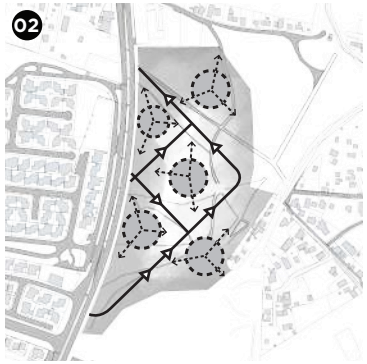
The Nodal city is a superblock prototype proposed in a plot with an area of 688890.27 sq ft to articulate the northern sector of the city. It is composed by six nodes that have a thorough planned combination of uses that allows them to function as a single and cohesive unit.

01



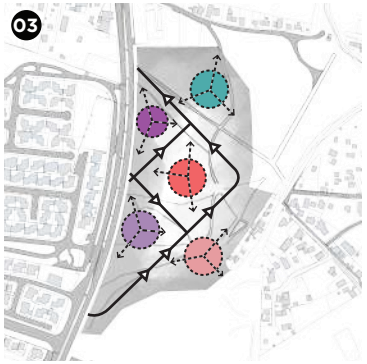
Route: The route for the main traffic circulation is defined to efficiently cover the whole plot.

02



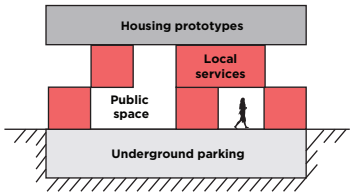
Progressive nodes: A serie of nodes is established from which the gradual development of the micro-city would start.

03



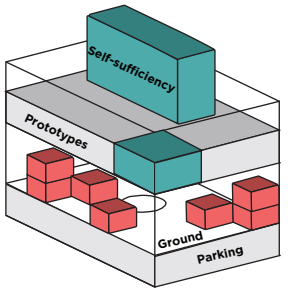
Classification of nodes: The nodes are classified to contain mixed-uses related to investigations based on future trends by 2050.

04



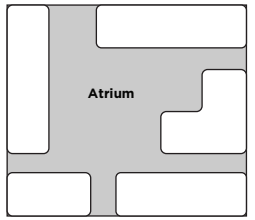
Nodes distribution: The housing prototypes will be elevated from the ground, and the parking area will be underground, freeing up the ground for public space and local services.

05



Productive spaces: The commercial services are located in the ground, while the corporative and self-sufficiency ones are distributes in the rest of the building.

06



Productive spaces: The Nodes will have atriums that link the first floor with the upper levels to integrated all the systems.

DESIGN CRITERIA

"Rurban" concept
Urban and Rural

Low-speed block

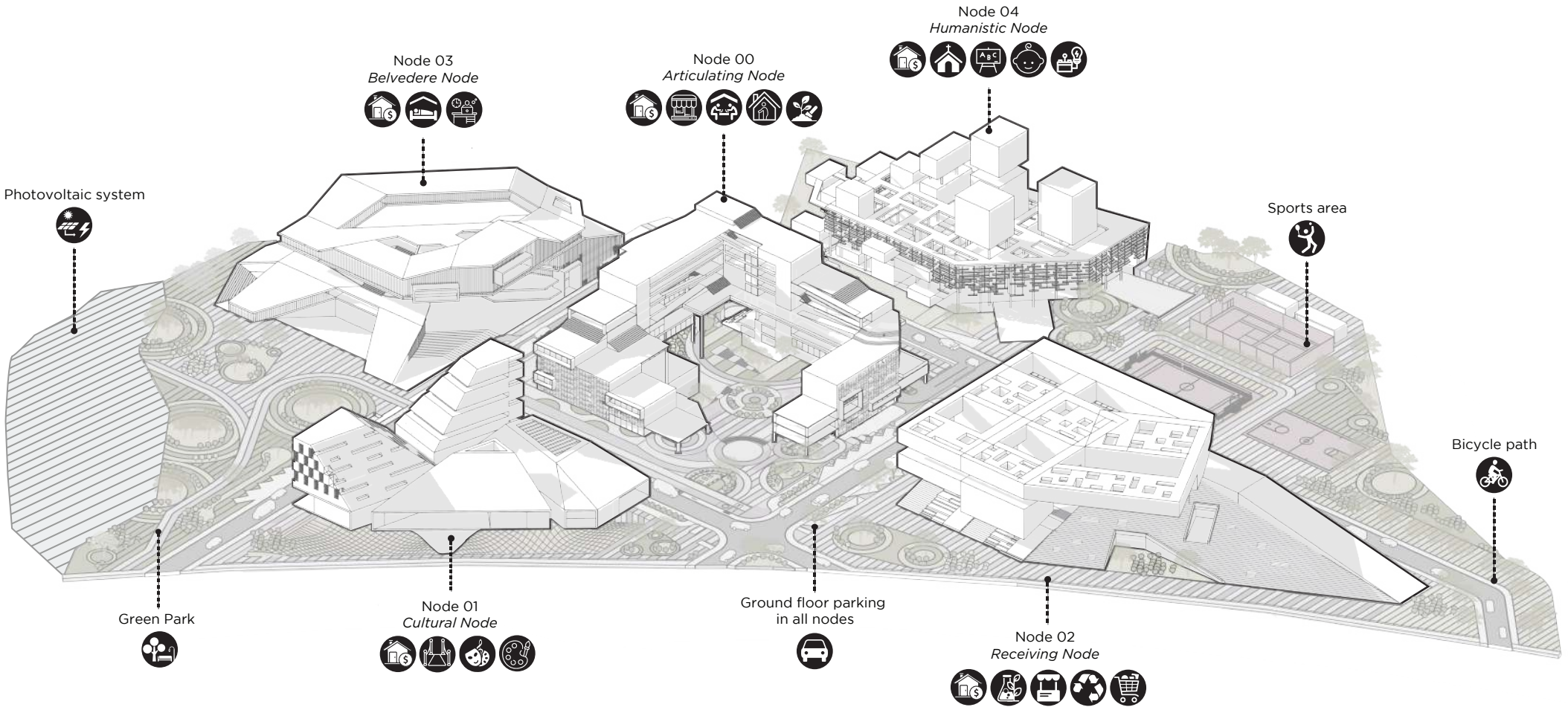
Hybrid buildings
and dynamism

Micro city
recycling services

Production chain
From home to city

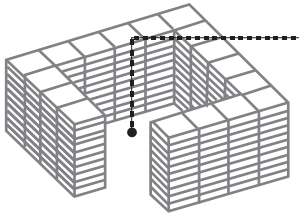
Inclusive city:
New family units,
elderly and disabled

THE NODAL CITY: RESULT



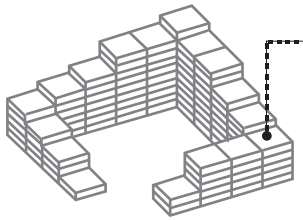
- *Productive housing*
- *Hotels*
- *Offices and commercial areas*
- *Local commerce*
- *Co-working, teleworking mini 3D industry*
- *Day center*
- *Agriculture*
- *Chapel*
- *Education center*
- *Daycare*
- *Energy control center*
- *Cultural center*
- *Event rooms*
- *Exhibition and artist workshops*
- *Agrilaboratory*
- *Bazaar and covered square*
- *Mini recycling plant*
- *Supermarket*

ARTICULATING NODE



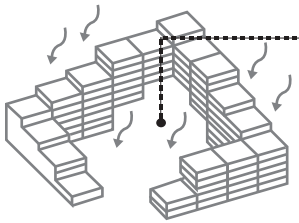
Atrium

Since people are the main characters, the development of the nodes begins from expansive atriums that serve as public areas, being the fundamental city's characteristic.



