

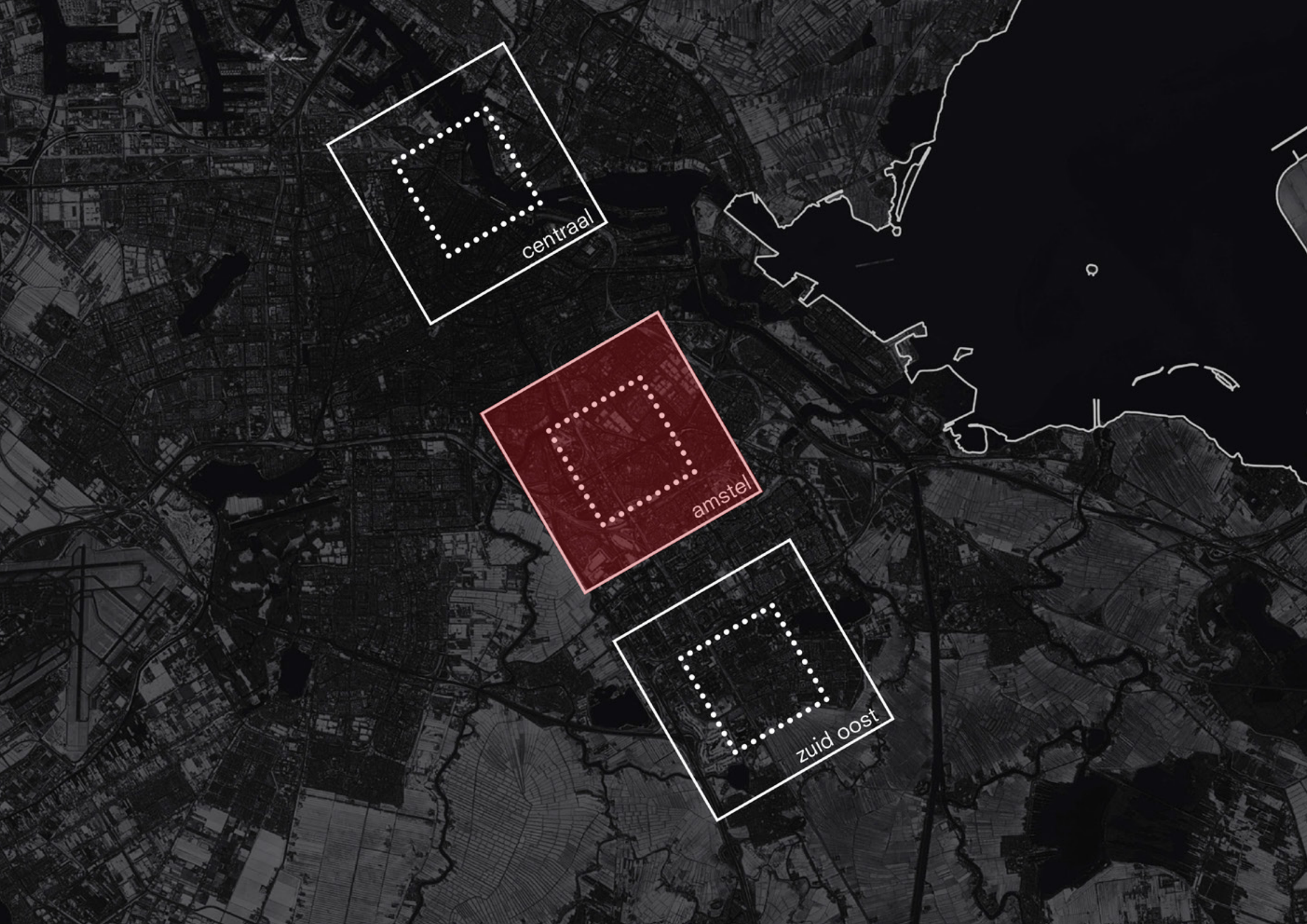
2100 **FUN** **UNIVERSE**

Vertical Entertaining Complex

P5

LI TAN
4700570

Complex Project Graduation Studio



centraal

amstel

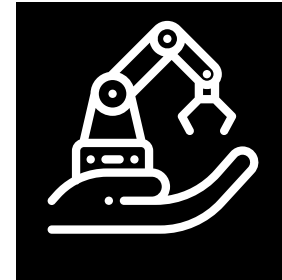
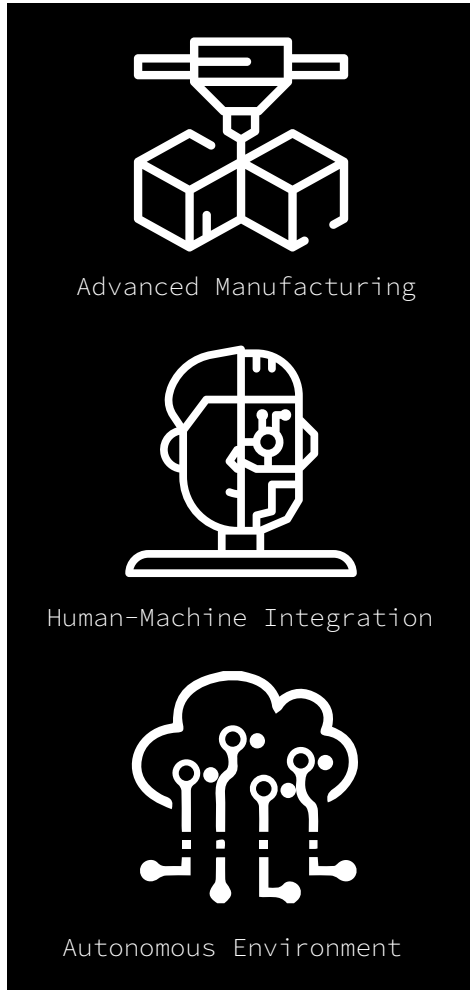
zuid oost

INTRODUCTION
TOWARDS (P)LEISURE CITY

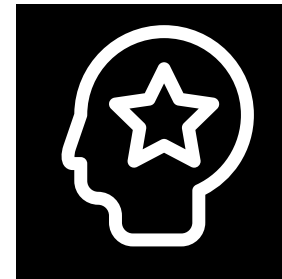
2100?



*RISE OF
PRODUCTIVITY*



*DECENTRALIZATION OF
WORK AND PRODUCTION*



*ECONOMY TURN ITS
FOCUS TOWARDS HUMAN
EMOTION AND WELLNESS*

2000



Clothing



Electronics

Materialism



Housing



Cars

2000



2100



Clothing



Electronics

Materialism



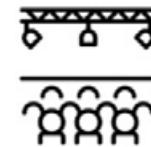
Housing



Cars



Sports



Live events

Experiences

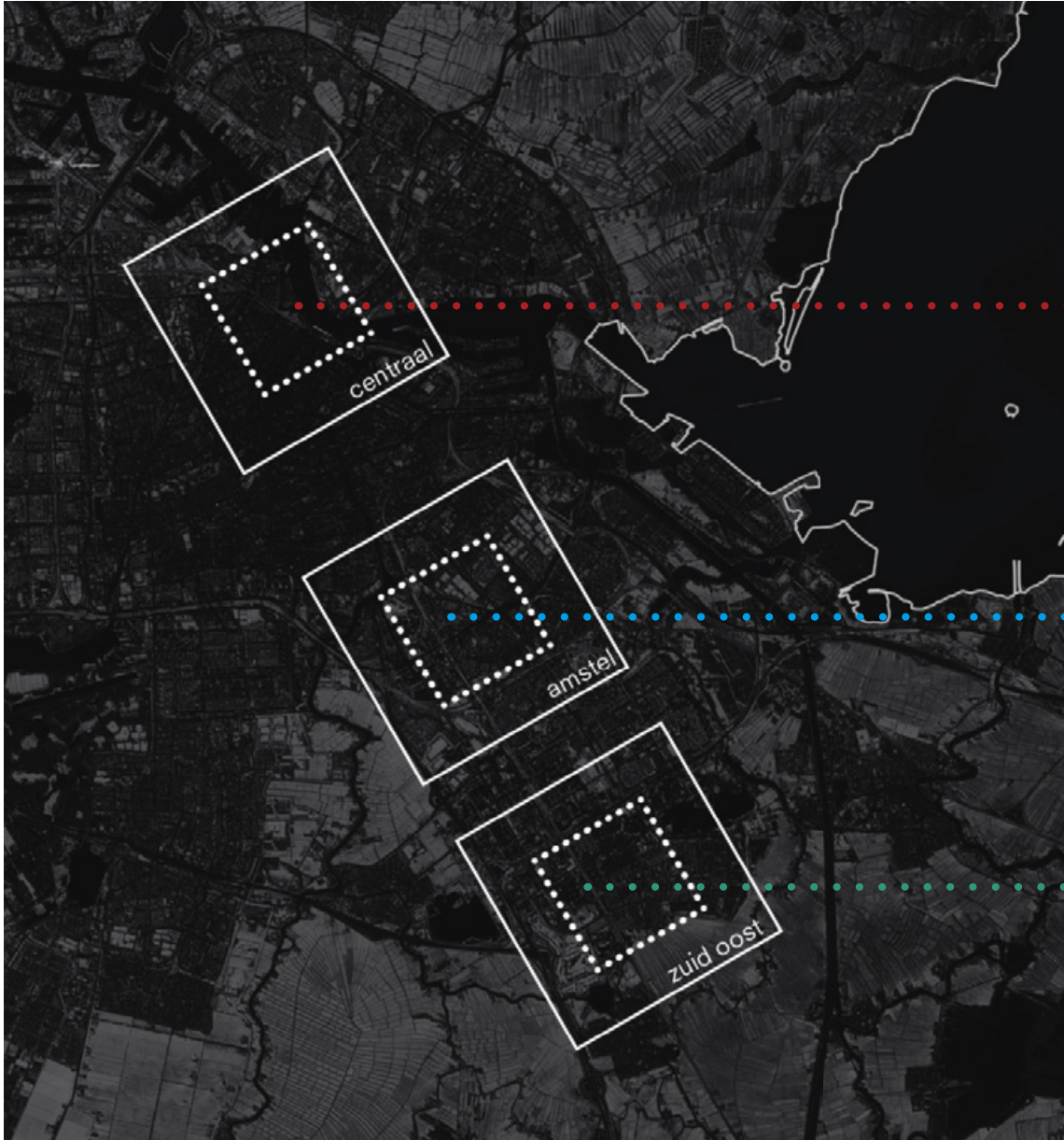


Theater



Travel

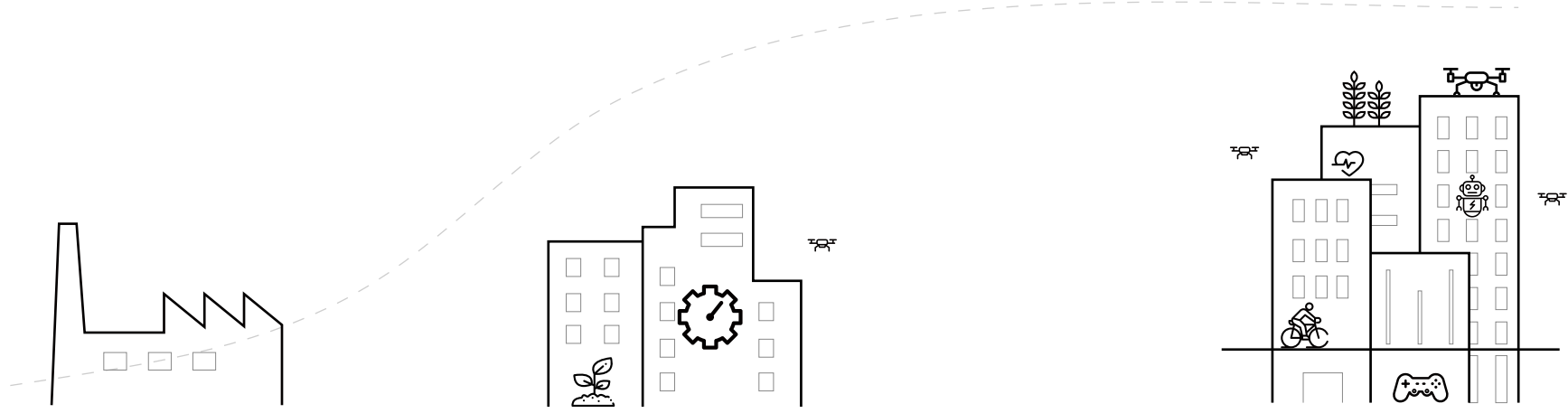
“
Pleasure and Leisure are becoming the next leading economy.”



City of Museum

City of (P)leisure

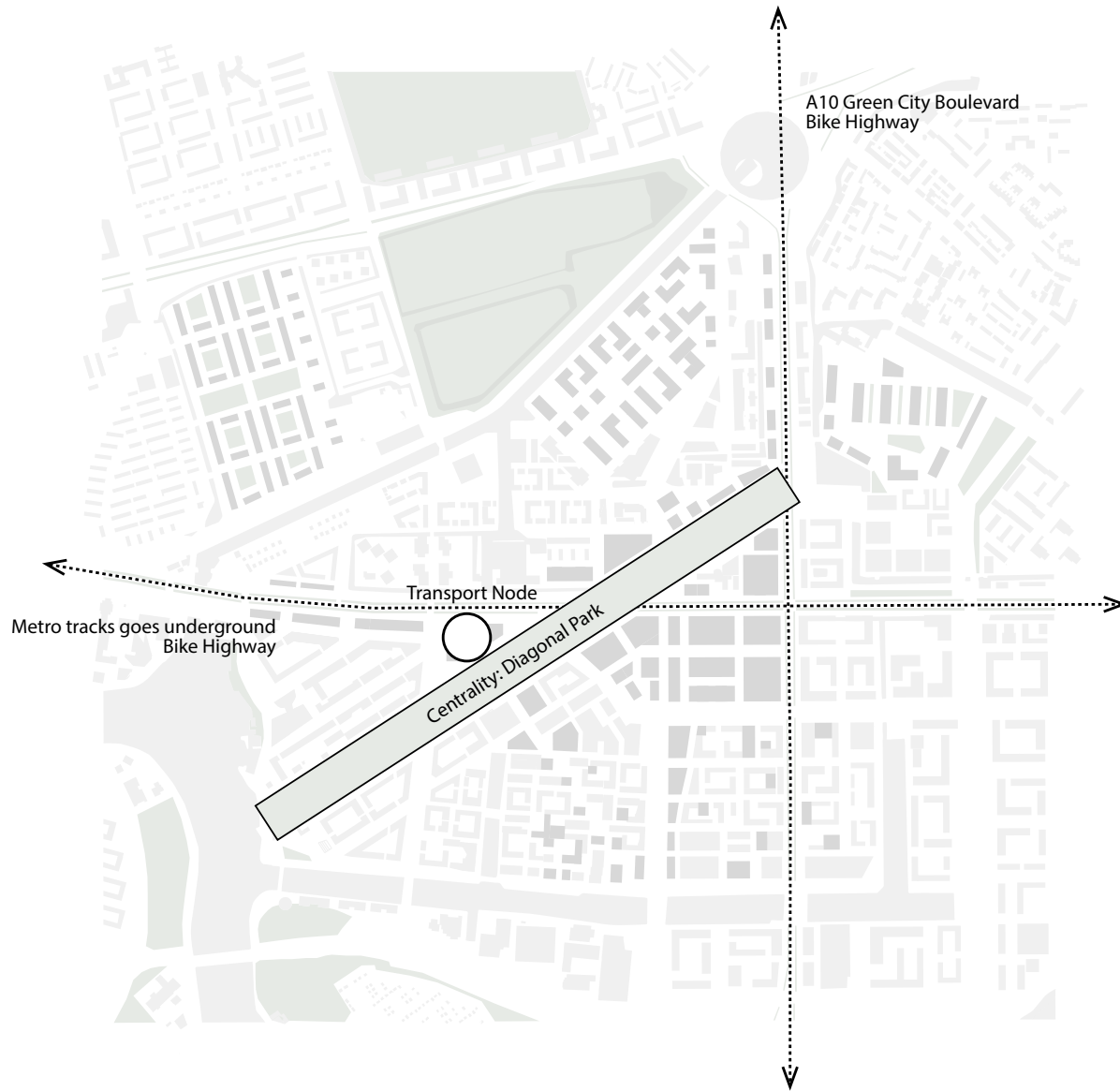
City of Green



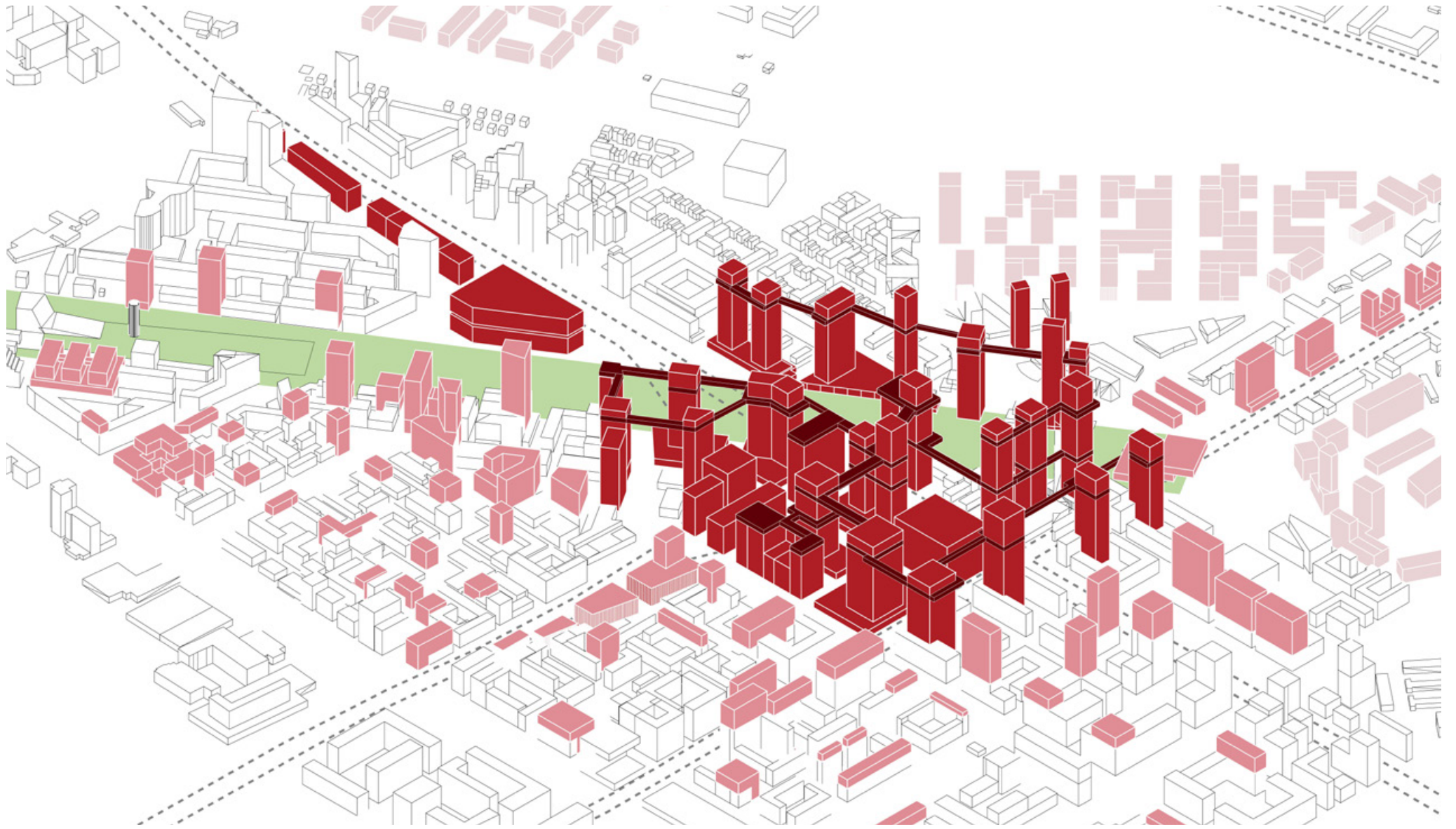
20th Century
Industrial

2050
Productive

2100
(P)leisure



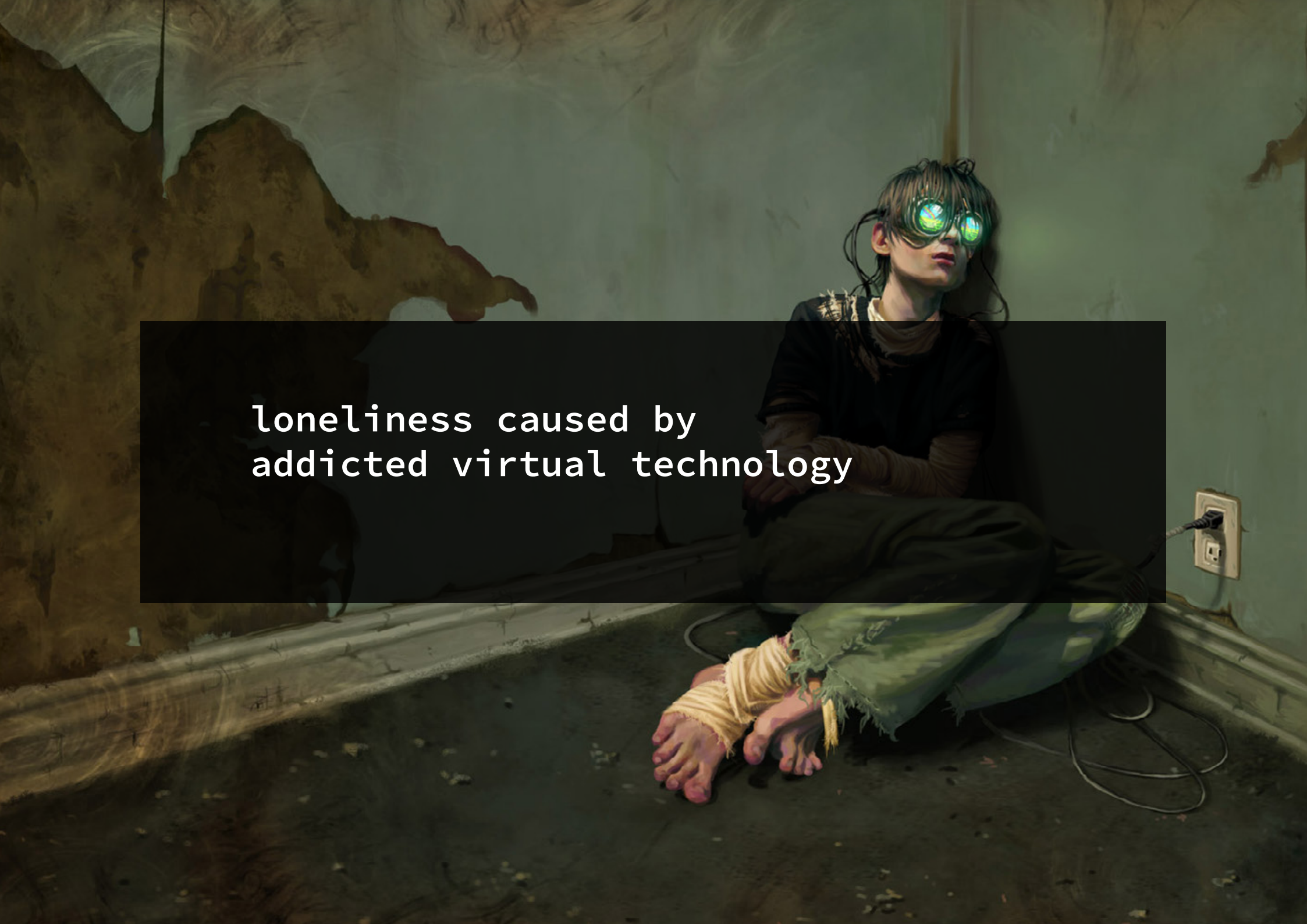
2100 Amstel Schematic Strategy




What are the problems and conflicts stopping Amstel from reaching the (P)Leisure City?



high entertainment demand in dense
urban environment

A person with long dark hair and glowing green eyes, wearing a black long-sleeved shirt and dark pants, sits on a dark floor in a dilapidated room. The walls are peeling and stained. A power outlet is visible on the wall to the right, with a cord plugged into it. The person's feet are wrapped in yellow tape. The overall atmosphere is one of isolation and technological dependency.

loneliness caused by
addicted virtual technology



offline-space undergo a transformation
in creating more experience



Core Research Question

How can we respond to the growing needs of social entertaining experience within dense urban area, and address the issue through an architectural space that fuses the virtual and the physical environment?

RESEARCH

THE FUTURE OF ENTERTAINMENT

The Changing Concept of Leisure

more innovative, immersive, hyper-connected and age-inclusive



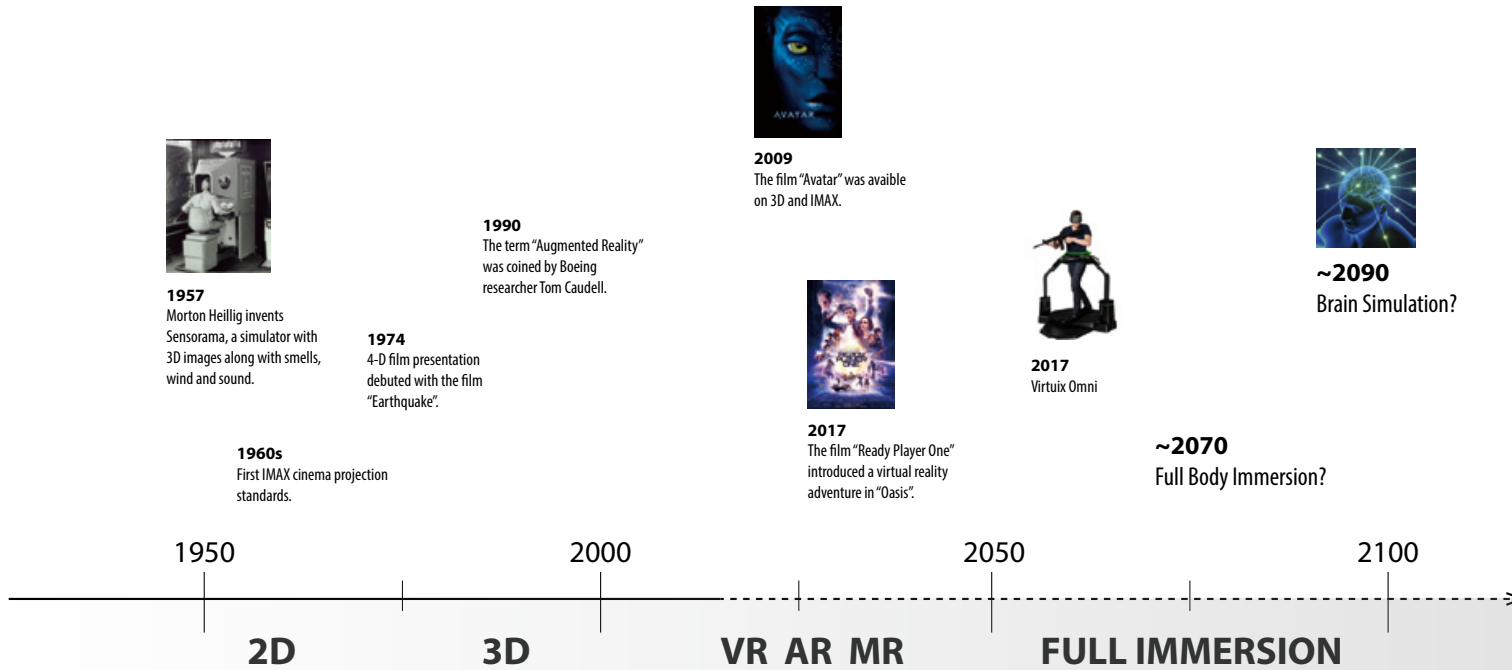
**Purchasing
Experience**



Socializing



New Physical Space



1947
Dennis Gabor developed the theory of holography.

1982
Hollywood movie "Iron" was first to depict virtual reality.



1993
Sega introduced its wrap-around VR glasses.



1999
The film "The Matrix", featuring a computer-generated world where citizens of the future are imprisoned from birth.



2012
Oculus

2014
Wearable Google Glass

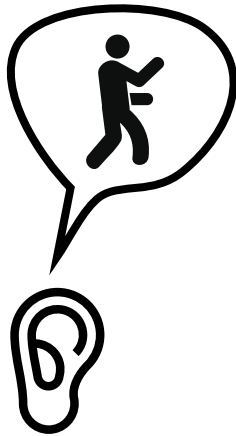
2016
Pokémon GO



~2080
Hologram Projection?



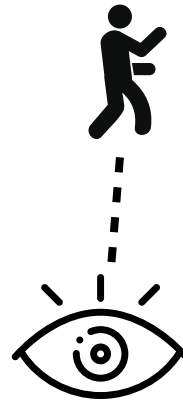
Sensory Technology Timeline



Hear

3rd-person

subject described
by others



Watch

2nd-person

directly observe
the subject



Participate

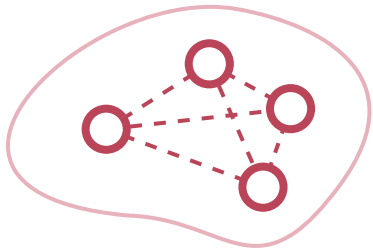
1st-person

the audience is
the subject



Linear
Storyline

- fully traditonal stories
- Interactive Tradtional stories



Dynamic &
Non-linear
Storyline

- Multi-Ending stories
- Branching Path stories
- Fully Player Driven Stories
- Open-ended stories

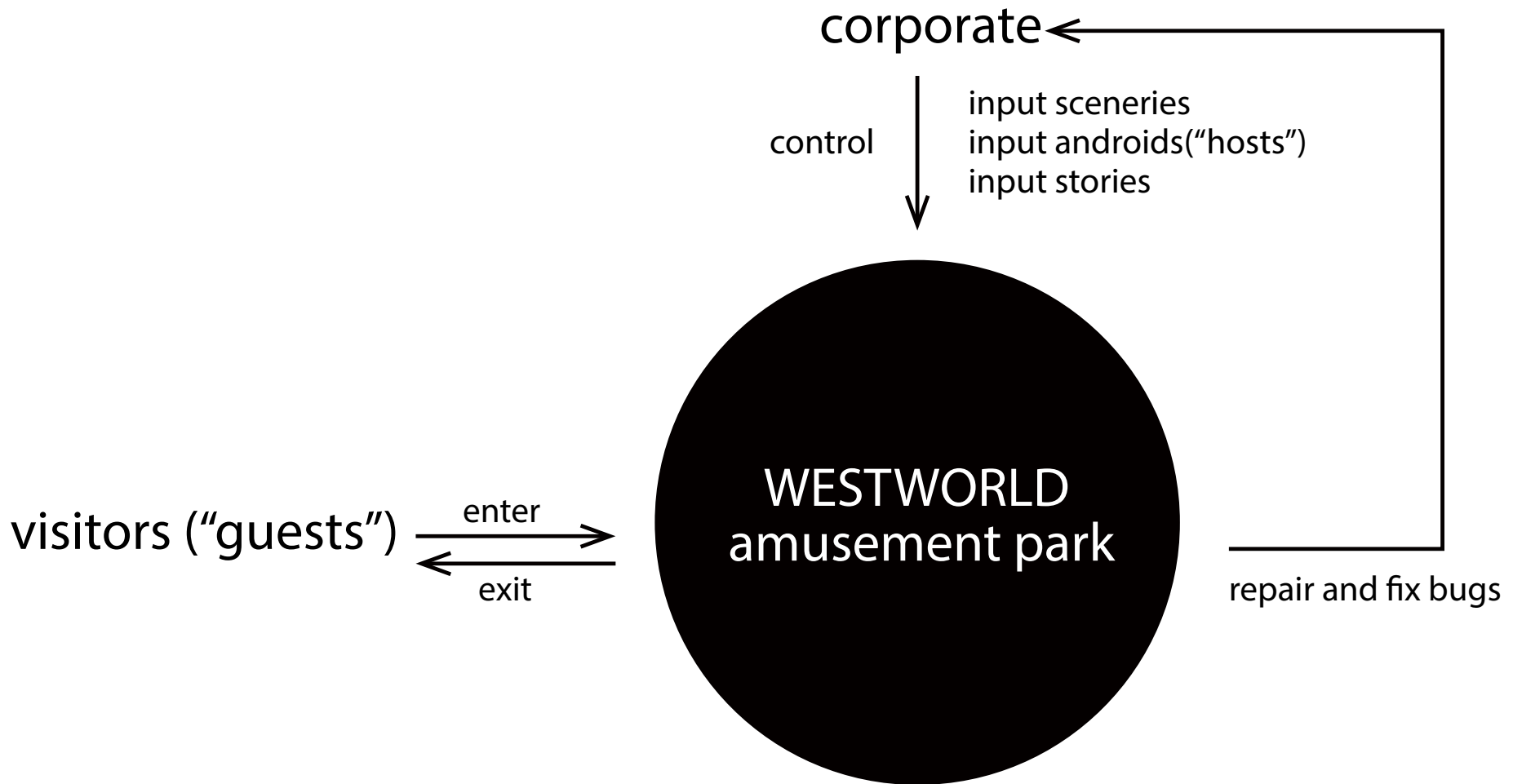
SECRET CINEMA PRESENTS







Inspiration:
A Complex Entertaining Product- **Westworld**



Visitors' Perspective

Arrival



Dressing Up



Entering



Amusement Park



Possible Experiences inside

Street View



Sexual
Activities



Riding Horse



Gun Fighting



Corporate's Perspective

Manufacturing



Narrative
Building



Acting in
Amusement Park



Repair



NOW



FUTURE

+more realistic

+more immersive

+more interactive

WATCH A FILM



**ENJOY A CINEMATIC
EXPERIENCE**

+more realistic

+more immersive

+more interactive



+more realistic

+more immersive

+more interactive

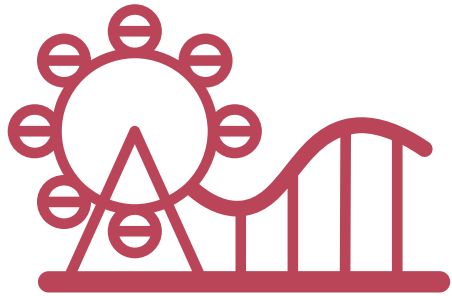


purchasing products ----> purchasing experiences

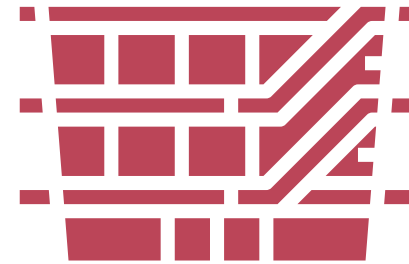
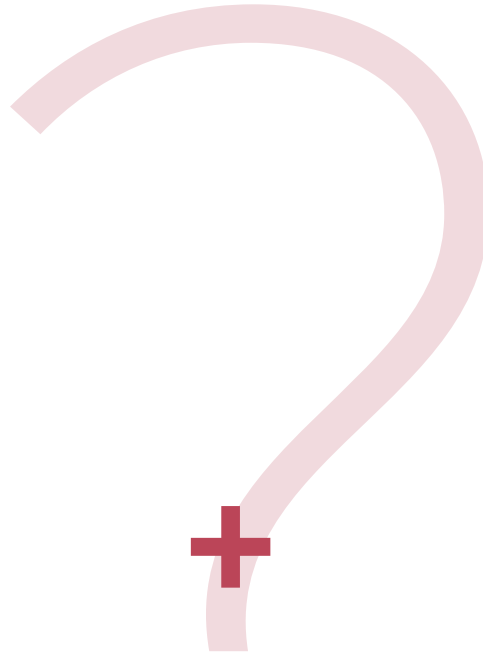
What can **architects** do?

Can we design an entertaining complex in the city that offers rapidly updating social and recreational activities fusing the virtual and the physical environment?

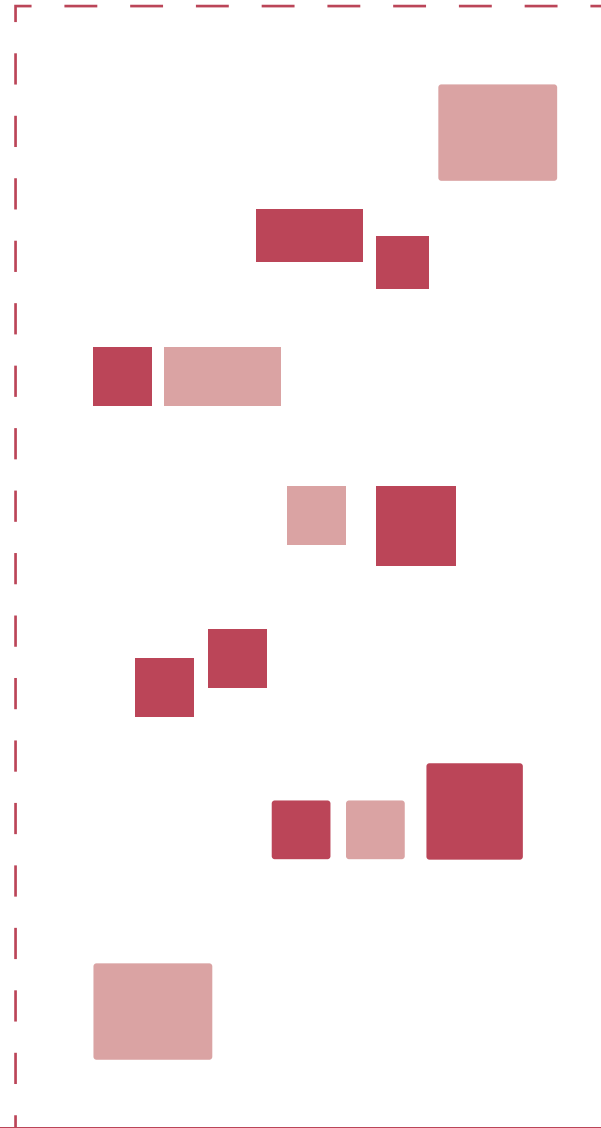
Can we create a routing that connect these immersive activities?

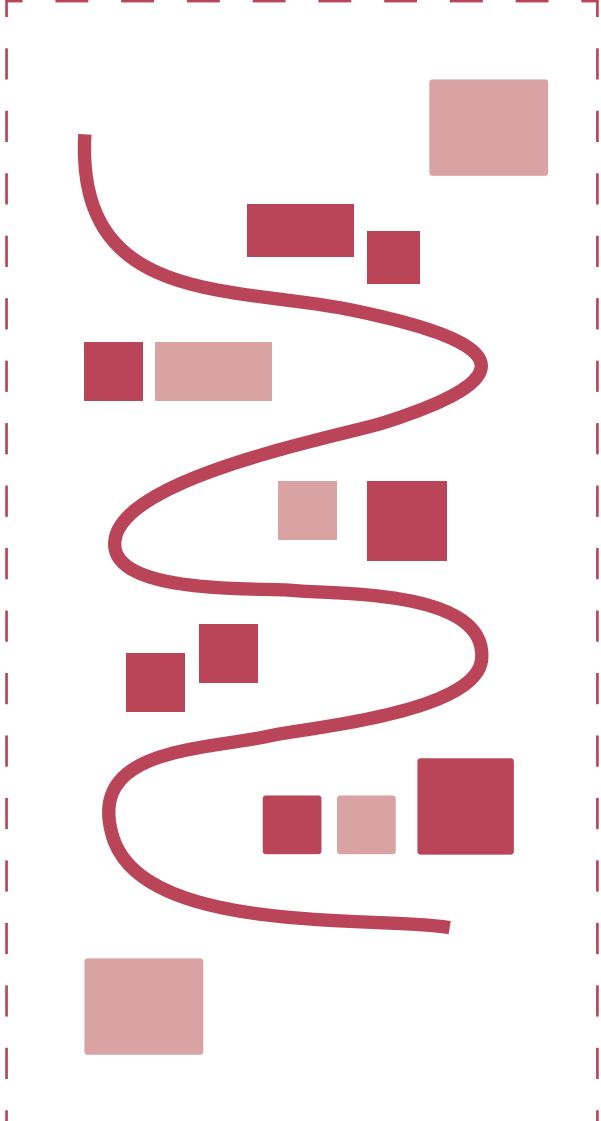


theme park



shopping mall







Three Minutes to Nirvana, Eugenia Loli

Precedents Study Program



Vendsyssel Theatre
SHL

Location: 9800 Hjørring,
Denmark
Year: 2017
Area: 4,200 m²



Lideta Market
Vilalta Arquitectura

Location: Addis Ababa,
Ethiopia
Year: 2016
Area: 14,200 m²



The Shed
DS+R

Location: Hudson Yard,
New York
Year: 2019
Area: 18,500 m²



Bunjil Place
FJMT

Location: 2 Patrick
Northeast Drive, Narre
Warren, Australia
Year: 2017
Area: 24,500 m²

Precedents Study

Theme Park Organization



Disneyland Anaheim

Location: California,
USA
Year: 1955
Area: 343,982 m²



Universal's Islands of Adventure

Location: Florida, USA
Year: 1999
Area: 450,000 m²



Universal Osaka

Location: Osaka, Japan
Year: 2001
Area: 540,000 m²

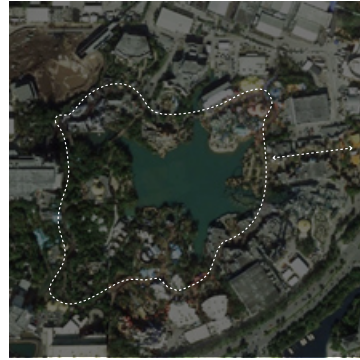
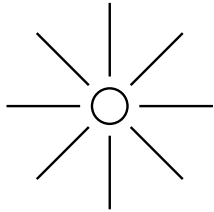


EXPO Milan 2015

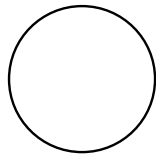
Location: Milan, Italy
Year: 2015
Area: 1,100,000 m²



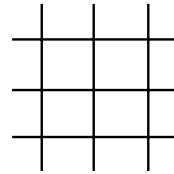
Hub and Spoke



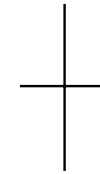
Circular



Grid

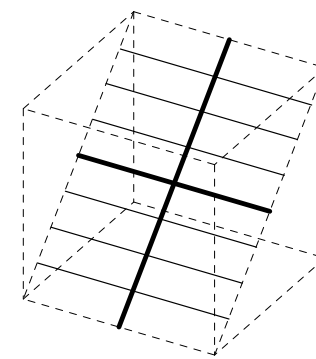
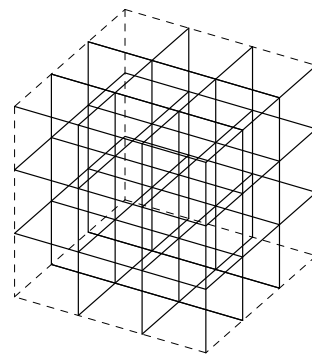
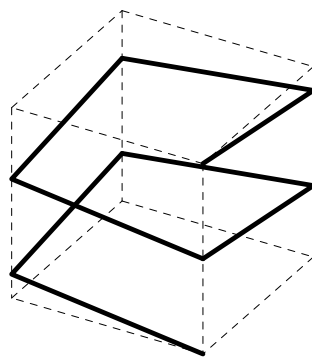
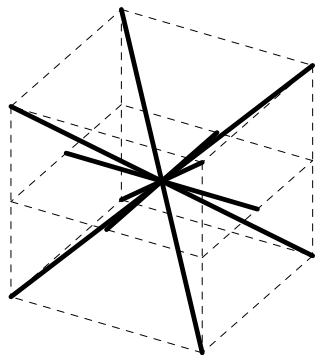


Axis



from plan to 3D

from plan to 3D





DESIGN
THE FUN UNIVERSE

Program

***Traditional
Digital Film***

Screenplay, Financing, Casting

Pre-Production

Cameras, Studios, Lighting, Sound

Production

Editing, Rendering, Sound Track

Post-Production

Advertising, Packaging,
Transportation

Distribution

Cinema Playing

Cinema Presentation

DVD/TV/ Online

Secondary Presentation

***Traditional
Digital Film***

Screenplay, Financing, Casting

Pre-Production

Cameras, Studios, Lighting, Sound

Production

Editing, Rendering, Sound Track

Post-Production

Advertising, Packaging,
Transportation

Distribution

Cinema Playing

Cinema Presentation

DVD/TV/ Online

Secondary Presentation

***Future
Interactive Cinematic Experience***

Screenplay, Financing, Testing

Programming, Scene Design

Sensory Design

Download,
Additive Printing, Robotics Manufacturing

Augmented Experiential Spaces,
Visitors Participation

Live Broadcasting

realtime updating

How to construct an immersive Scenography?



physical settings



environmental control

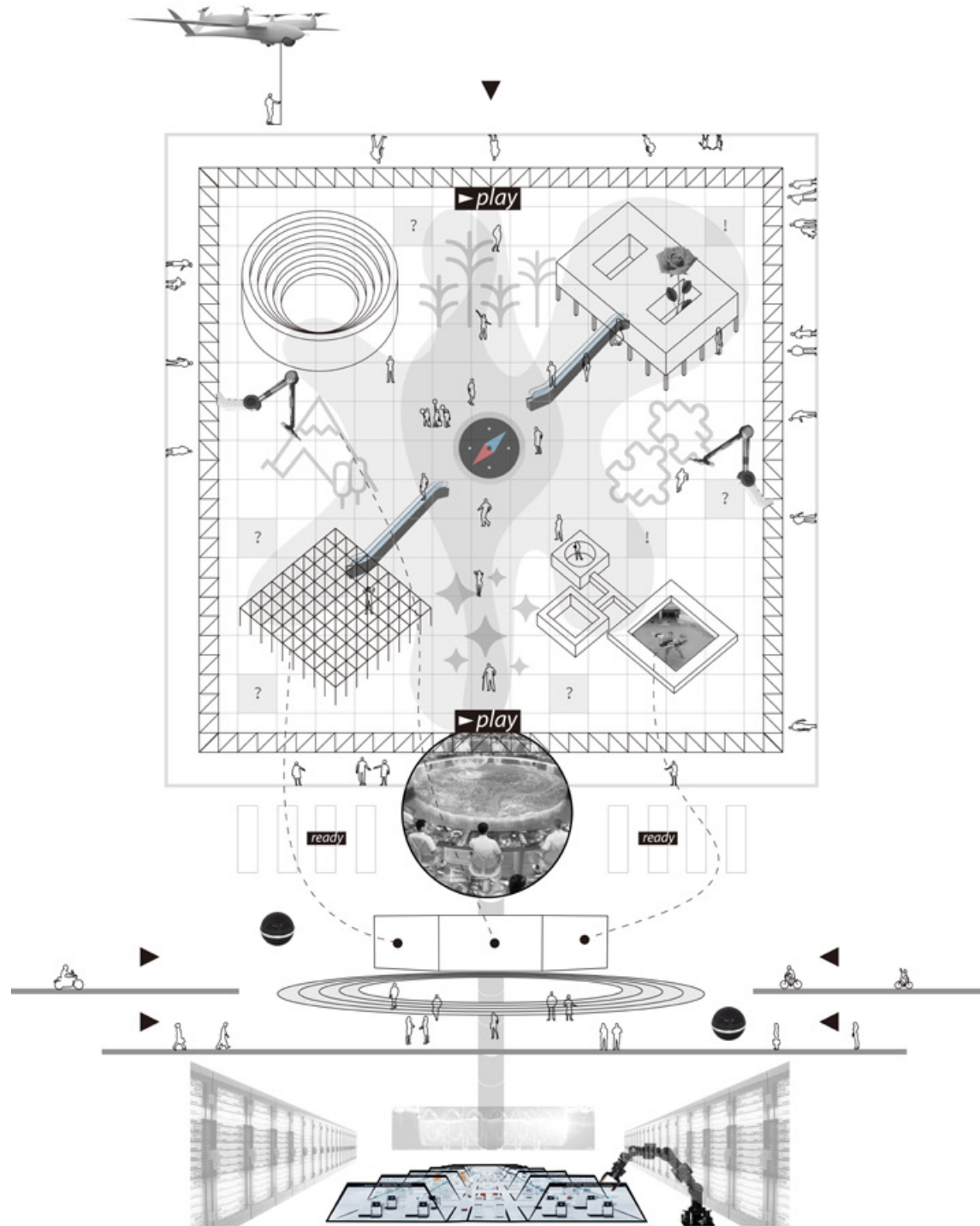
androids



augmented virtual projection

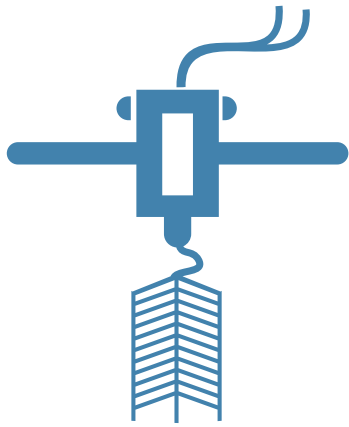


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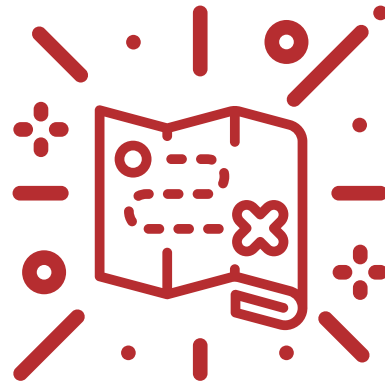


The Fun Universe is an entertainment complex dedicated to producing, presenting and broadcasting all types of social entertaining and visual augmented activities including cinematic experience, interactive performing arts, immersive gaming etc.

It is an urban scale "Westworld", a vertical theme park that contains various popular destinations.



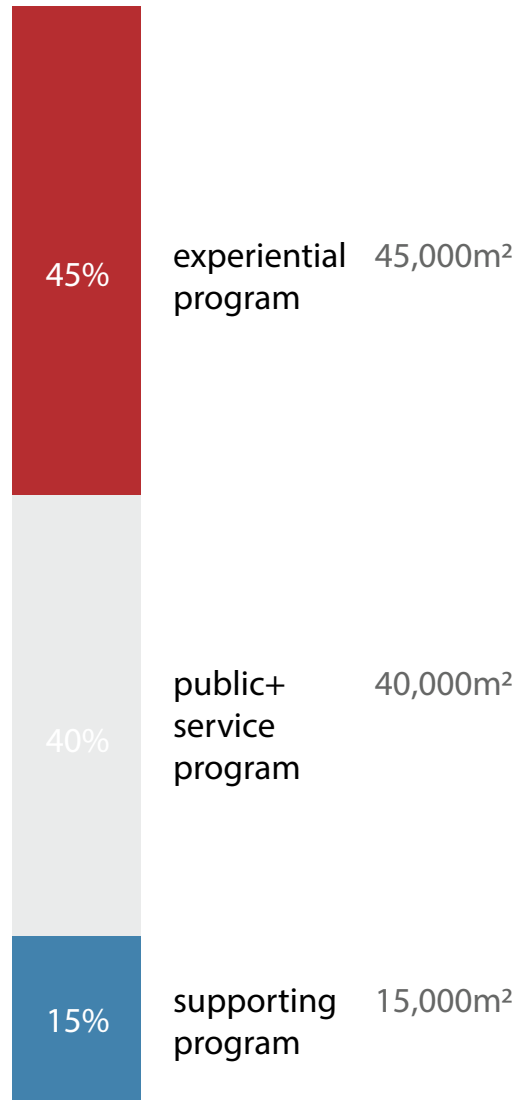
producing

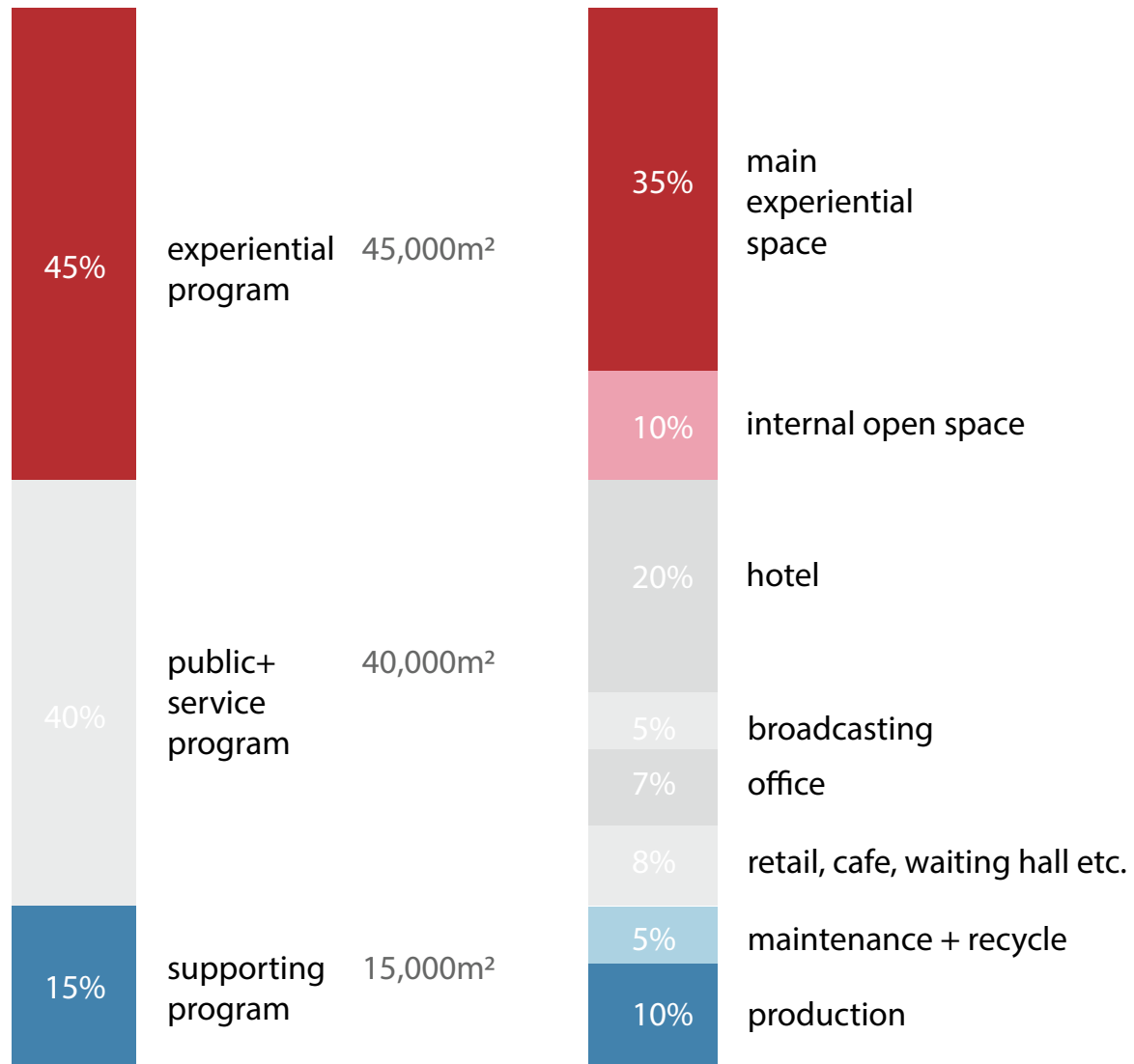


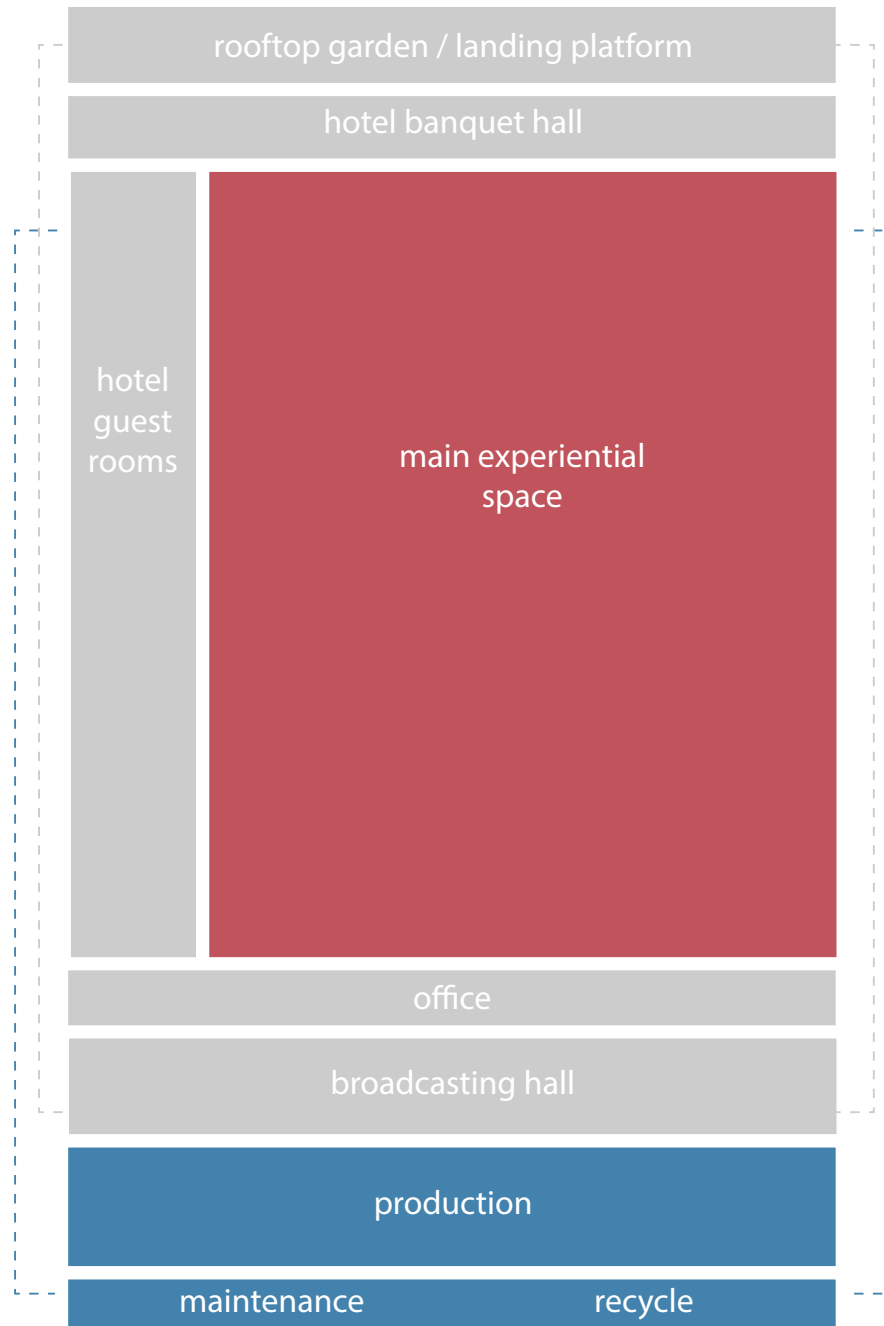
presenting



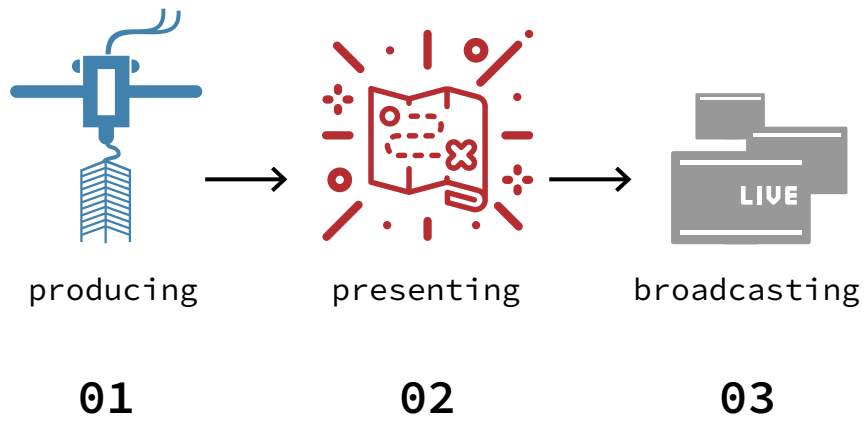
broadcasting



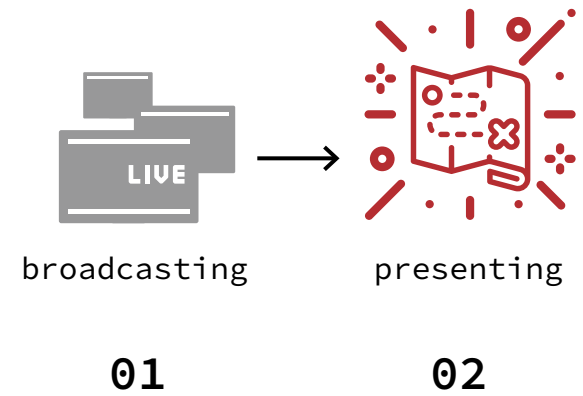




Building's Operating Flow

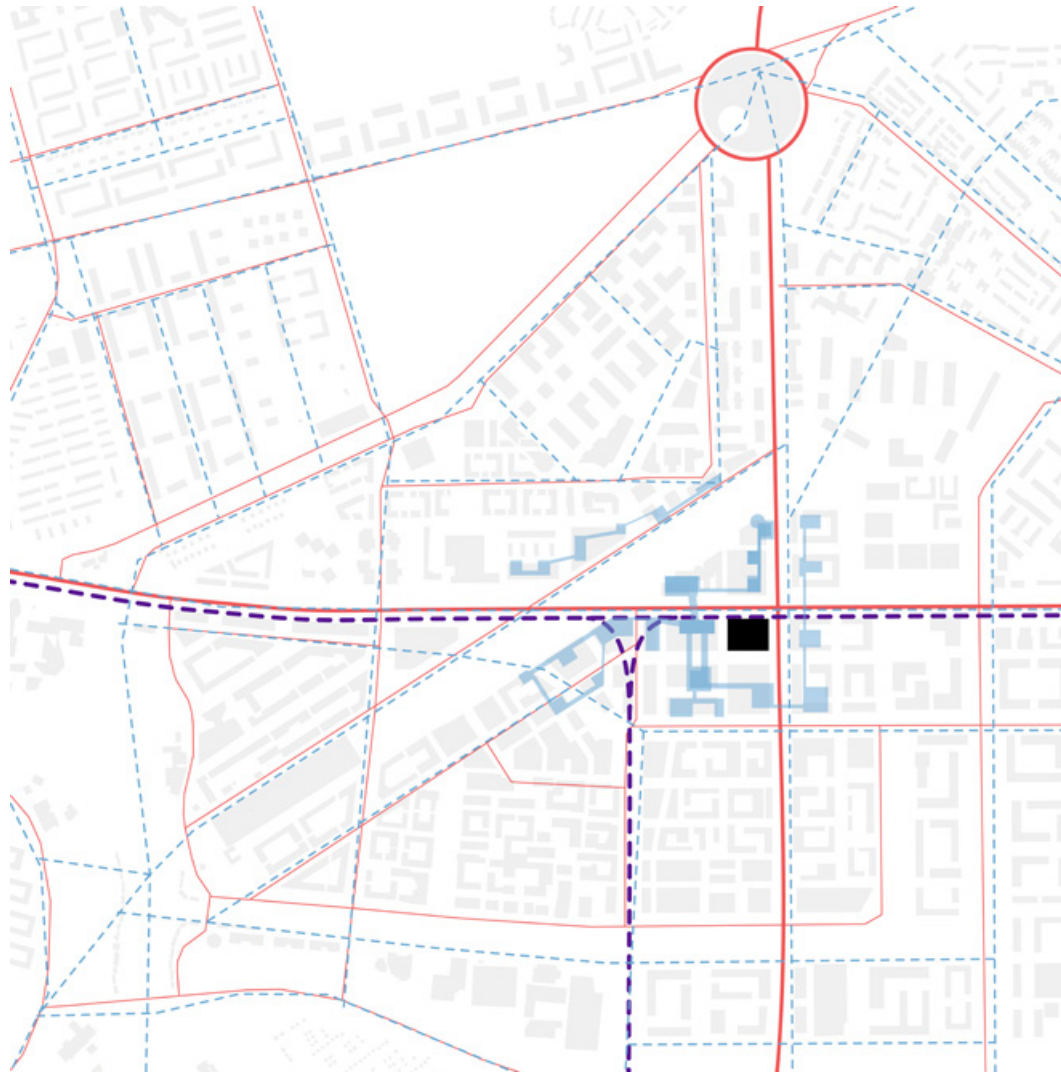


Visitors' Flow



Location





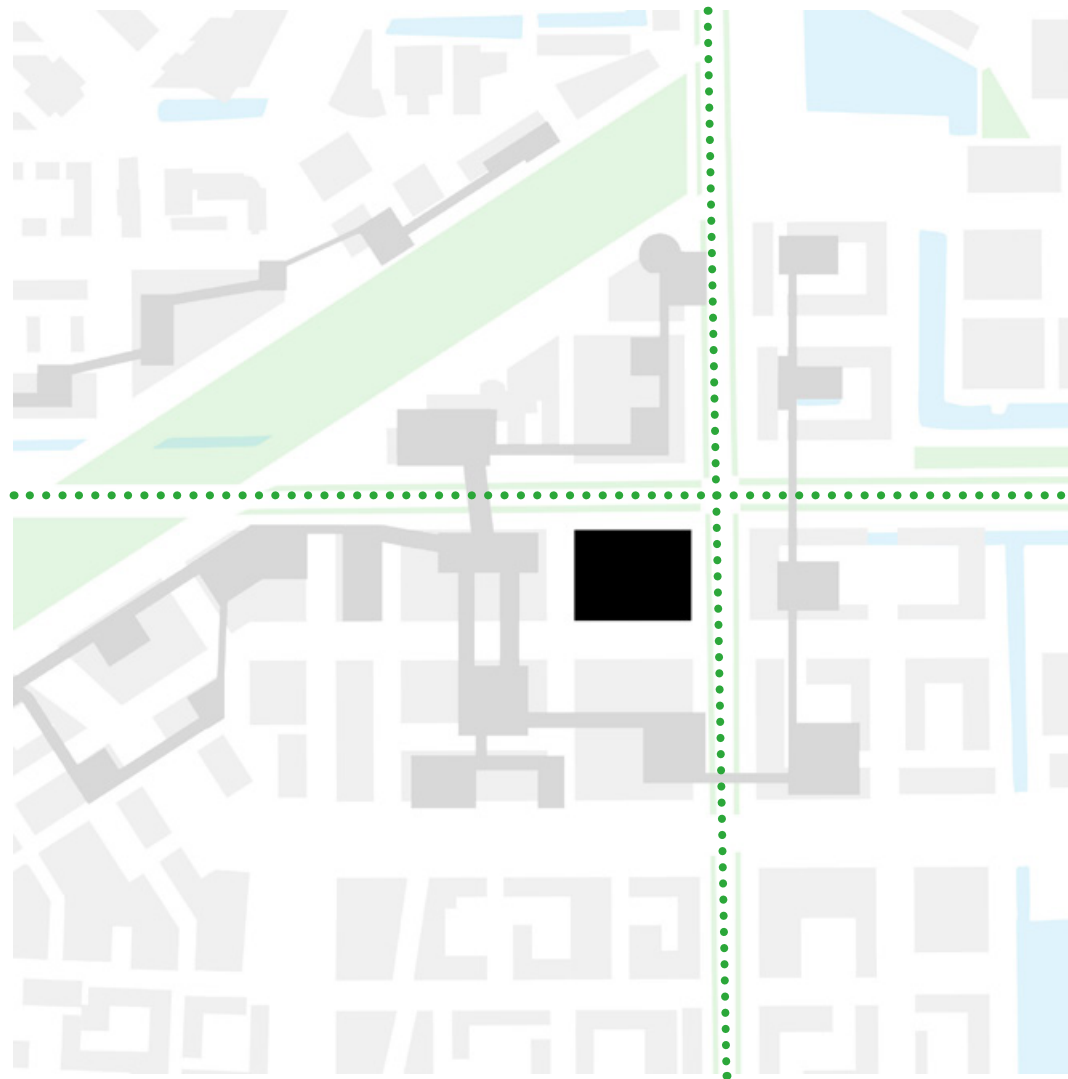
Principle1:

Great Connectivity: Easily accessible to the visitors
and convenient for logistics.



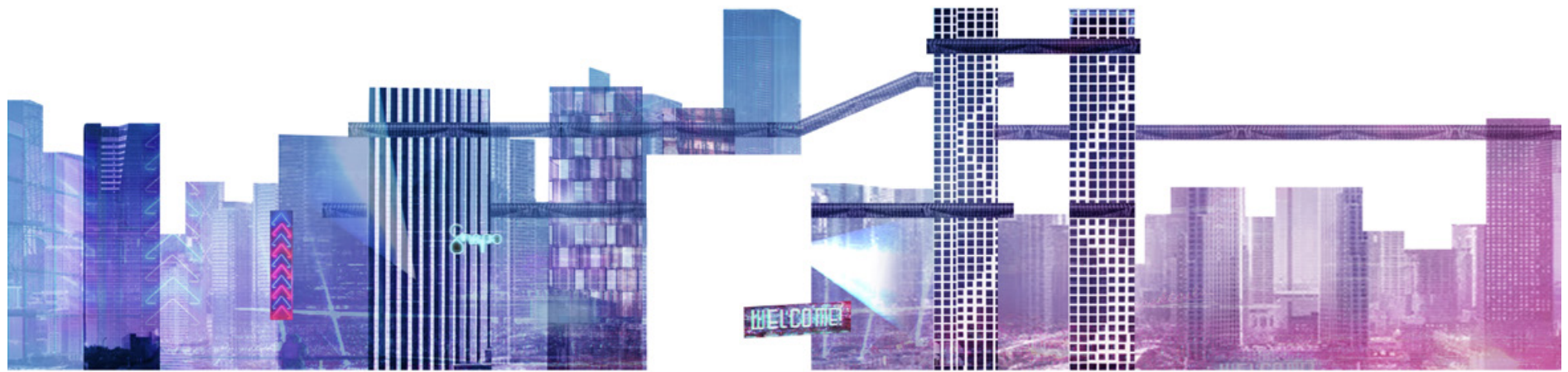
Principle2:

High Passenger Flow: Density leads to enough demand



Principle3:

Great Visibility: Represents a FrontPage of the area. For upper level, there is a visual contact directly to the Diagonal Park.



Mass Study

Decentralized

Compact

Mega Structure

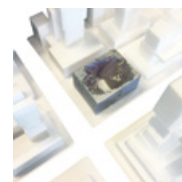
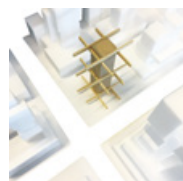
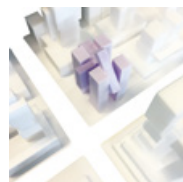
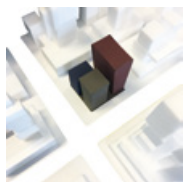
Modular

Organic

Layering

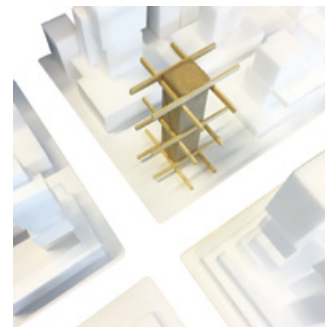
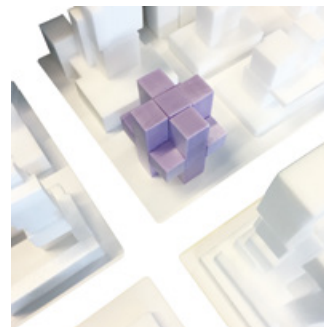
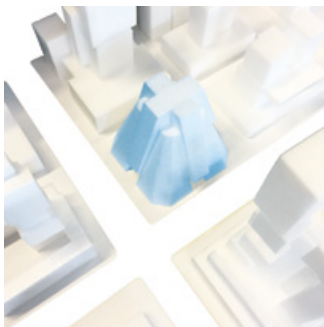
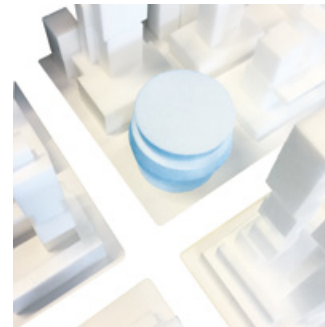
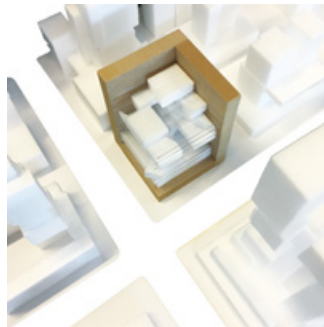
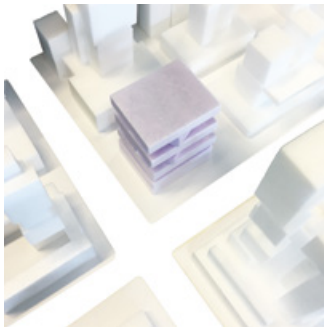
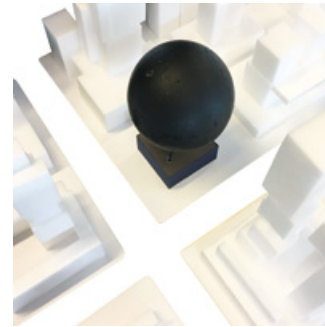
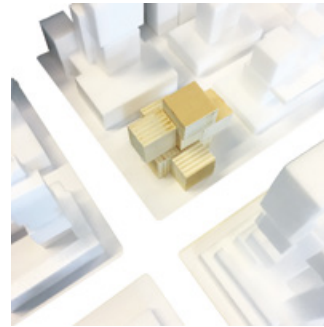
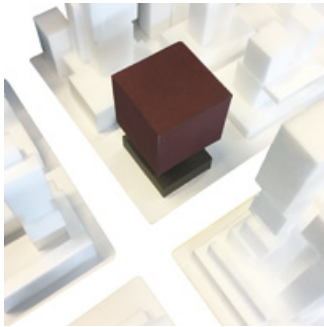
Centrality

Courtyard



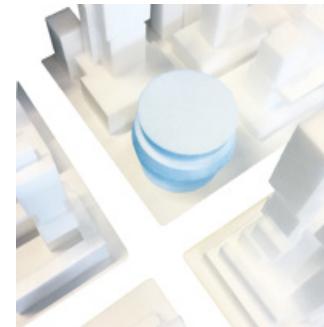
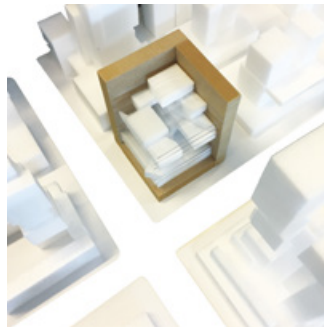
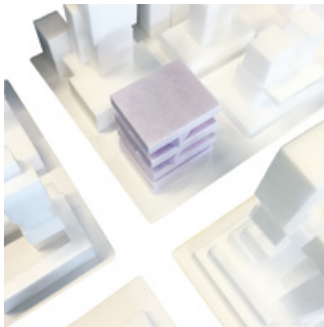
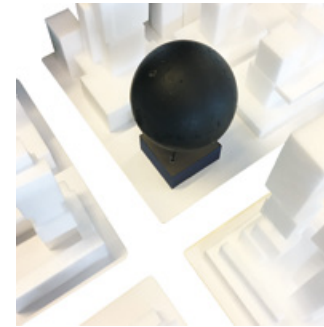
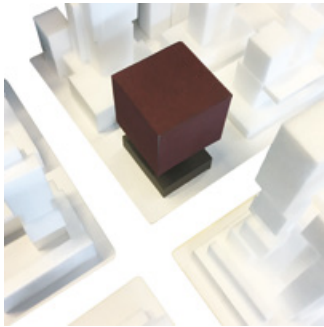
Final Principles

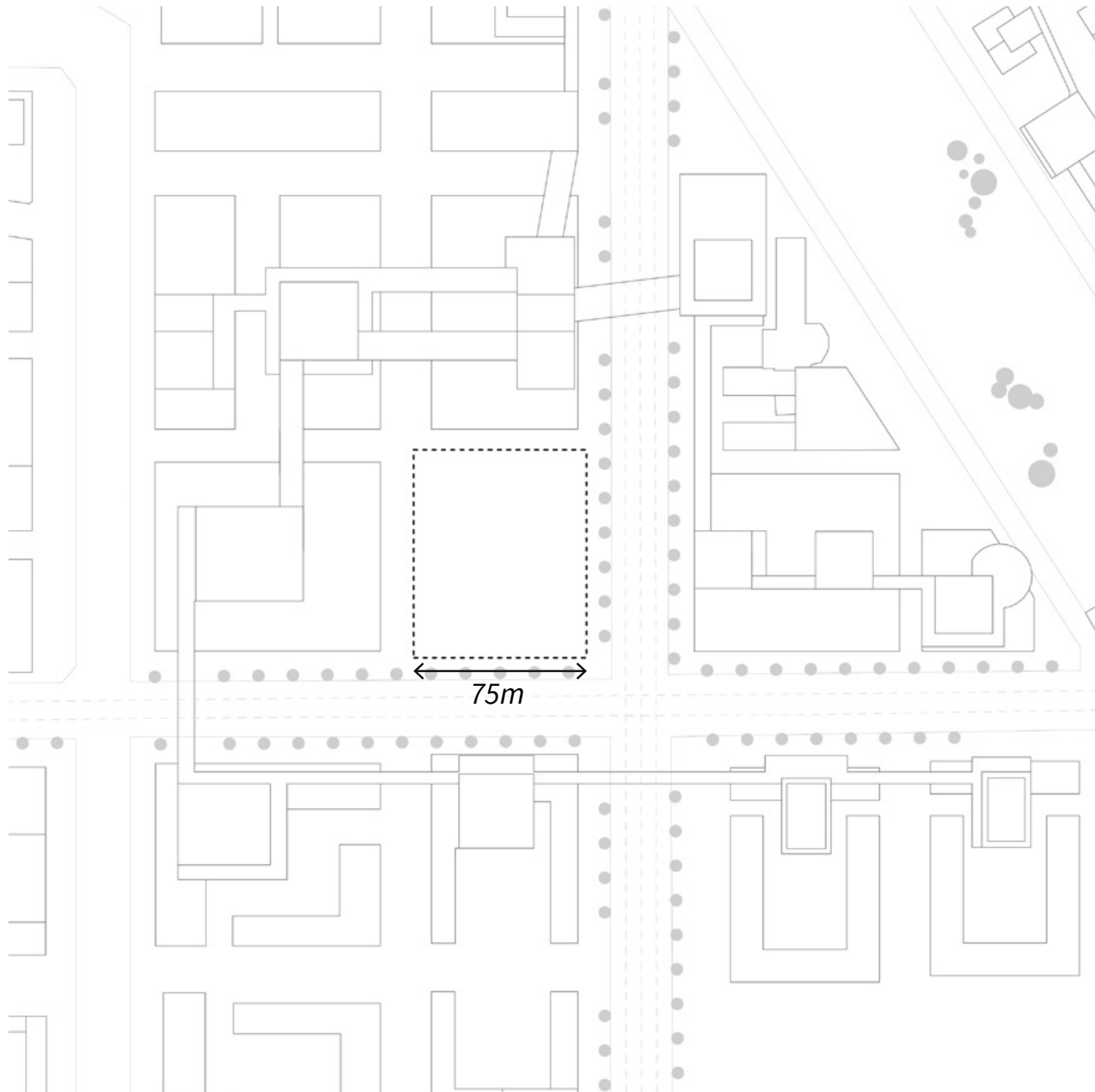
-Integrated Functions

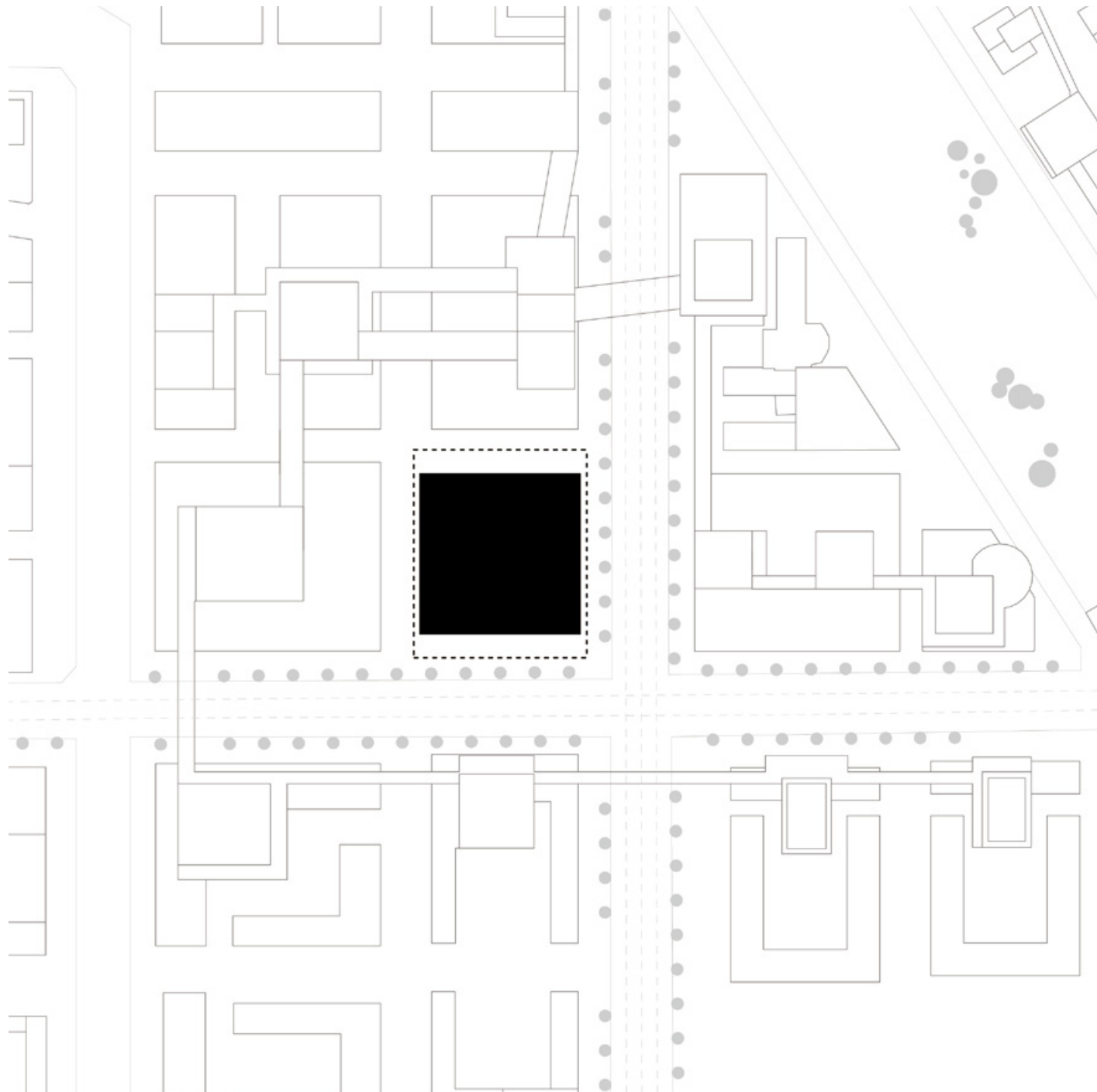


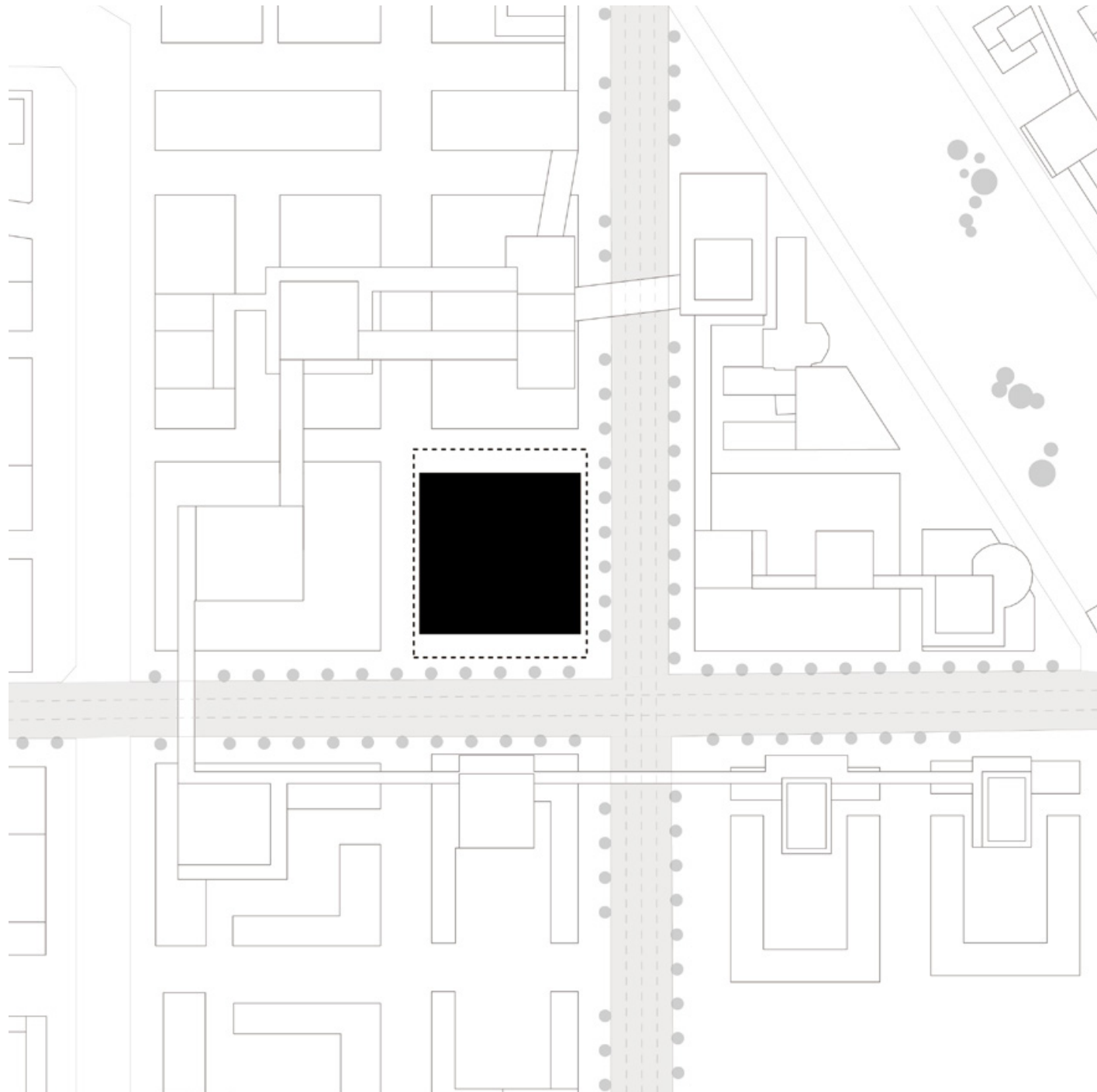
Final Principles

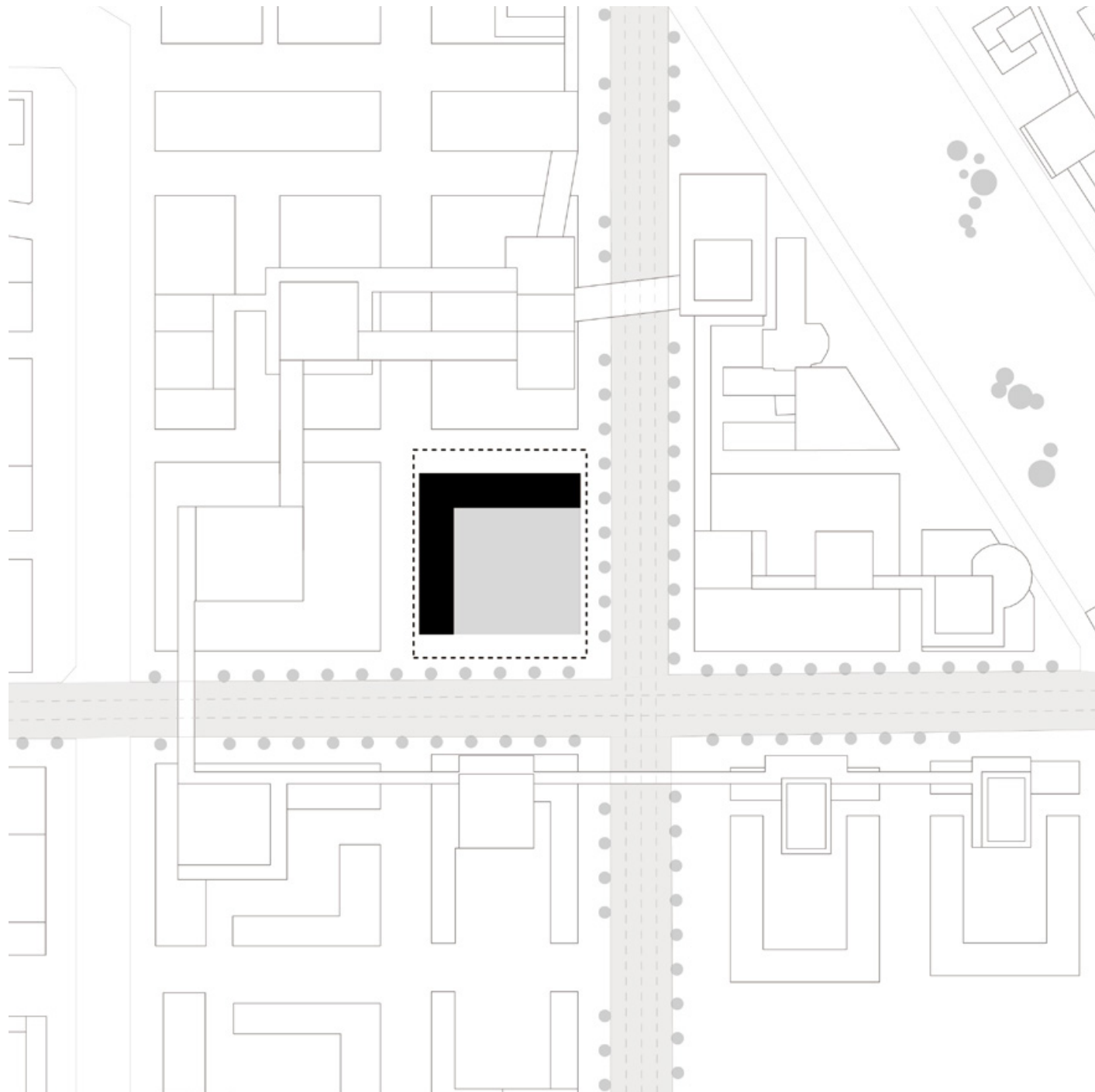
- Integrated Functions
- Large Open Space

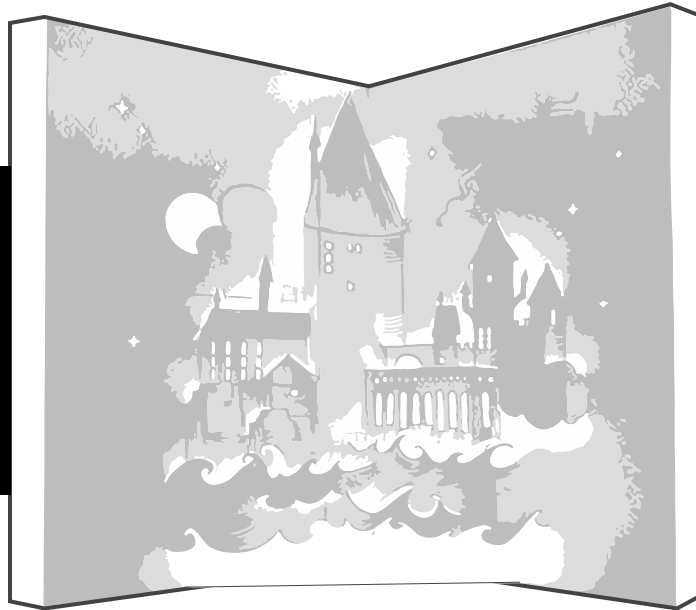






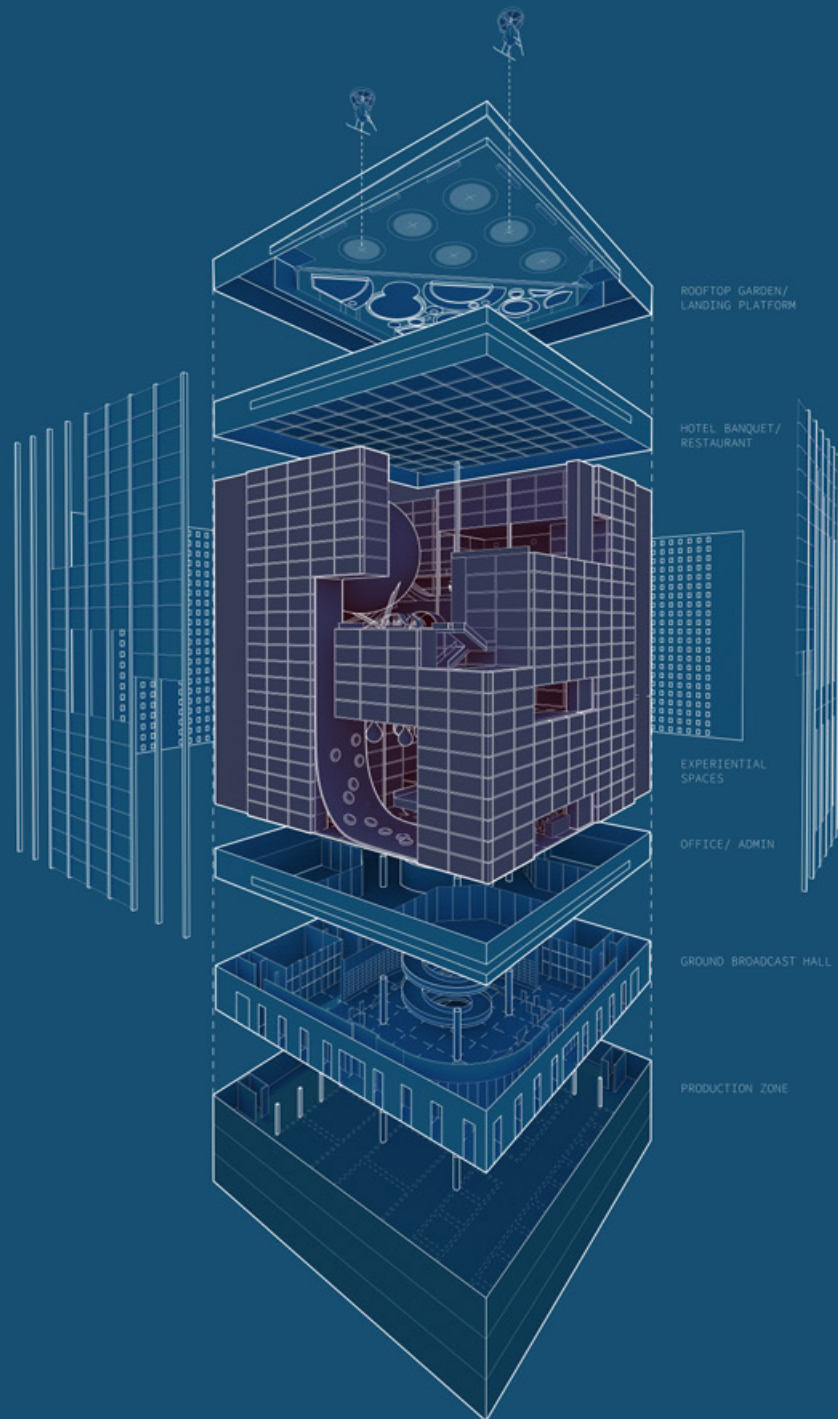






Fun Universe as an
“URBAN STORYBOOK”