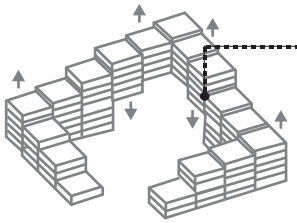
Terraced building

In a Post-COVID world, the terraces will be used as outdoor spaces to bring an urban experience even above the ground. They will also be for people's self-sustenance and production such as crops.



Ventilation

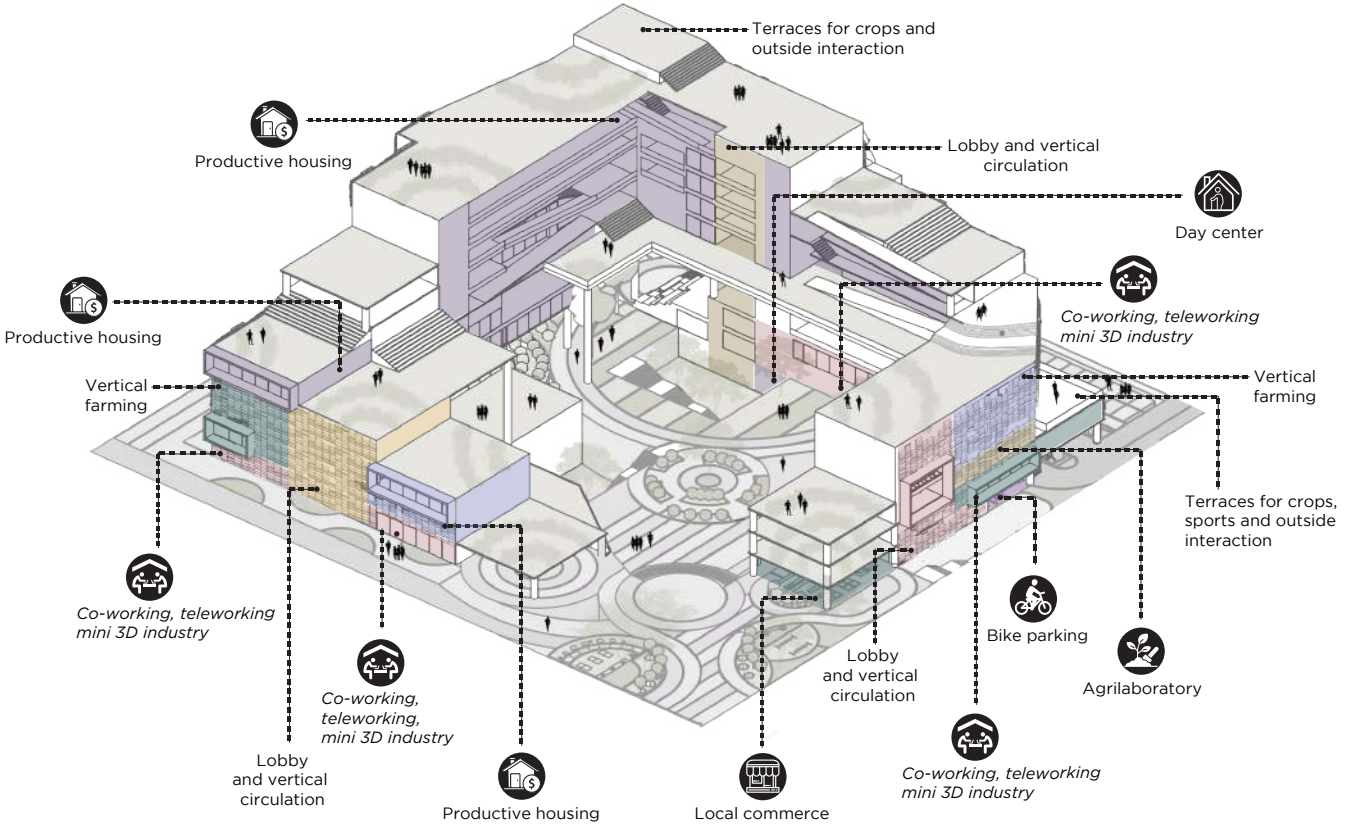
To have a rewarding experience in the public area as well as in the terraces and the interiors of the building, an opening in the back is designed for ventilation purposes.



Slopes

In a Post- Covid world, slopes are added between the prototypes and production areas to bring people a sense of security and isolation in case diseases come due to overpopulation in 2050.

Since it is the articulating node, it was intended to create a volume that would be open to the context and give people the impression that they were living in a big square.



LANDSCAPE

Ornamental vegetation, crops, sporting, and recreational areas

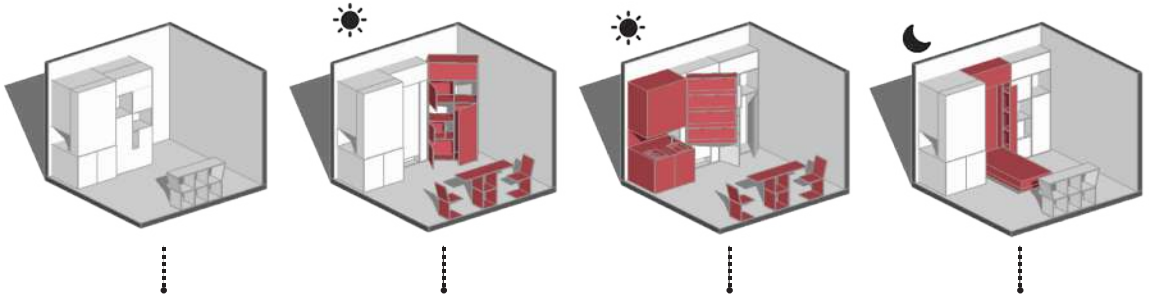
Circulation area. Space between lines 2 mt in event of distancing due a pandemic

UNITS PROTOTYPES

HOUSING PROTOTYPES - CATALOG OF MODULES

To generate a replicable, stackable, low-cost, high-density housing prototype it was developed a catalog of modules within a format of 4m x 4m each. Now families can adapt their house according to their needs by freely selecting the modules. Numerous possible configurations are acquired from the module/space catalog. For each family/inhabitant typology, 6 basic or referential configurations were chosen as suggestions.

The catalog also includes folding furniture, which creates mutable spaces based on the time of day. In addition to this solution, dozens of other options can be found through new furniture ideas and hybrid spaces.



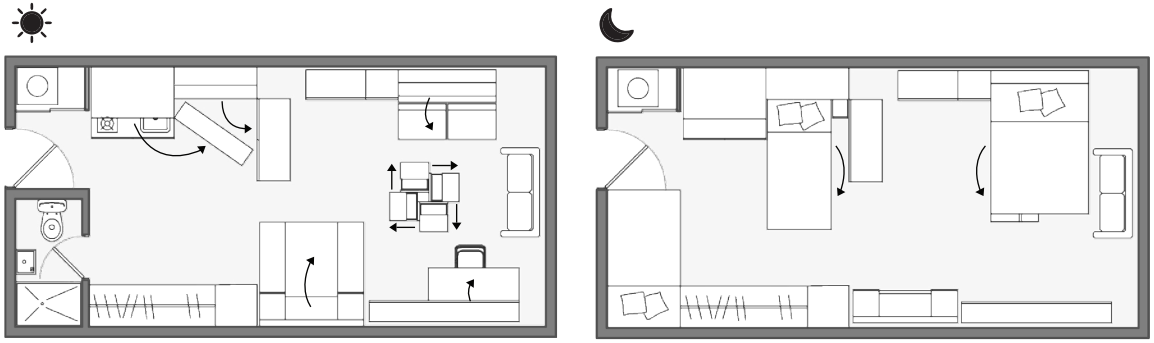
Furniture closed

- Living room
-Closet

- Kitchen
-Living room

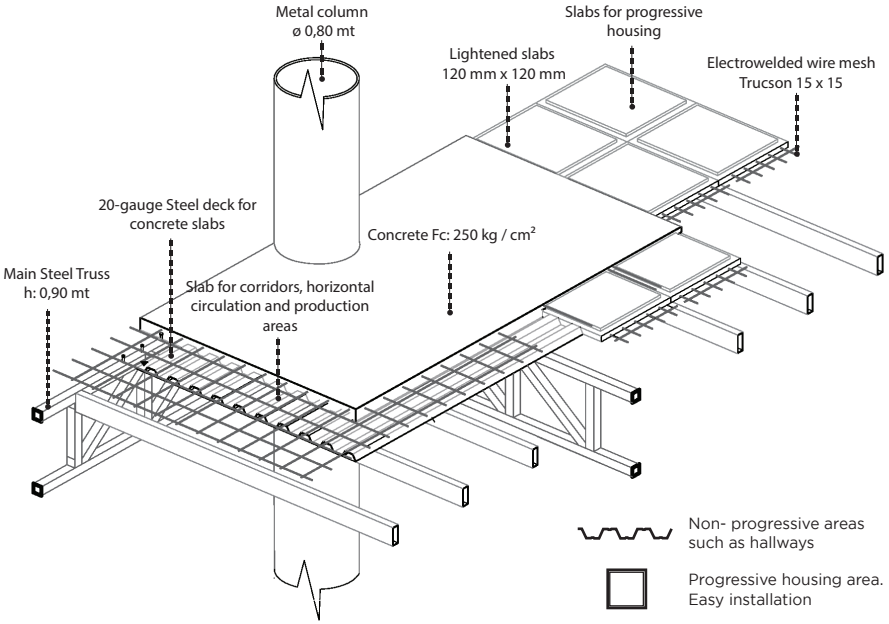
- Bedroom
-Storage area

Flexible module 01
4 mt x 4 mt
16 m²
Tipology: Single

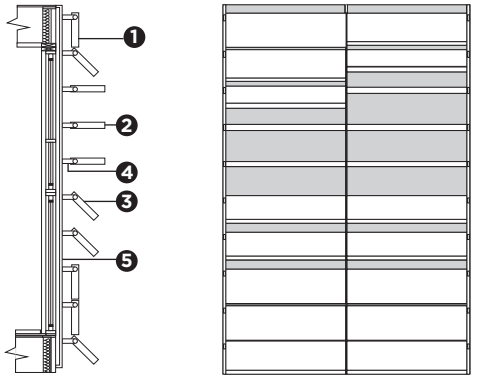


Flexible modules 05 and 06
4 mt x 4 mt each
32 m² total
Tipology: Family, 4 people