Design



ROOFTOP GARDEN/
LANDING PLATFORM

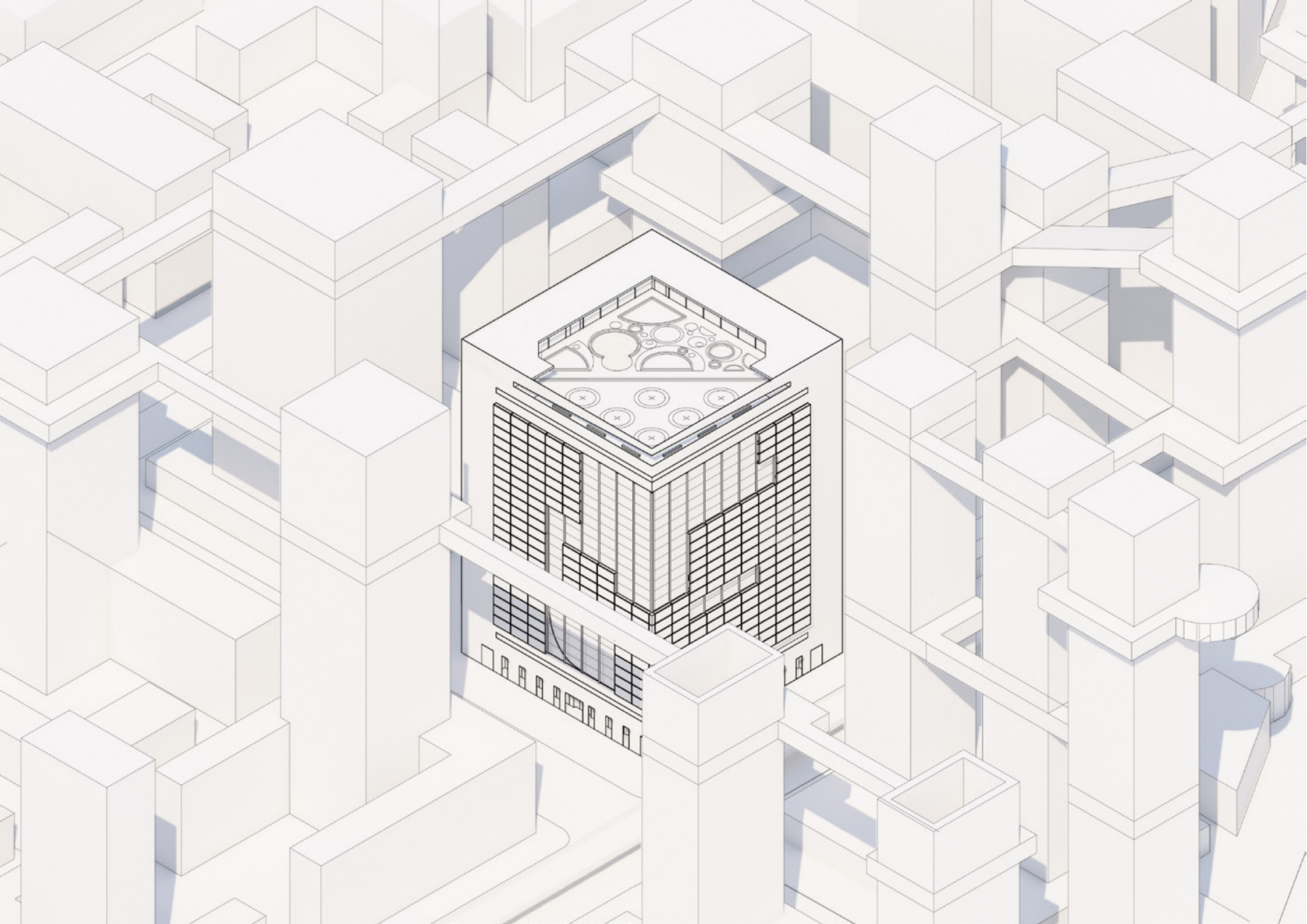
HOTEL BANQUET/
RESTAURANT

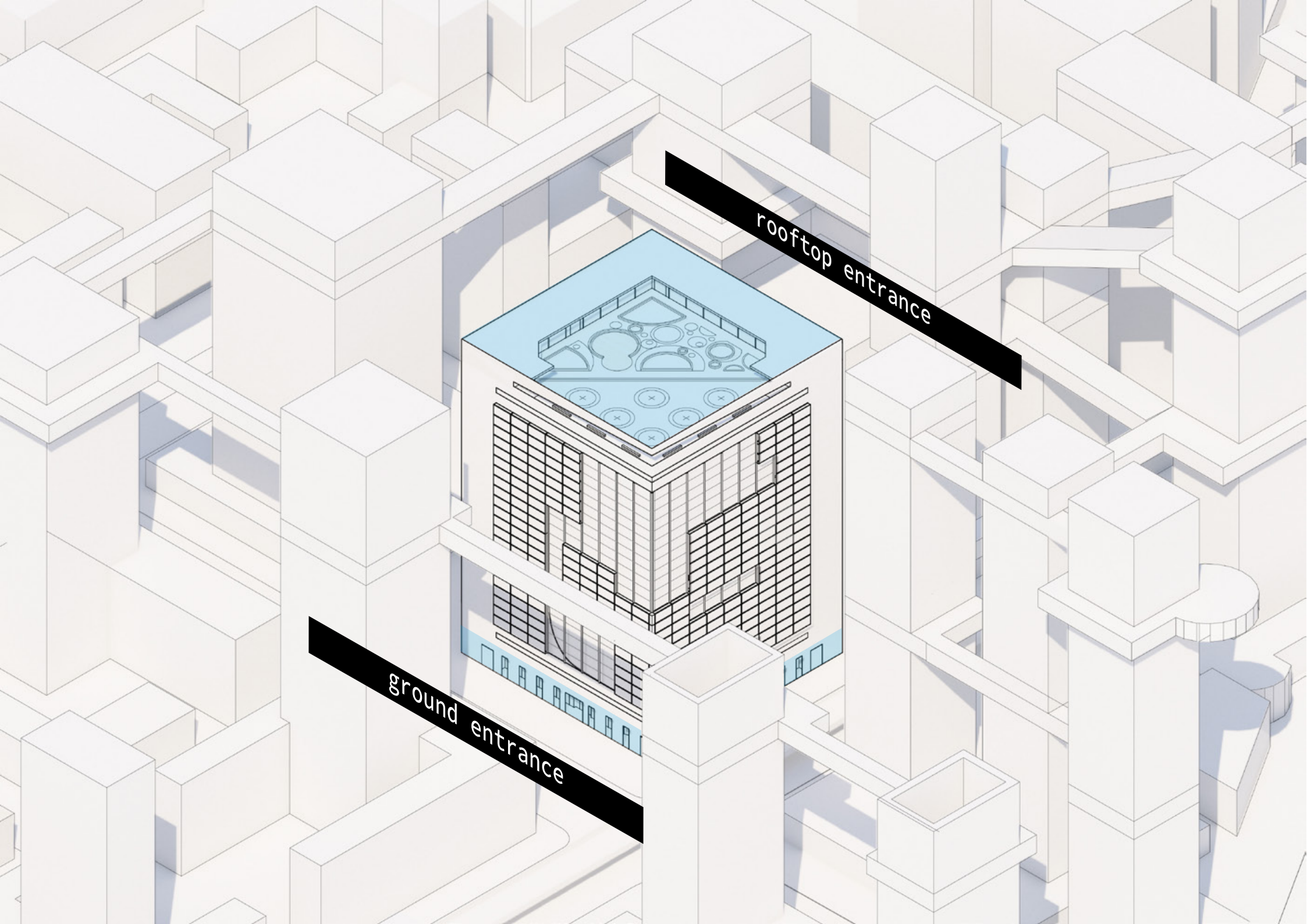
EXPERIENTIAL
SPACES

OFFICE/ ADMIN

GROUND BROADCAST HALL

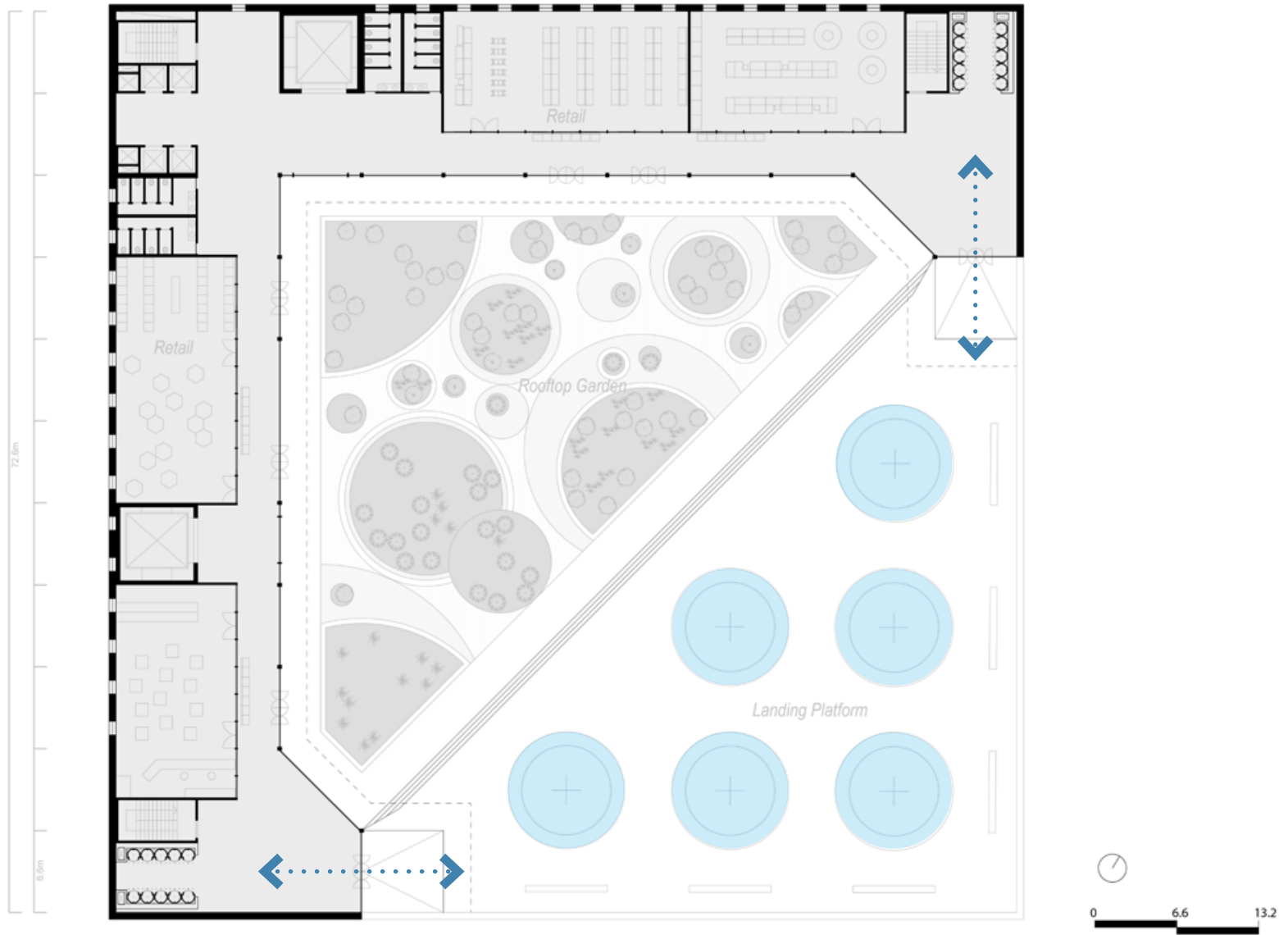
PRODUCTION ZONE



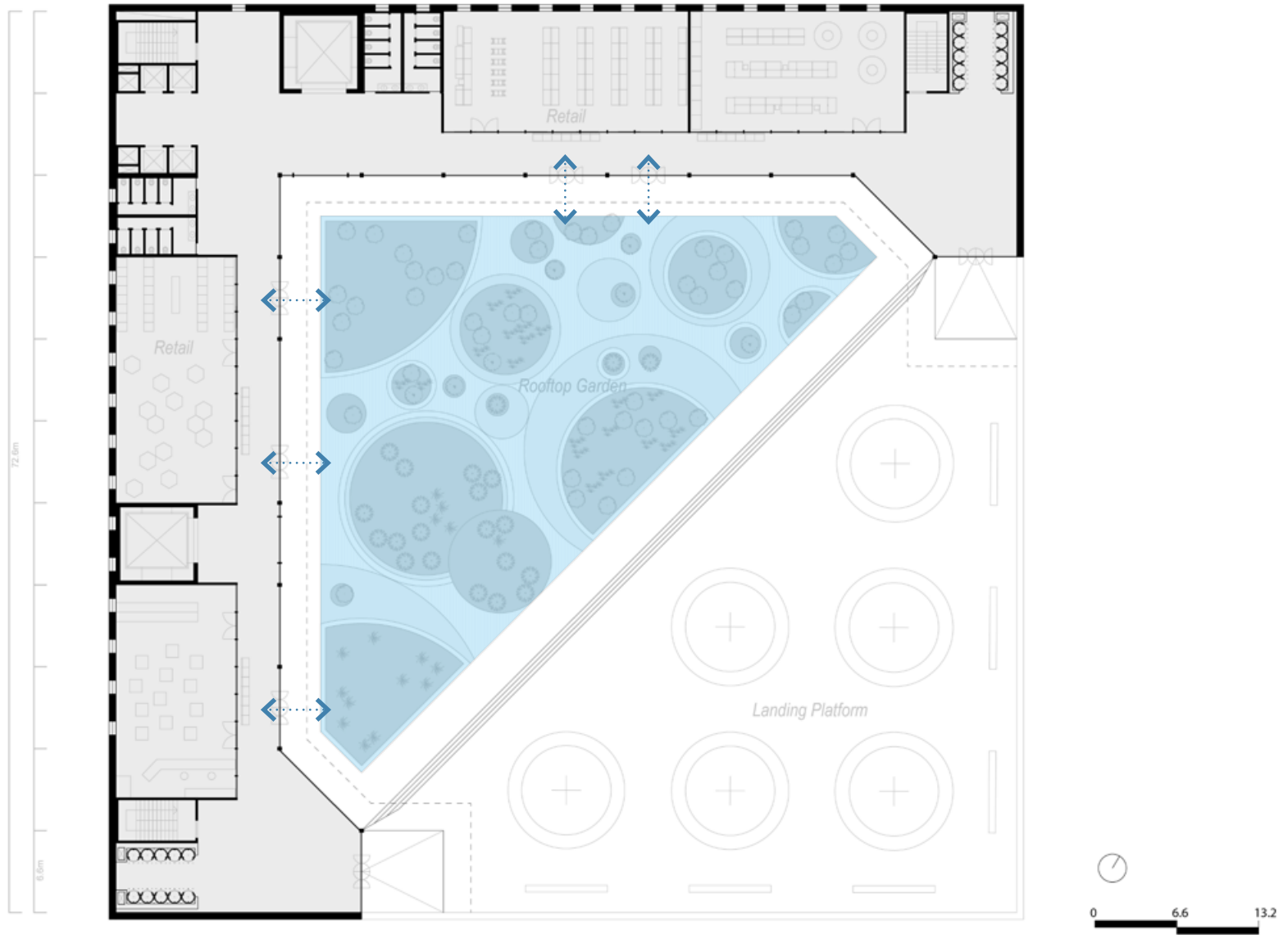


rooftop entrance

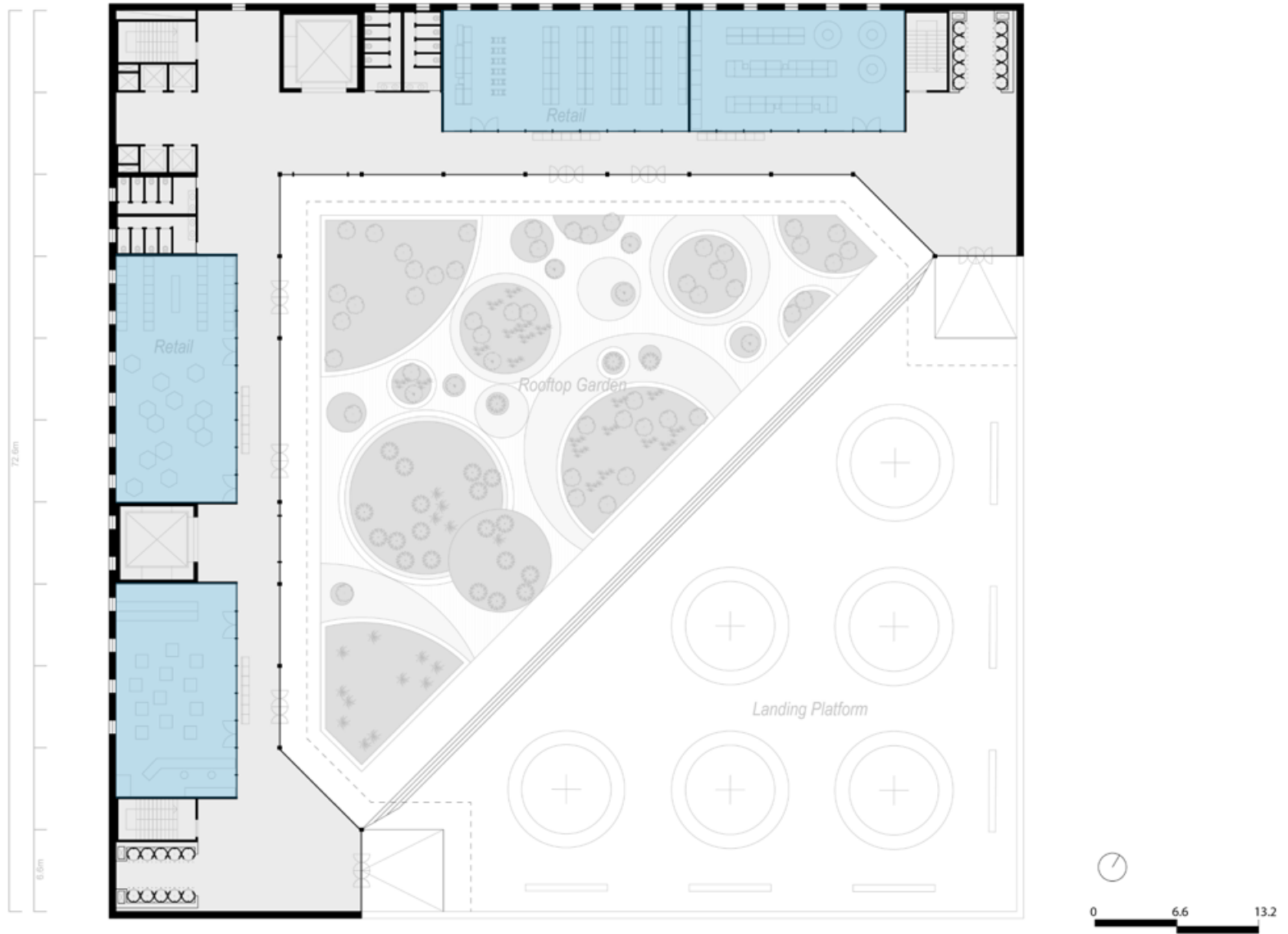
ground entrance



Rooftop - Landing Platforms



Rooftop - Garden Landscape

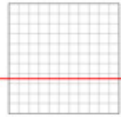


Rooftop - Retail

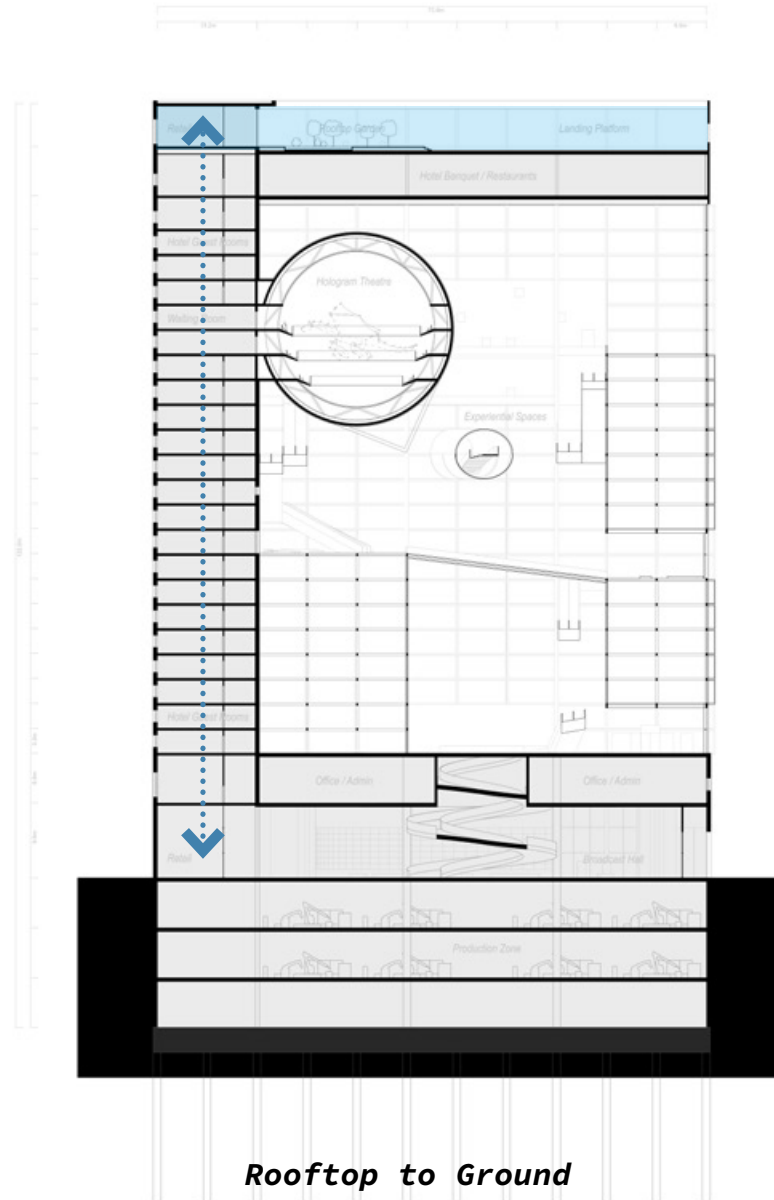


The "Fifth Facade"





0 6.6 13.2 26.4

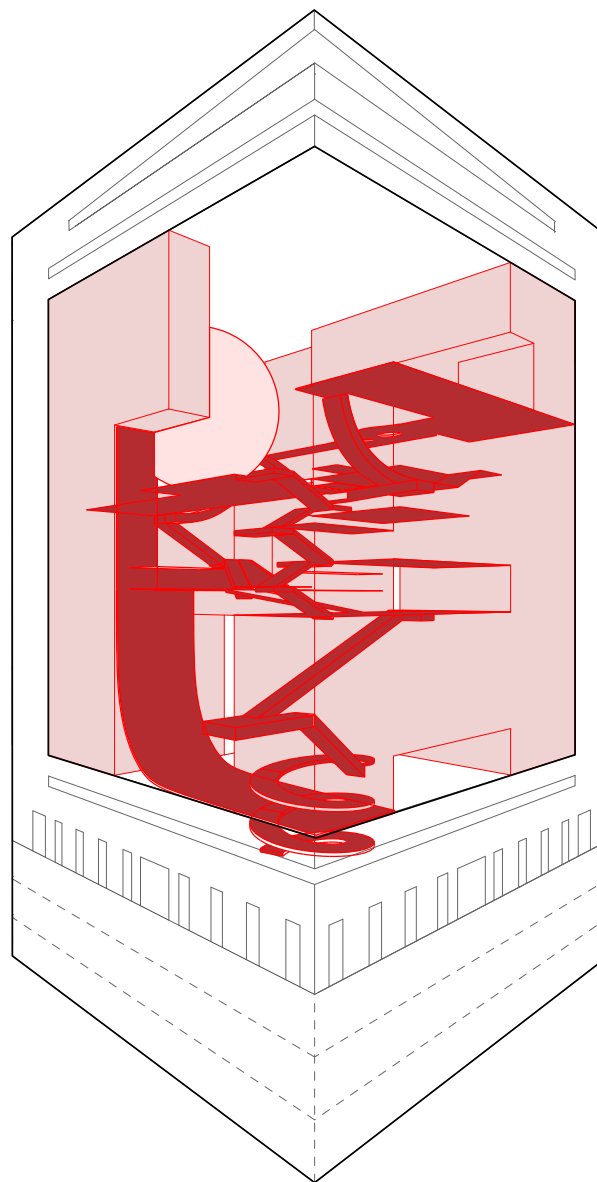
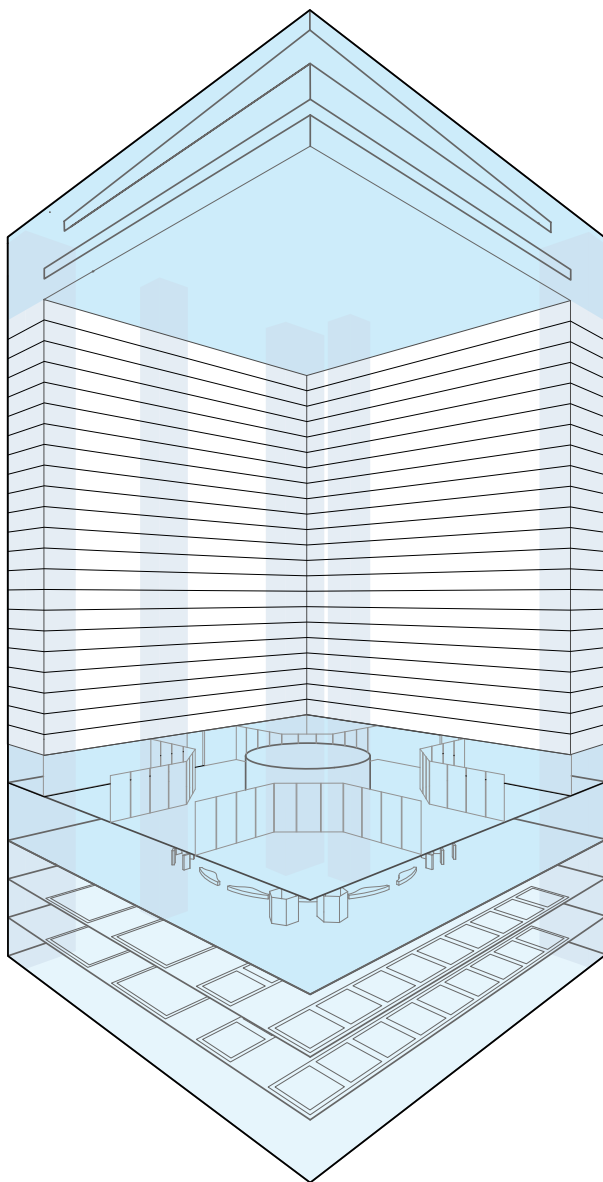


rooftop
platform

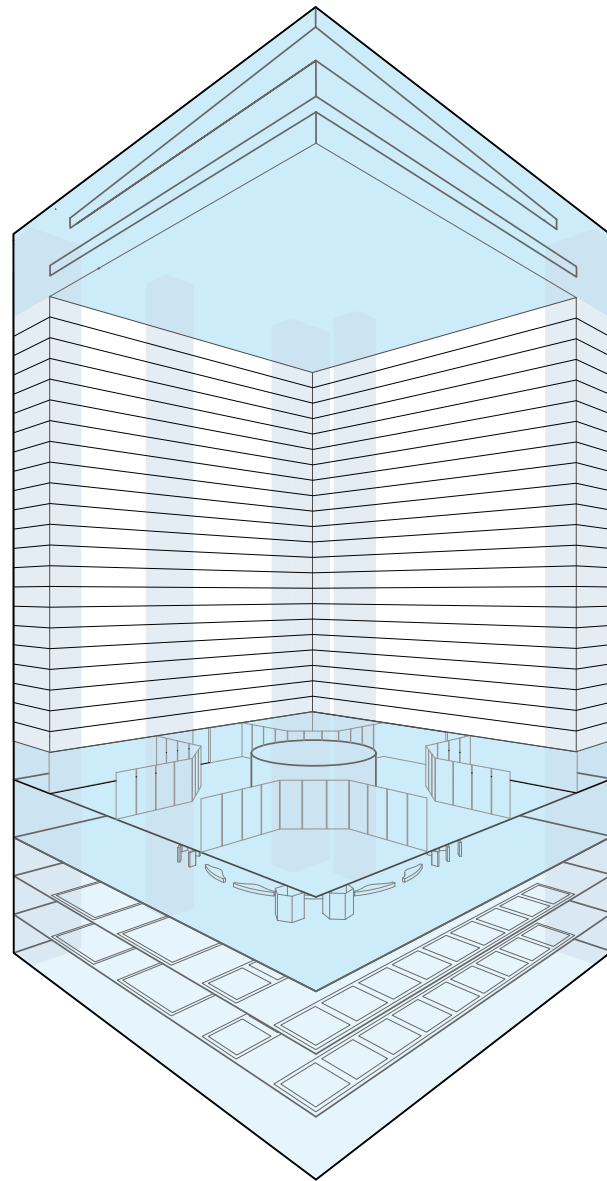
hotel

office
broadcast hall

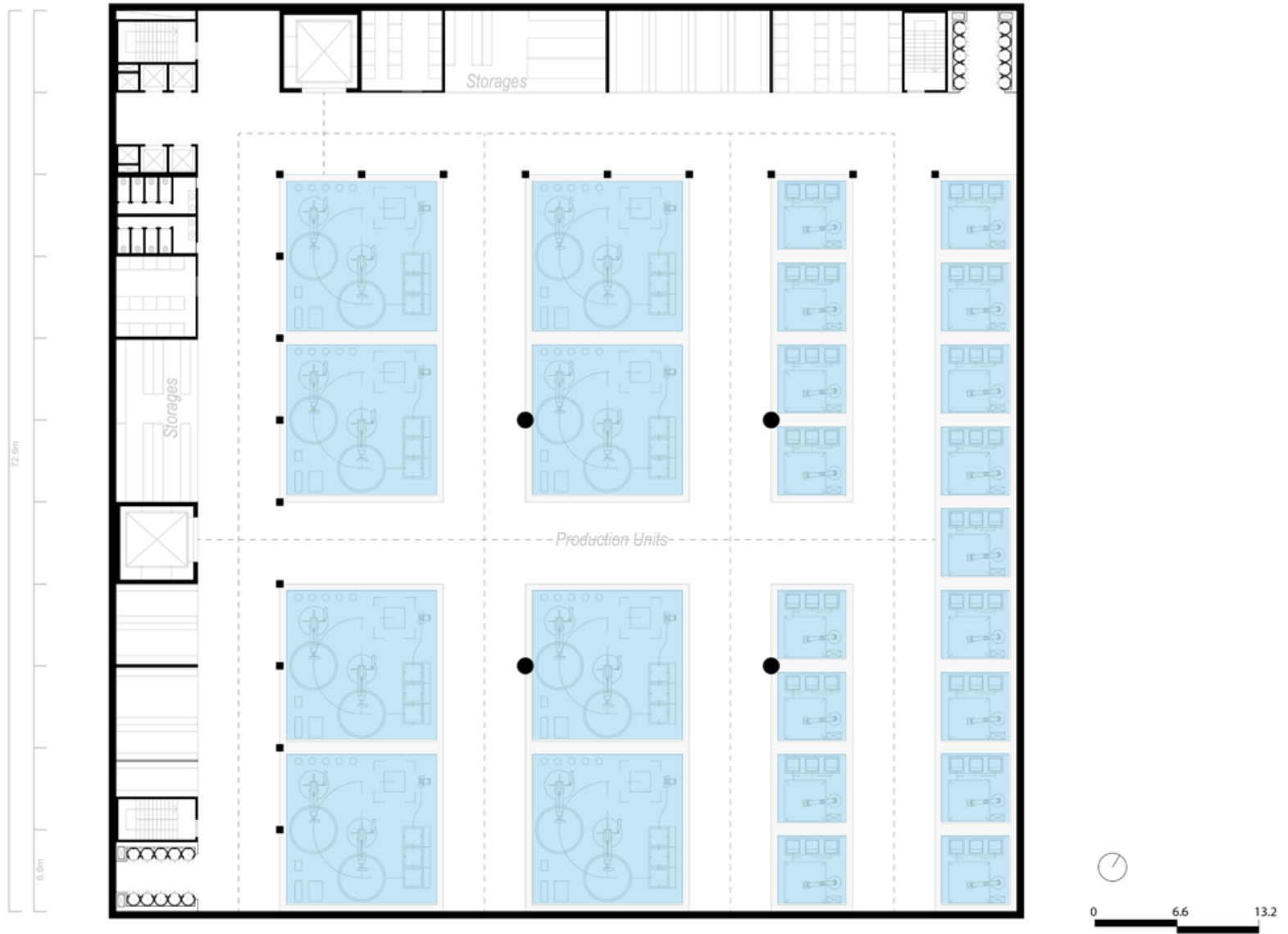
production



main
experiential
space

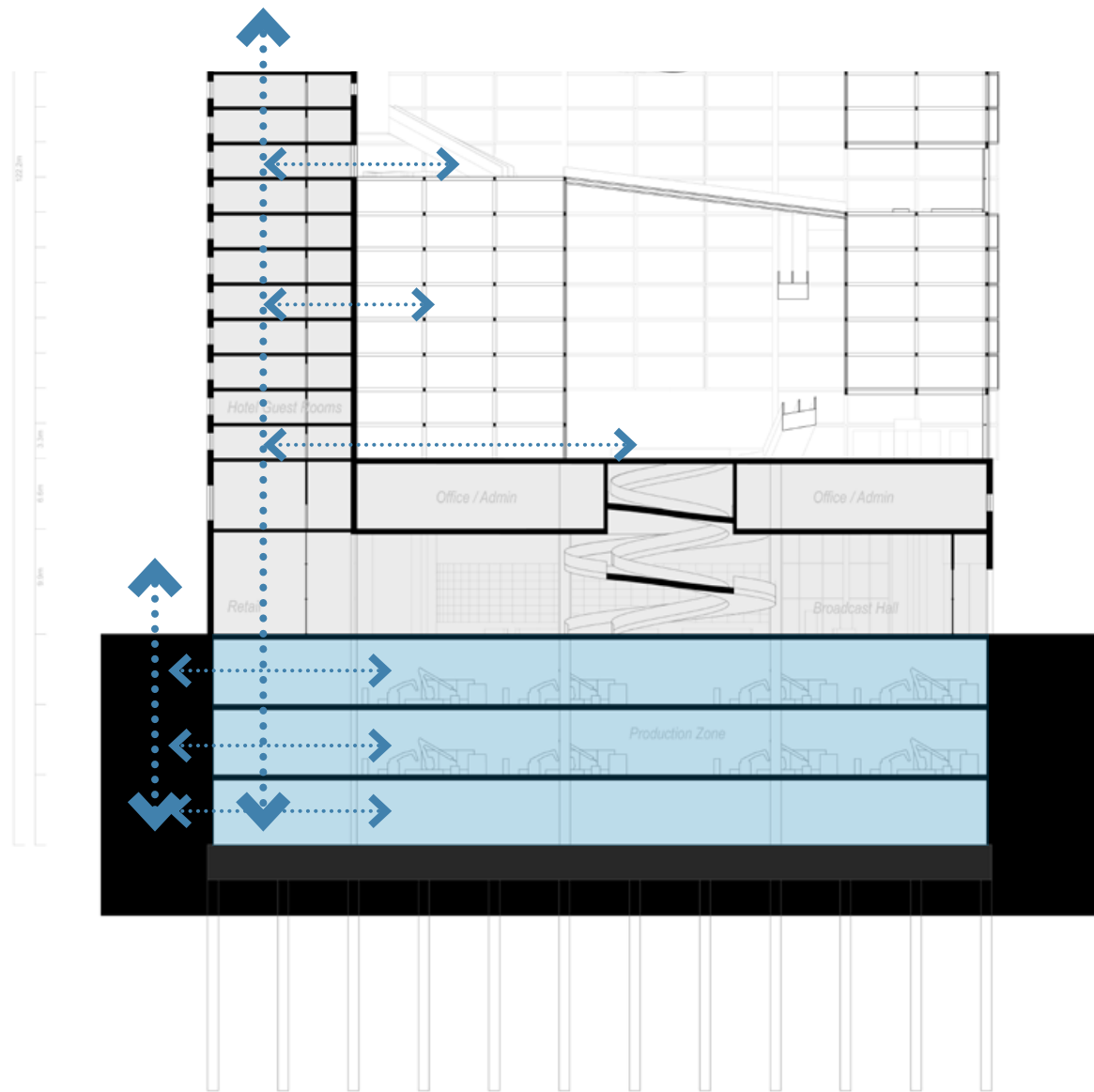


production

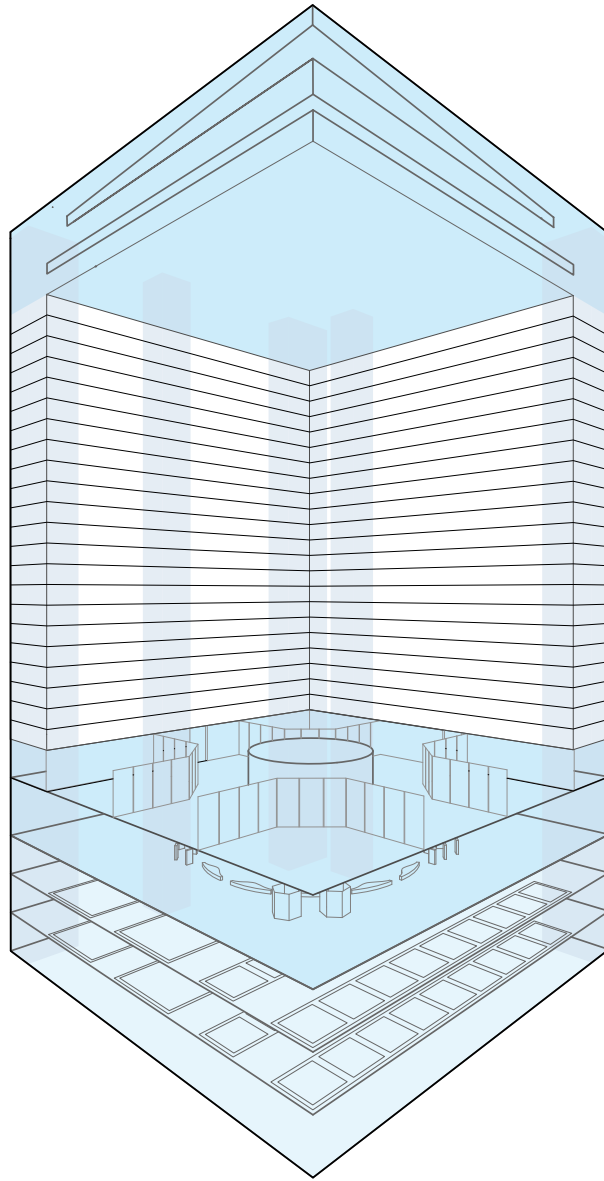


Underground - Production Units

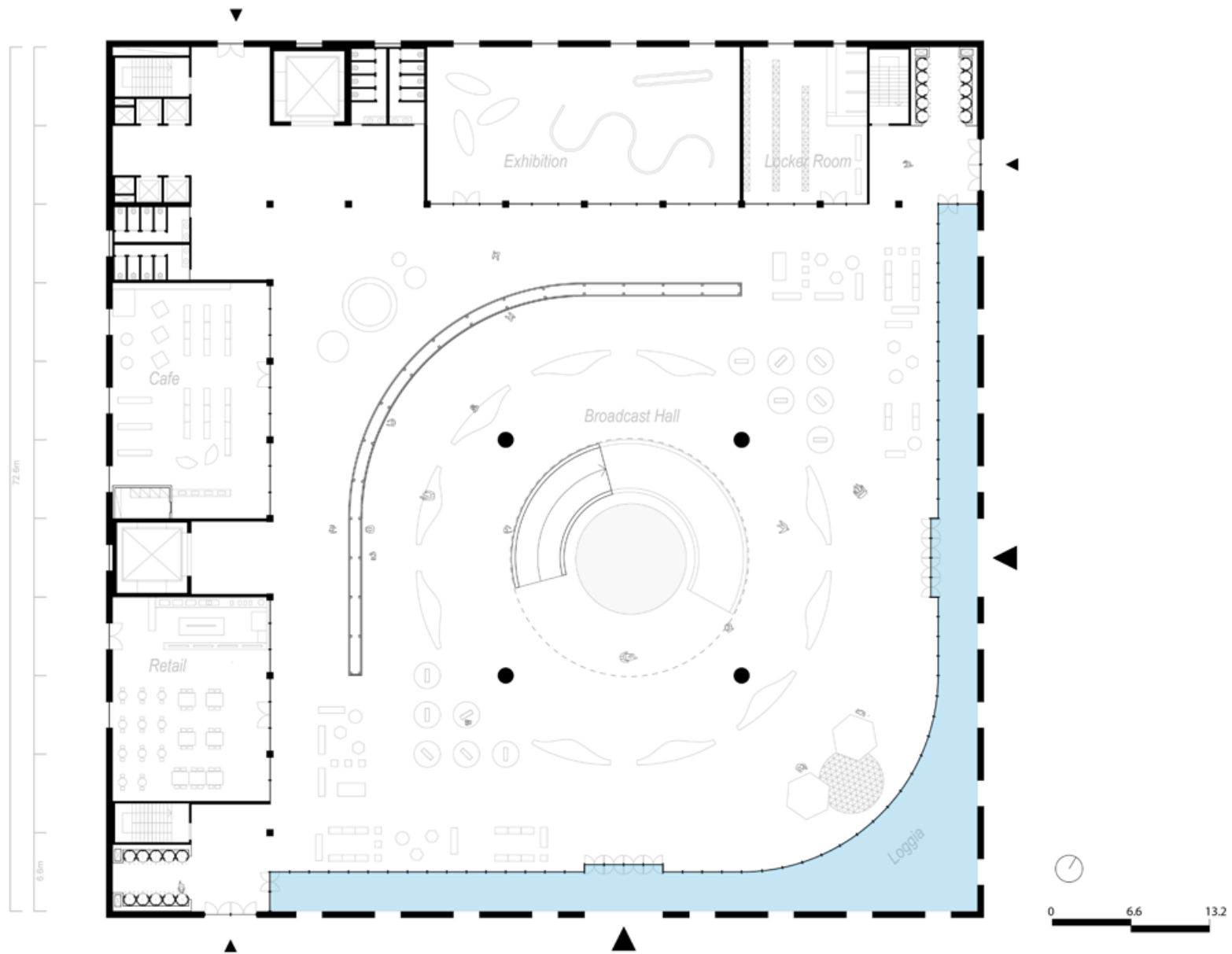




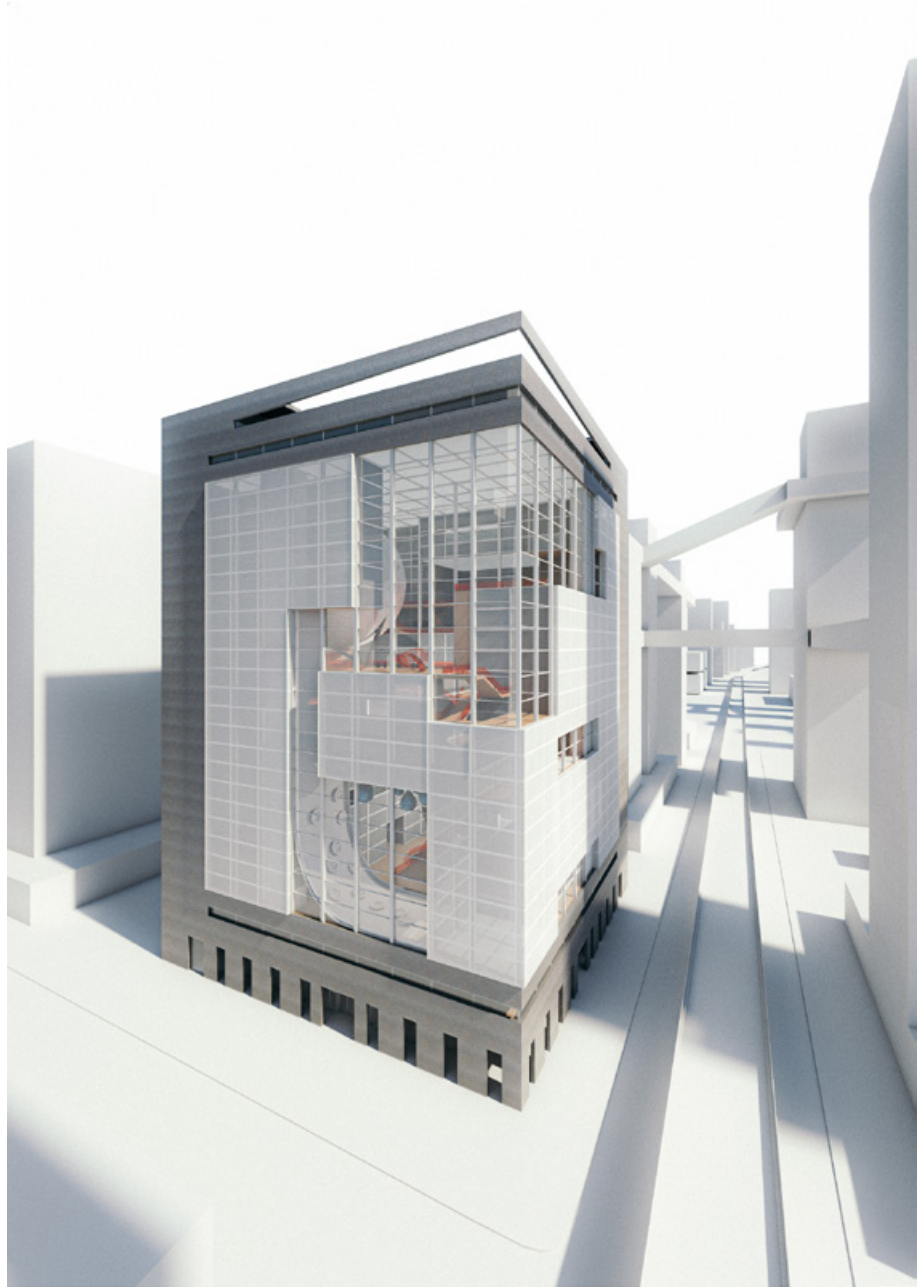
Underground

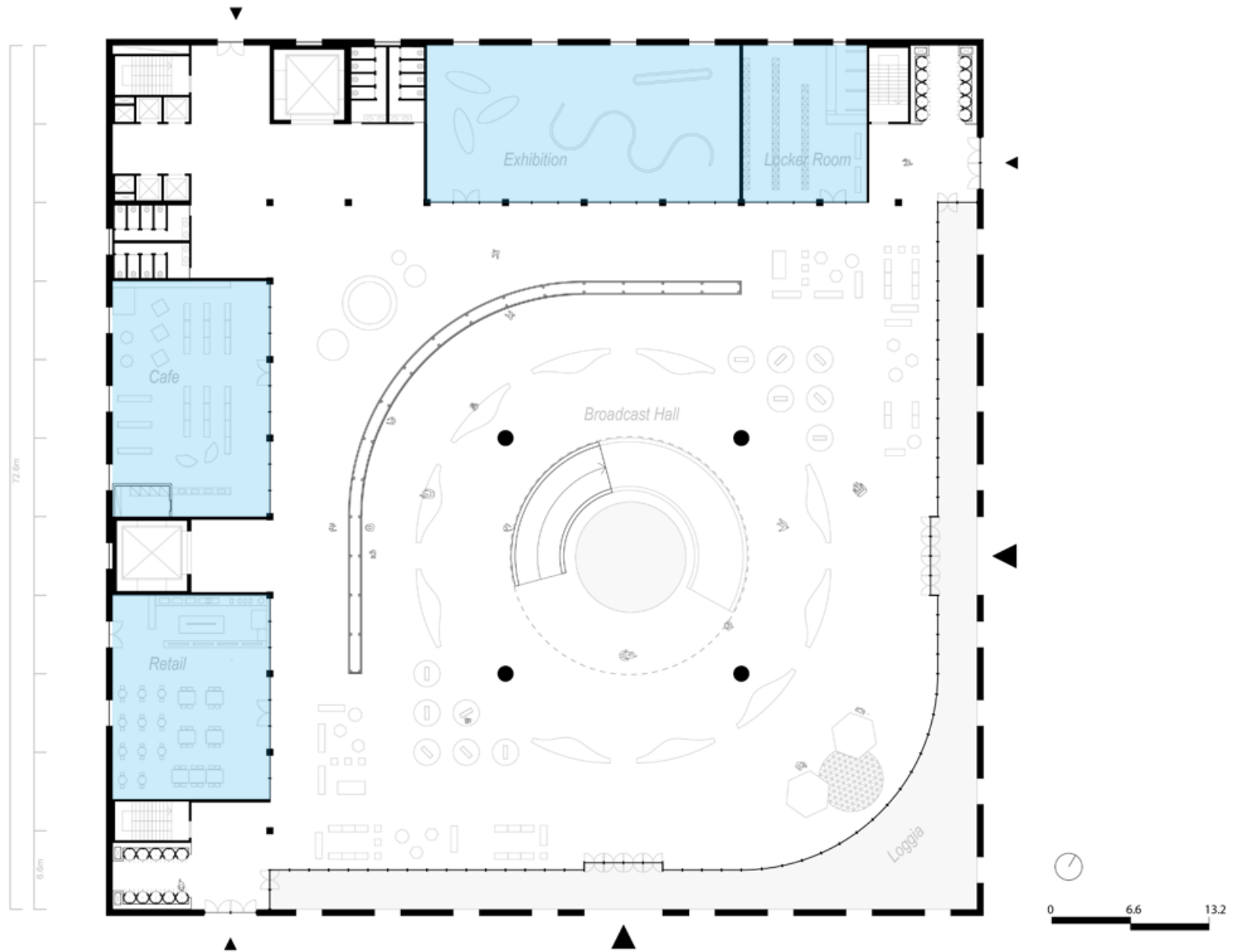


broadcastcast hall

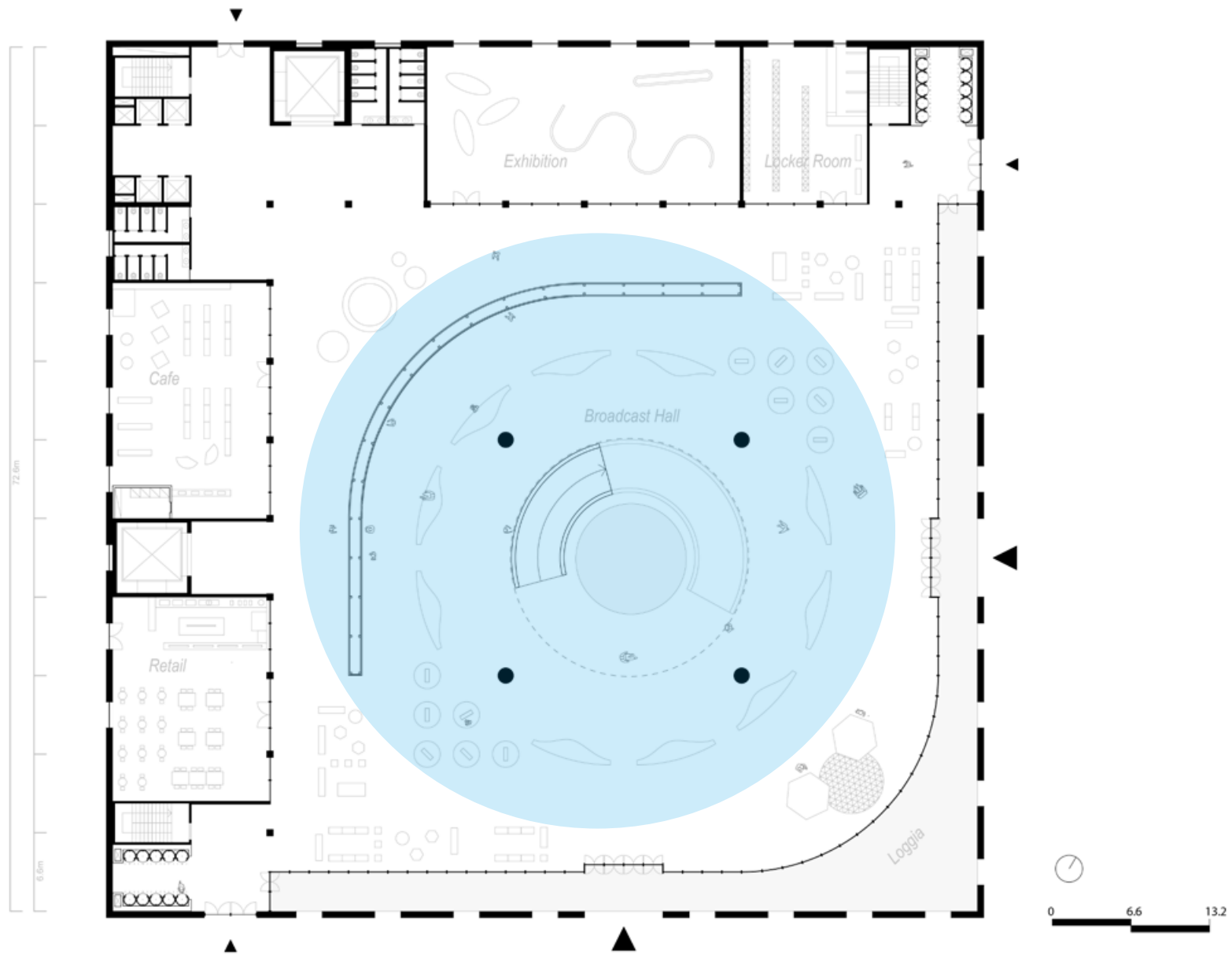


Ground Floor - Loggia





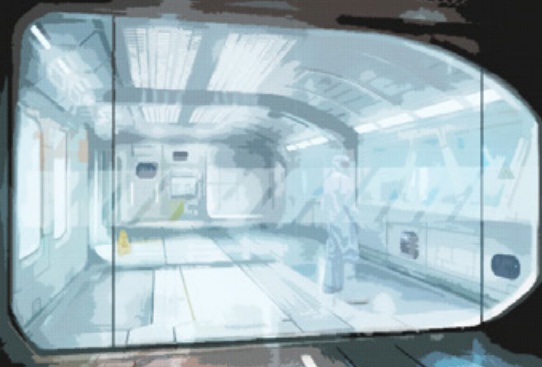
Ground Floor - Retail, Cafe, Exhibition



Ground Floor - Broadcast Hall

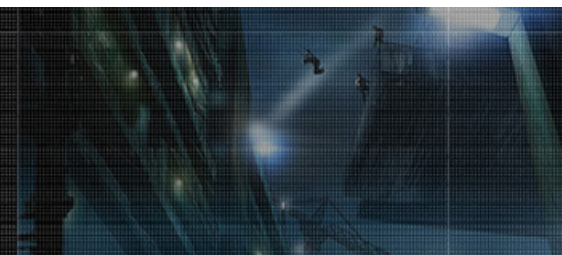


CAMERA C-2-11



THE SECRET LAB
on sale!