TECHNOLOGY - HYBRID SYSTEM

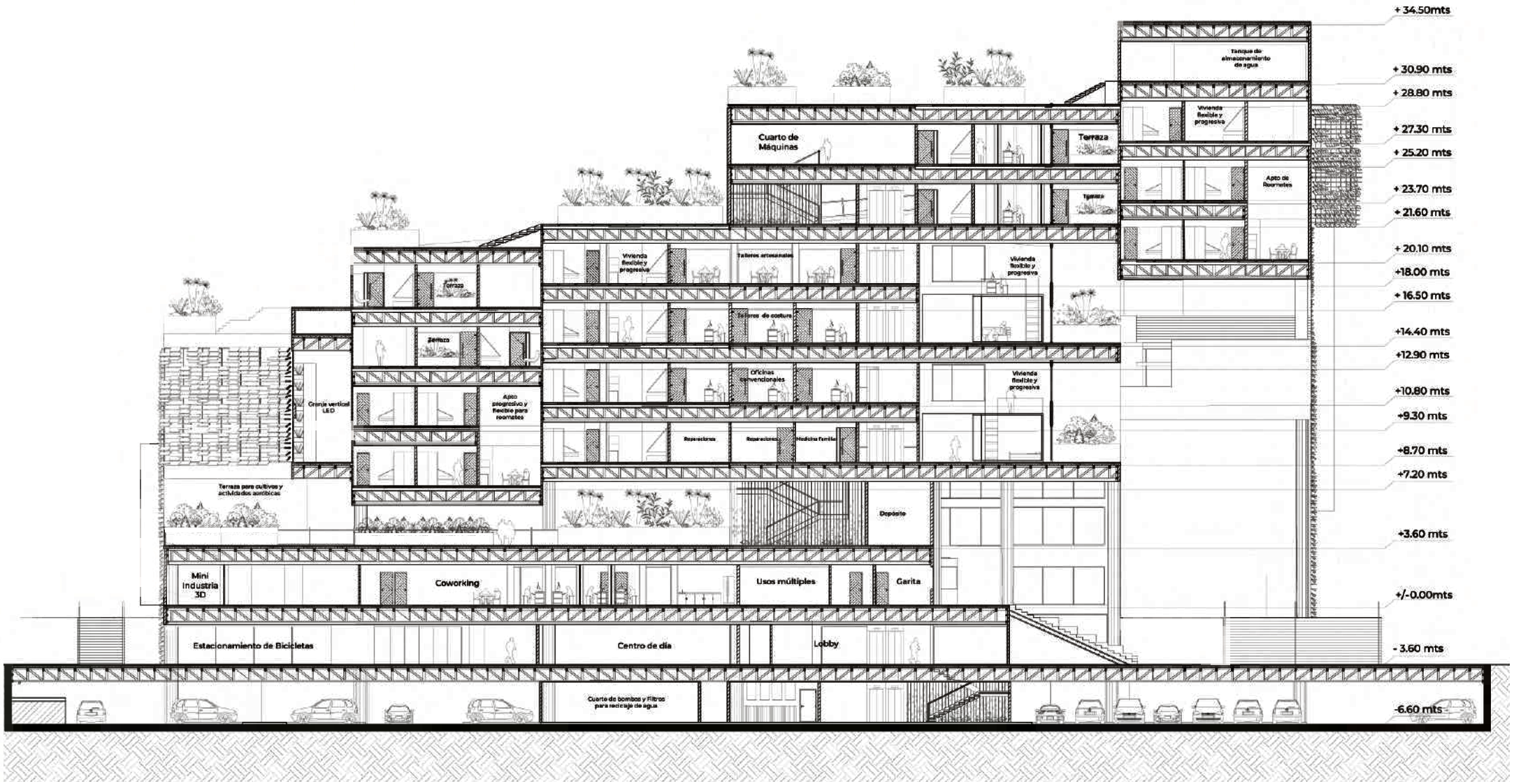


FACADE COVERING - HIDING UNUSED PROGRESSIVE AREAS



1. ETFE Wall covering
2. 90° tilt ETFE Wall covering
3. 45° tilt ETFE Wall covering
4. Anchored aluminium
5. Steel support anchored to facade

SIDE VIEW SECTION



Forests&Fields

Row Houses

Location
Maracaibo, Venezuela

Scope
Architecture

Status
Conceptual Design

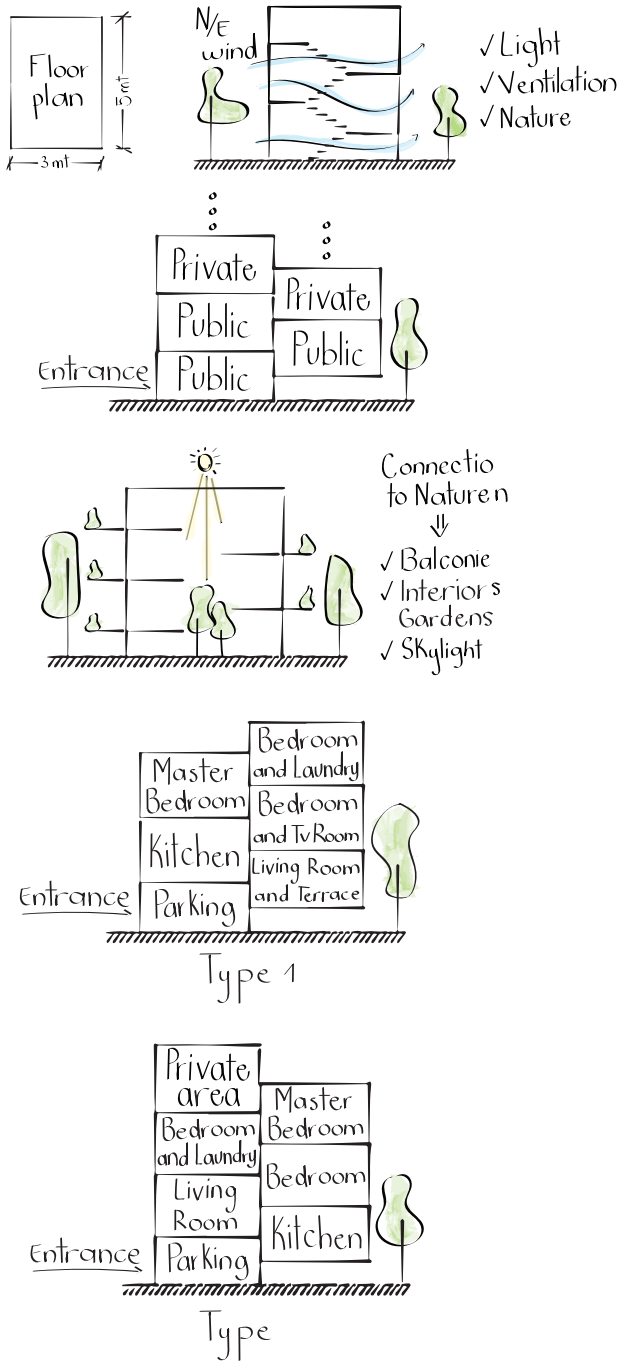
Size
5820 square meters

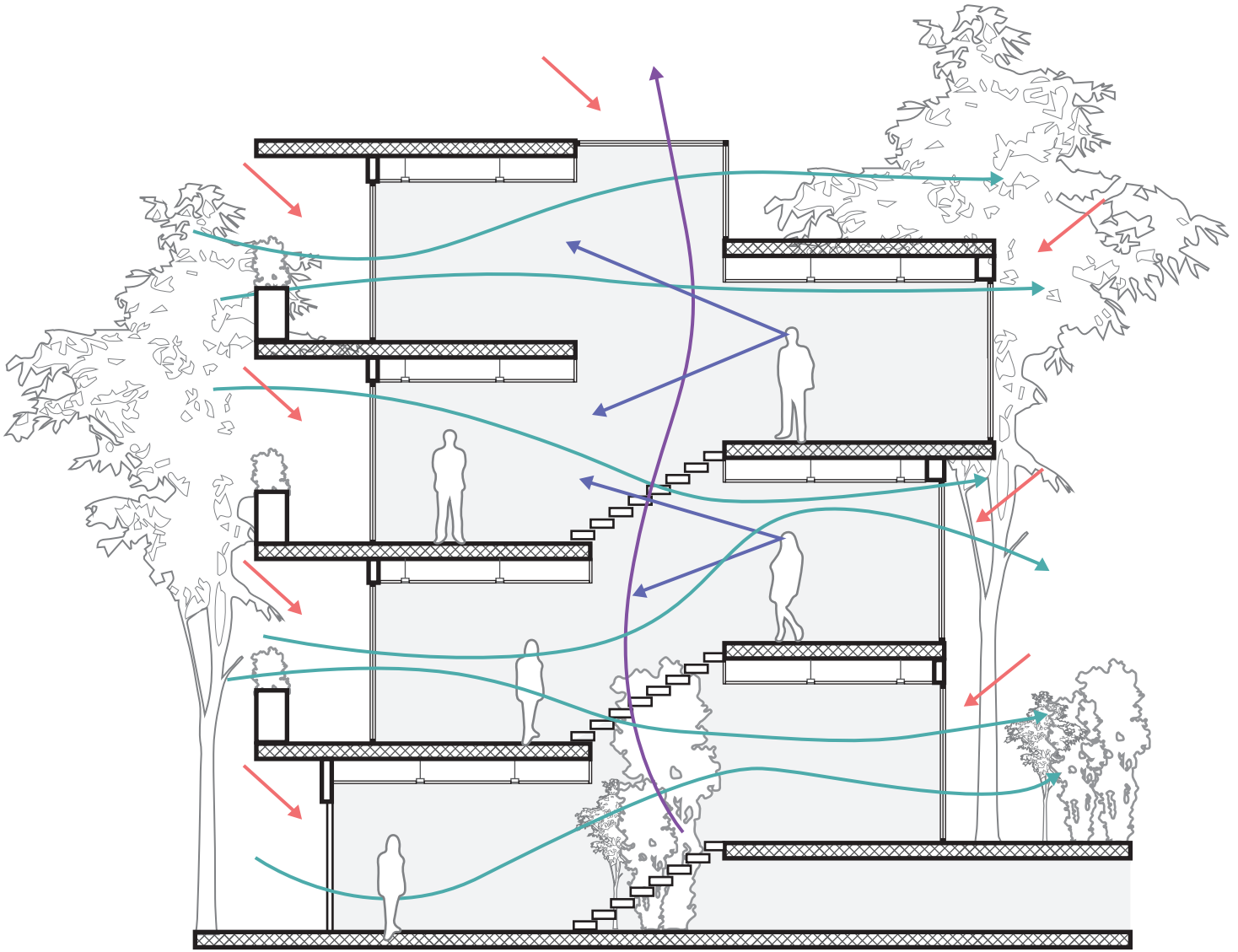
Typology
Residential

Year
2022

On a 5820 sq m plot of land, the project consists of 23 housing units arranged in two rows that open onto a sizable square where the residents experience a sense of community. The primary challenge of this project was figuring out how to make the most of each house's two facades, which were its only sources of natural light, ventilation, and connection to nature, and designing units with the needed spaces within the maximum height allowed: 15 mt.

DESIGN CRITERIA - PROCESS





the interior garden and vegetated balconies offer a fresh and relaxed atmosphere inside the house.

The hot air rises through the vertical circulation being released.

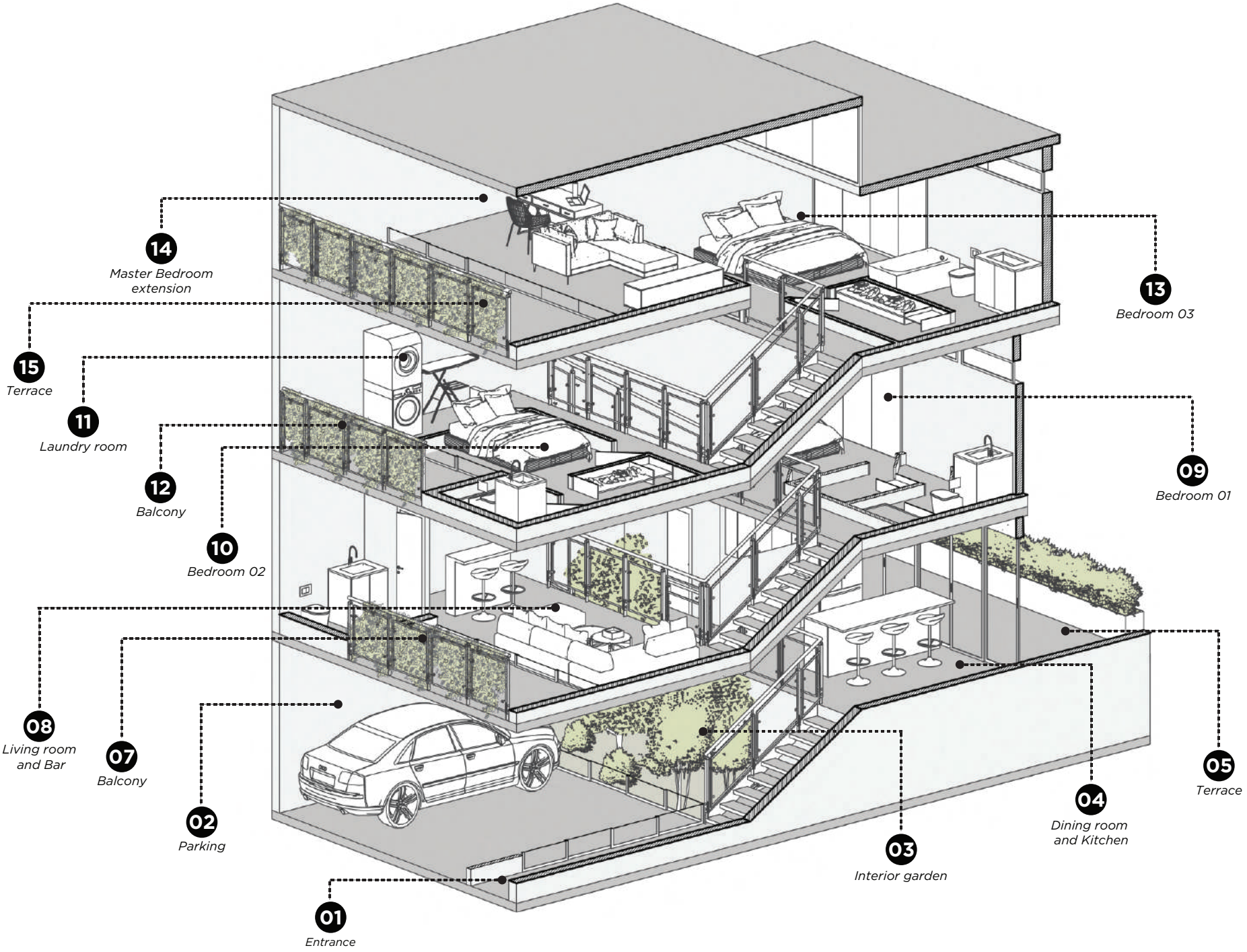
Vegetated balconies provide privacy to the house, reduce the temperature and protect the facades from the sun.

The slopes allow strategic ventilation between the different levels.