Next Entry: 16:35, Gate C-2
Duration: 45m—2h15m



CAMERA F-6-2



CAMERA F-6-5

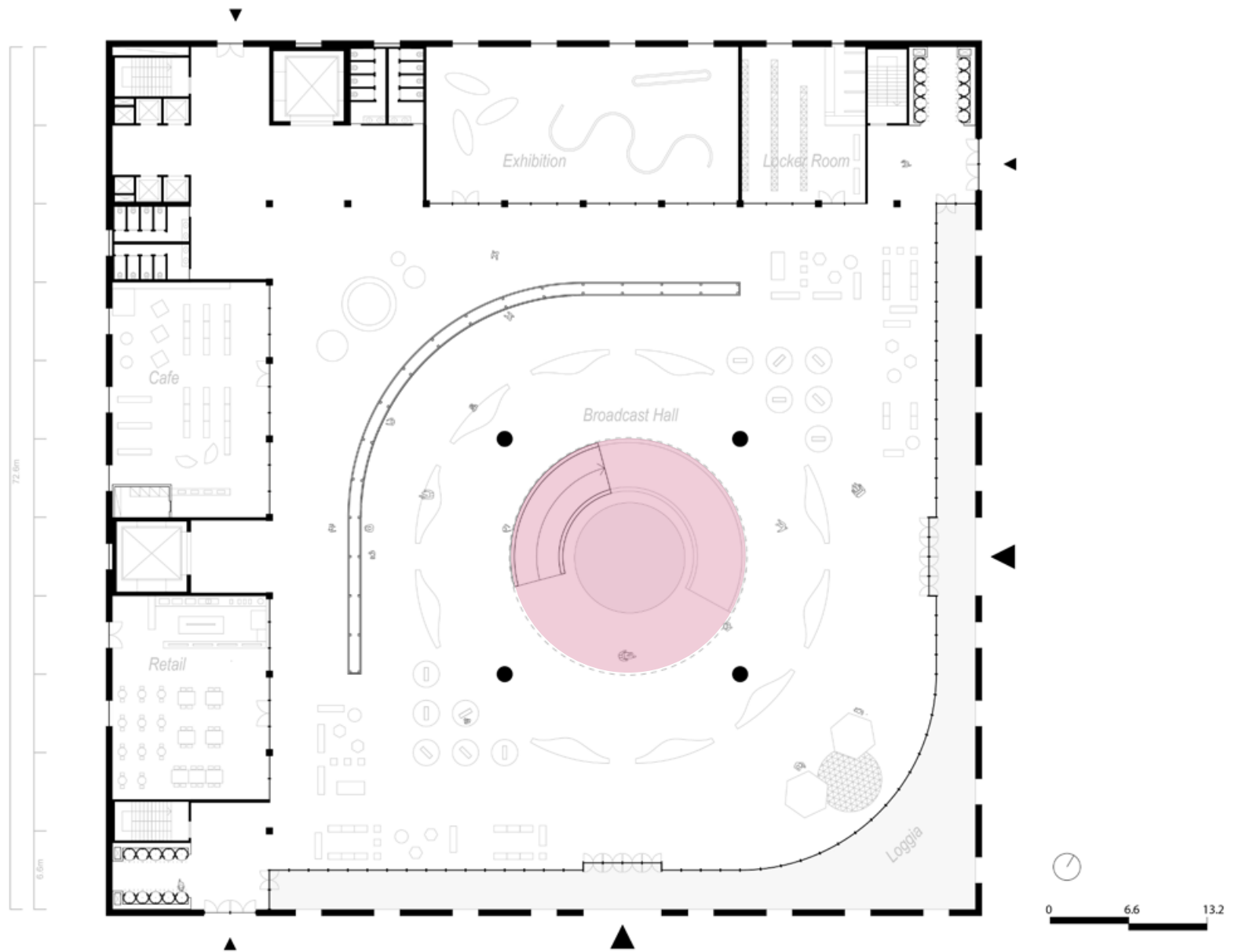


1967 Underground

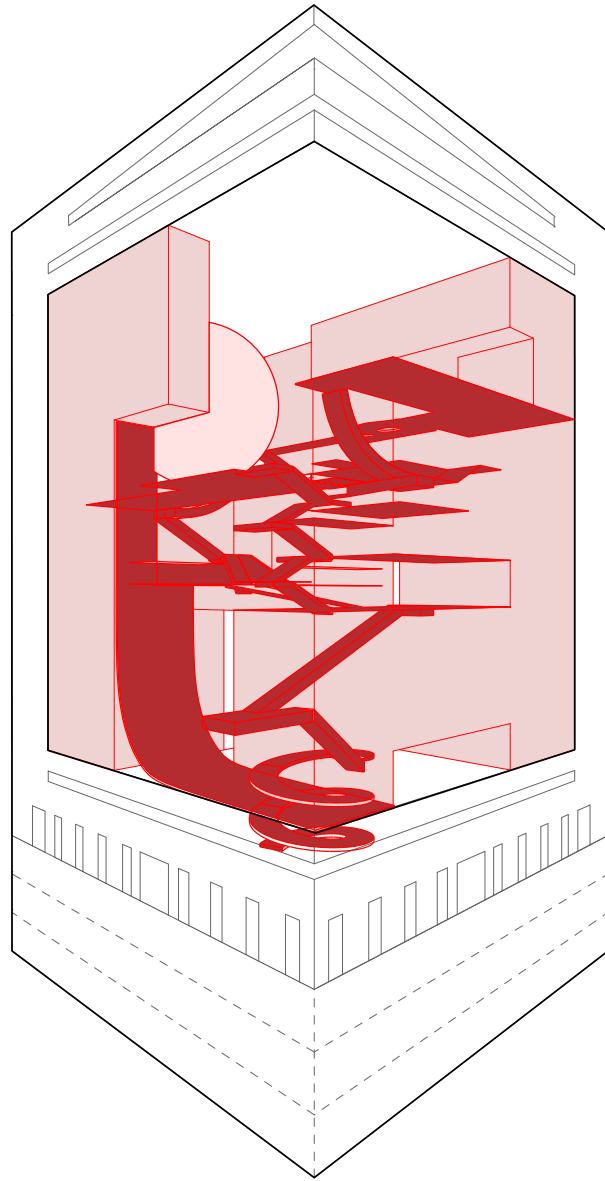
Next Entry: 16:35, Gate F-e
Duration: 1h10m—1h40m

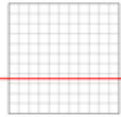
over 12 years only



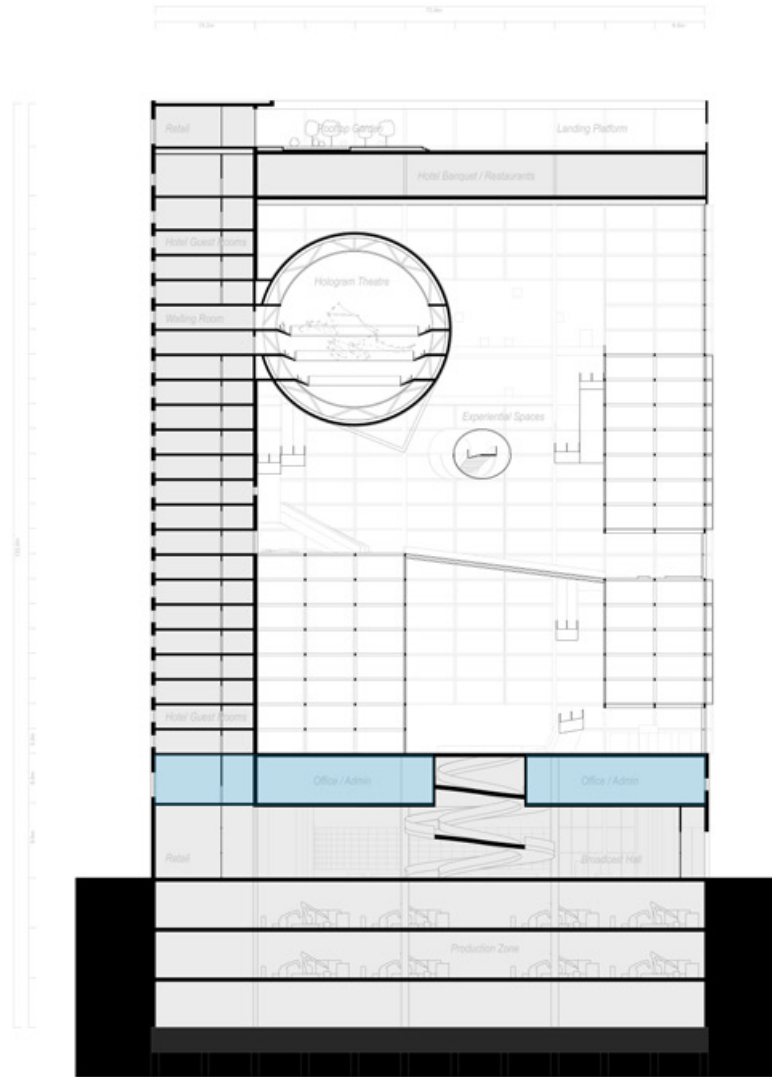


Ground Floor - Broadcast Hall

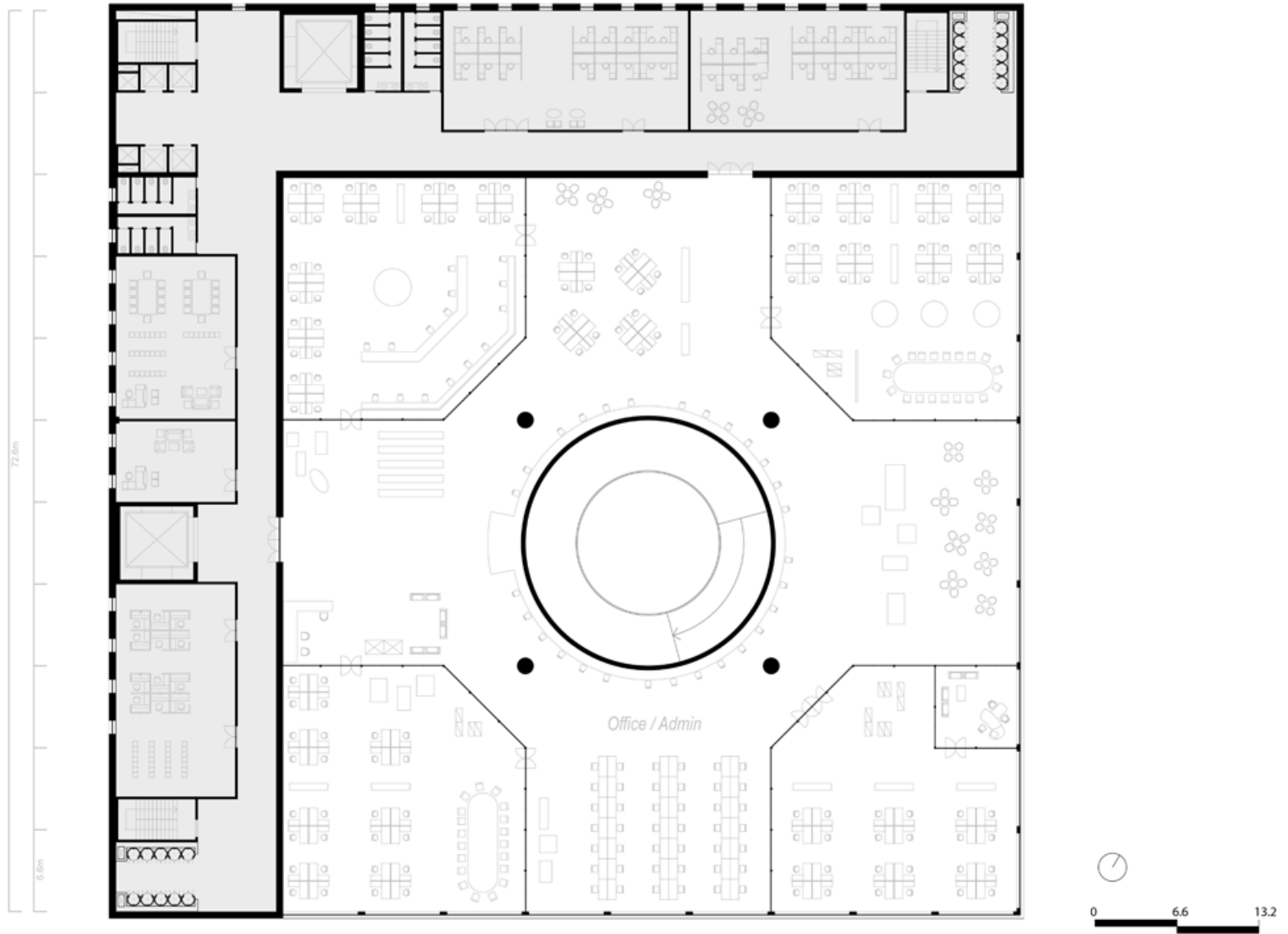




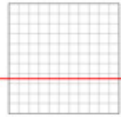
0 6.6 13.2 26.4



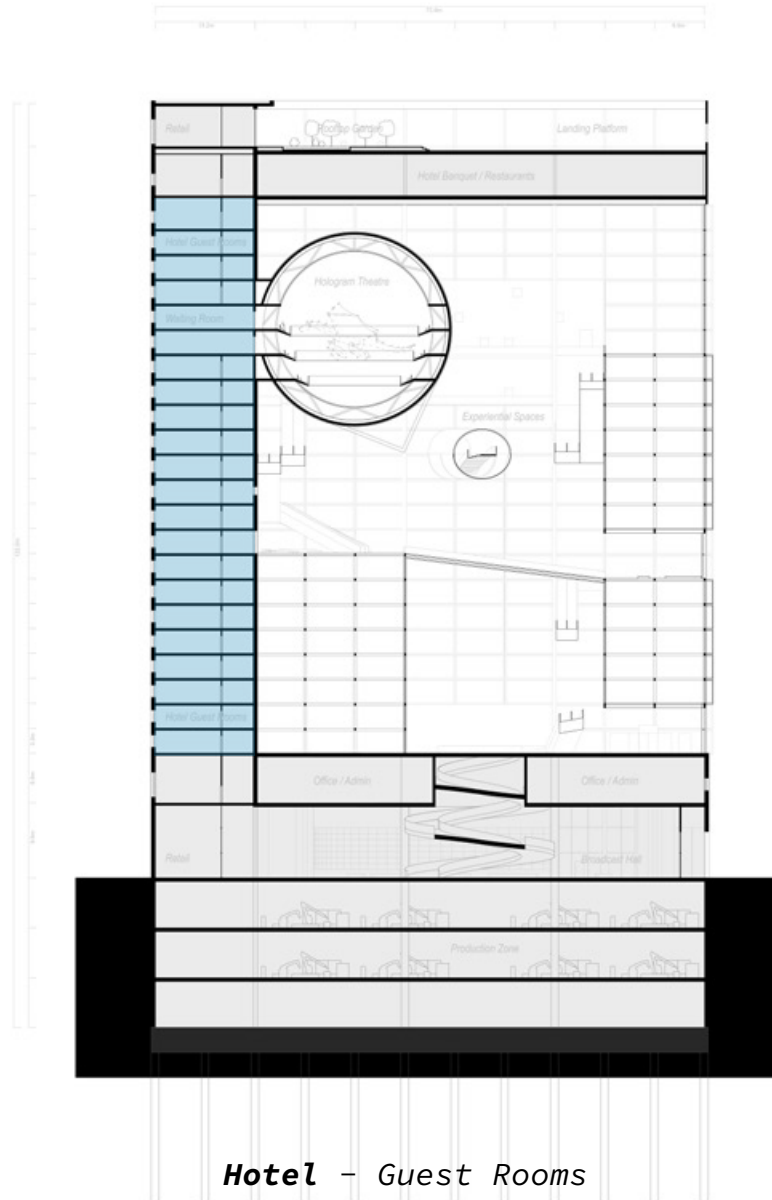
First Floor - Office & Administration



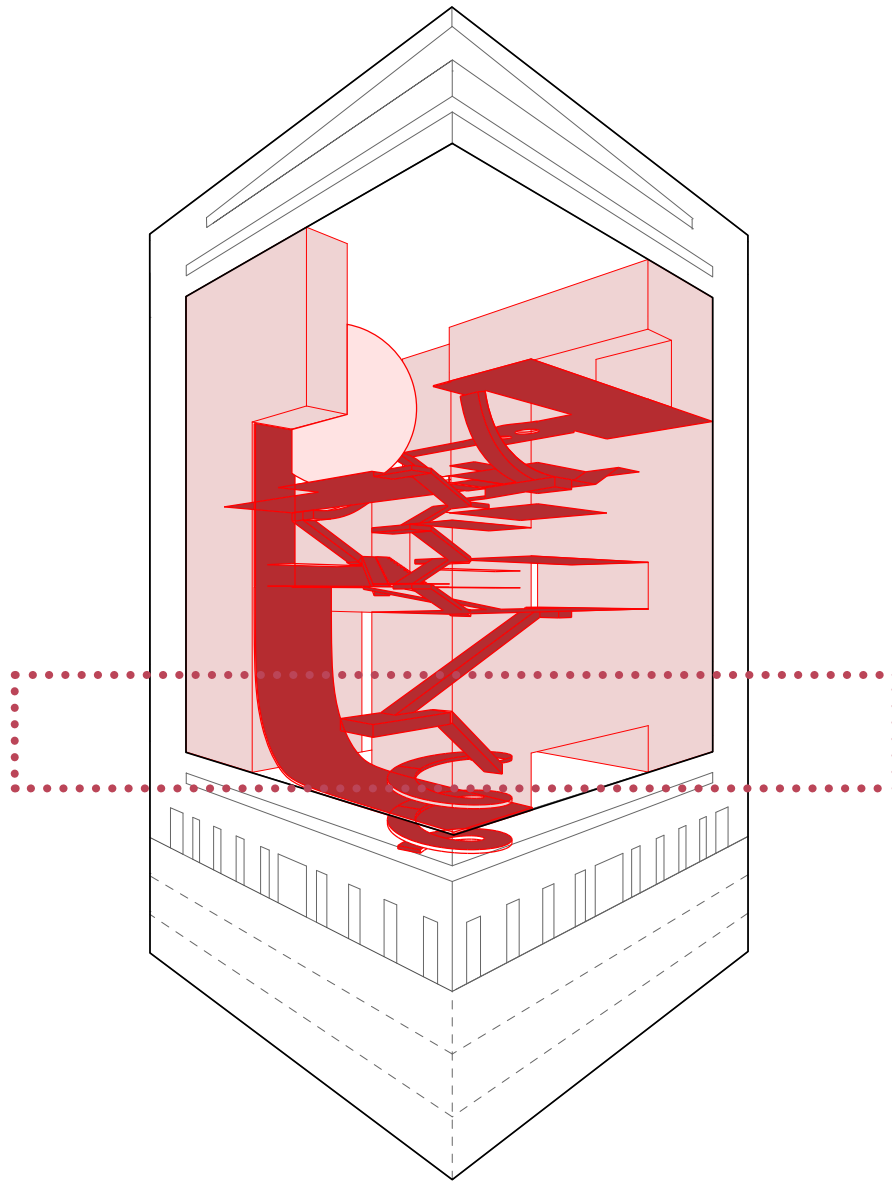
First Floor - Office & Administration

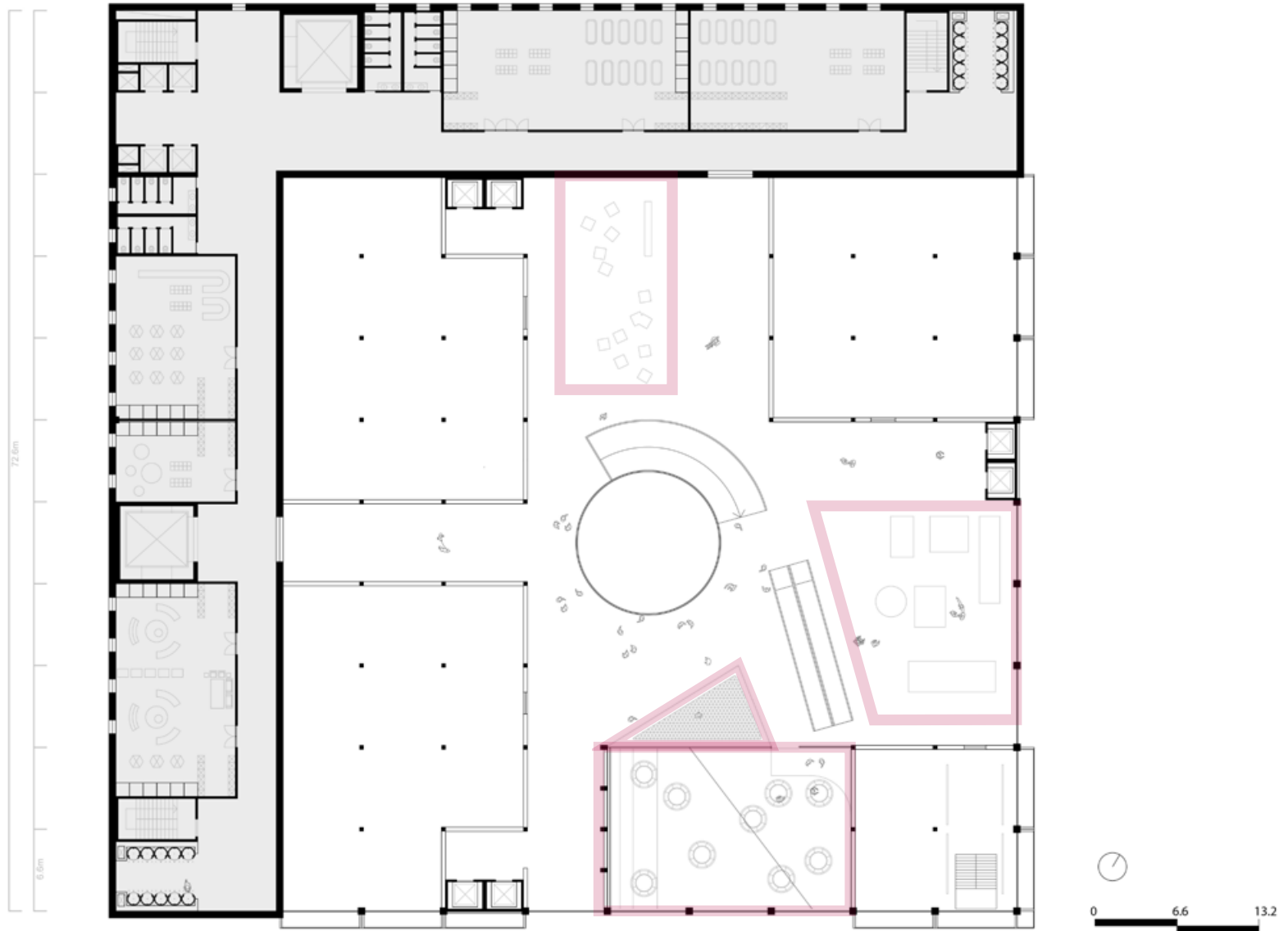


0 6.6 13.2 26.4



Hotel - Guest Rooms



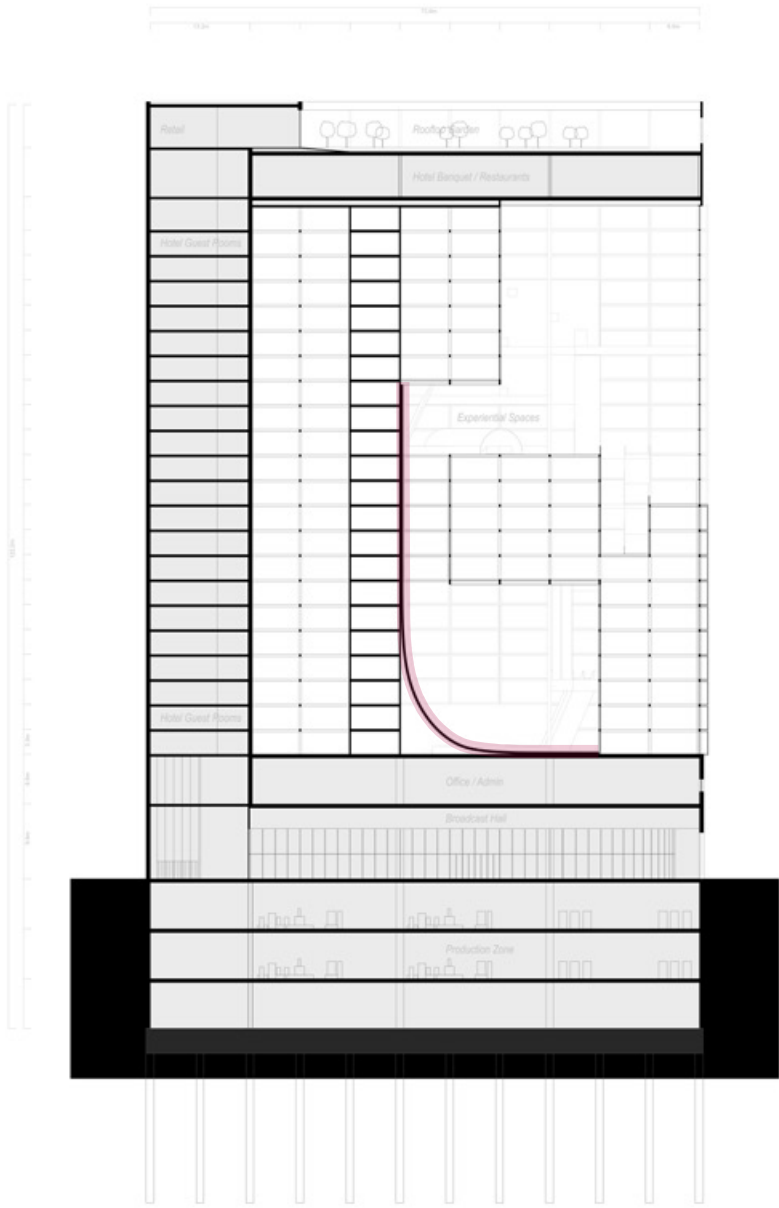


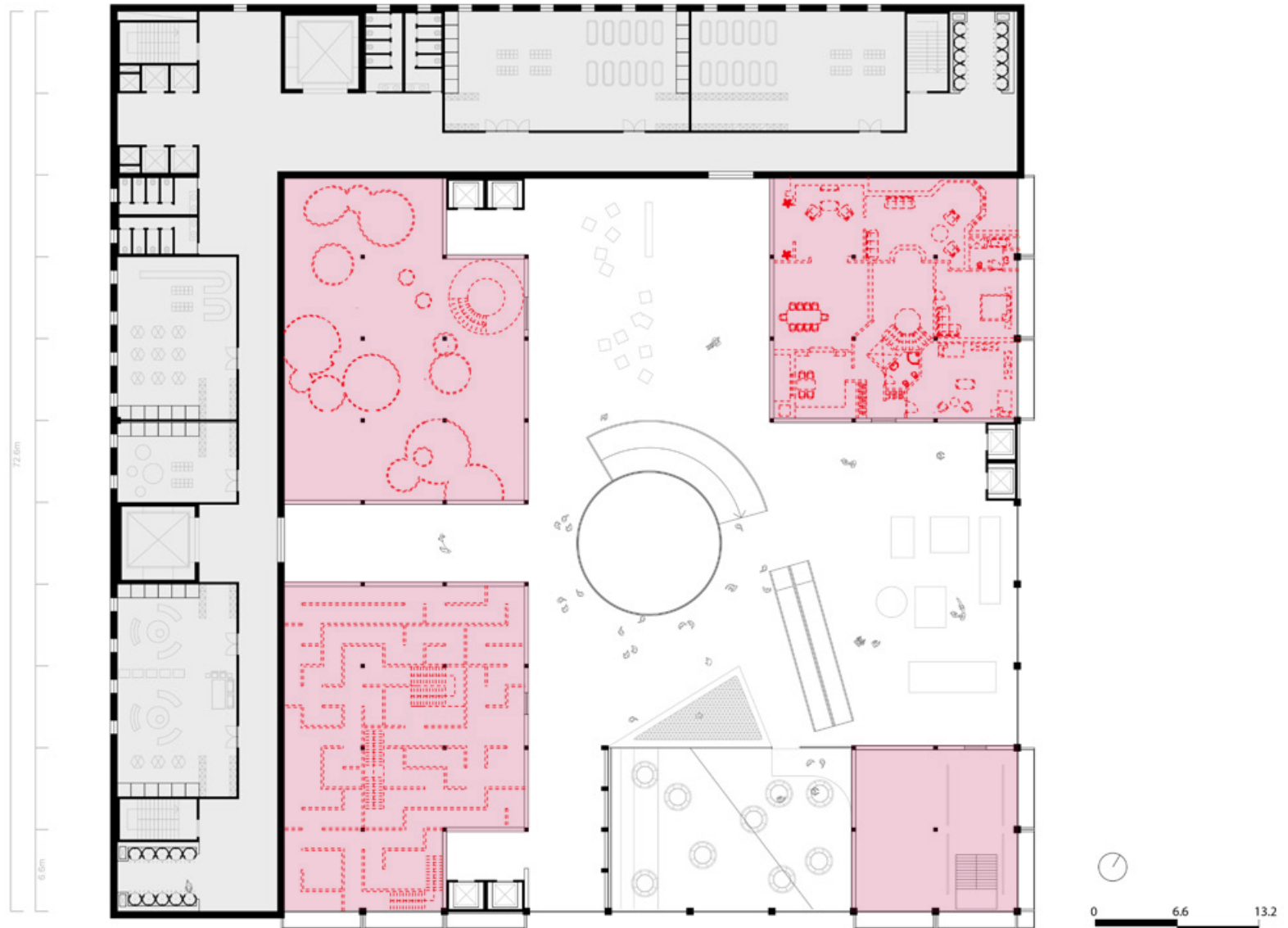
Main Experiential Space - Open Space



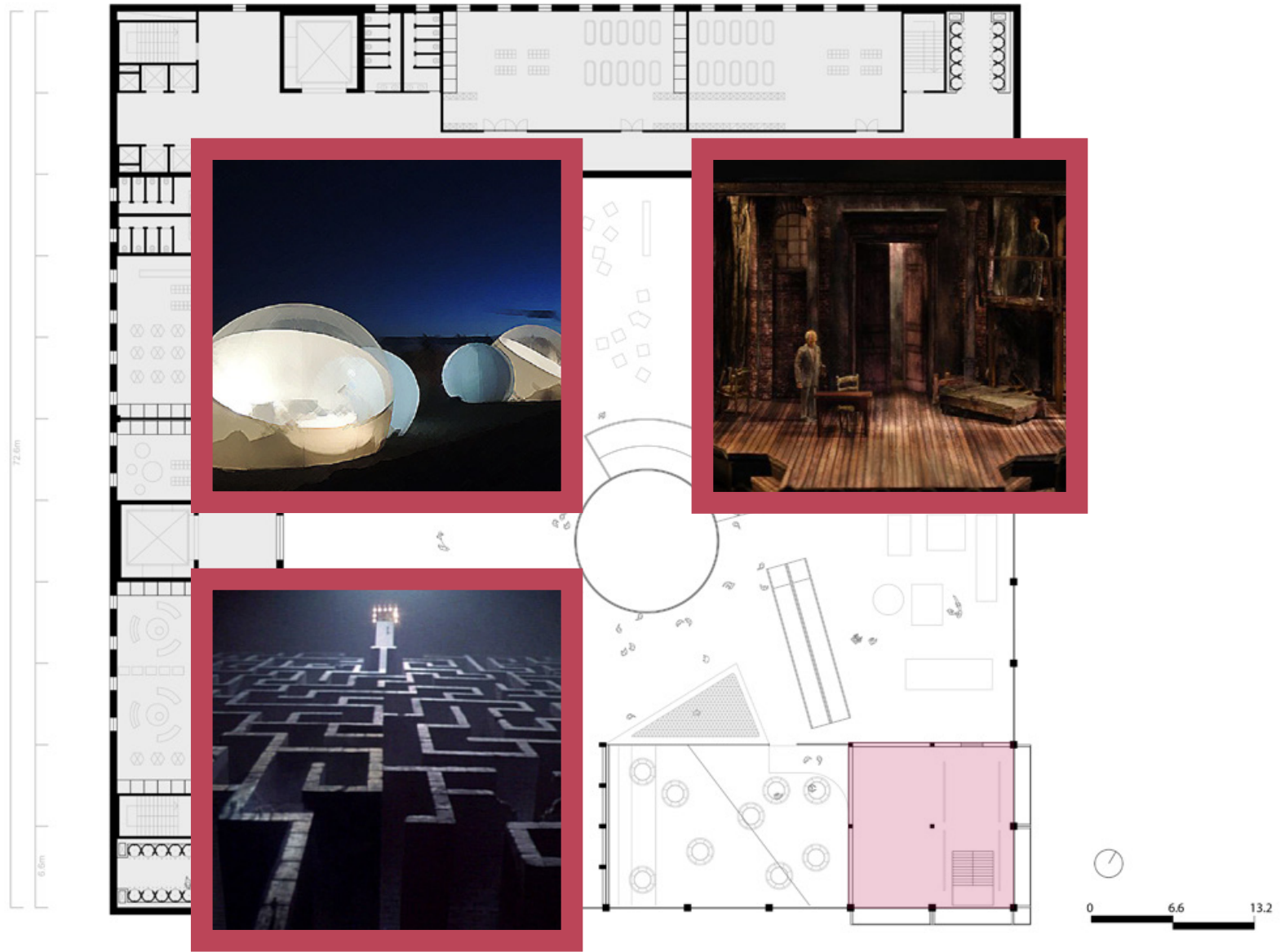


0 6.6 13.2 26.4

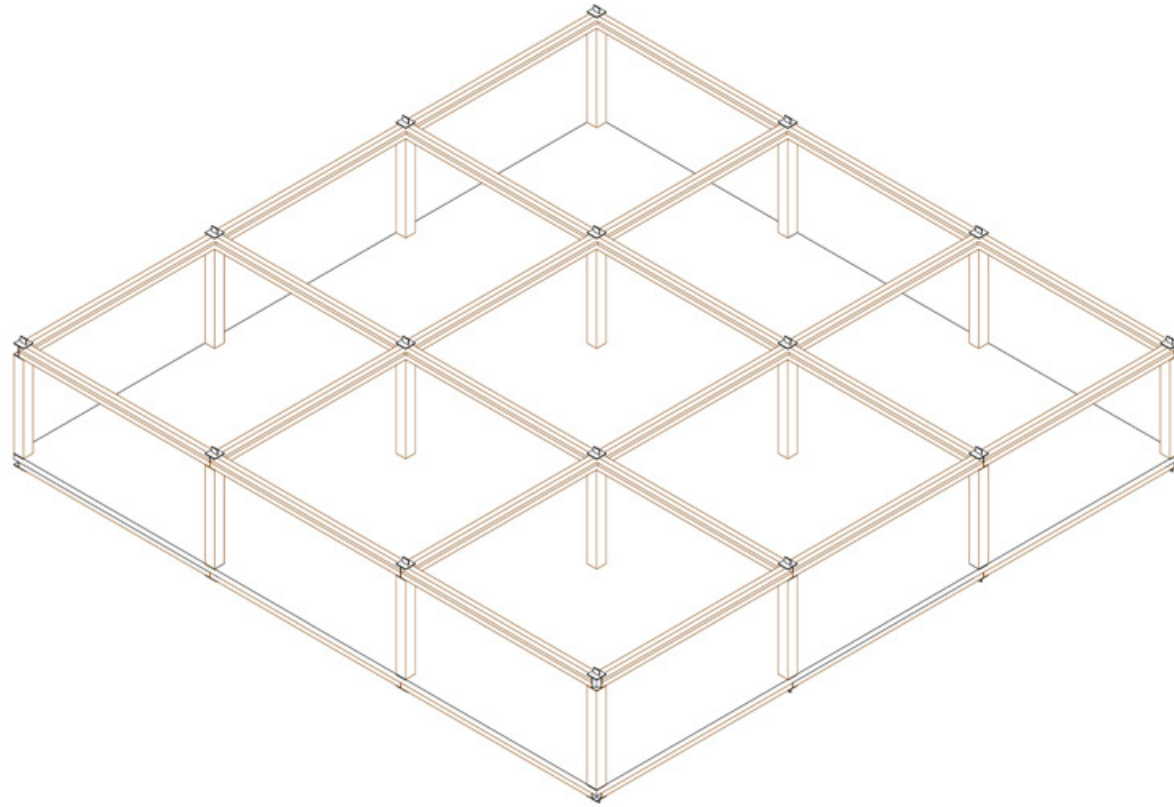


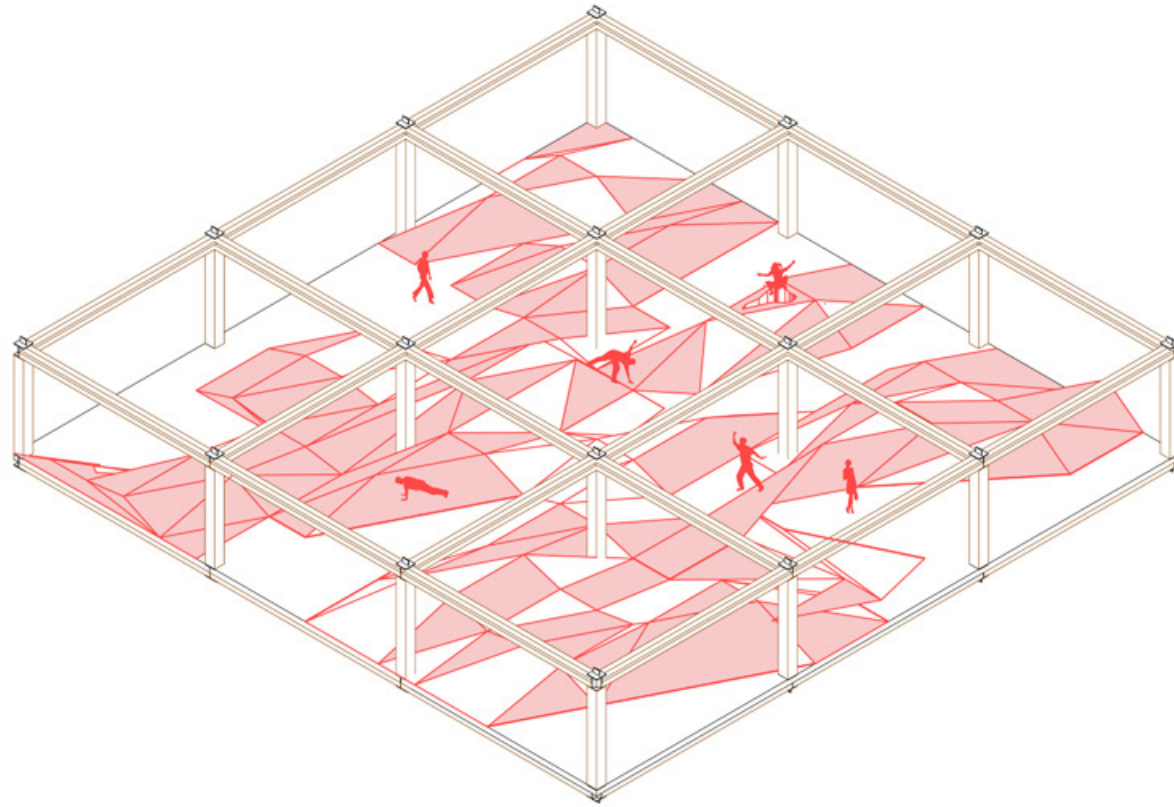


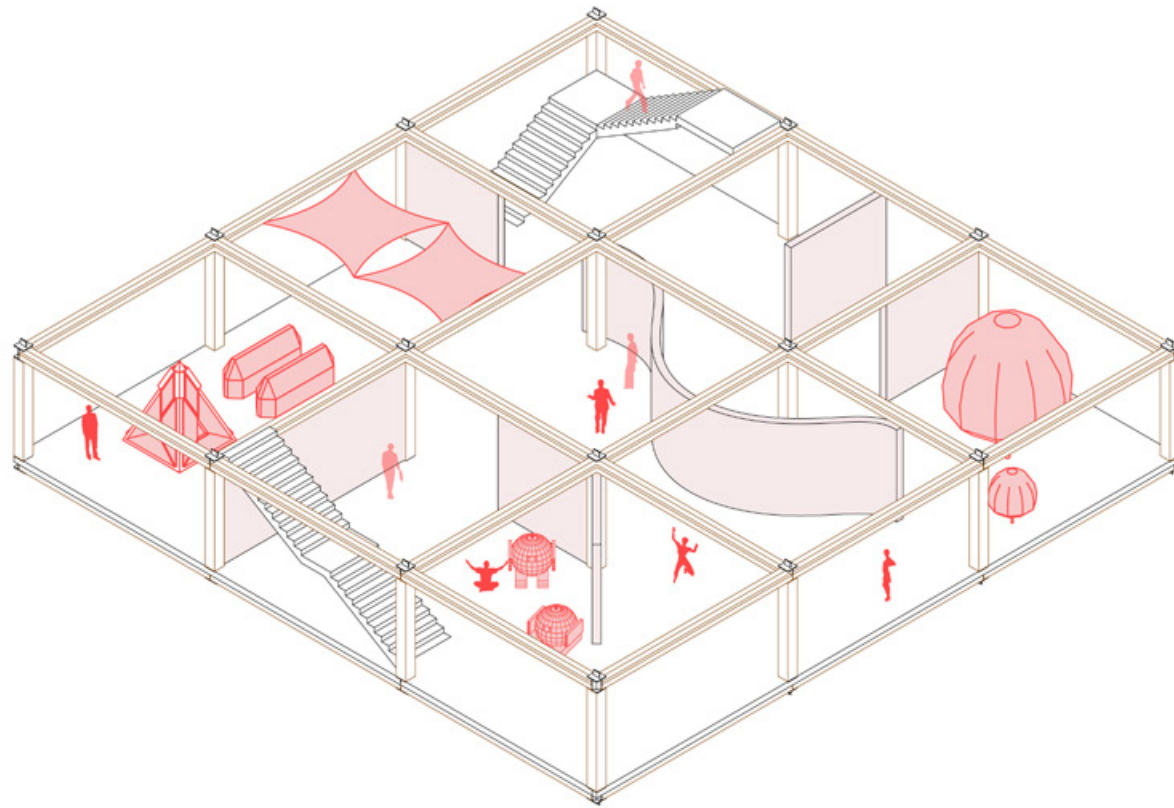
Main Experiential Space - Rooms

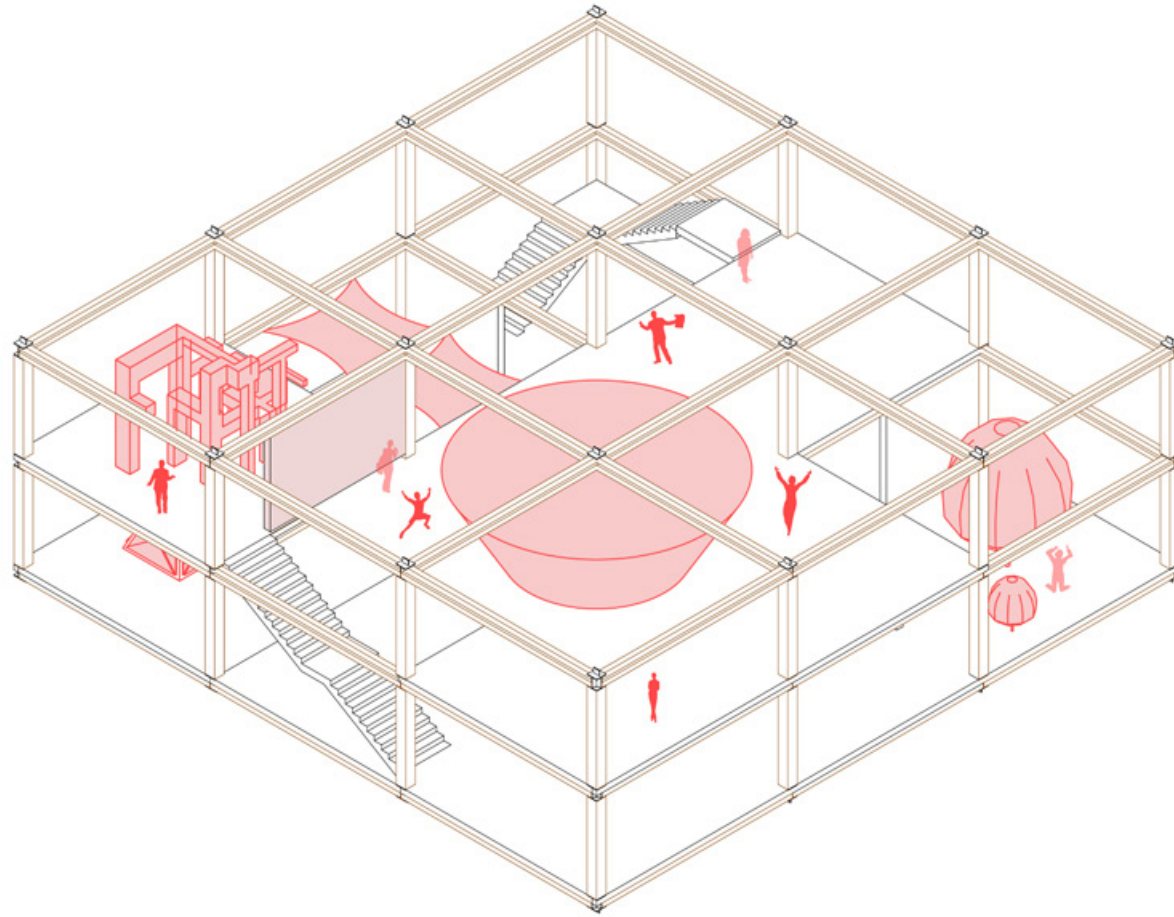


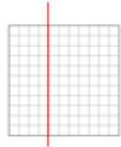
Main Experiential Space - Rooms



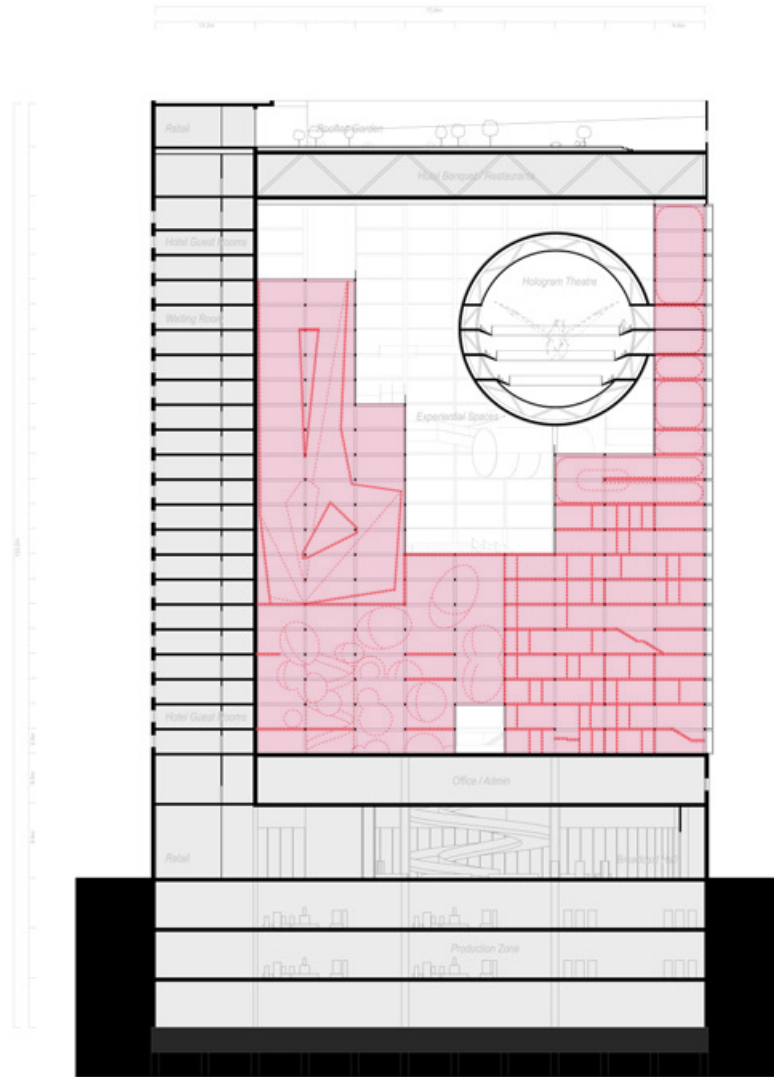




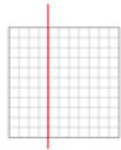




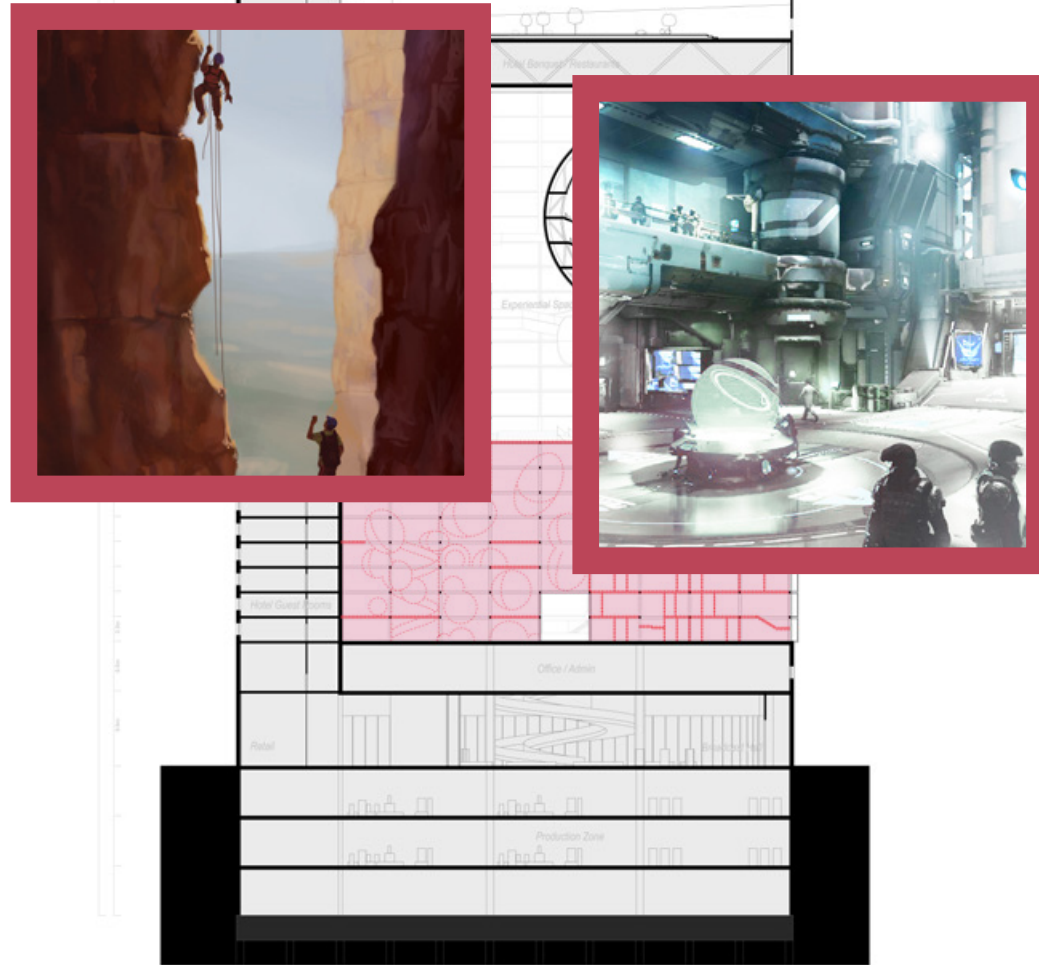
0 6.6 13.2 26.4



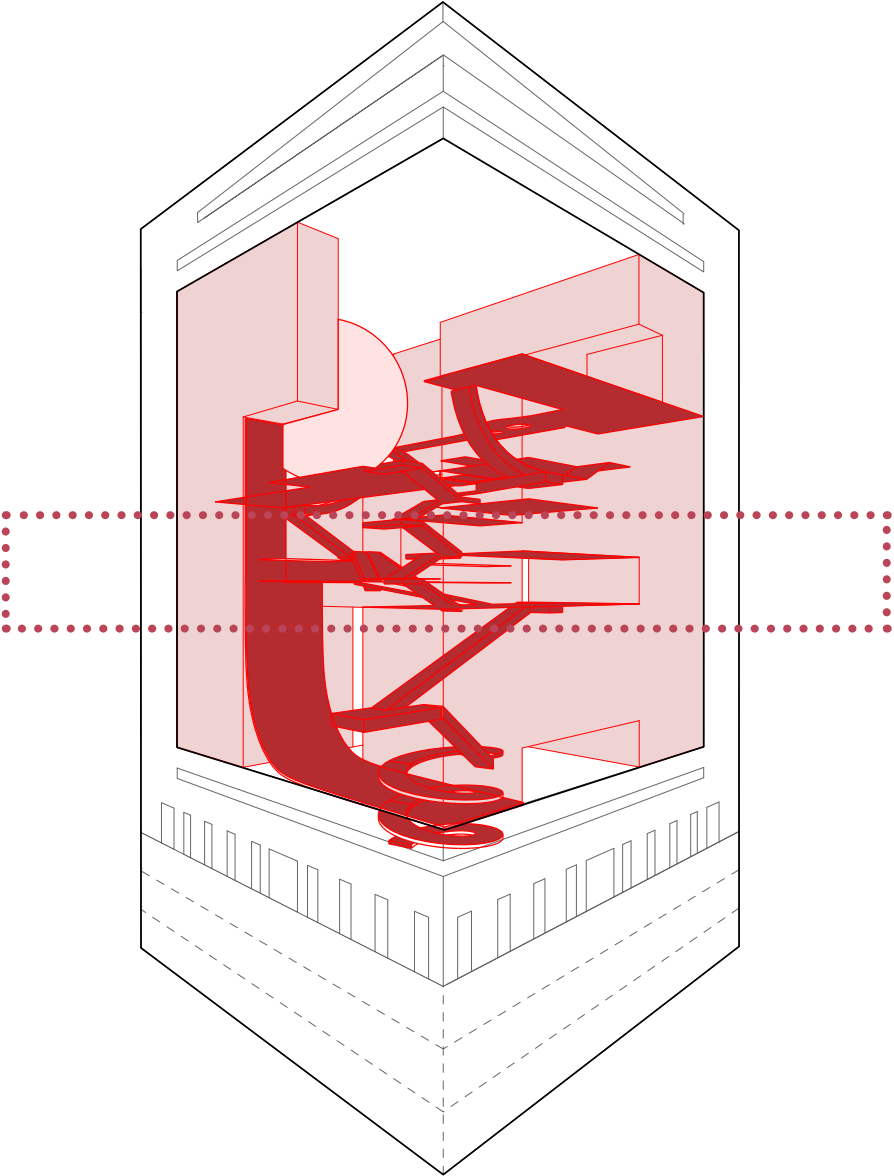
Main Experiential Space - Rooms



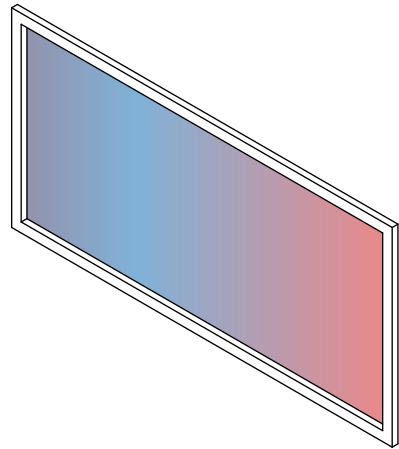
0 6.6 13.2 26.4



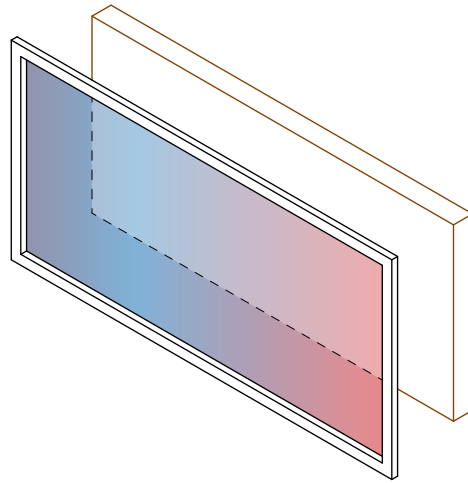
Main Experiential Space - Rooms



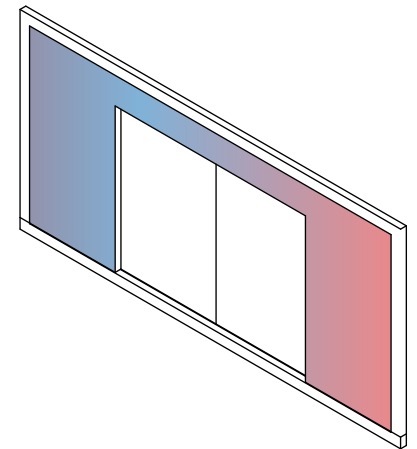




Transparent LED Panel



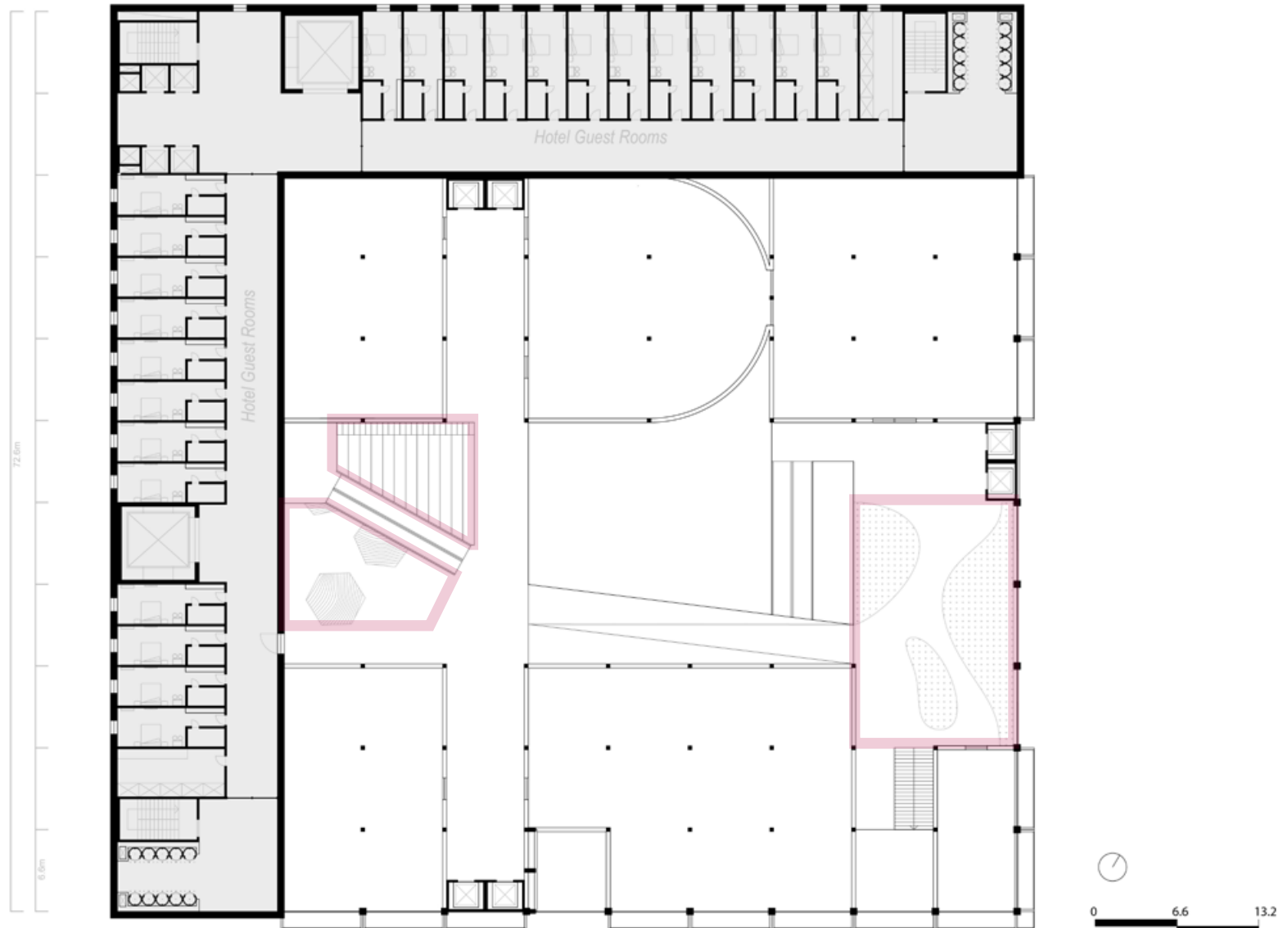
Transparent LED Panel
+
Mass Timber Wall