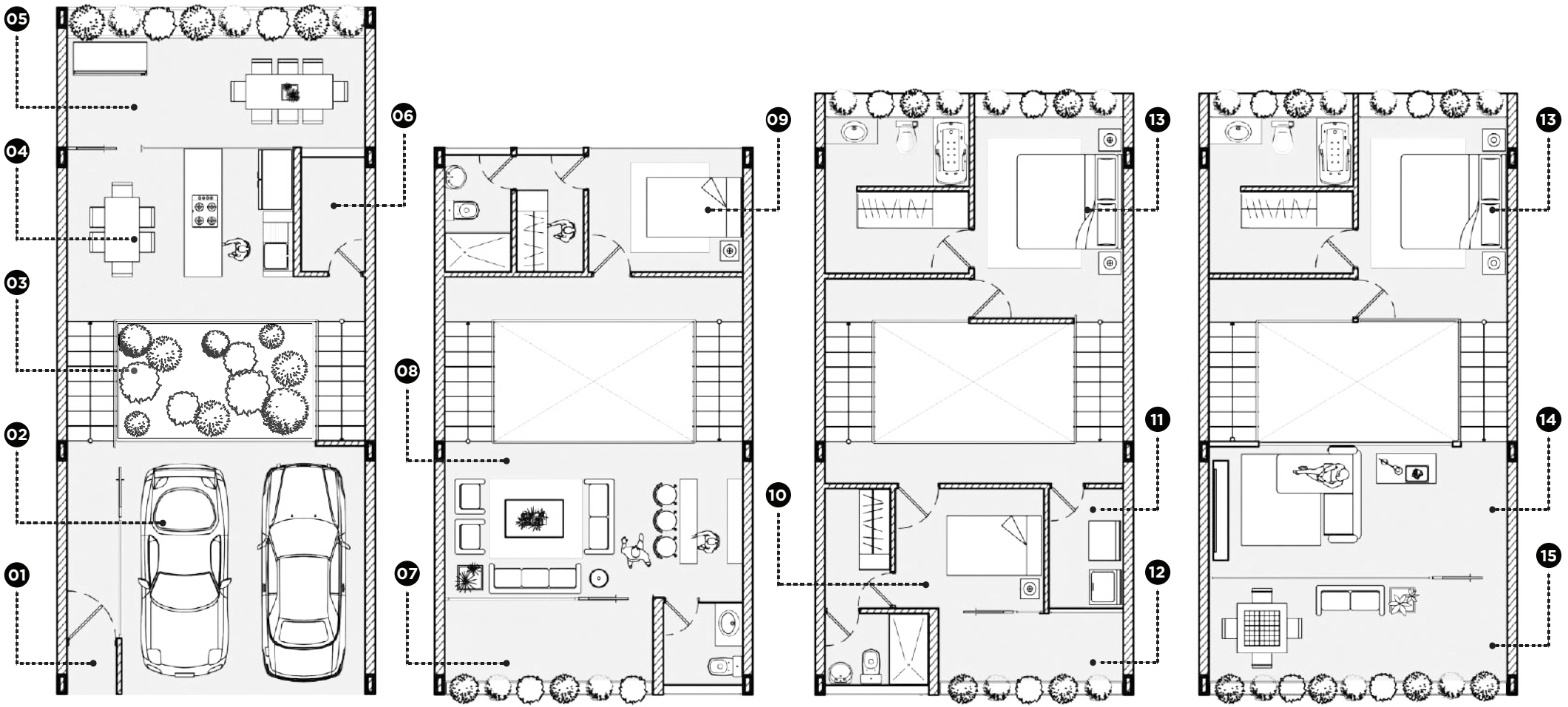
The house has big windows that let in natural light and provide connection to the outdoors and nature.

The slopes generate great sense of spaciousness turning the house into a dynamic space.

ISOMETRIC VIEW - DISTRIBUTION



TYPE 2: FLOOR PLAN



01 *Entrance*
02 *Parking*
03 *Interior garden*
04 *Dining room and Kitchen*
05 *Terrace*
06 *Storage room*
07 *Balcony*
08 *Living room and Bar*
09 *Bedroom 01*
10 *Bedroom 02*
11 *Laundry Room*
12 *Balcony*
13 *Bedroom 03*
14 *Master Bedroom Extension*
15 *Terrace*

TMS Office

Offices

Location
Maracaibo, Venezuela

Scope
Interior Design

Status
Built

Size
155 square meters

Year
2020

Client
Private

The TMS office in Torre Tendencia was designed to promote functionality, comfort, and openness. The layout includes a main office, six workstations, an attorney's office, a marketing area, and a kitchenette. Full-height glass partitions were used to enhance natural light, ventilation, and lake views, creating a bright and connected workspace. Thoughtful spatial planning and material choices ensure a modern, efficient, and human-centered environment.

DESIGN CONCEPT

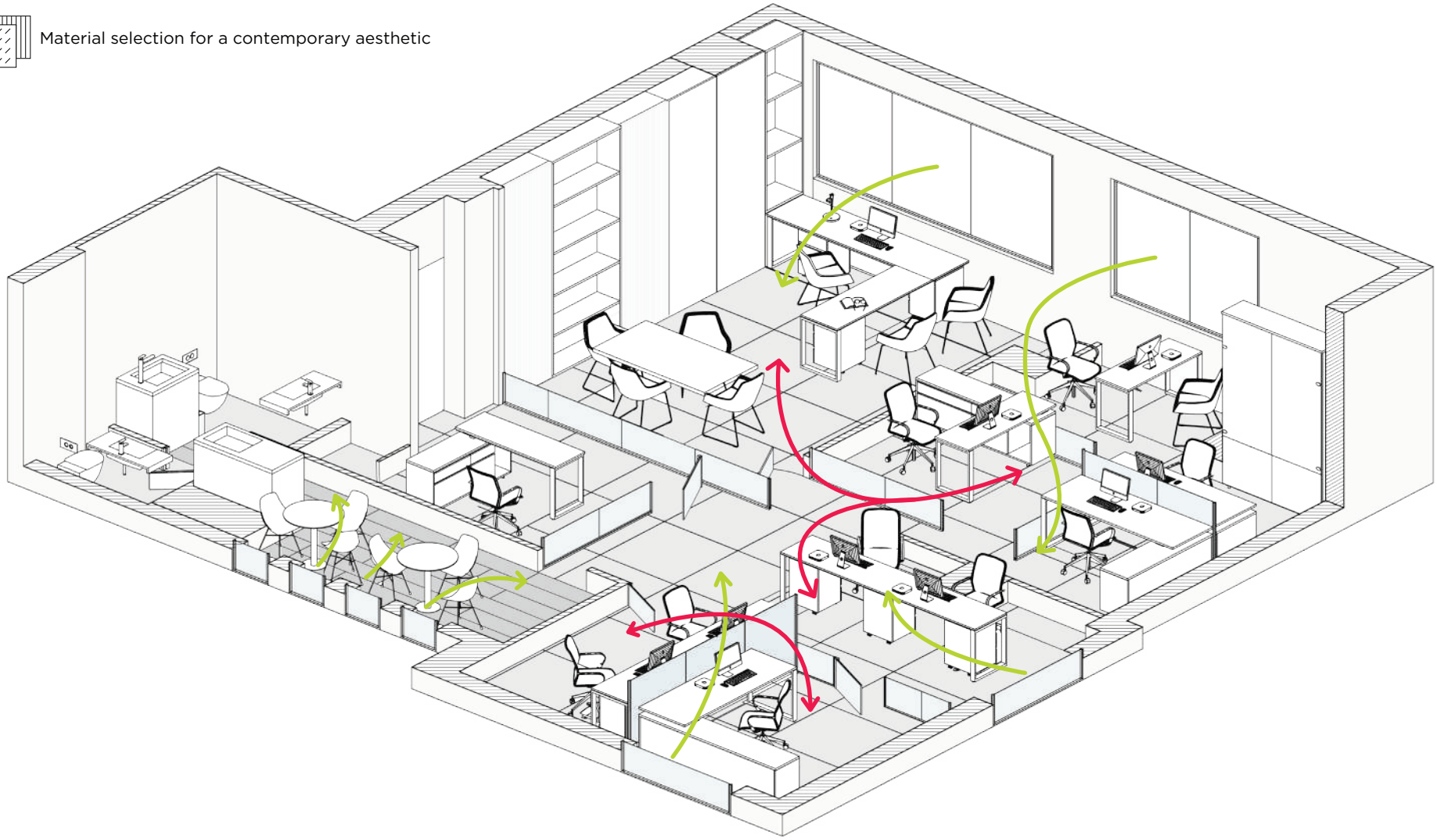
Spaces arranged for efficiency and productivity