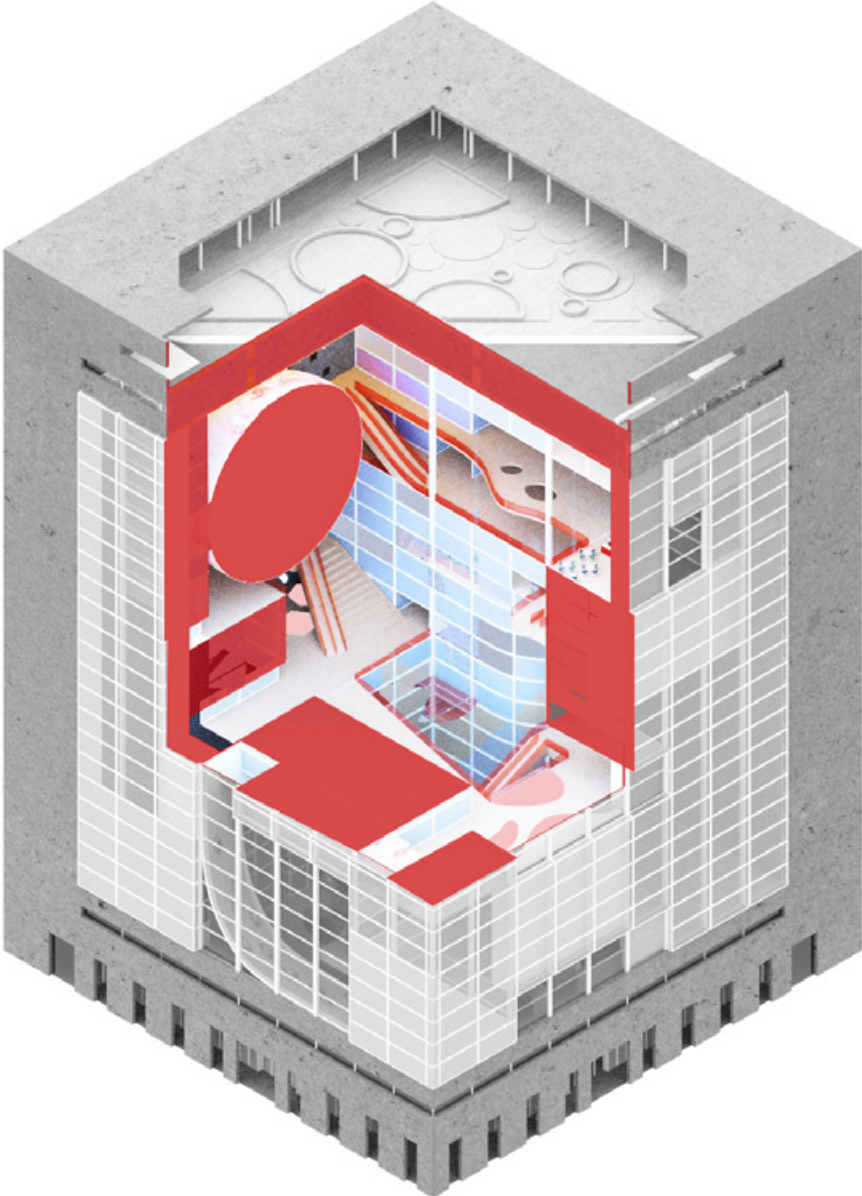
Opening, Entrance/Exit

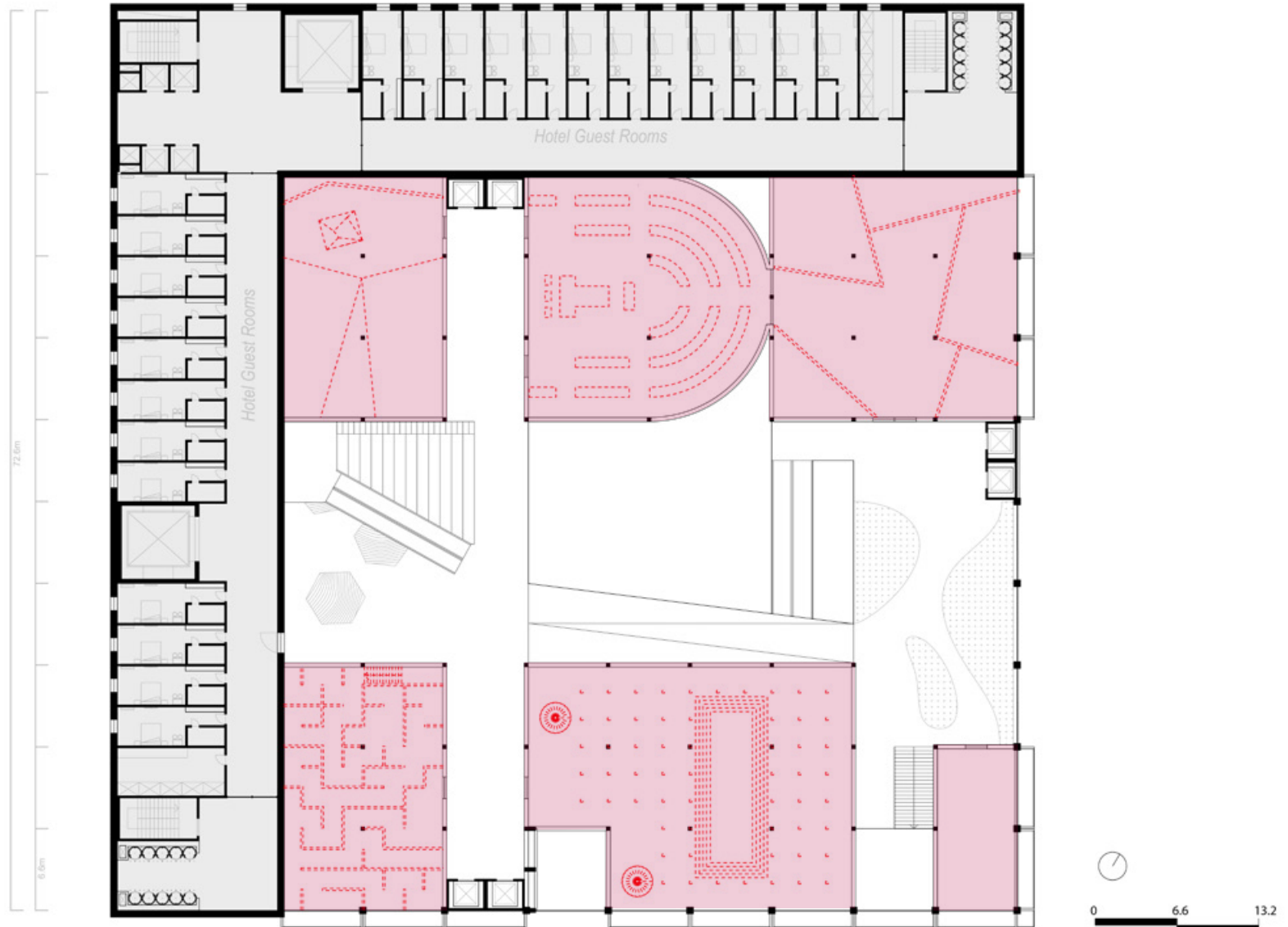
Various Panel Infill



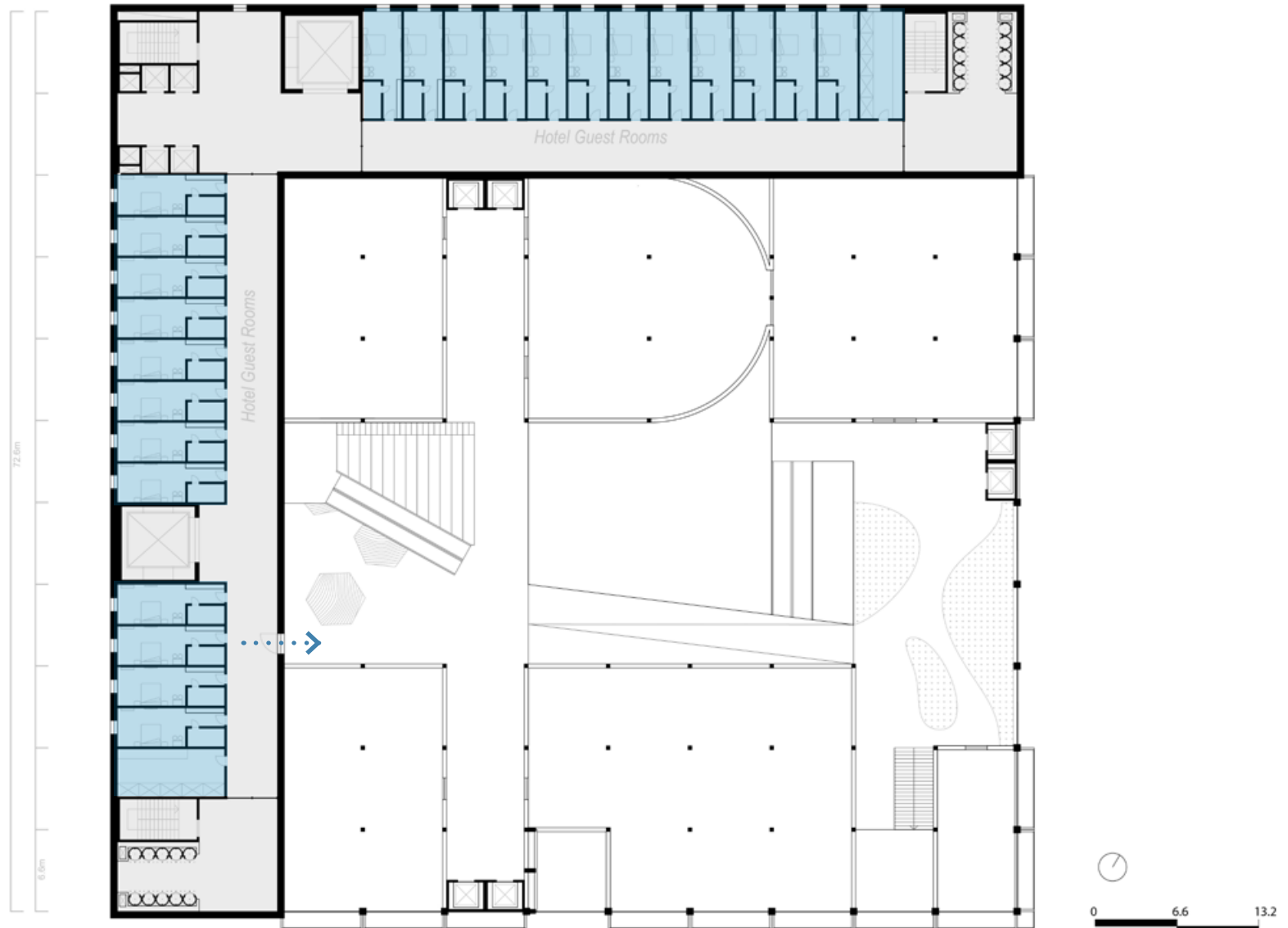


Main Experiential Space - Open Space

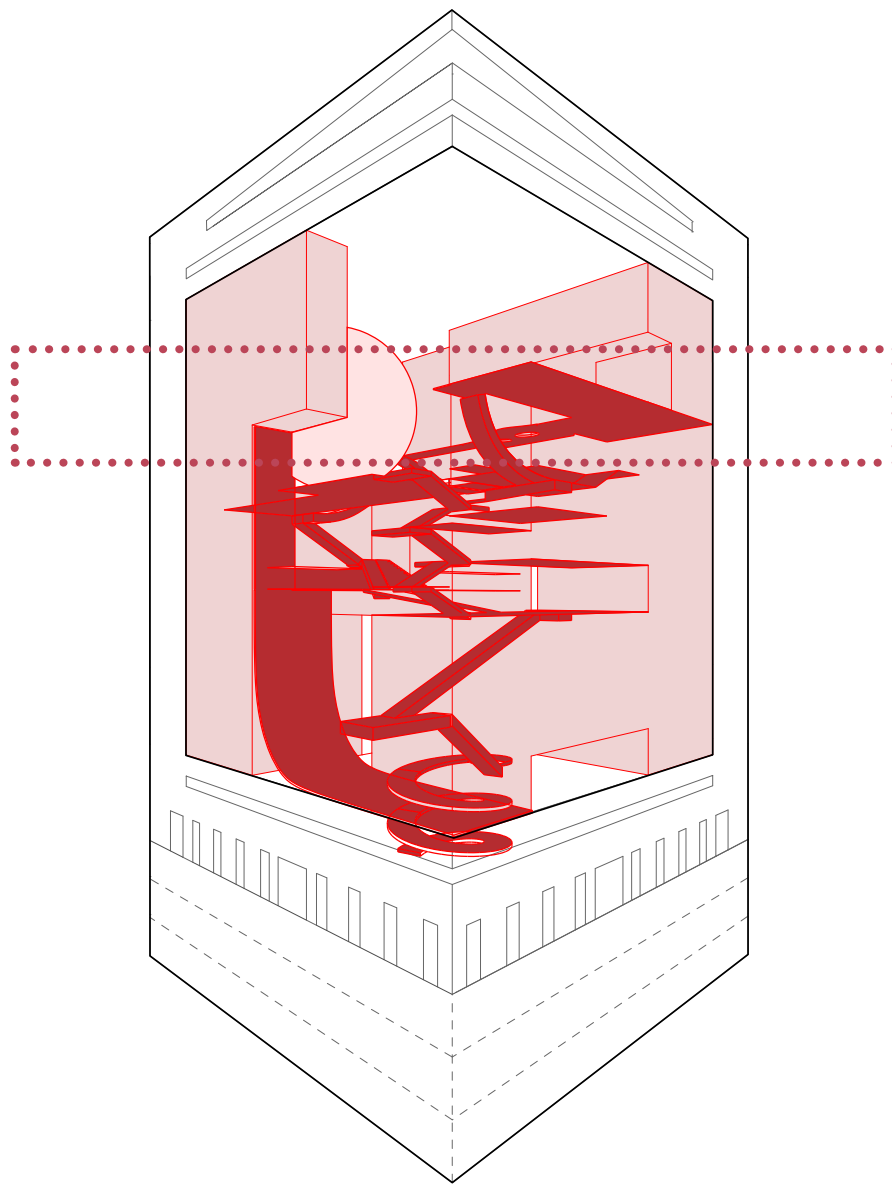


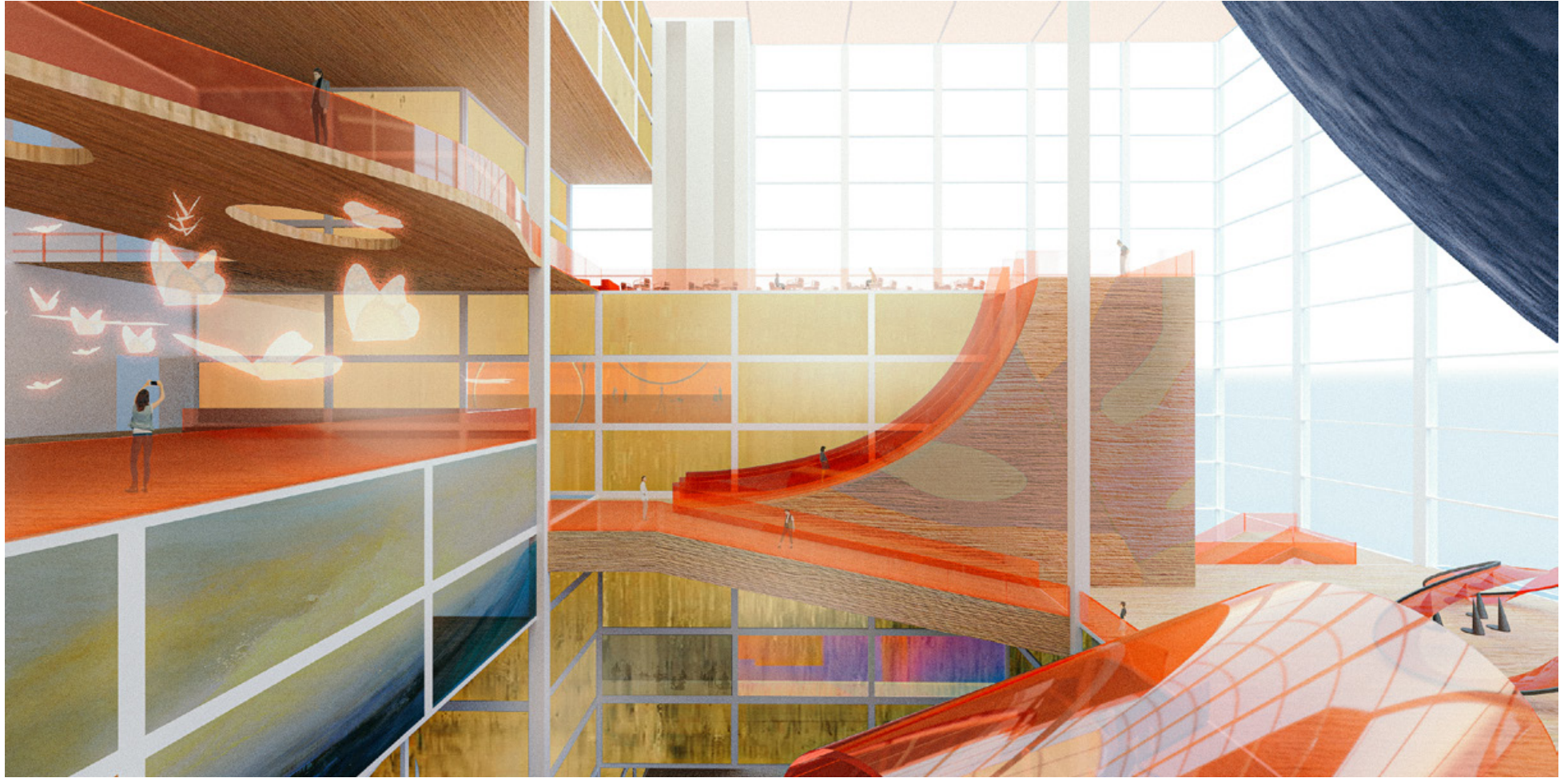


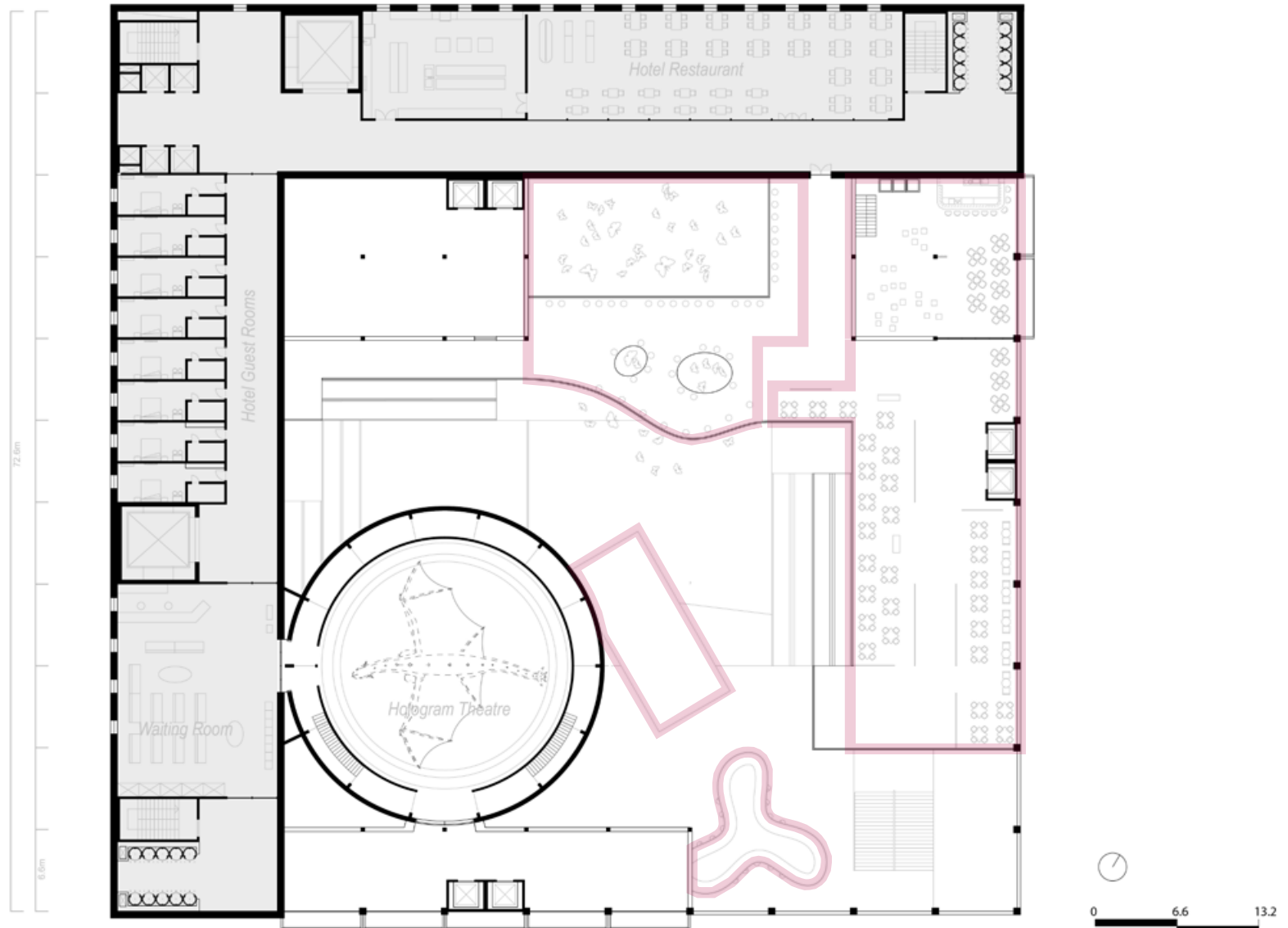
Main Experiential Space - Rooms



Hotel - Guest Rooms

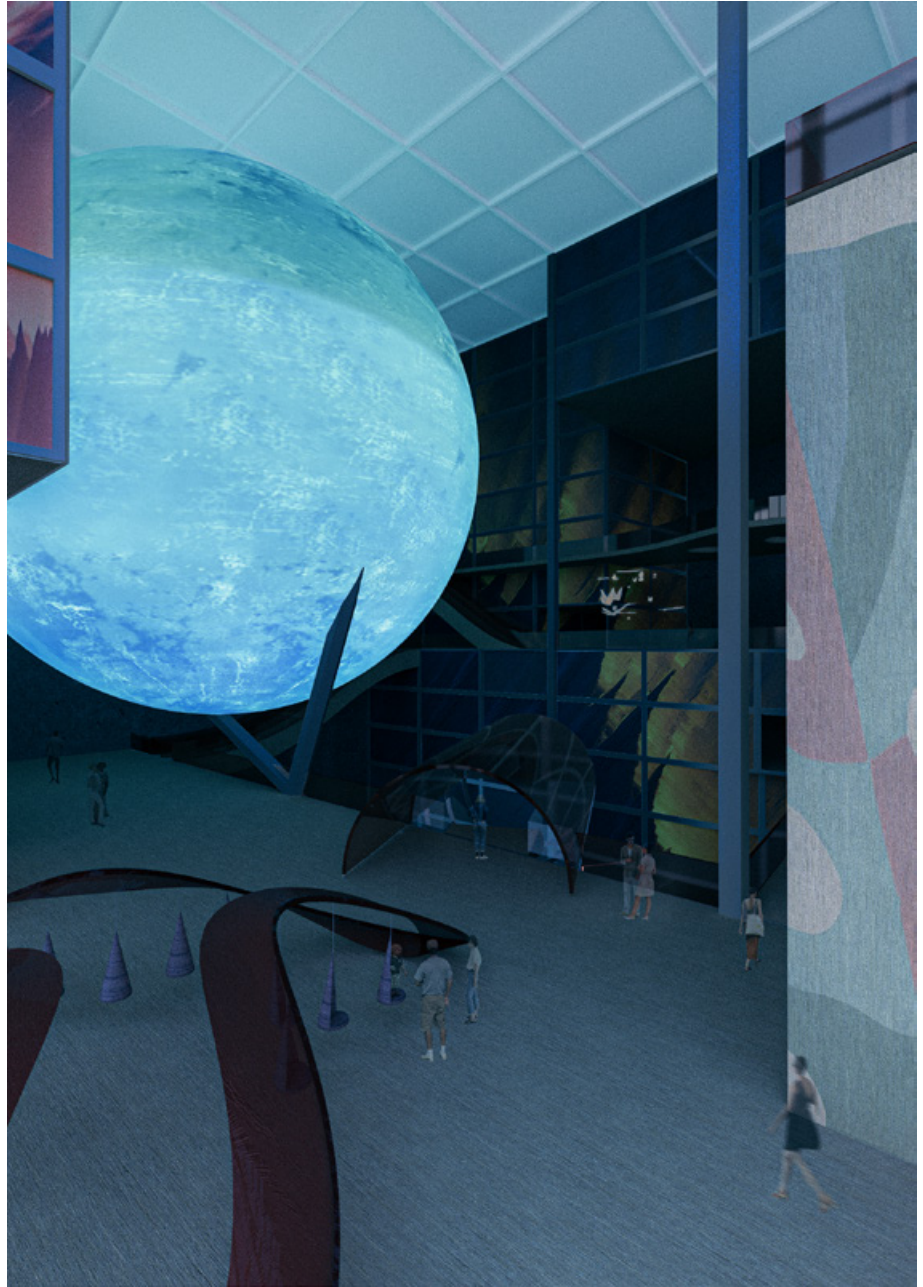


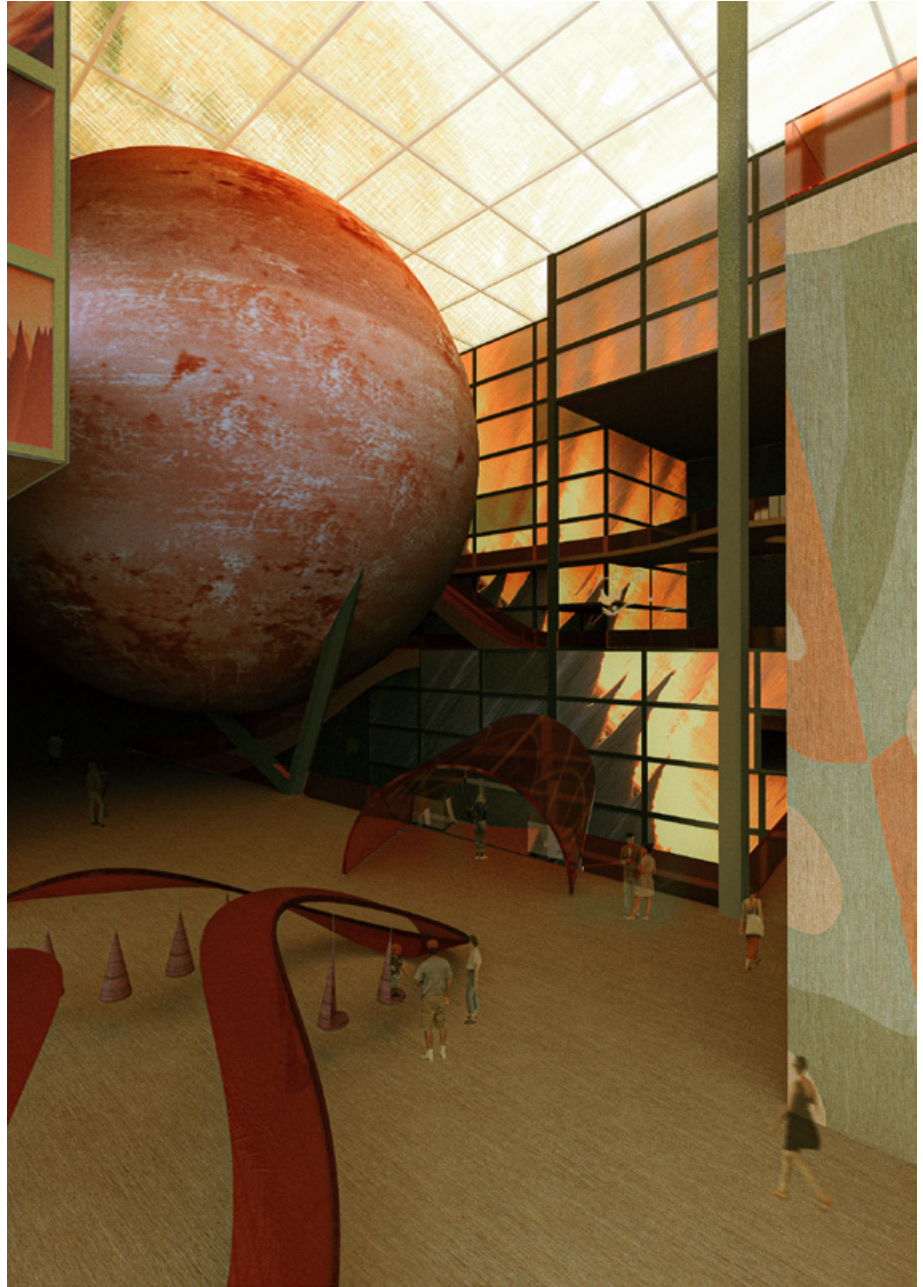




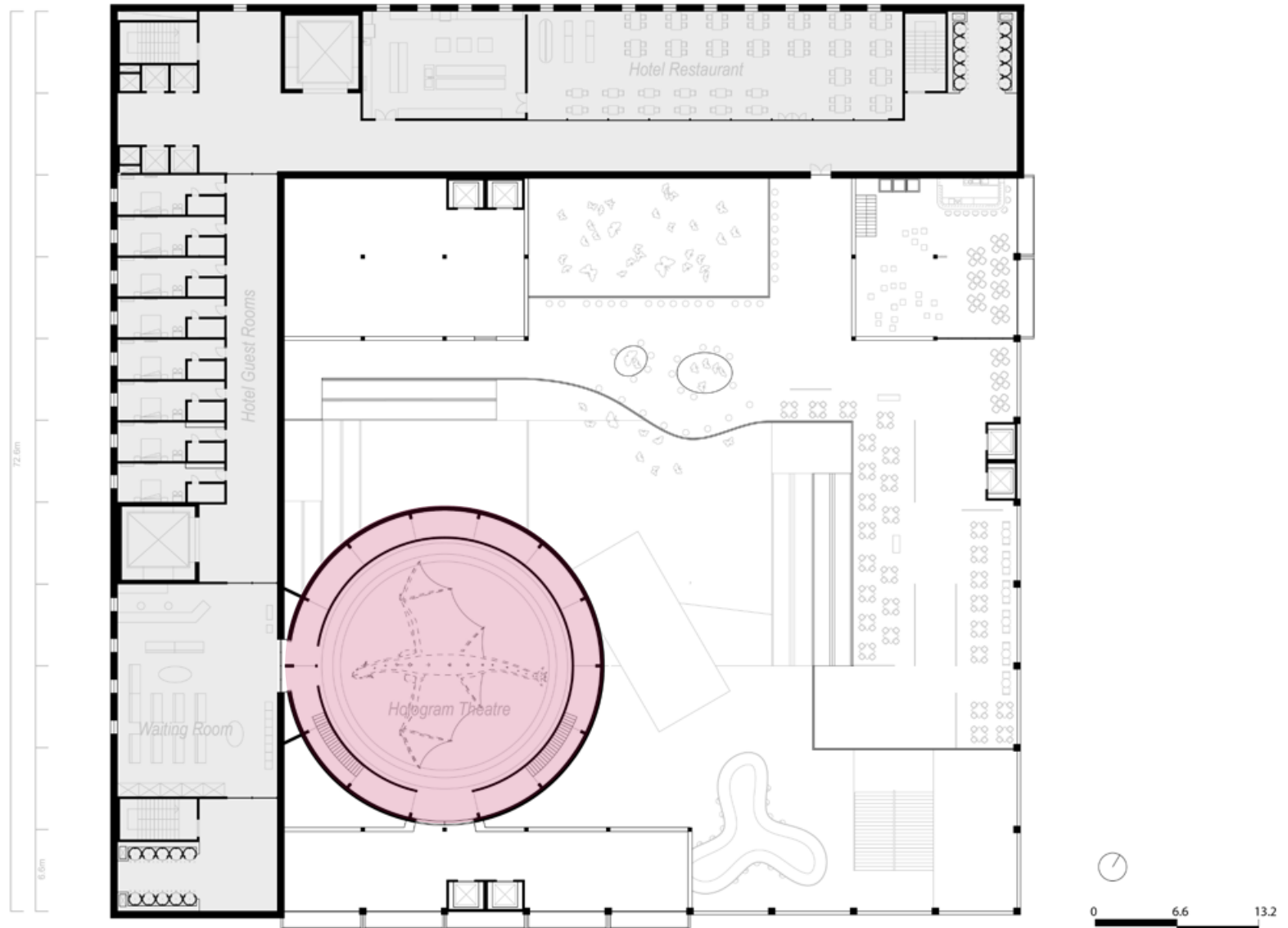
Main Experiential Space - Open Space



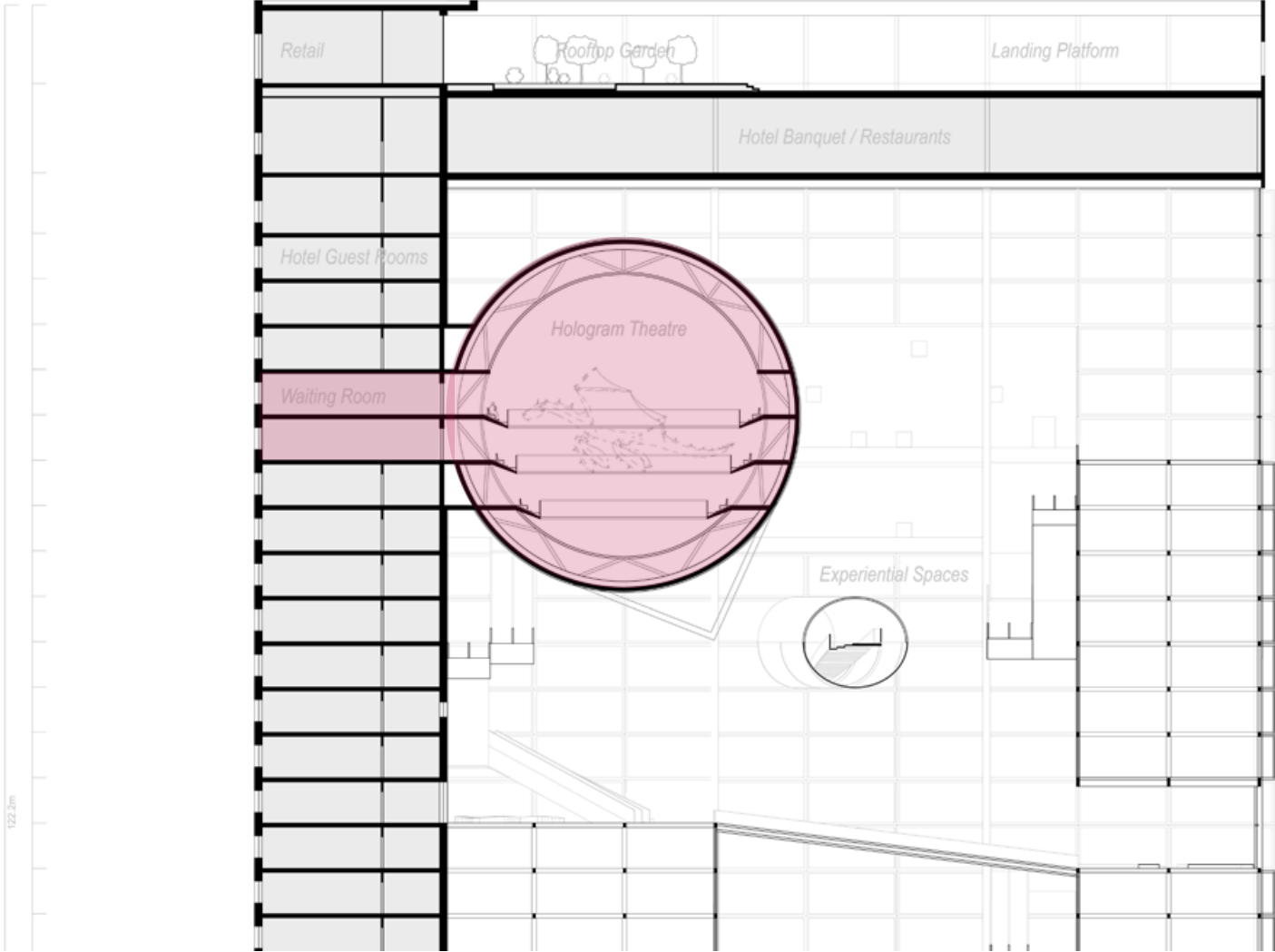




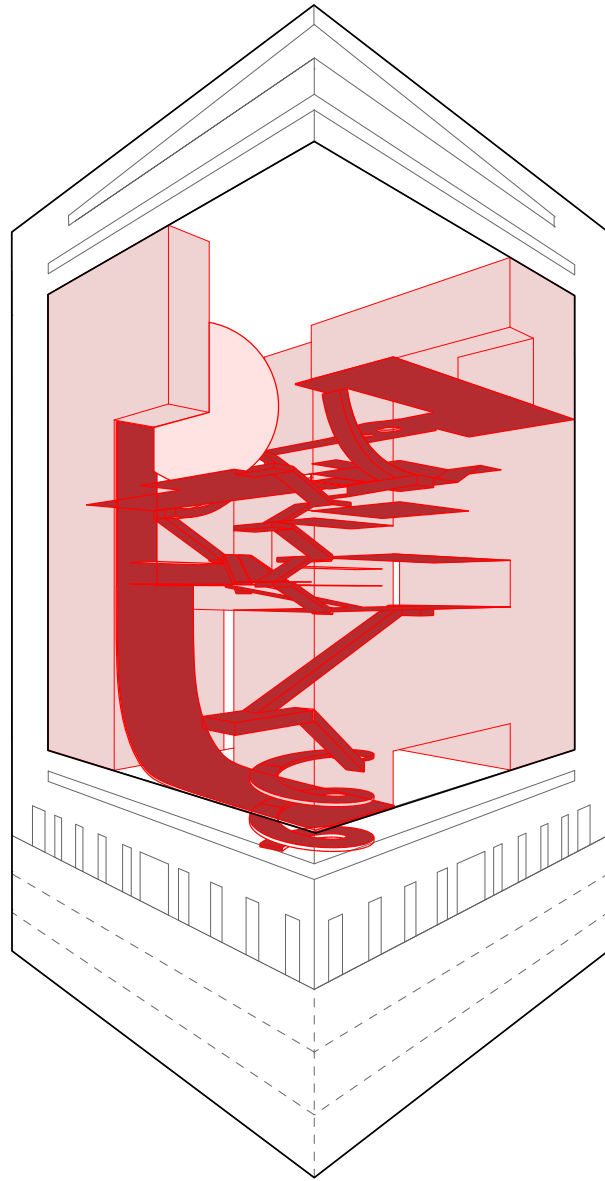


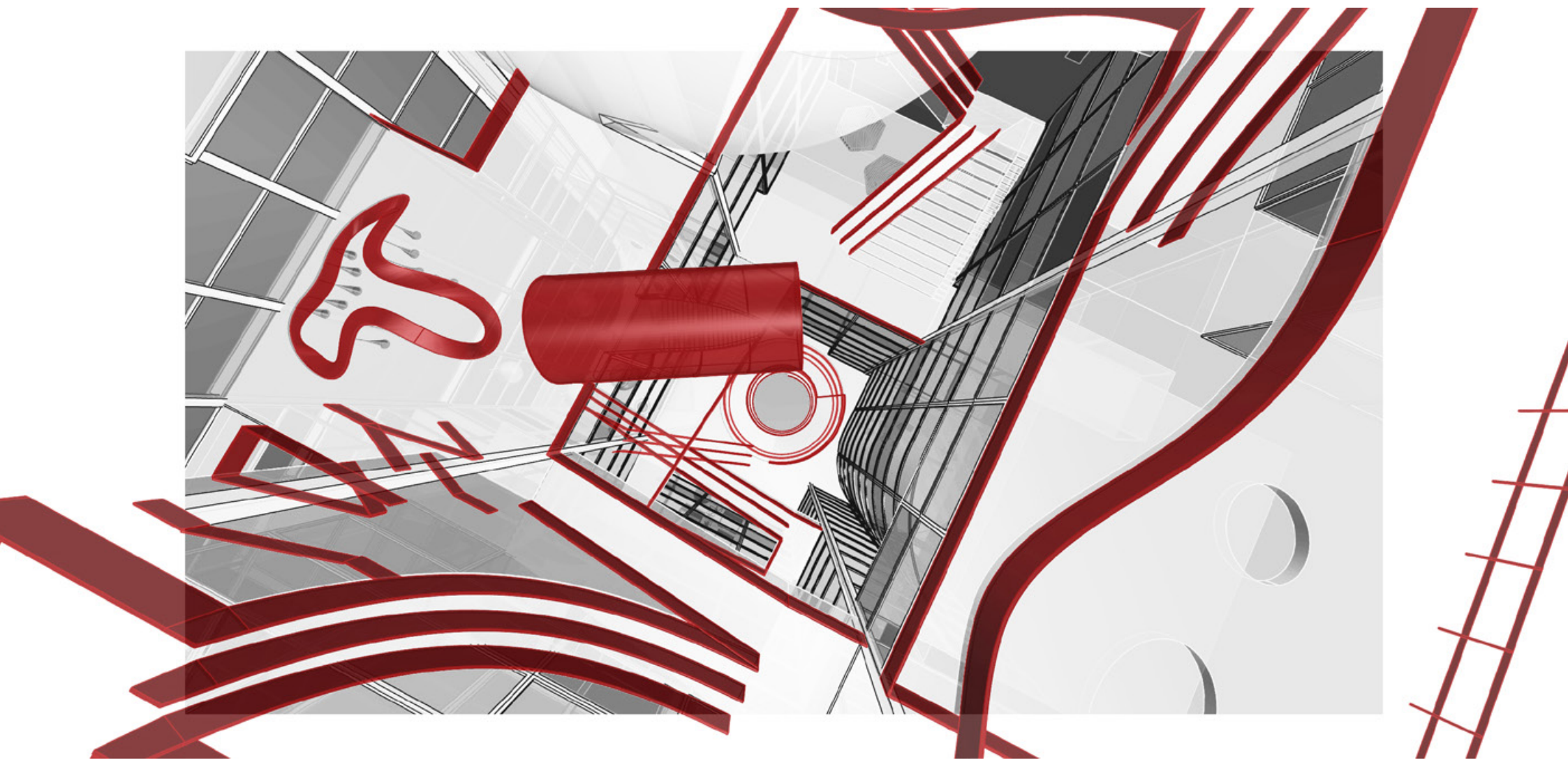


Main Experiential Space - Hologram Sphere Theatre

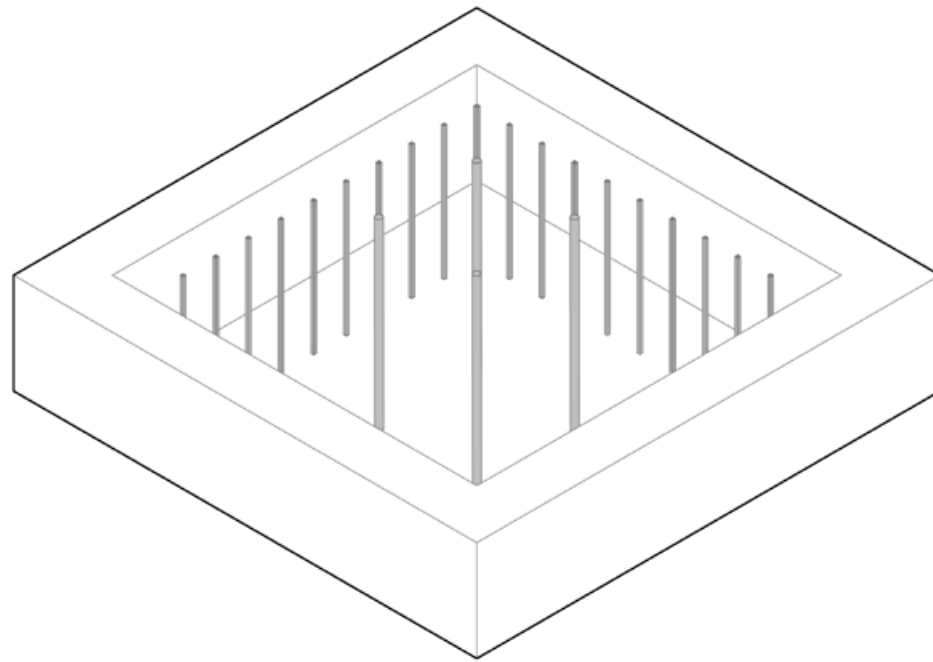


Main Experiential Space - Hologram Sphere Theatre

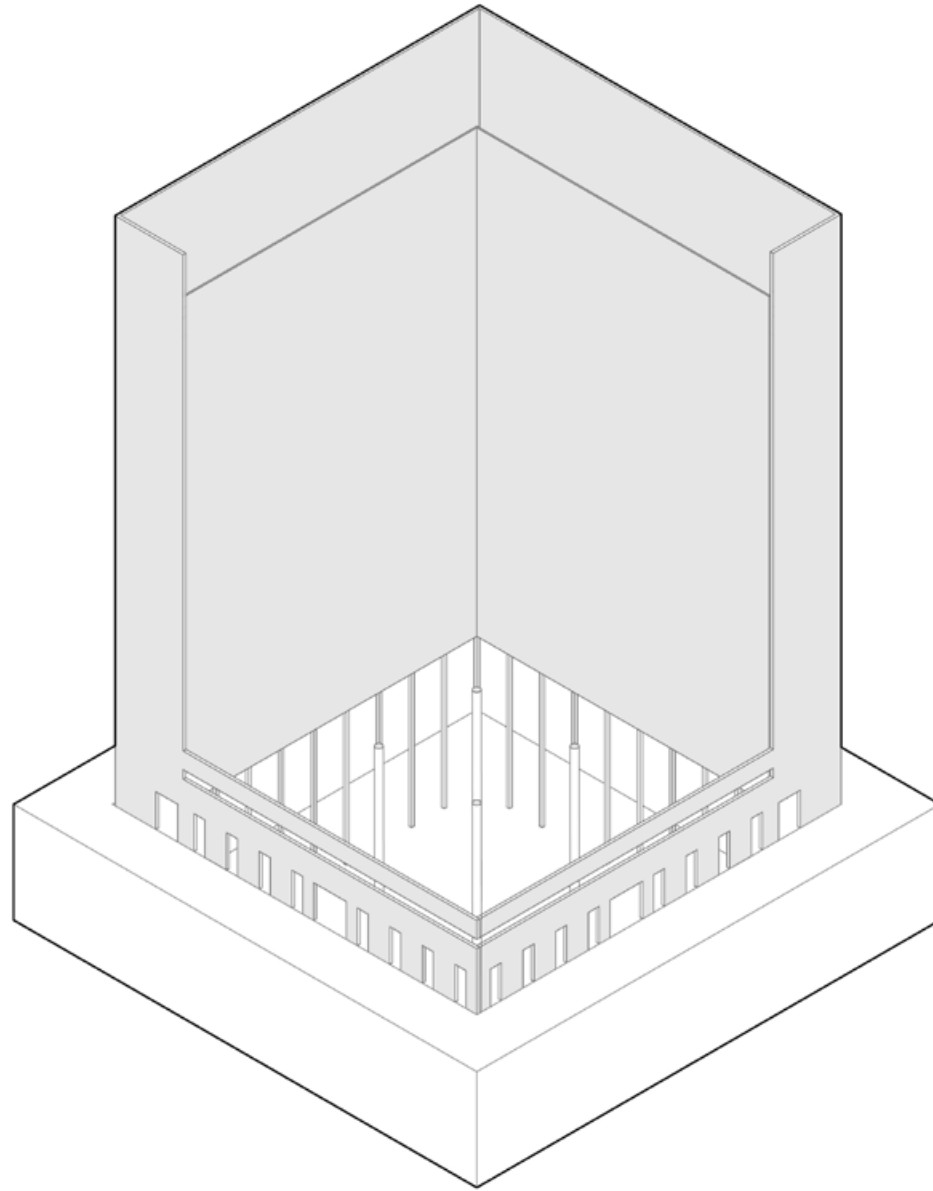




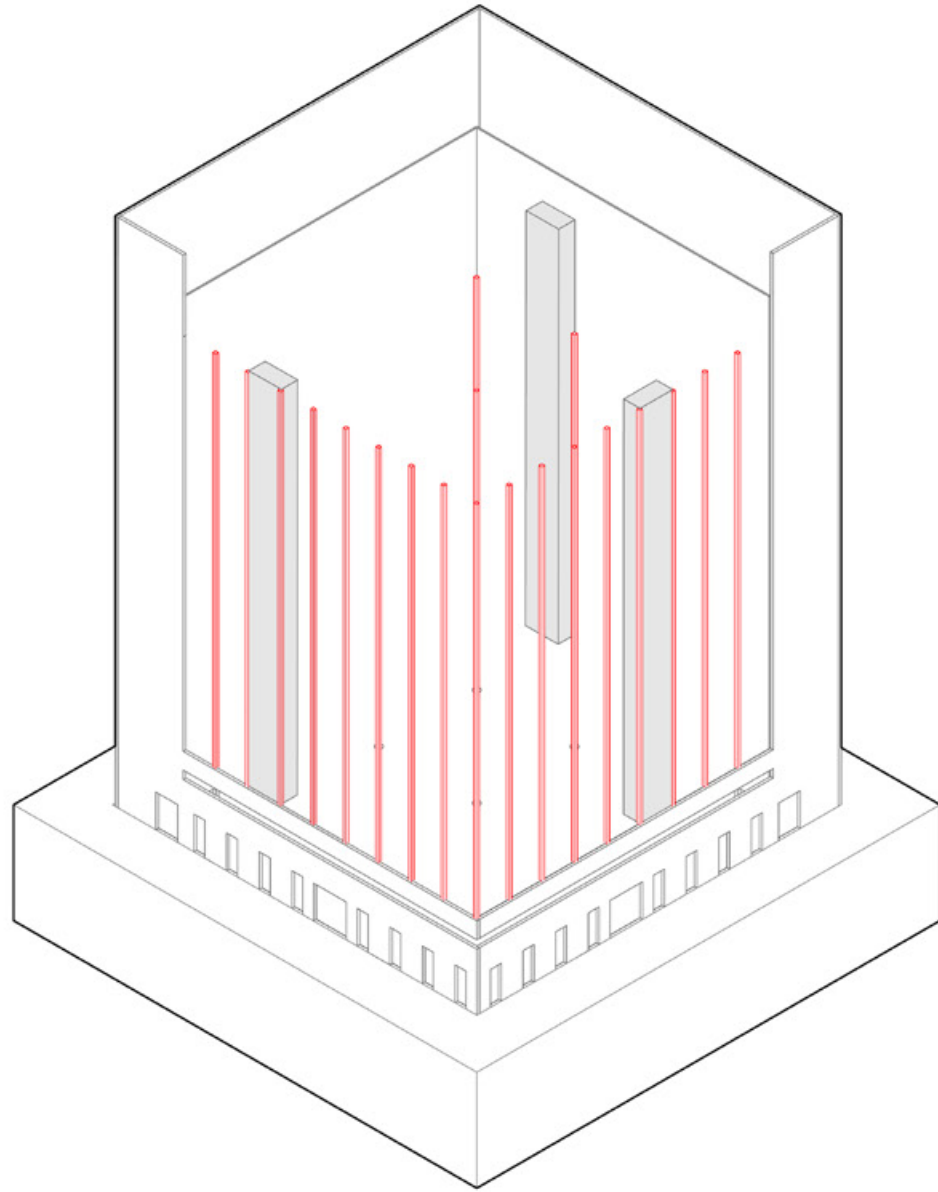
Construction



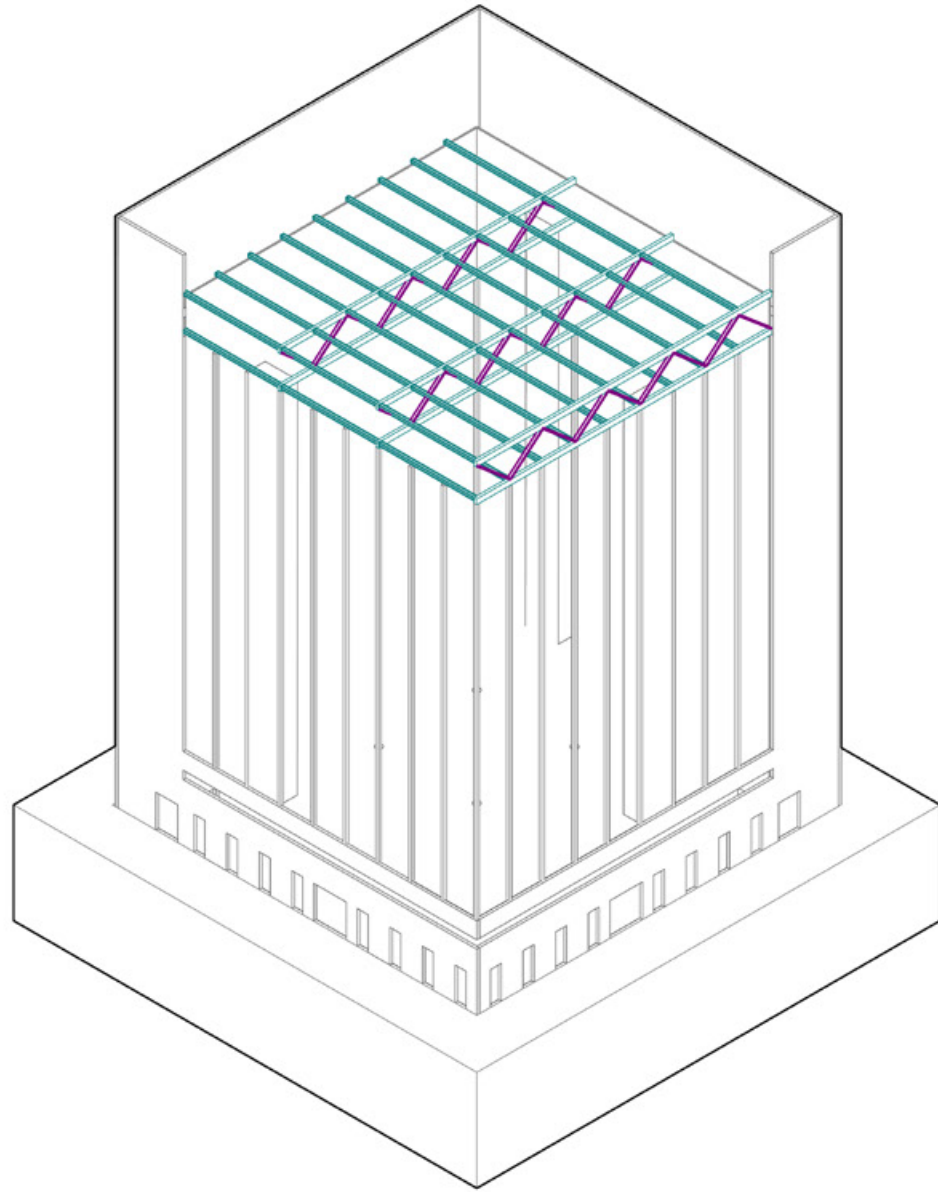
Underground- Concrete Columns



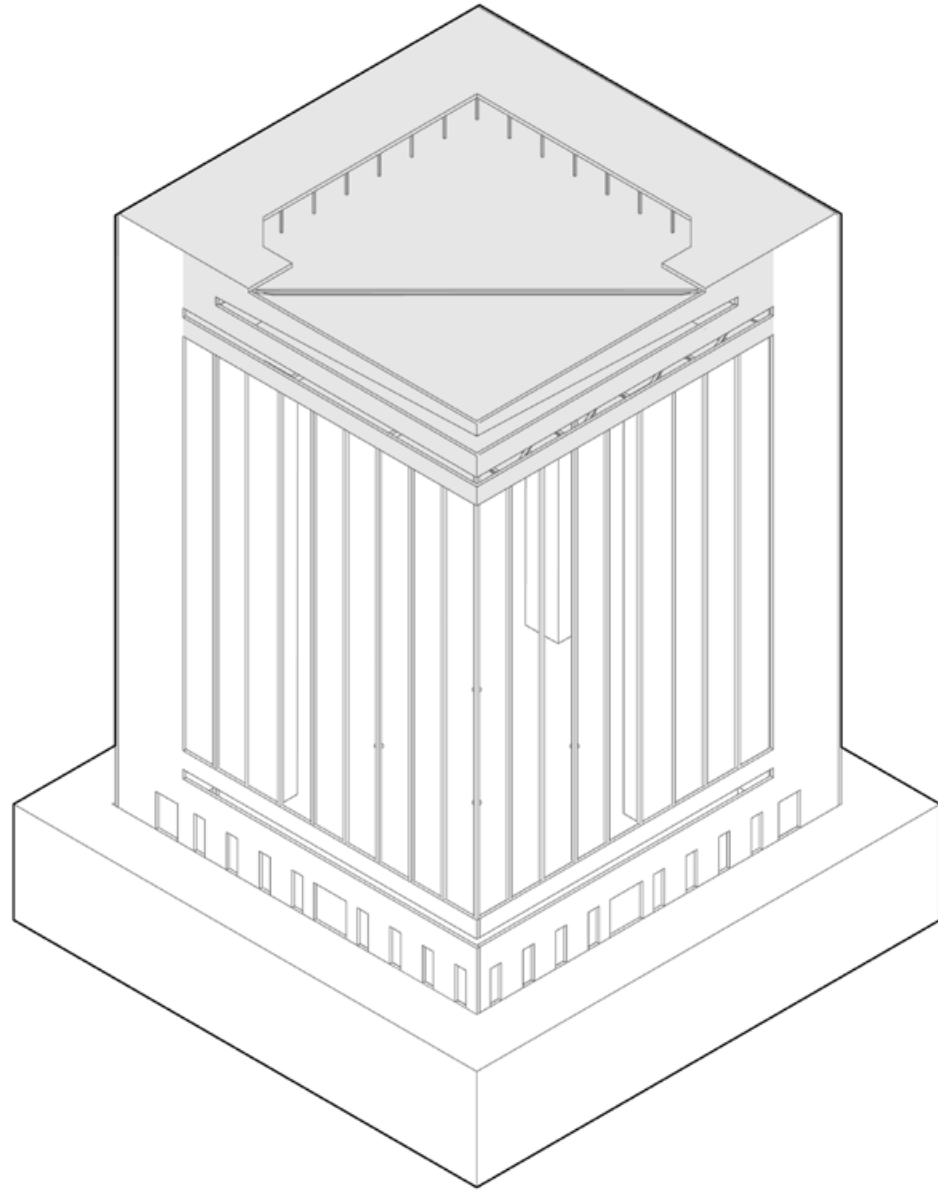
Insulating Concrete Wall



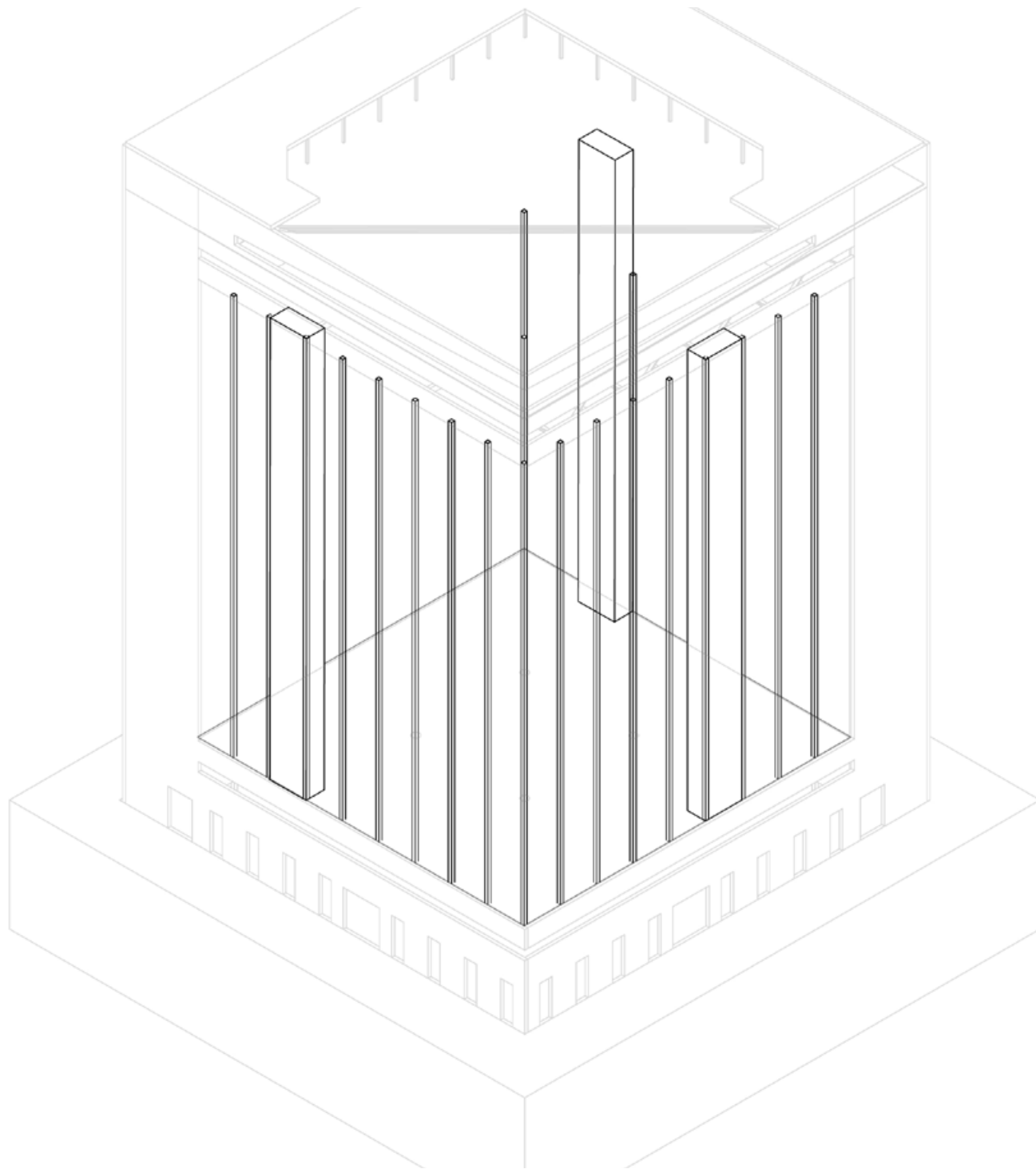
Columns / Elevator Cores

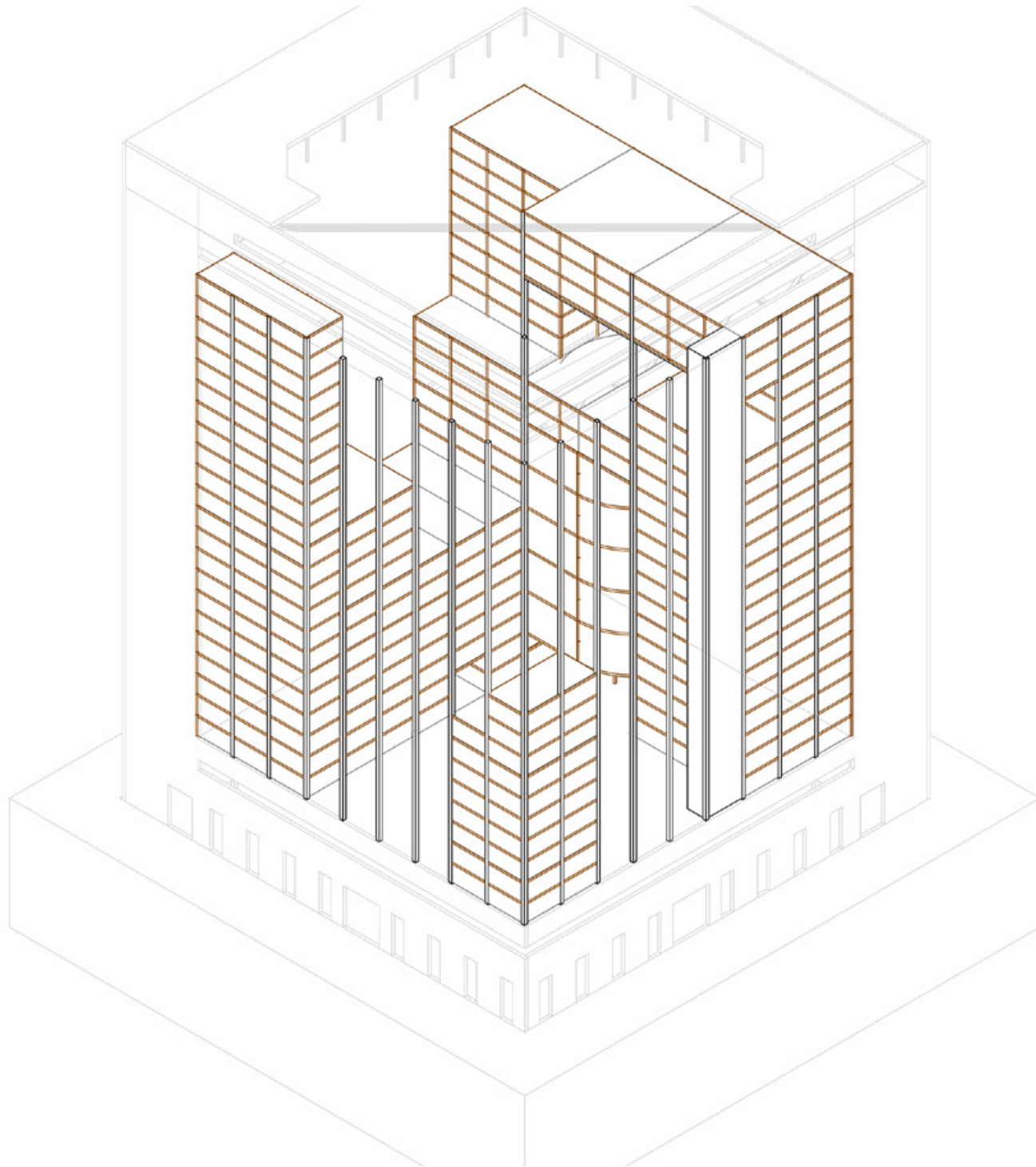


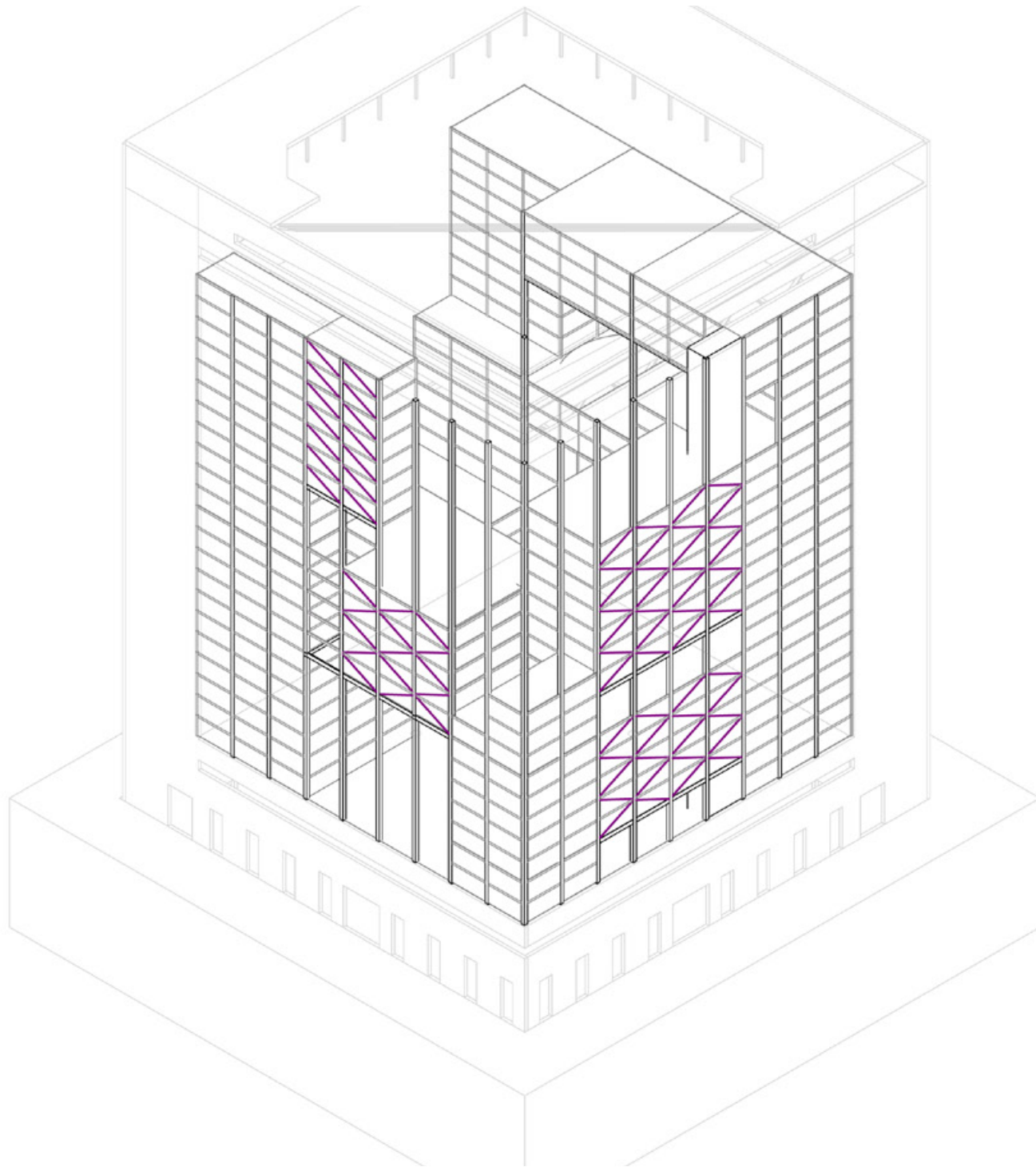
Roof Truss

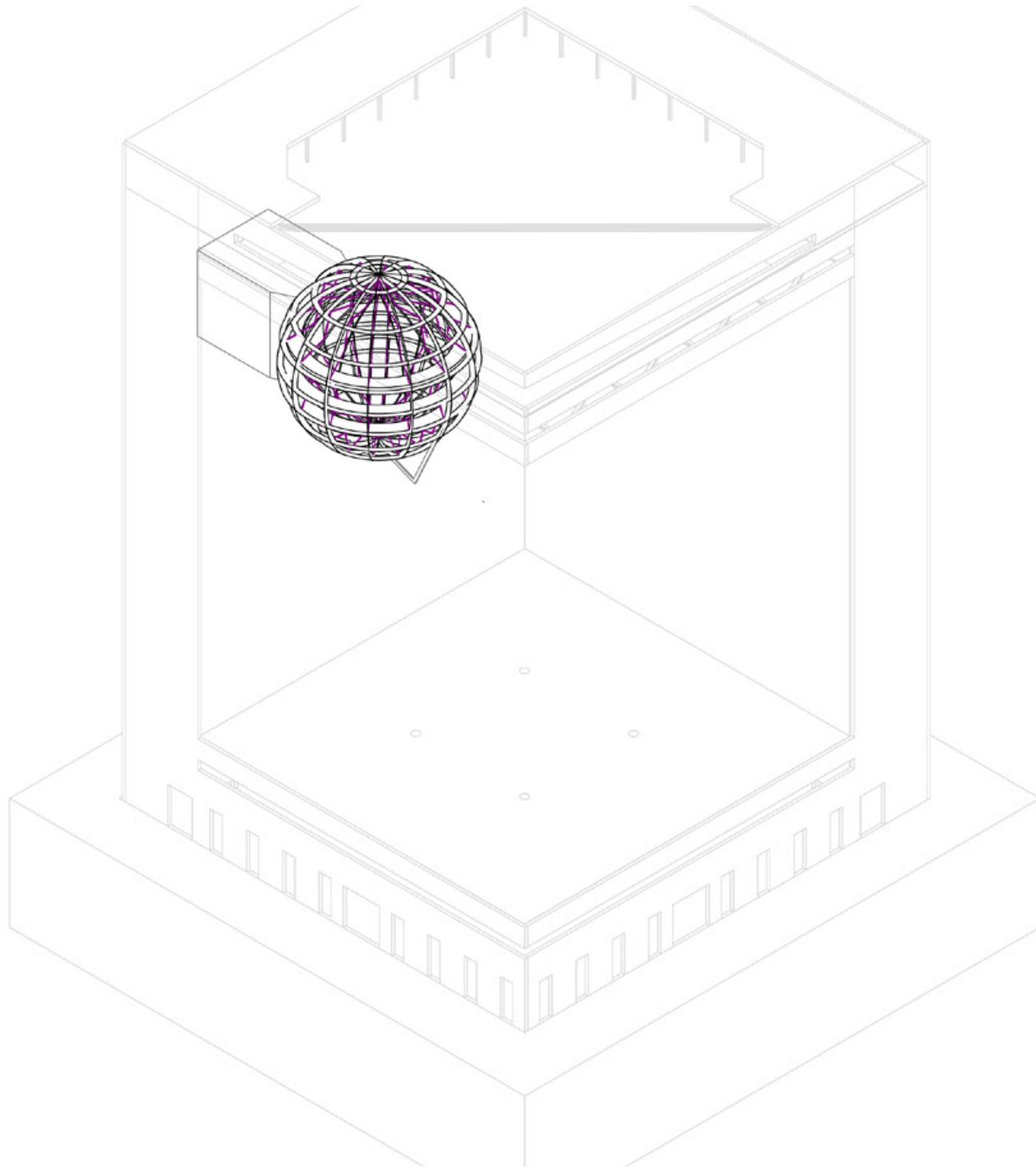


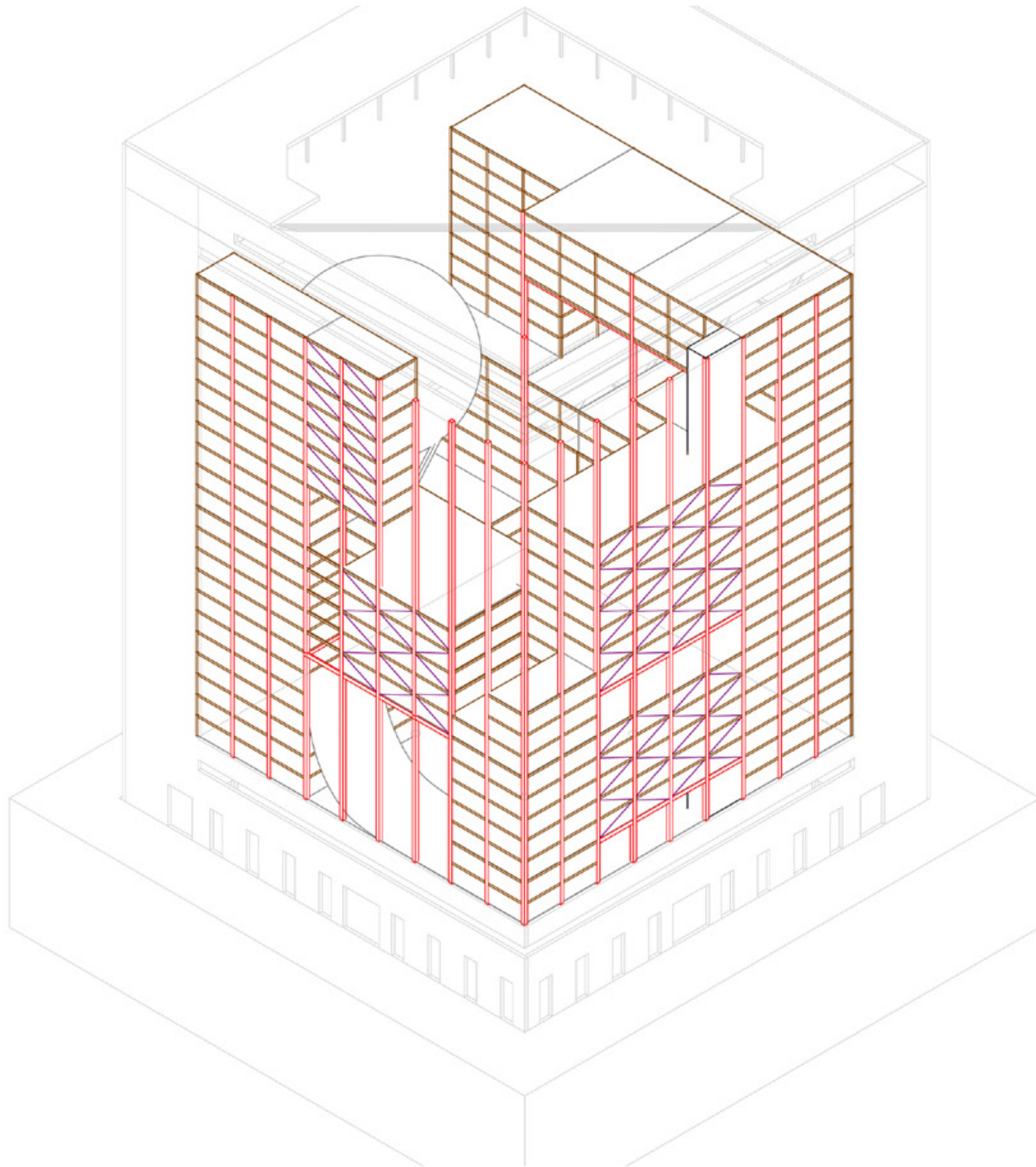
Rooftop Landing Platform









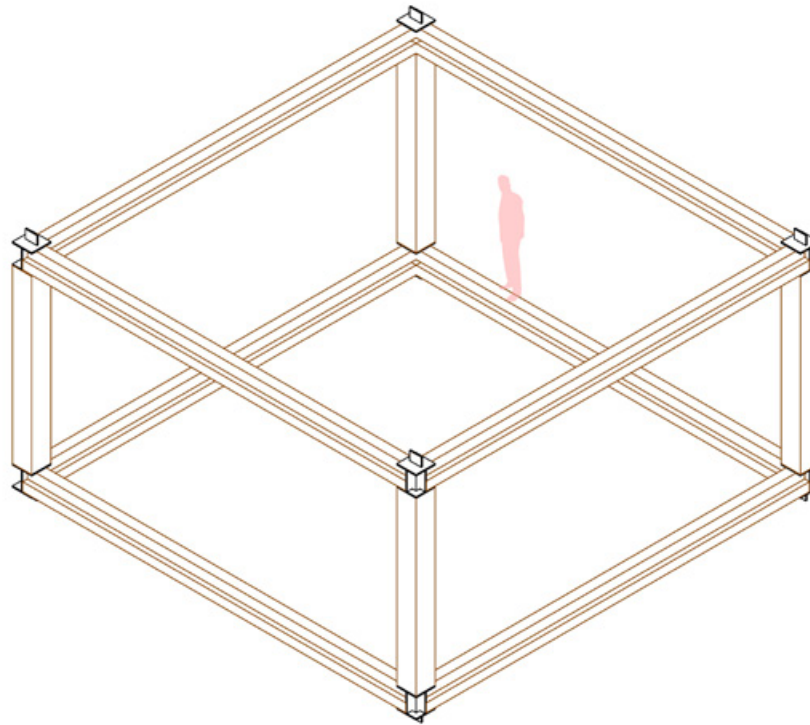


How internal scenography is arranged
in a dynamic system?

ensures the fundamental
physical movement of human
rather than visibility

maximize the freedom of
later arrangement of
the space by giving a
structure/restrain

convenient in arranging
staircases (vertical
circulation)

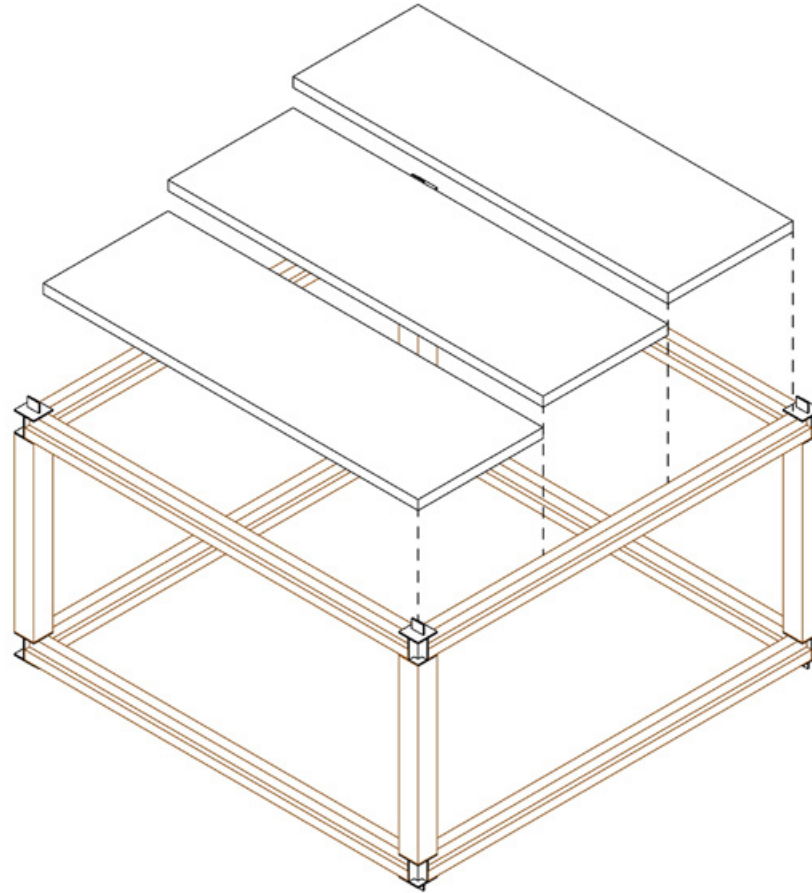


modular of 6.6*6.6*3.3m

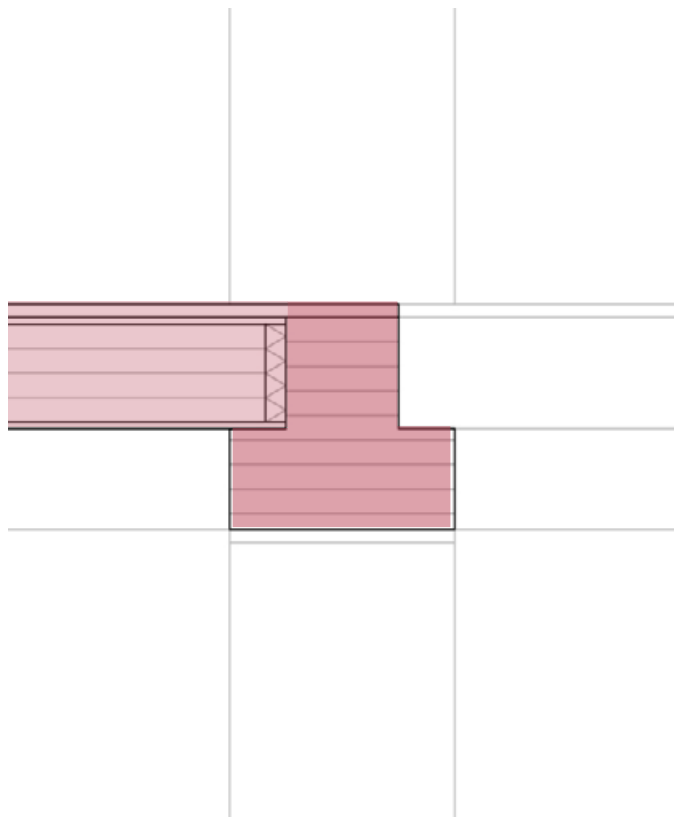
ensures the fundamental
physical movement of human
rather than visibility

maximize the freedom of
later arrangement of
the space by giving a
structure/restrain

convenient in arranging
staircases (vertical
circulation)



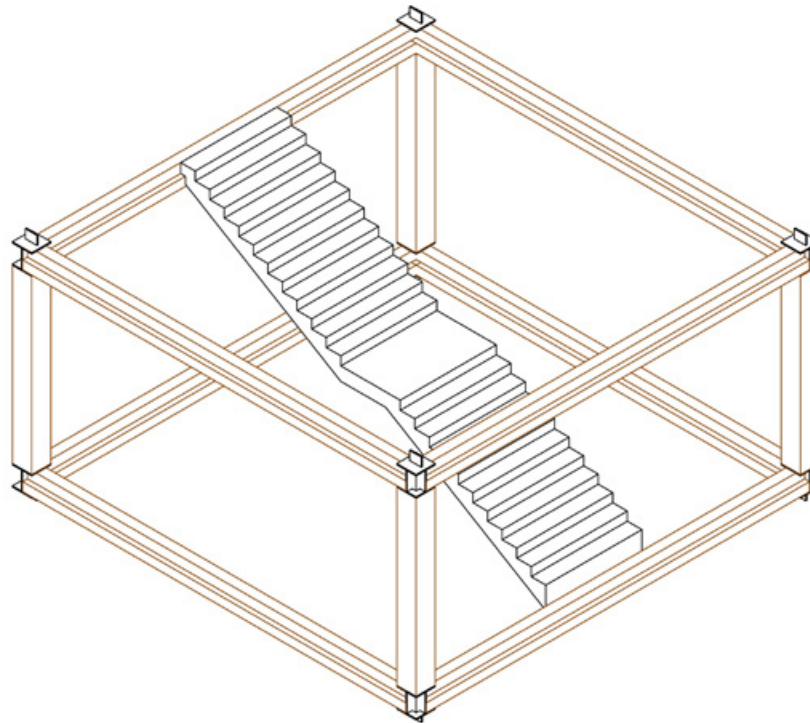
modular of 6.6*6.6*3.3m



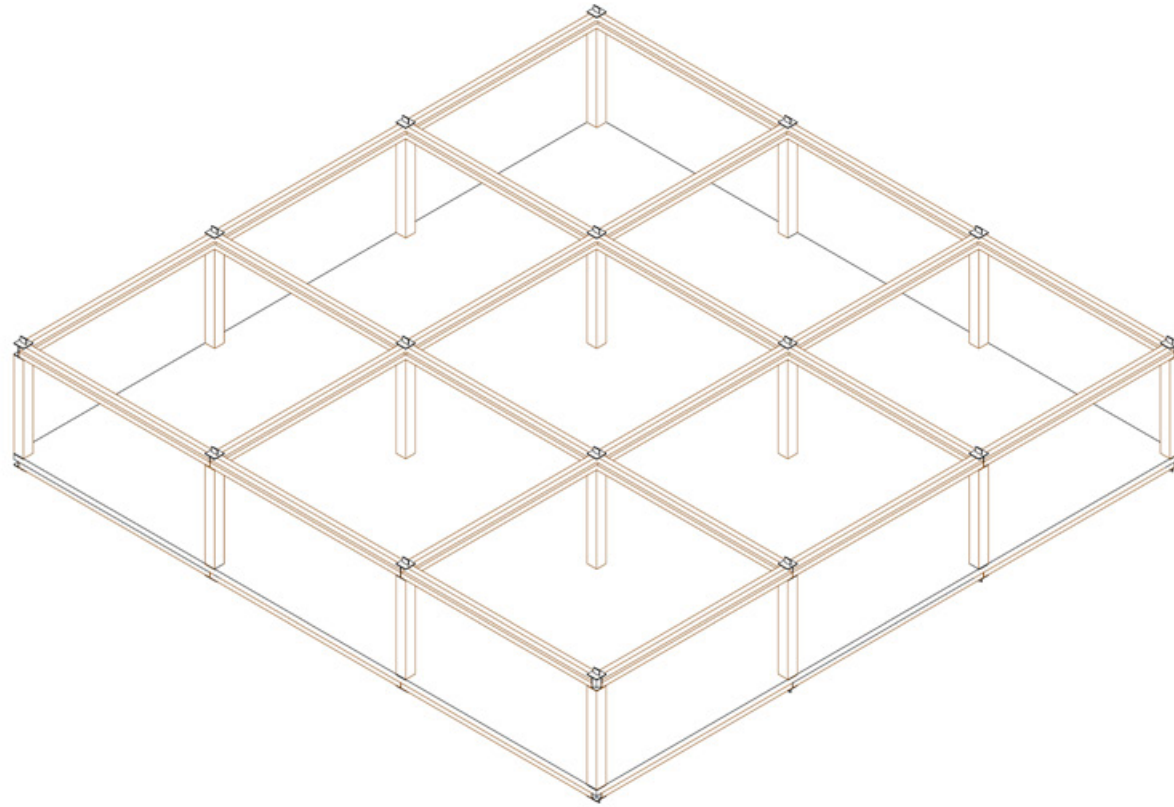
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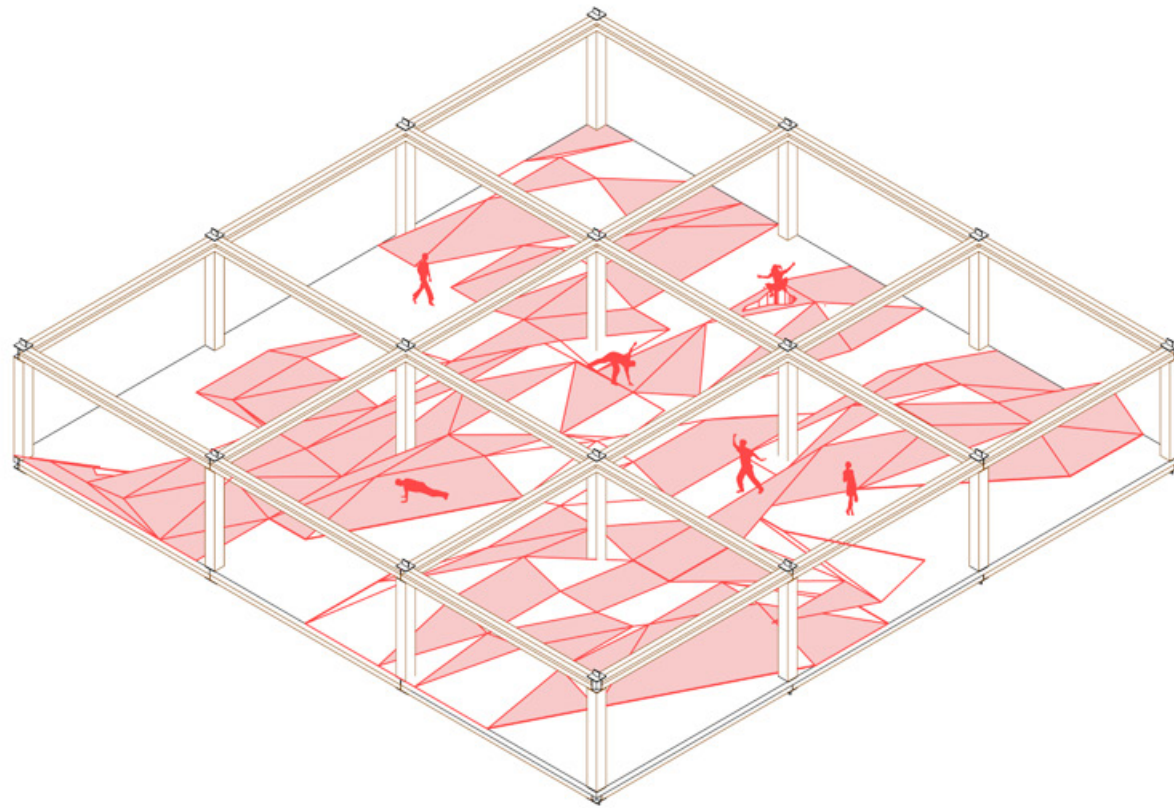
maximize the freedom of
later arrangement of
the space by giving a
structure/restrain

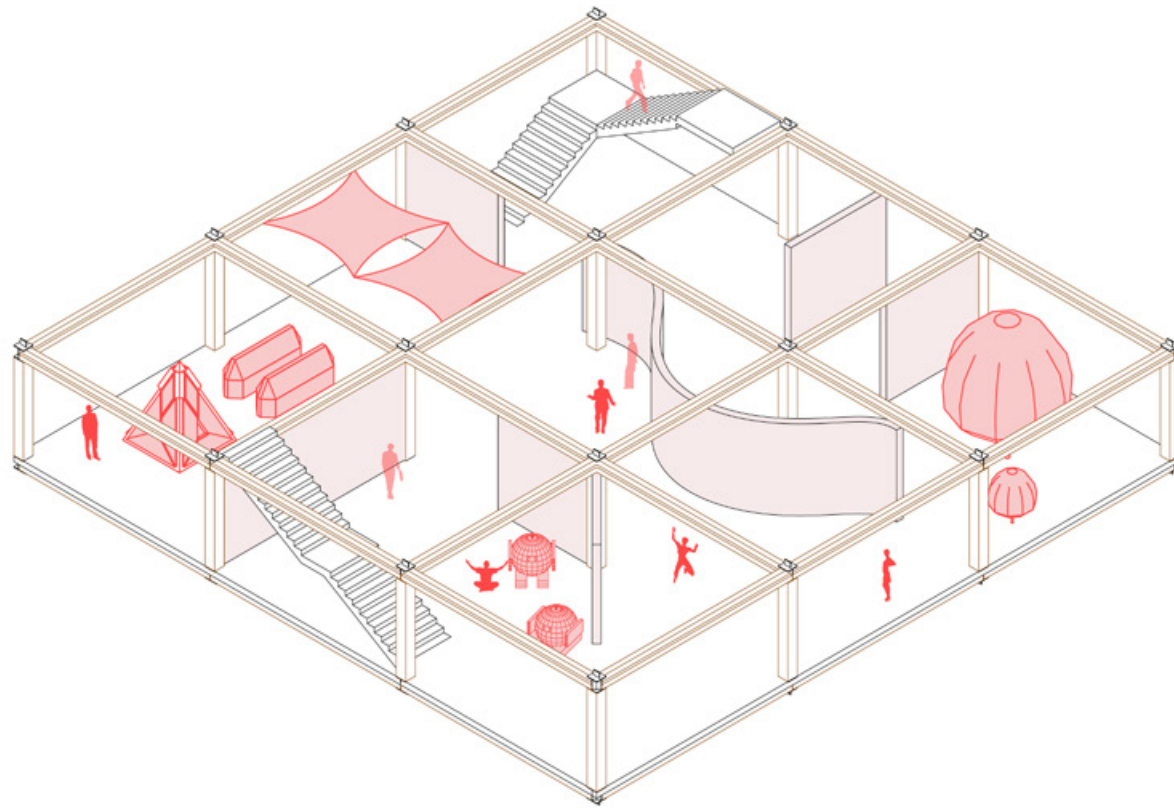
convenient in arranging
staircases (vertical
circulation)

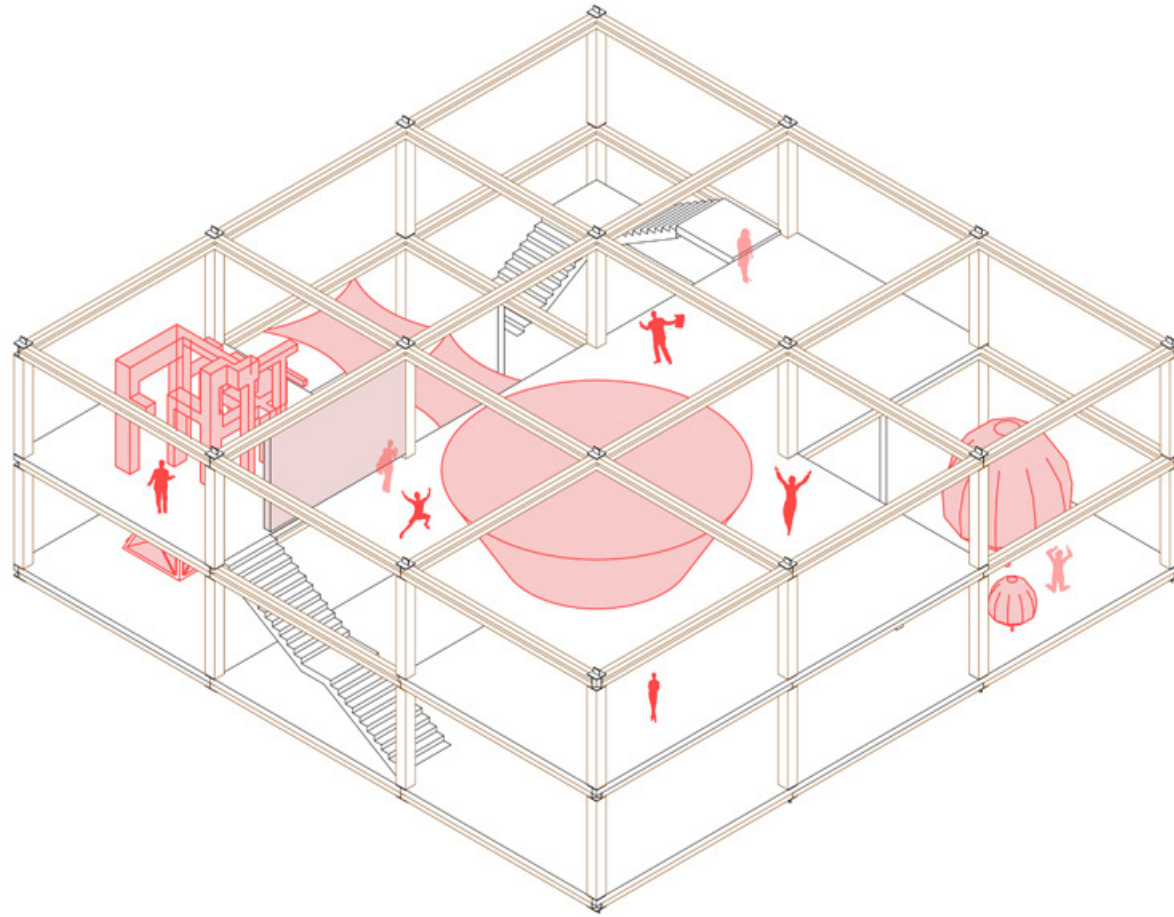


modular of 6.6*6.6*3.3m

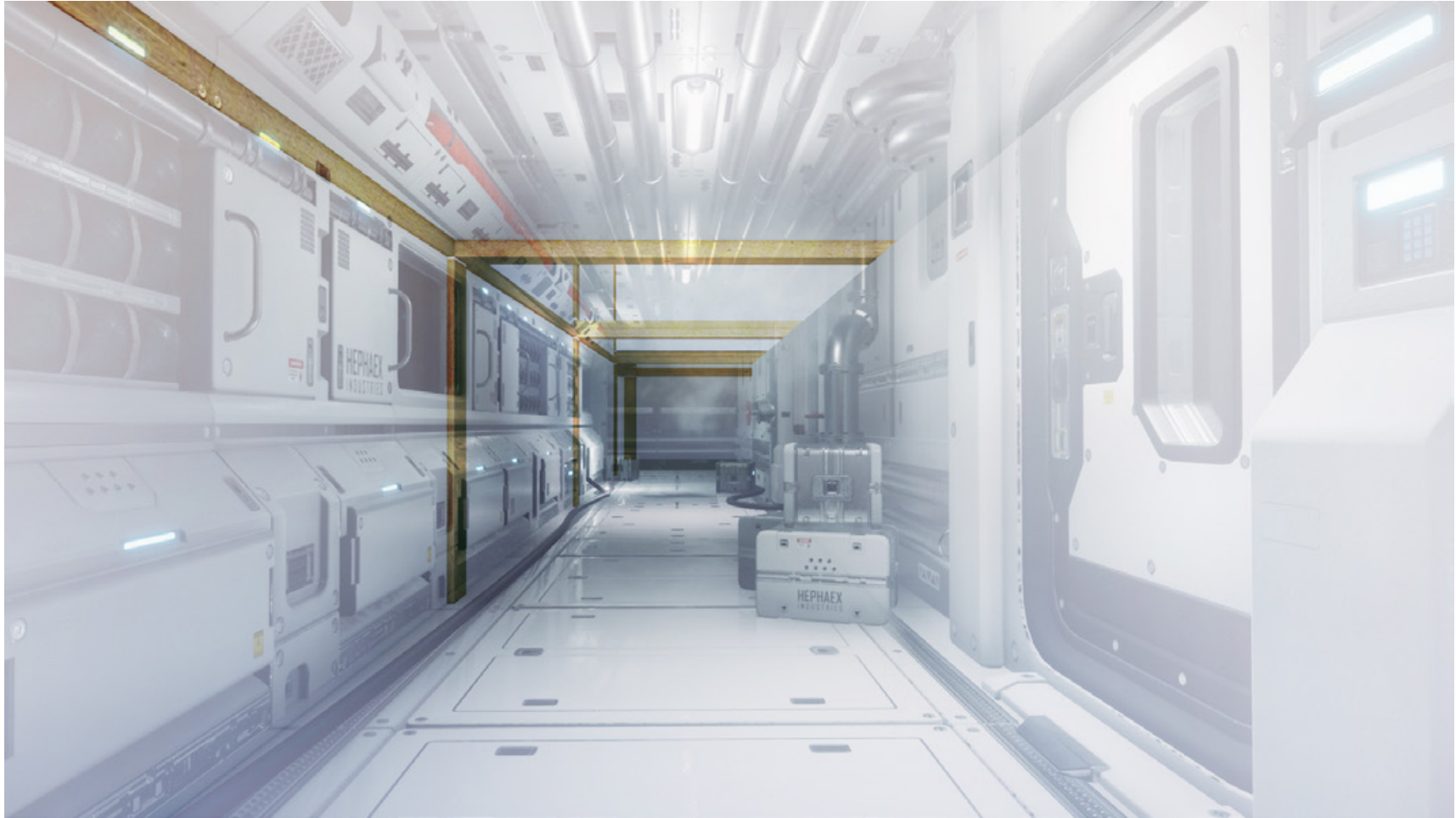




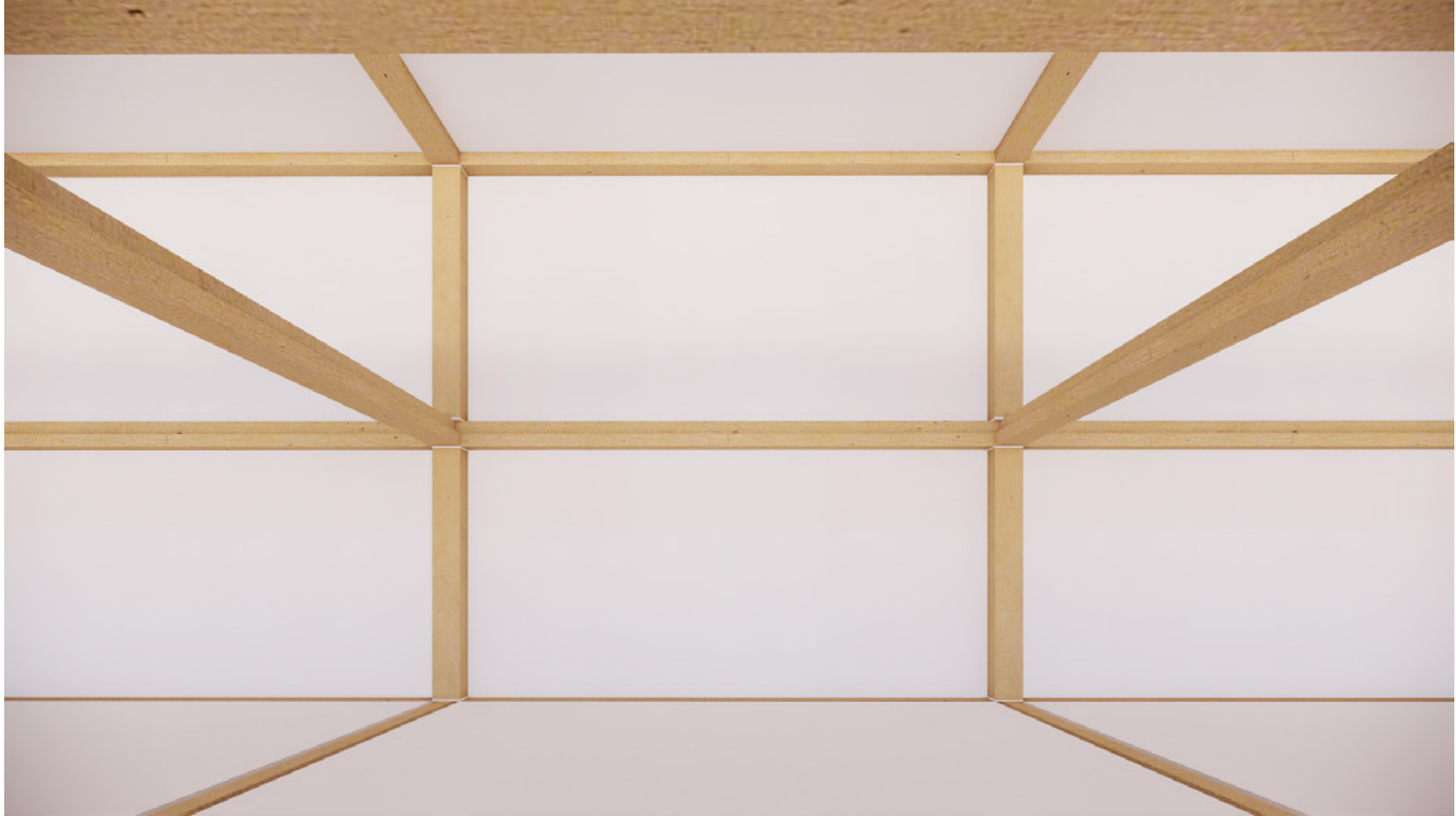








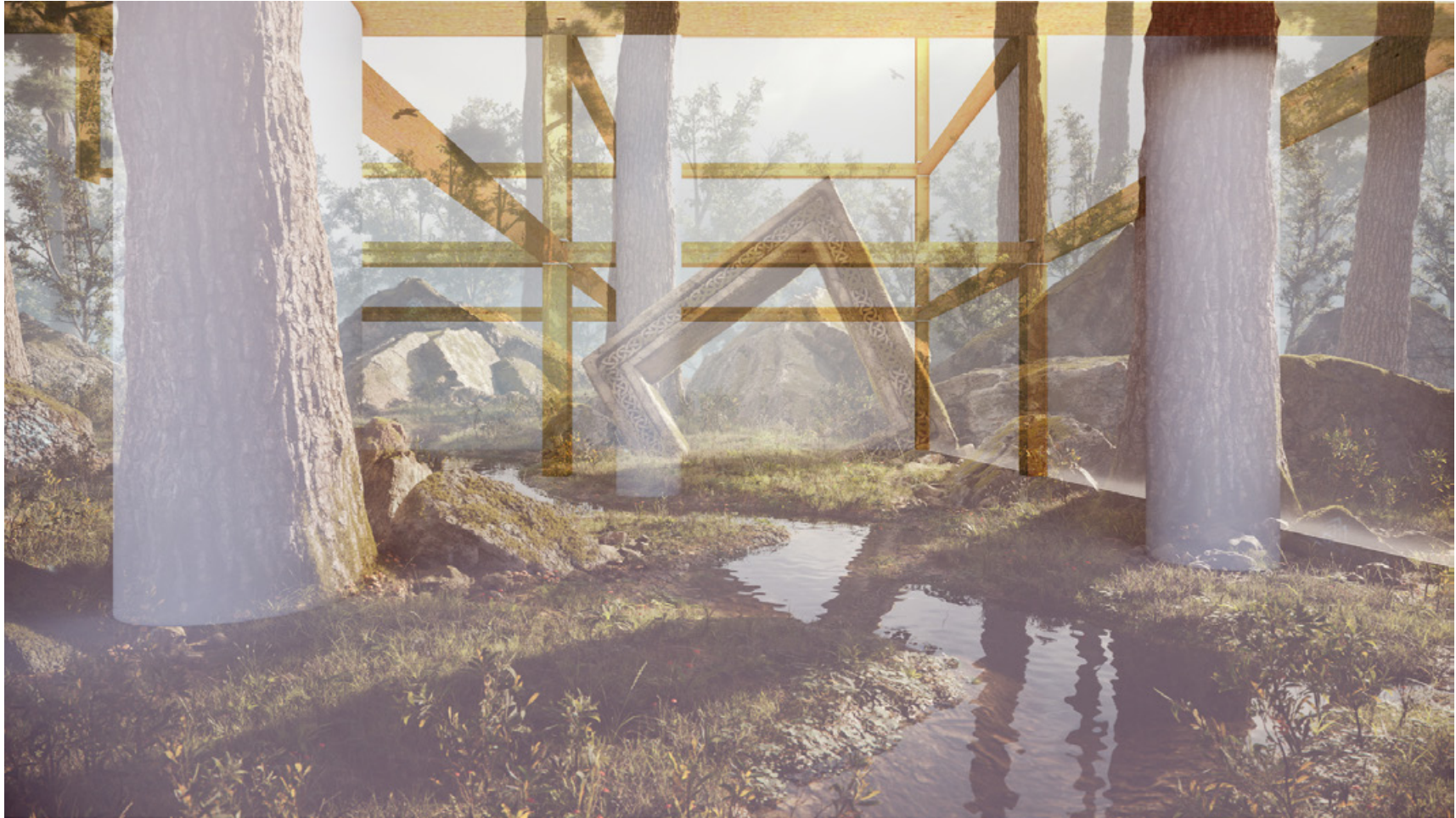
Augmented Interior Scenography



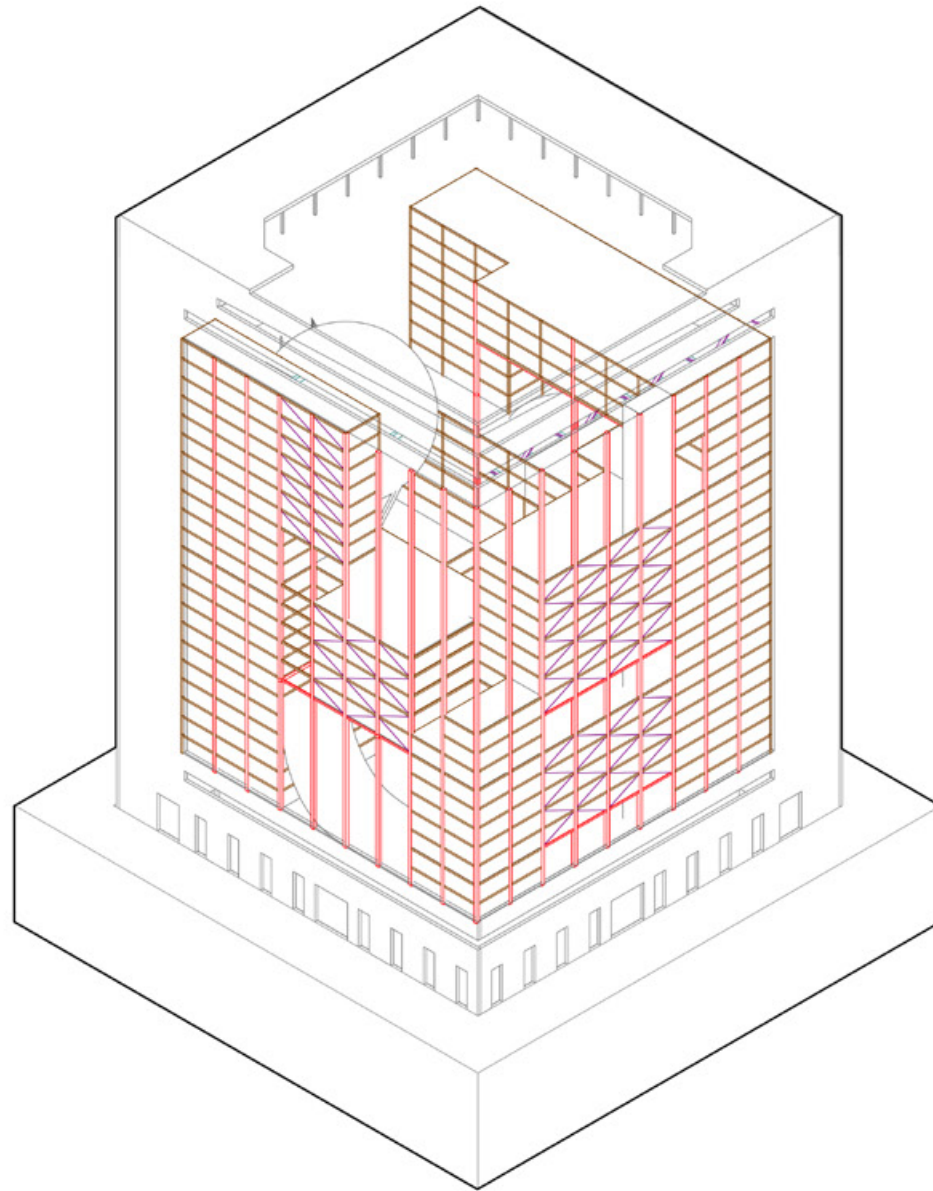


Augmented Interior Scenography

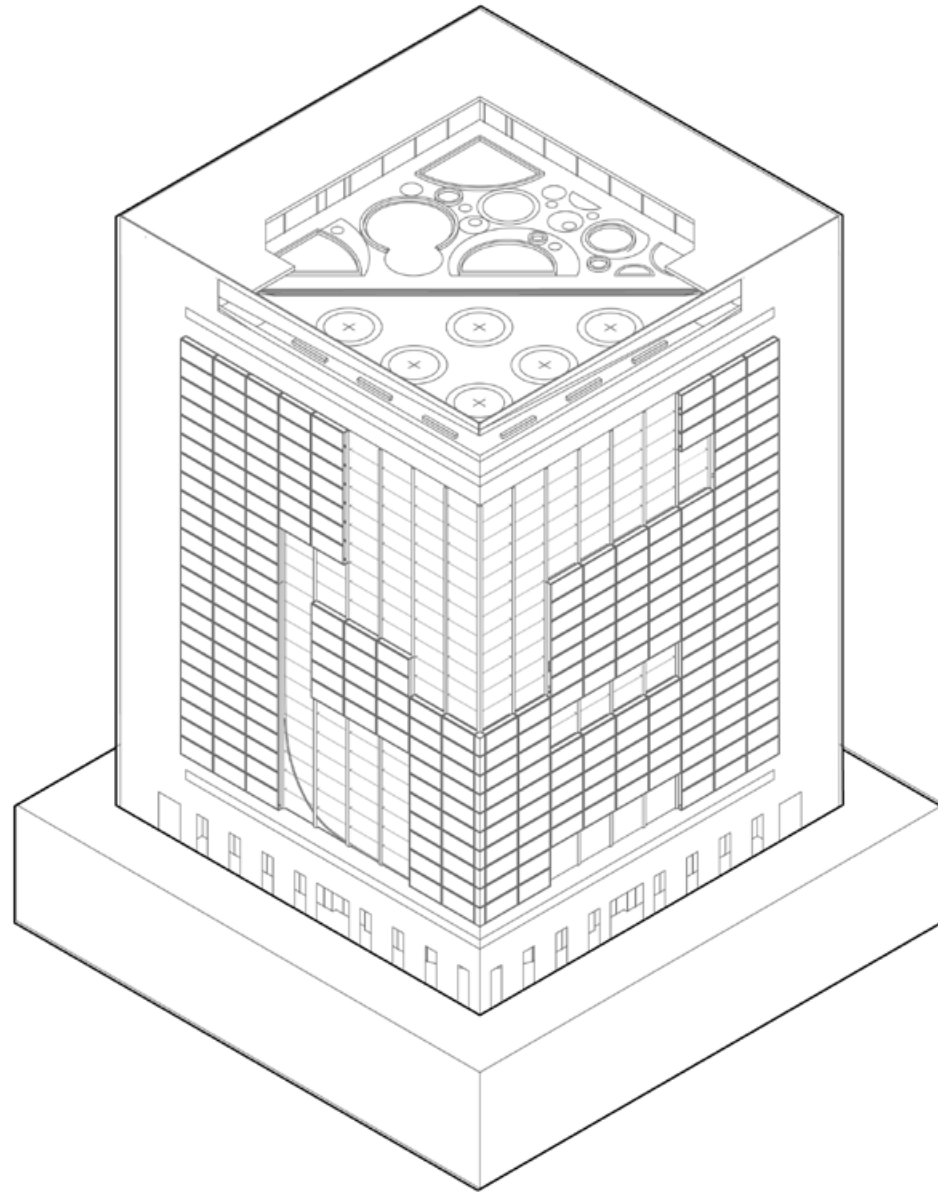




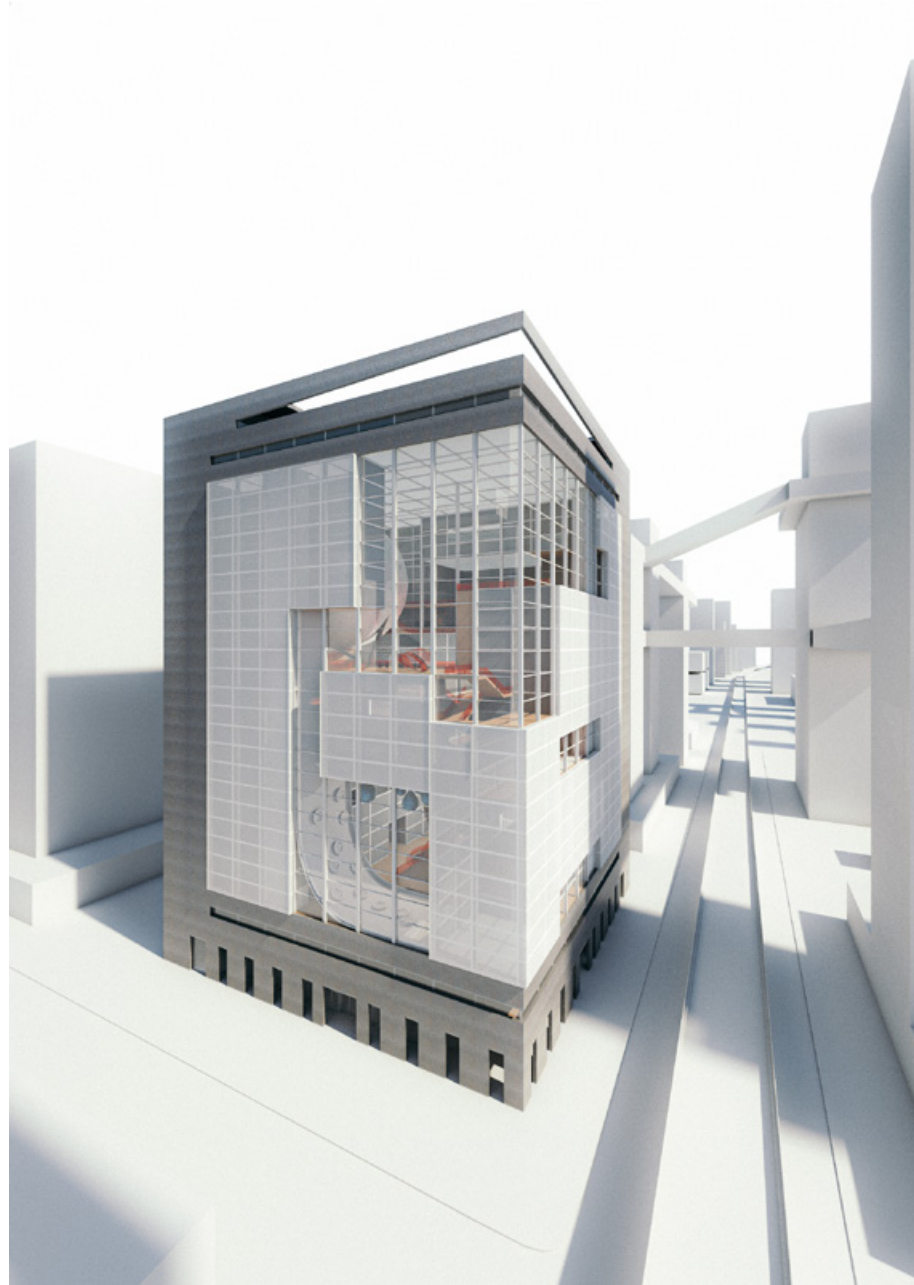
Augmented Interior Scenography

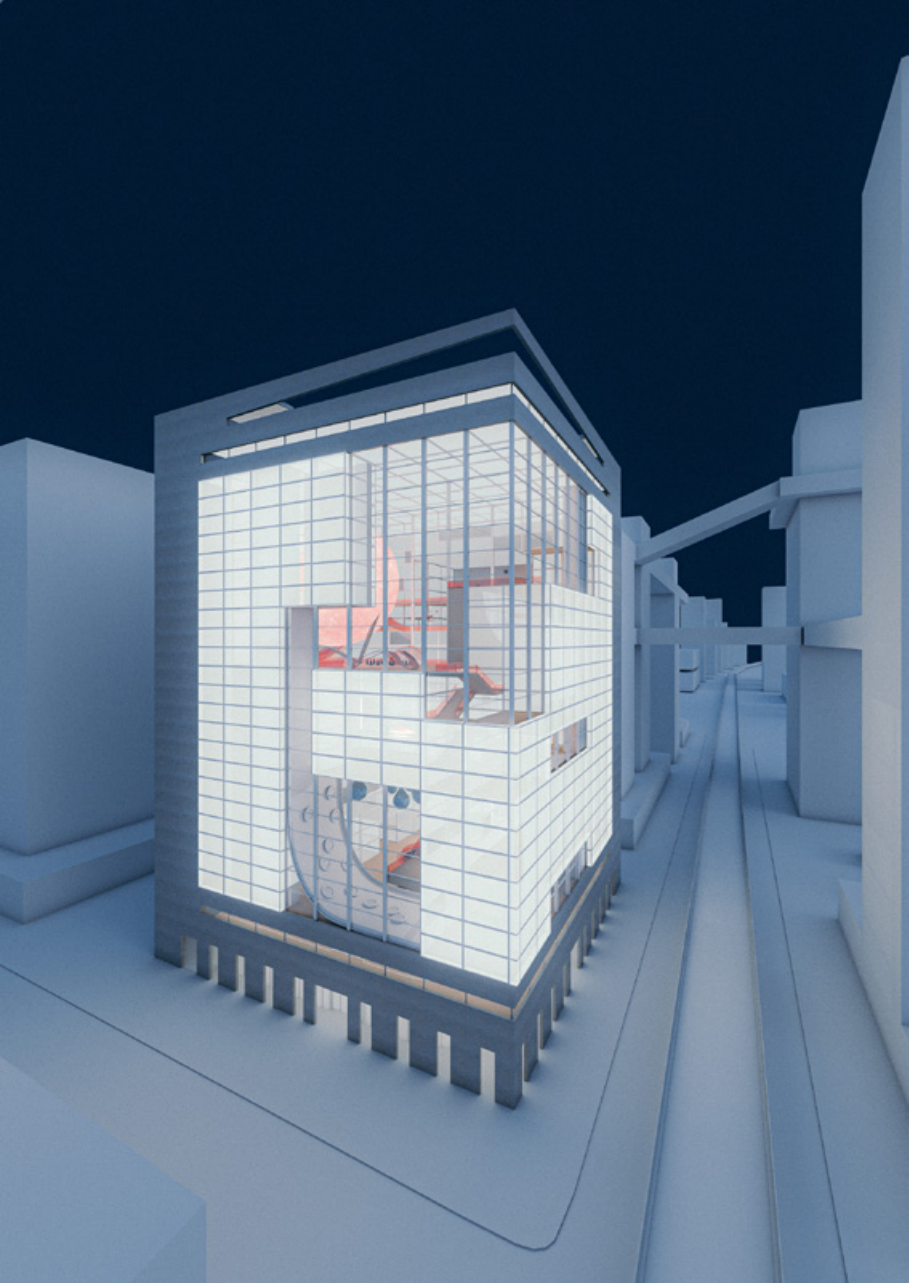


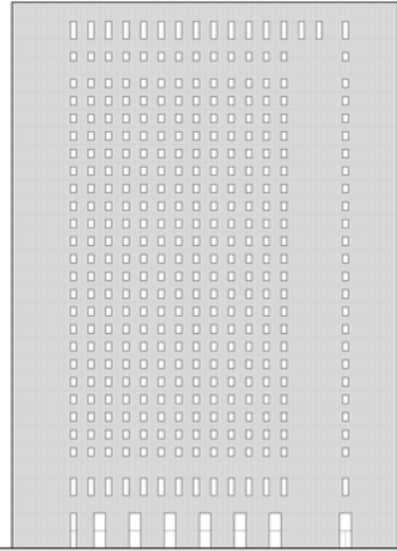
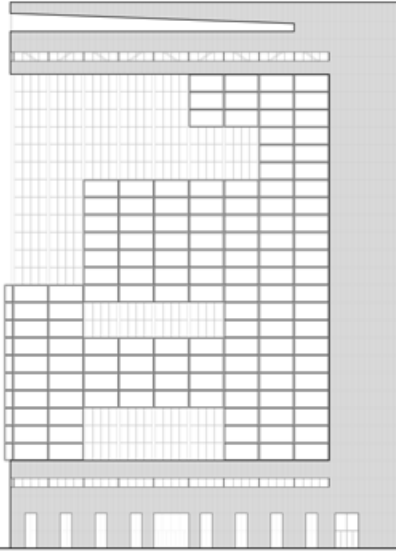
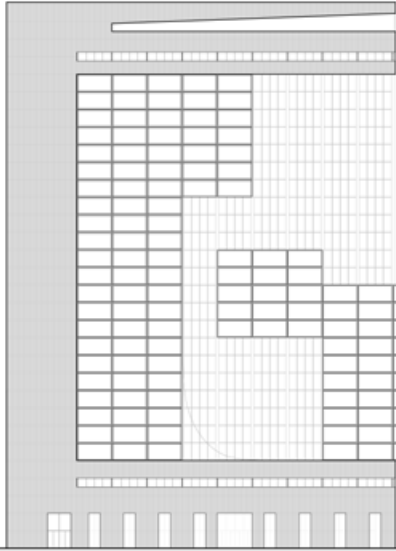
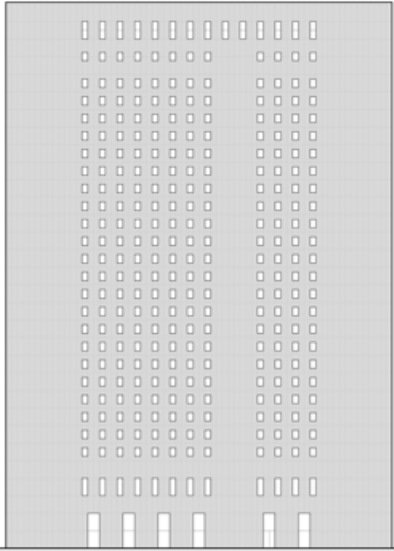
Timber Modular Structures with Bracing