Glass partitions for transparency, openness, maximize lake views, daylight, and ventilation

Light-filled environment that feels both open and organized

Kitchenette to support employee well-being and human-centered workplace

Material selection for a contemporary aesthetic



Tetriskase

Home Library

Location
New York, United States

Scope
Furniture Design
Interior Design

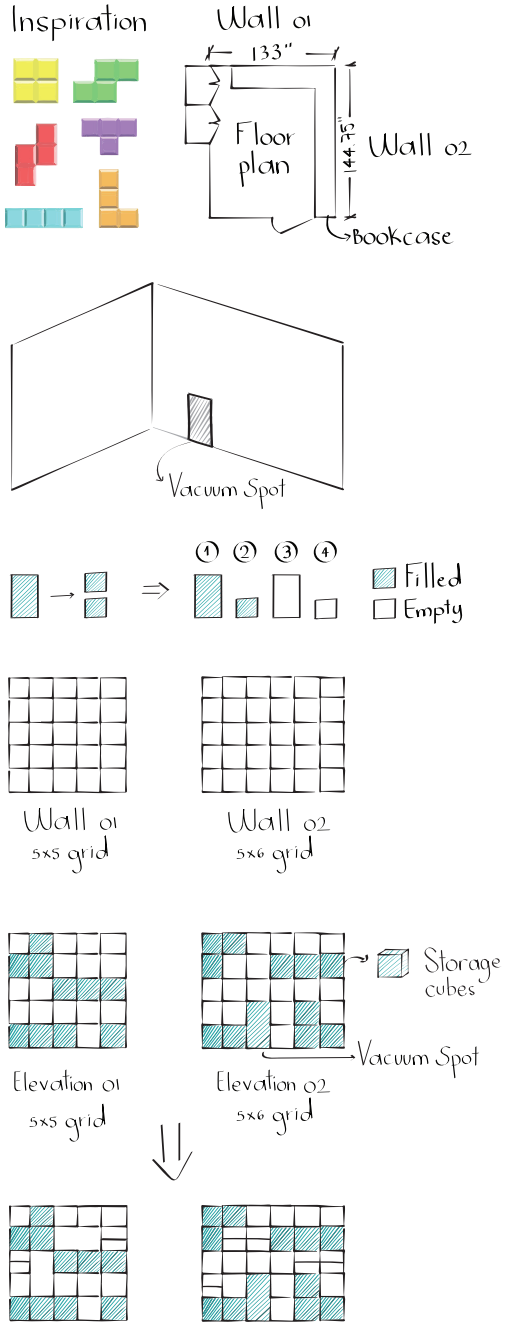
Status
Built

Typology
Residential

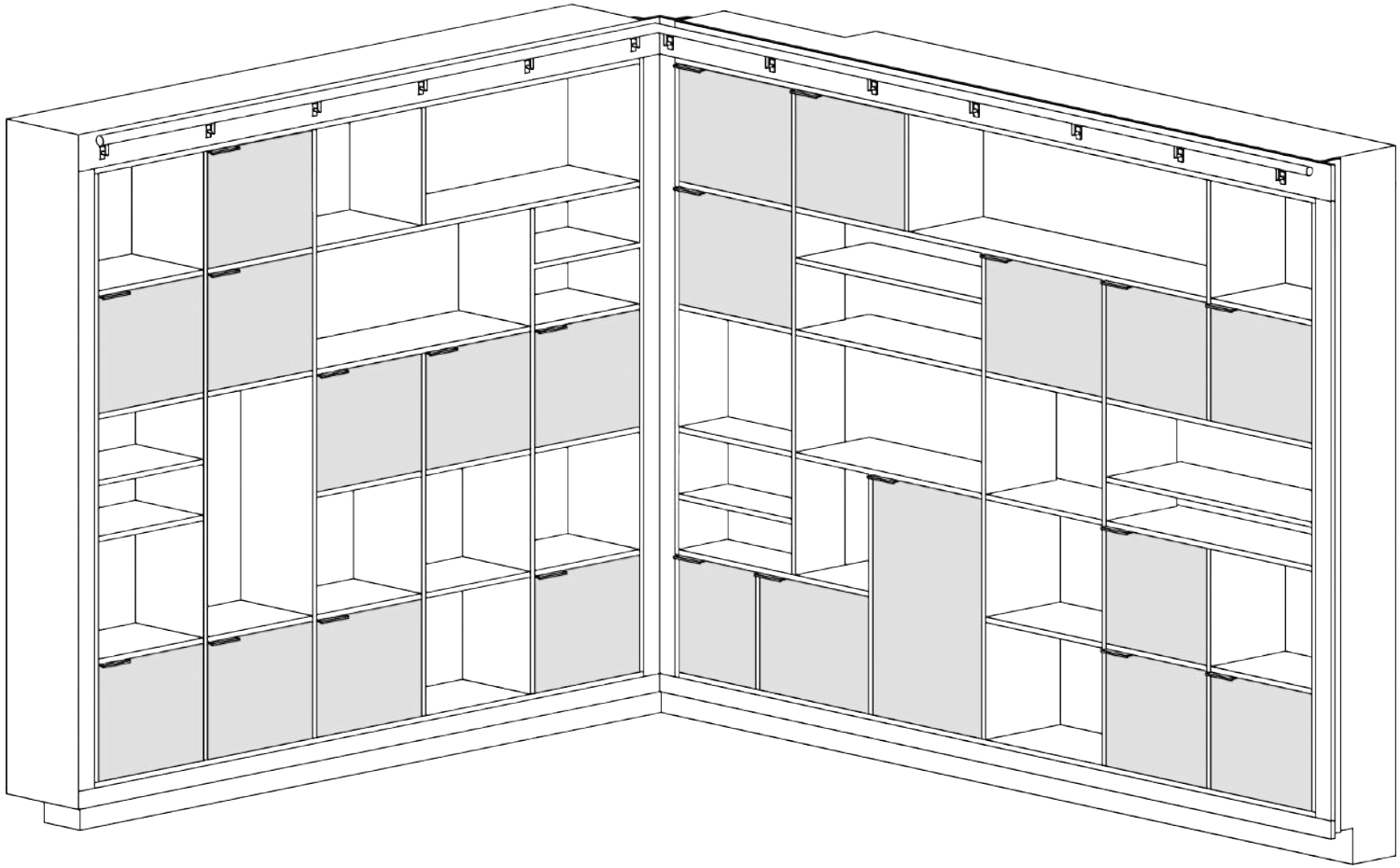
Year
2022

Inspired by the Video game Tetris, this project was created for a reading-loving family that desired a simple but elegant location to store their books. The starting point to design the furniture was a cavity in the wall to keep a vacuum, using that space to duplicate it multiple times to create a dynamic style that played between open and closed spaces while maintaining sobriety and elegance.

PROGRESS



RESULT

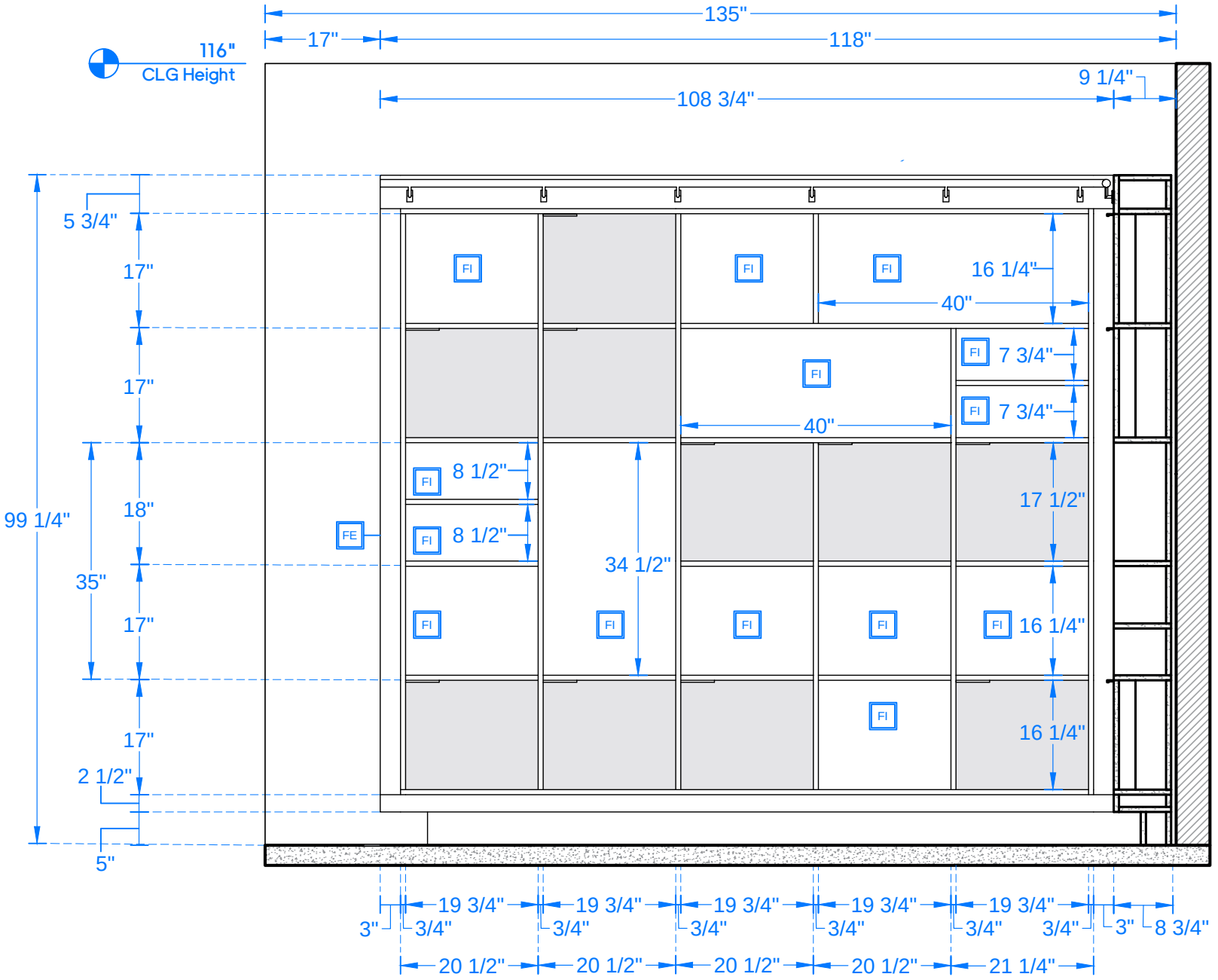


MATERIAL SCHEDULE

SUPPLIER	ITEM	DESCRIPTION
Lamitech	HPL Lamitech Fashion White 2125 Gloss Finish	For Home Library
Commodity	3/4" Particle board	Core for Home Library
Commodity	3/4" White melamine	For Home Library interiors and shelving

SUPPLIER	ITEM	DESCRIPTION
Commodity	Blum Inset Soft Close Hinges	Cabinetry Hinges
Richeliu	Contemporary Aluminium Edge Pull - 9898 Product # BP989850990	Brushed Edge Pull

ELEVATION


135"
17"
118"
116"
CLG Height
9 1/4"
108 3/4"
5 3/4"
17"
17"
18"
35"
17"
17"
2 1/2"
5"
99 1/4"
FI
FE
16 1/4"
40"
7 3/4"
7 3/4"
40"
8 1/2"
8 1/2"
34 1/2"
17 1/2"
16 1/4"
16 1/4"
3"
19 3/4"
3/4"
20 1/2"
3"
8 3/4"


ORIGAMI
ORIGAMI

OTHER INTERIOR PROJECTS

HOME OFFICE - MIAMI, USA

LANDAU KITCHEN - 2117 57ST BROOKLYN, NY, USA

STUDIO APARTMENT - TORRE LITE, MARACAIBO, VENEZUELA