Completed Facade







Exterior Materialization



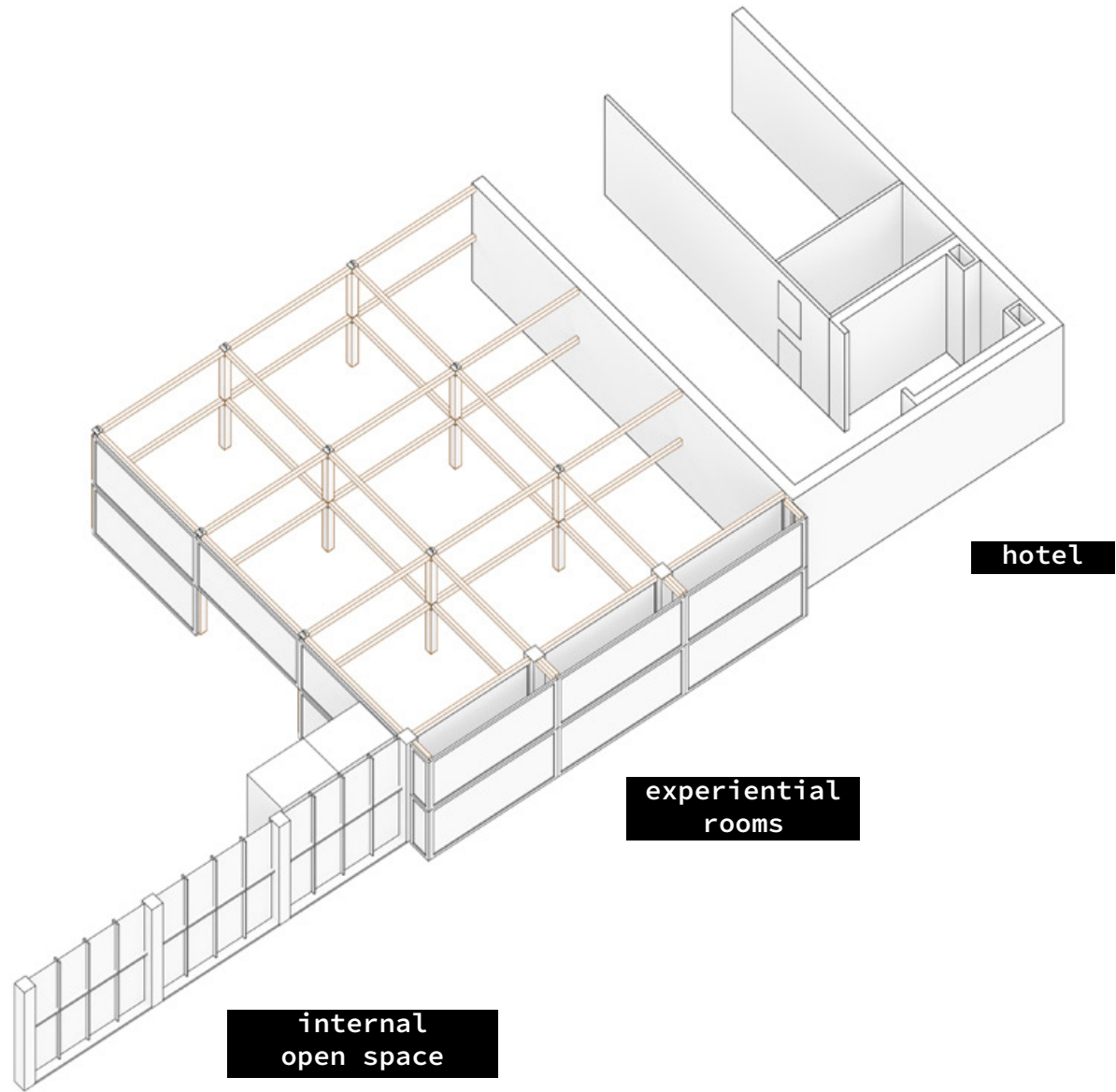
Glass



Translucent Double Facade



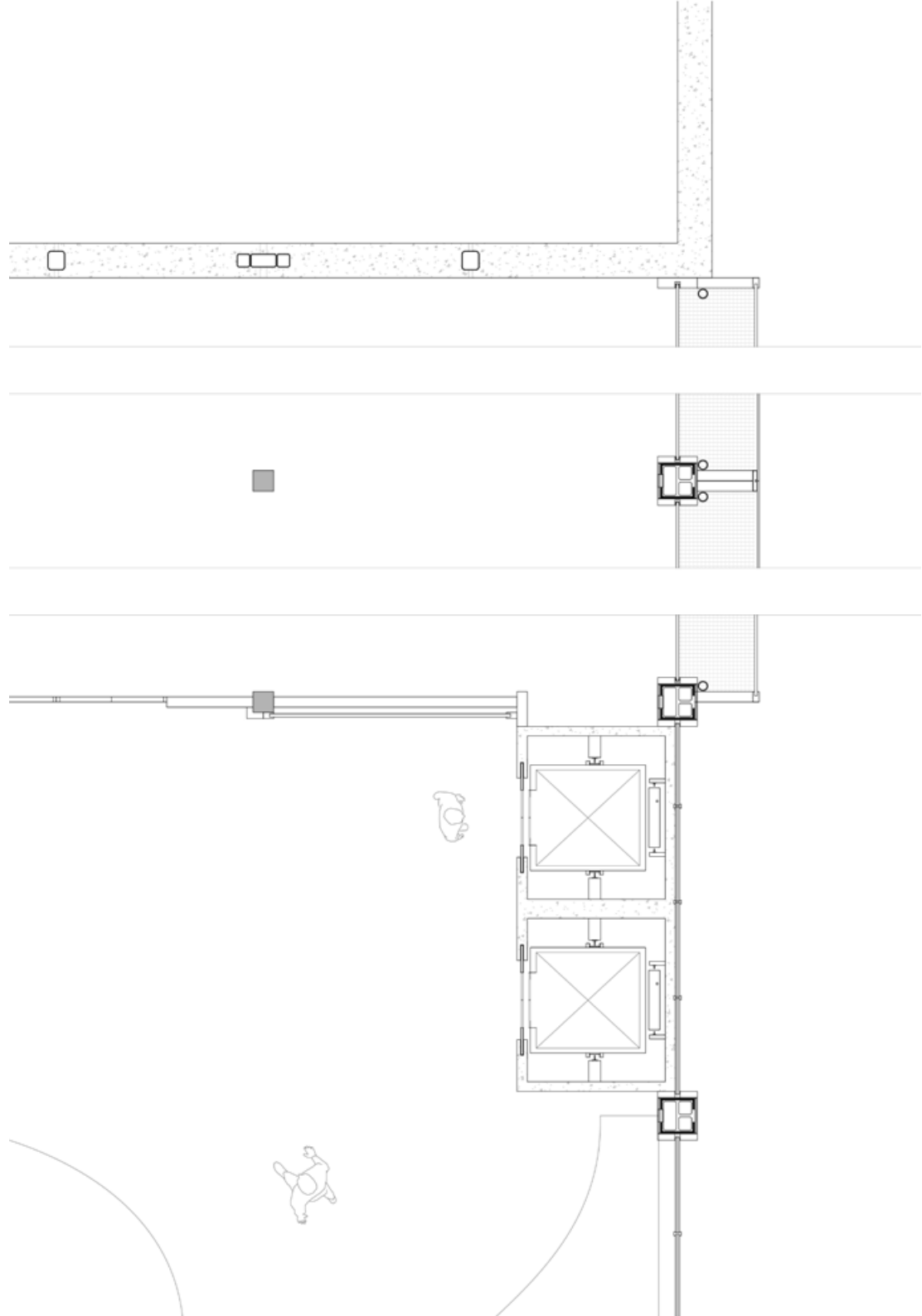
Insulating Concrete

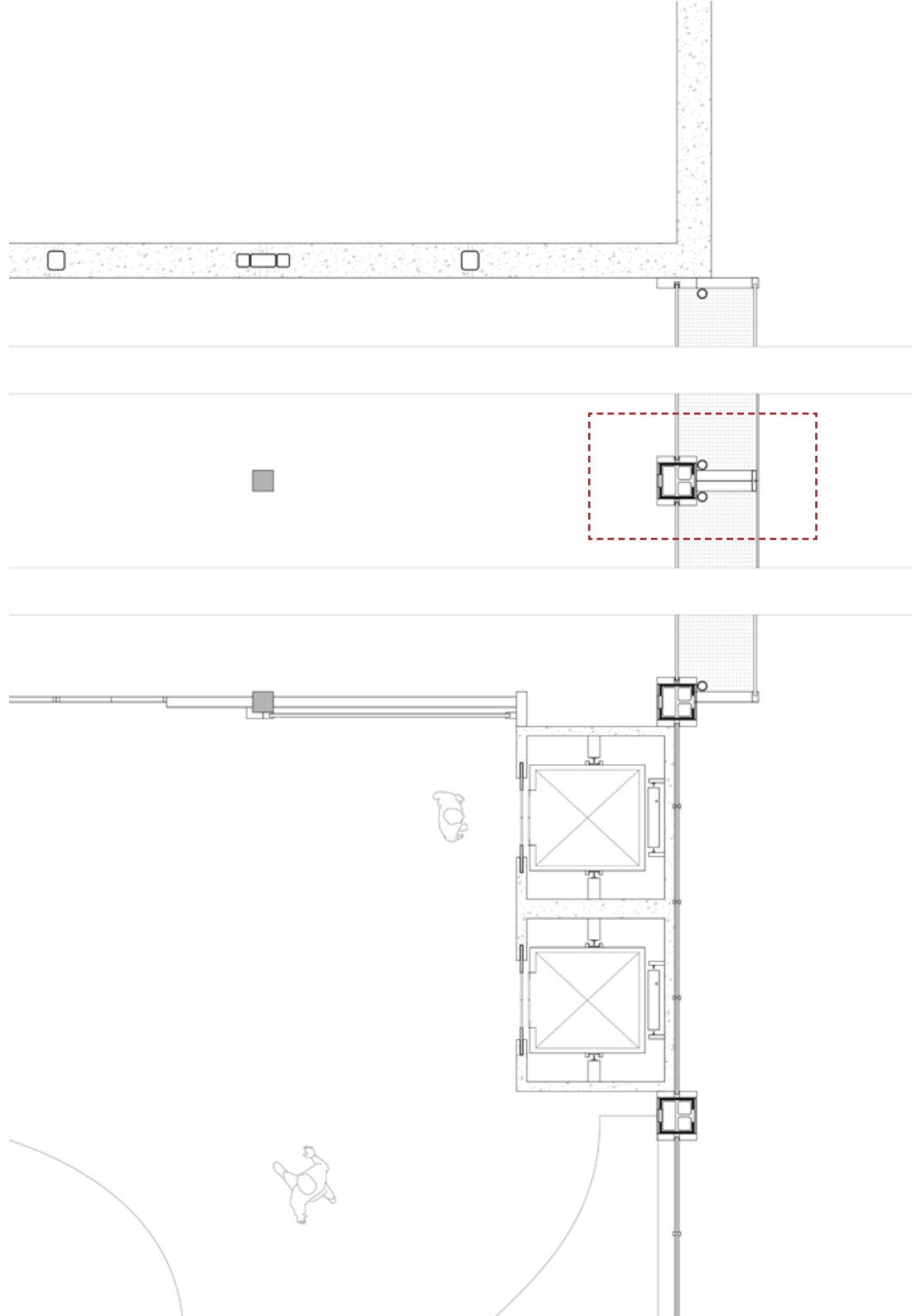


internal
open space

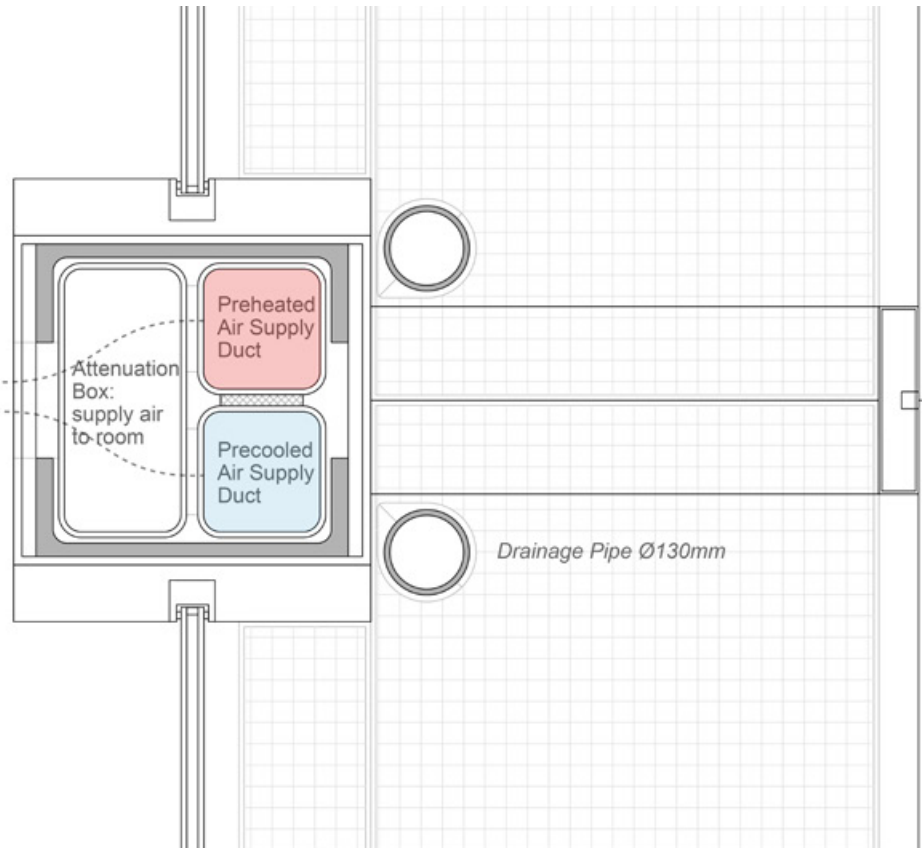
experiential
rooms

hotel



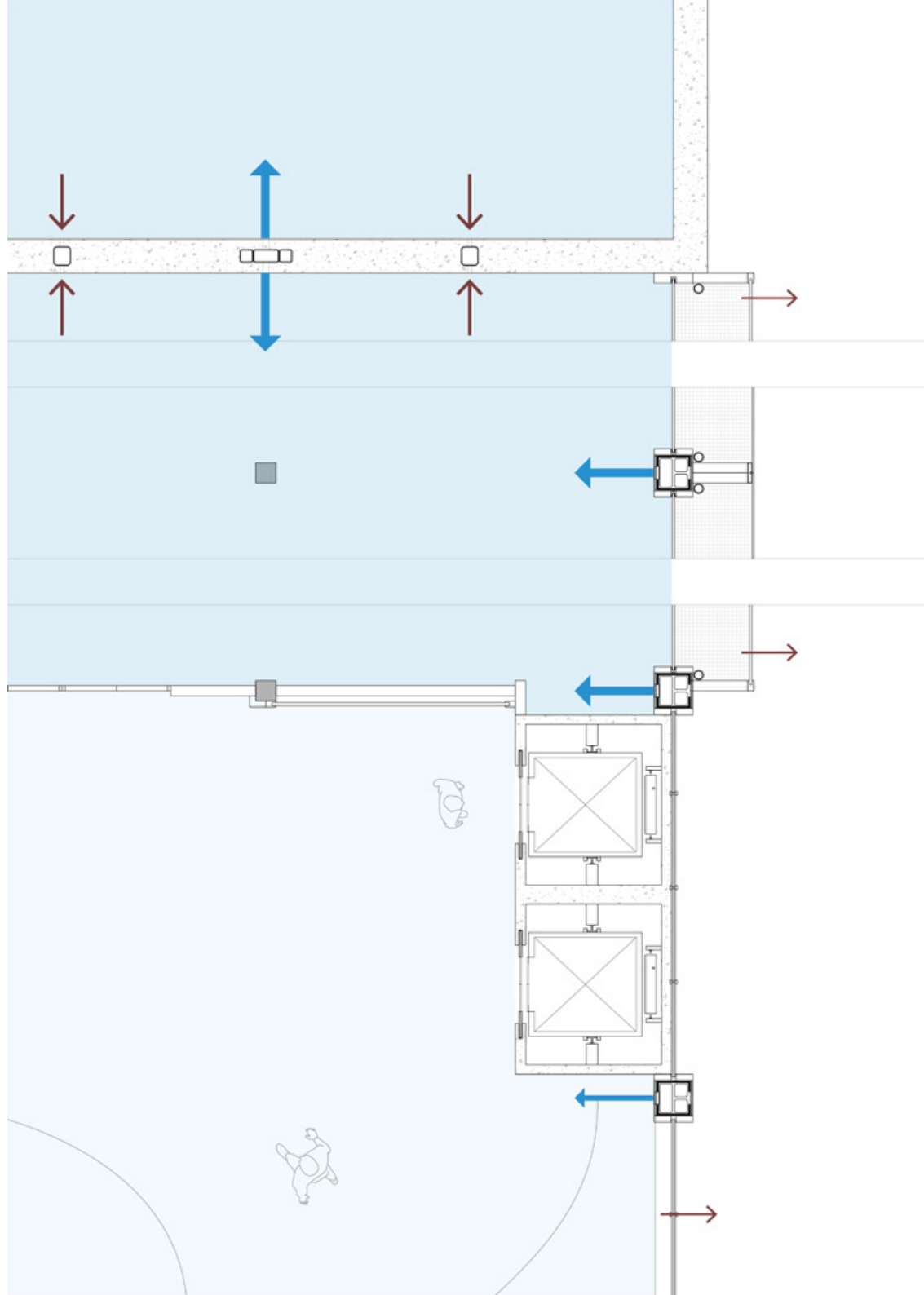


INTERIOR

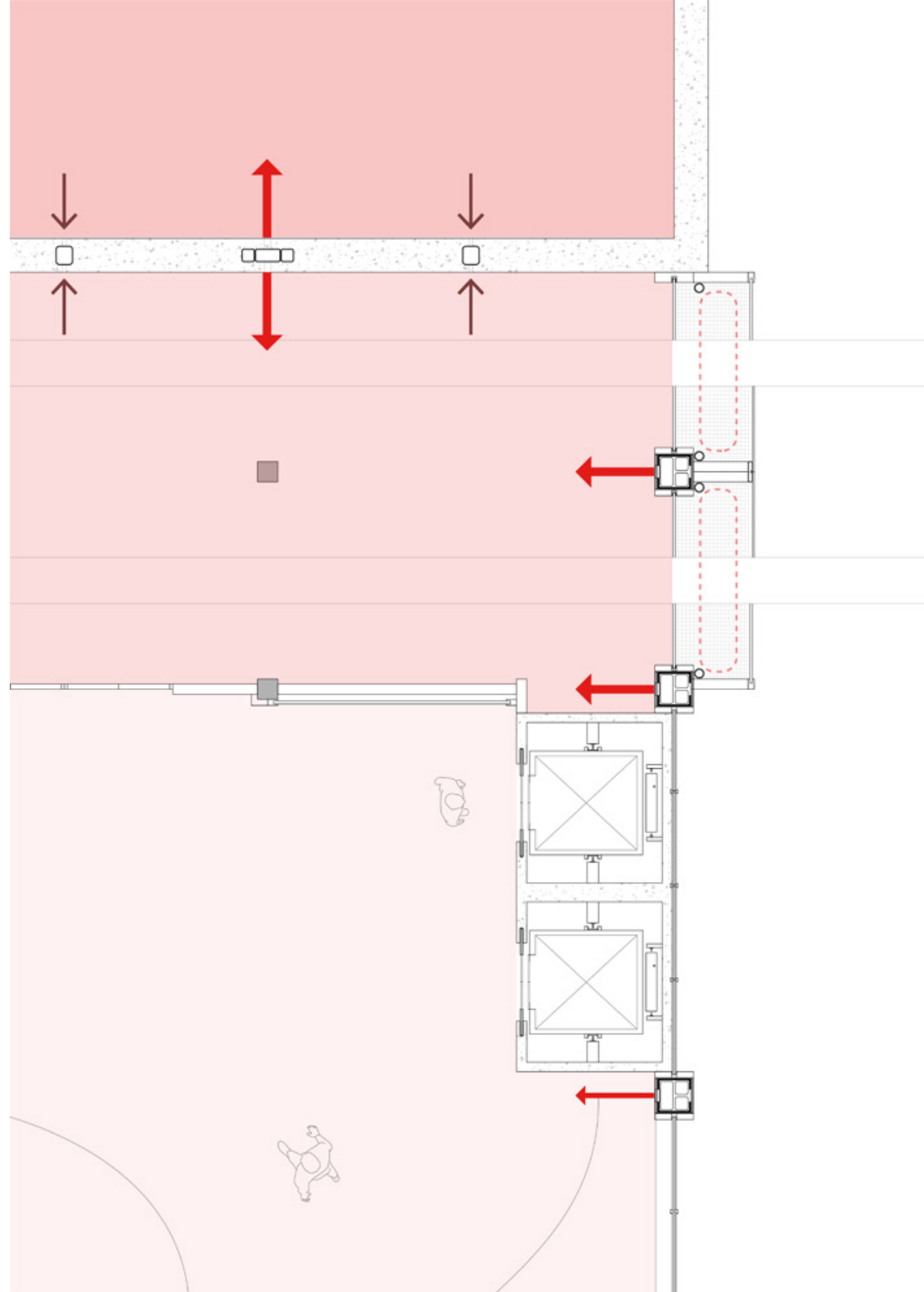


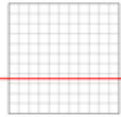
EXTERIOR

Summer

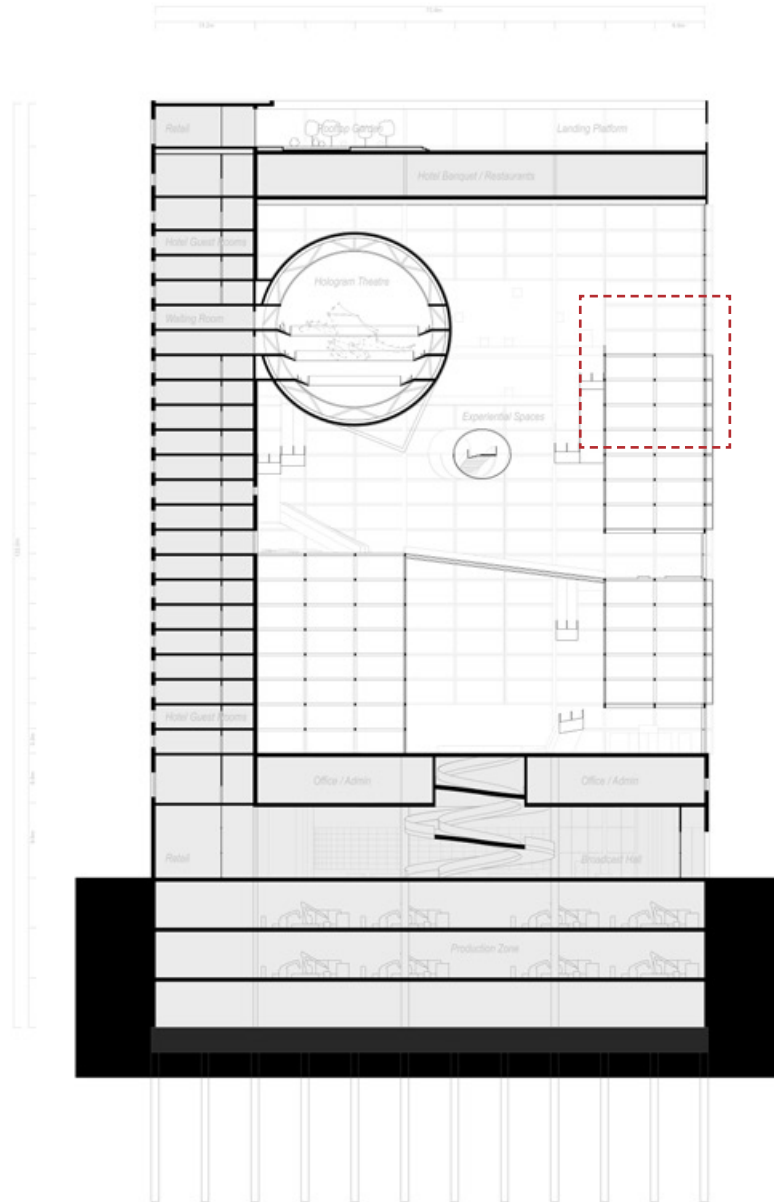


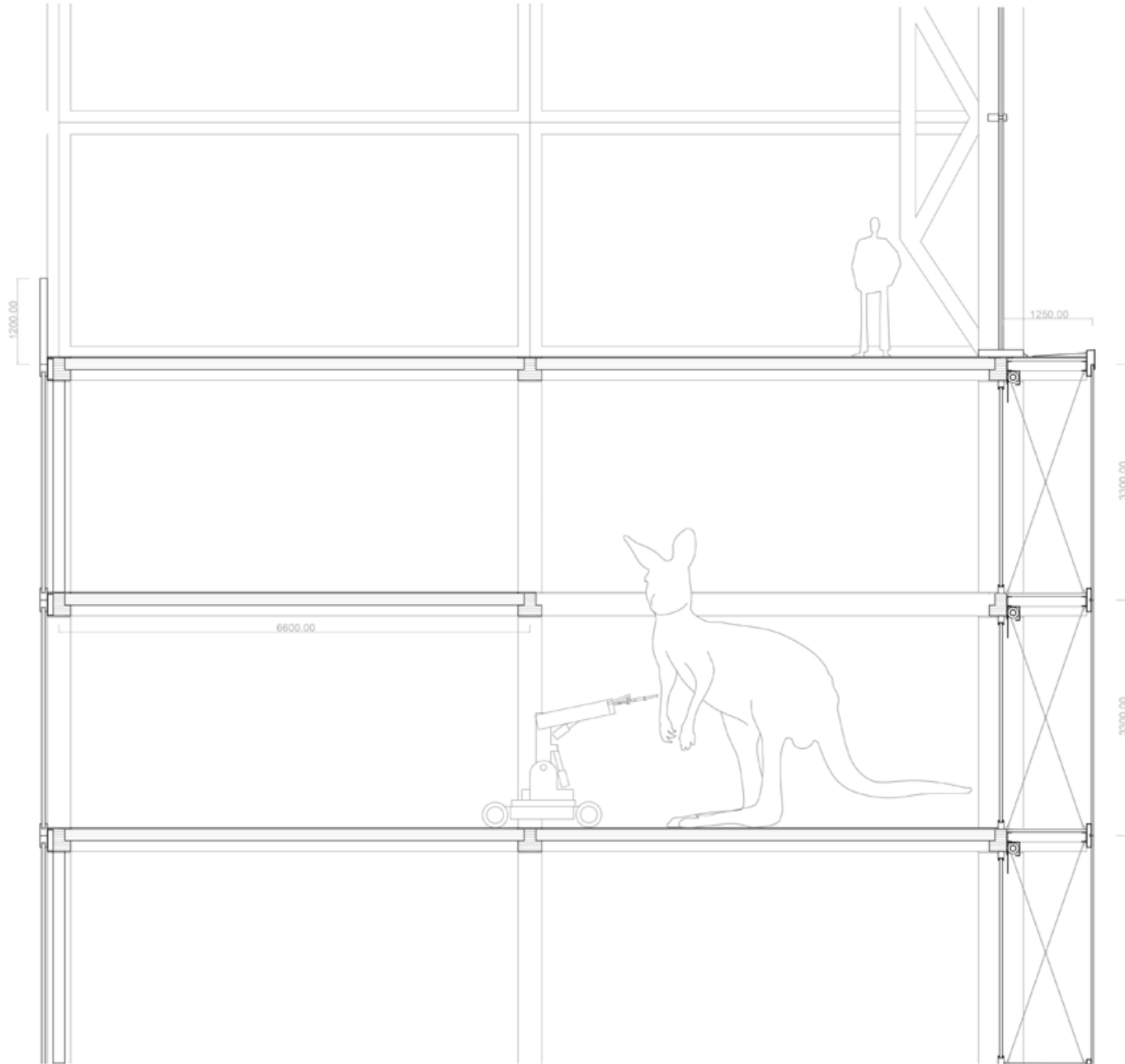
Winter

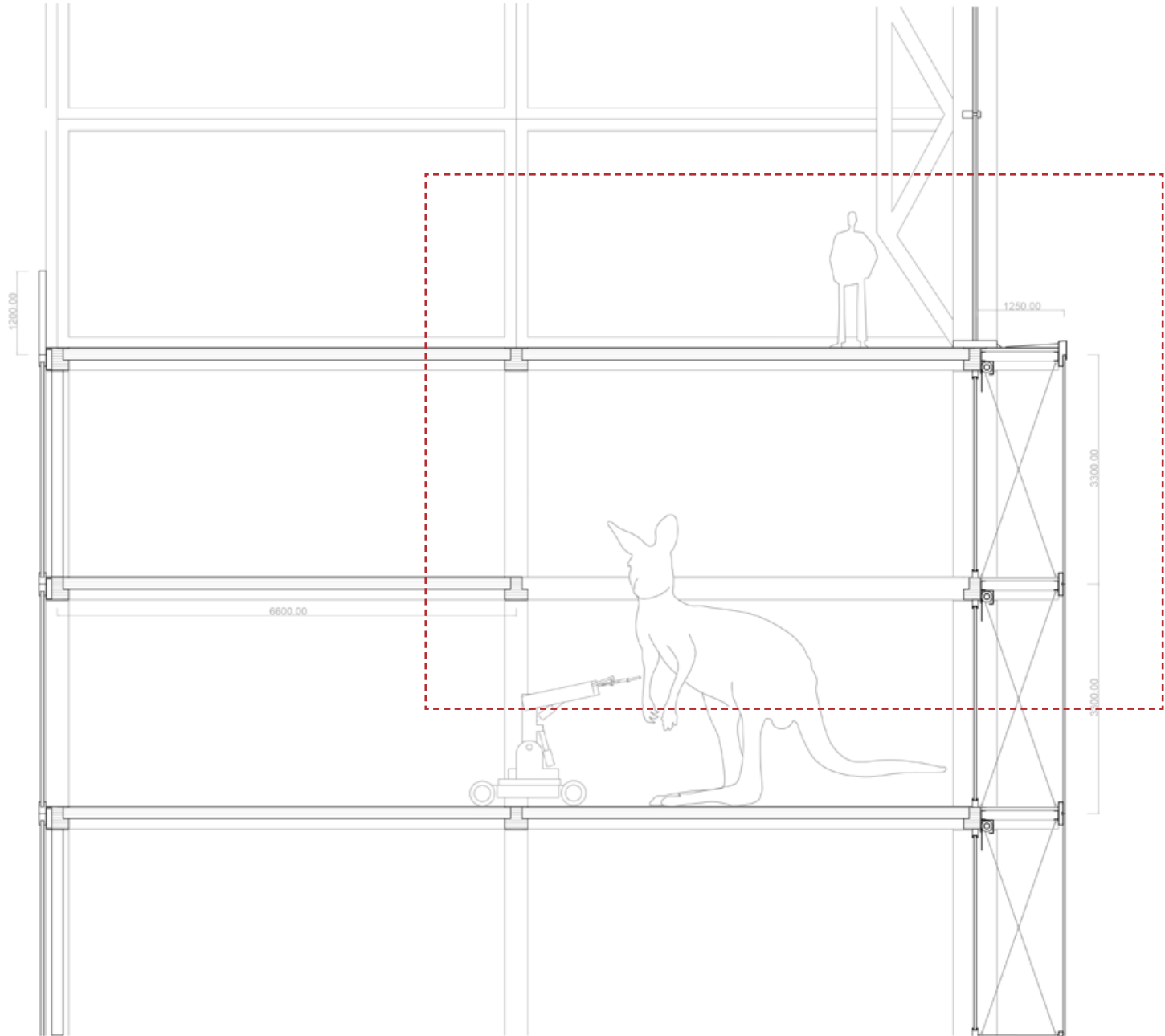


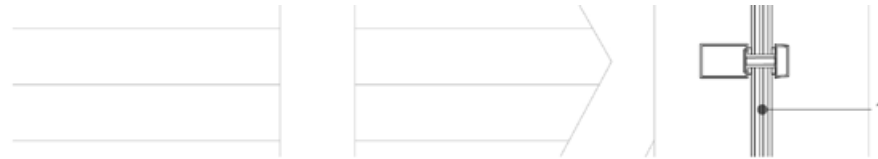
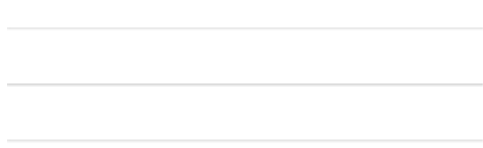


0 6.6 13.2 26.4



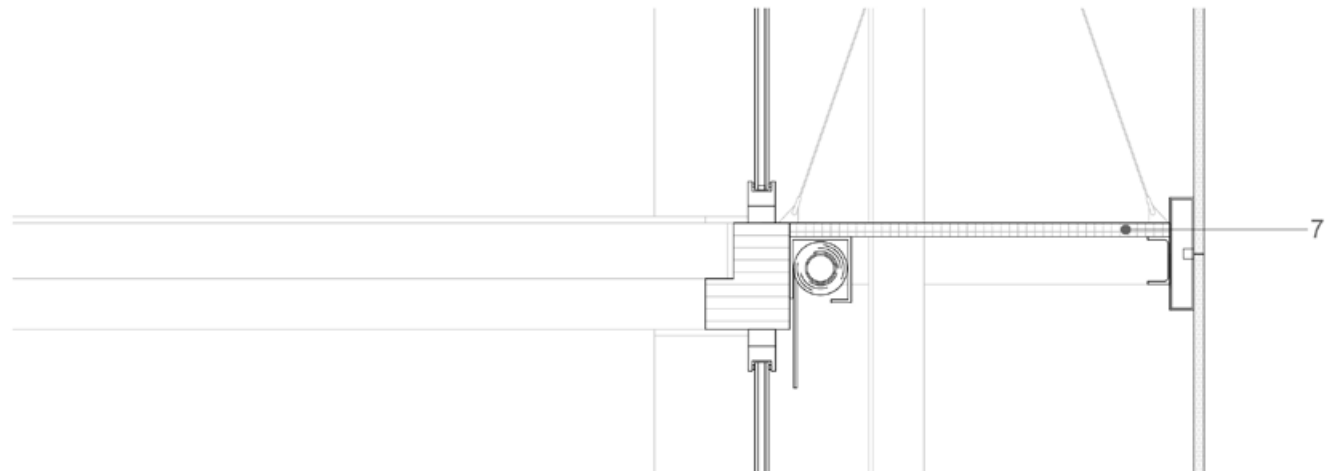
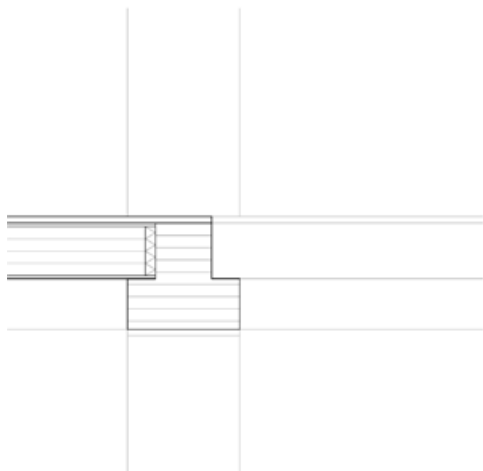
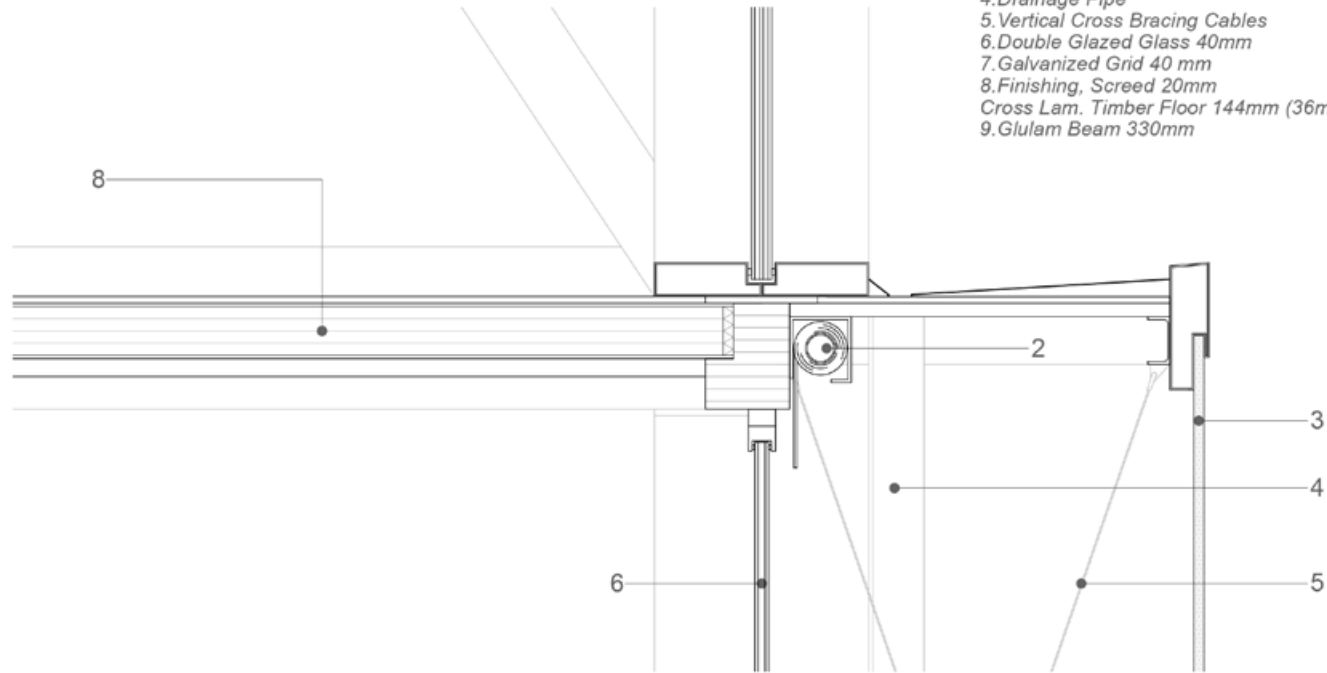
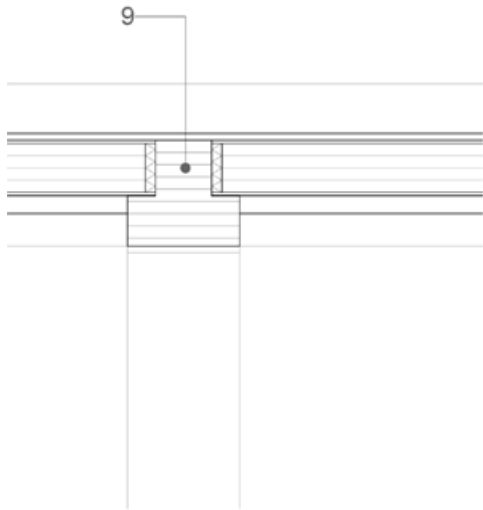


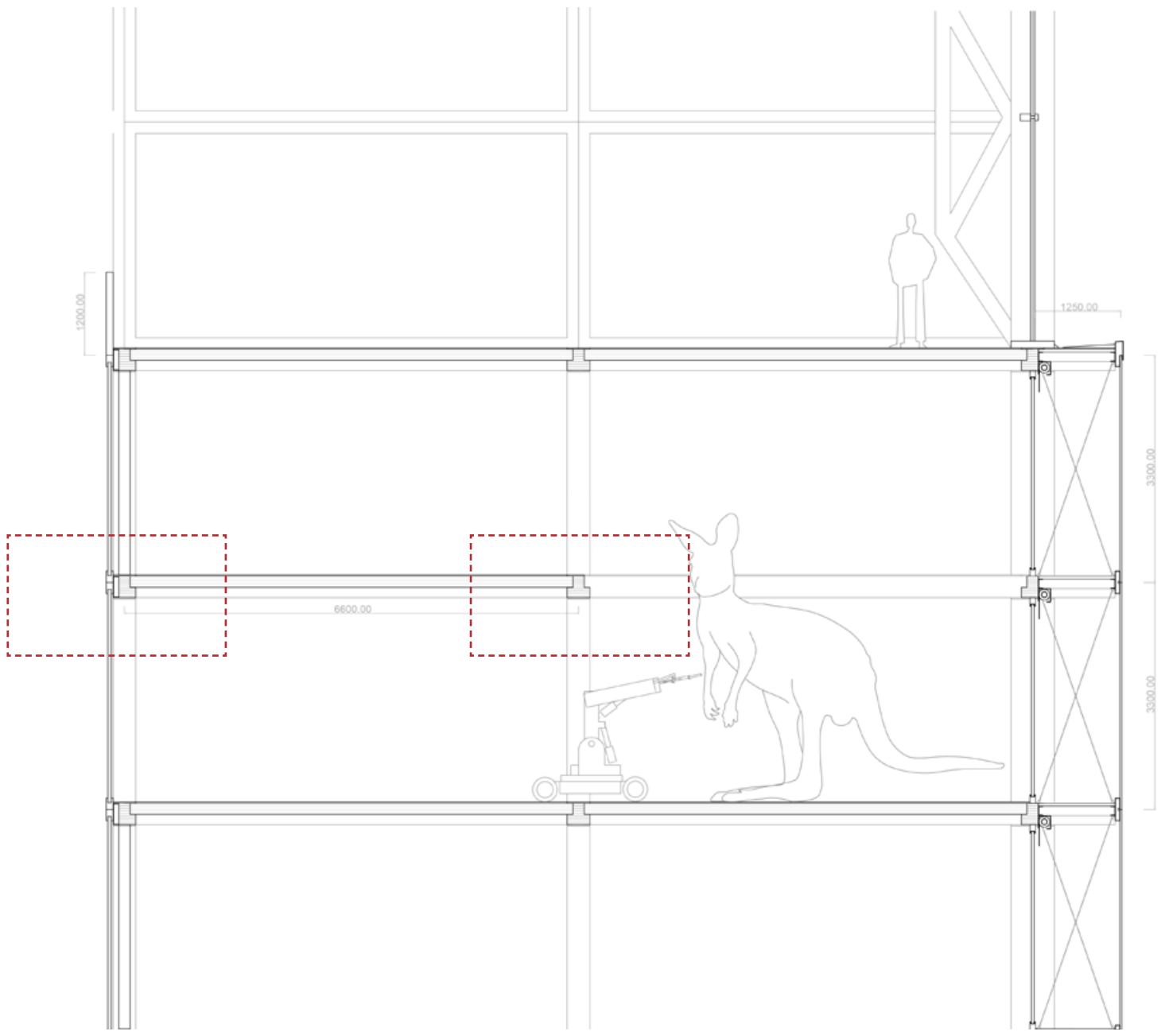


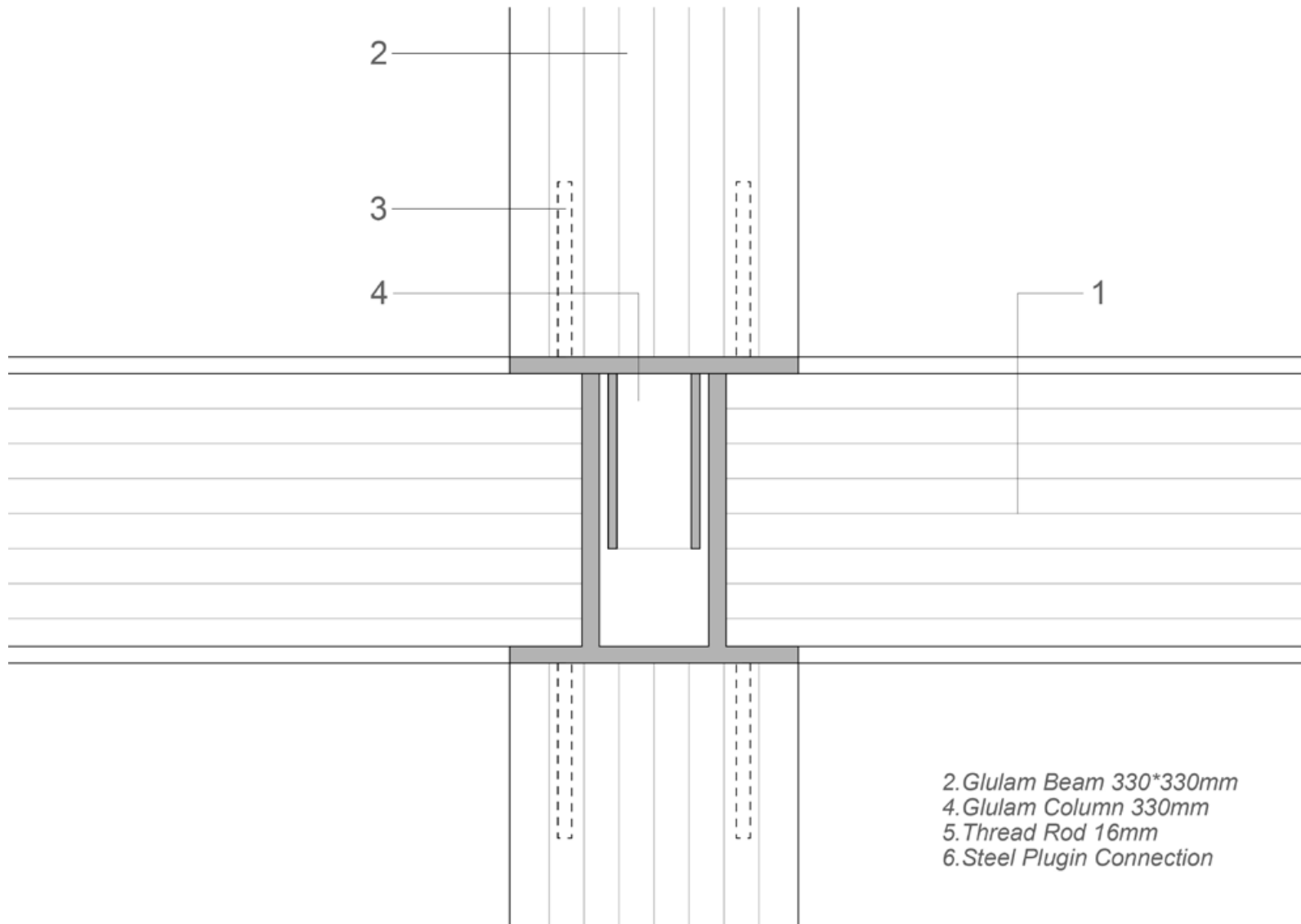


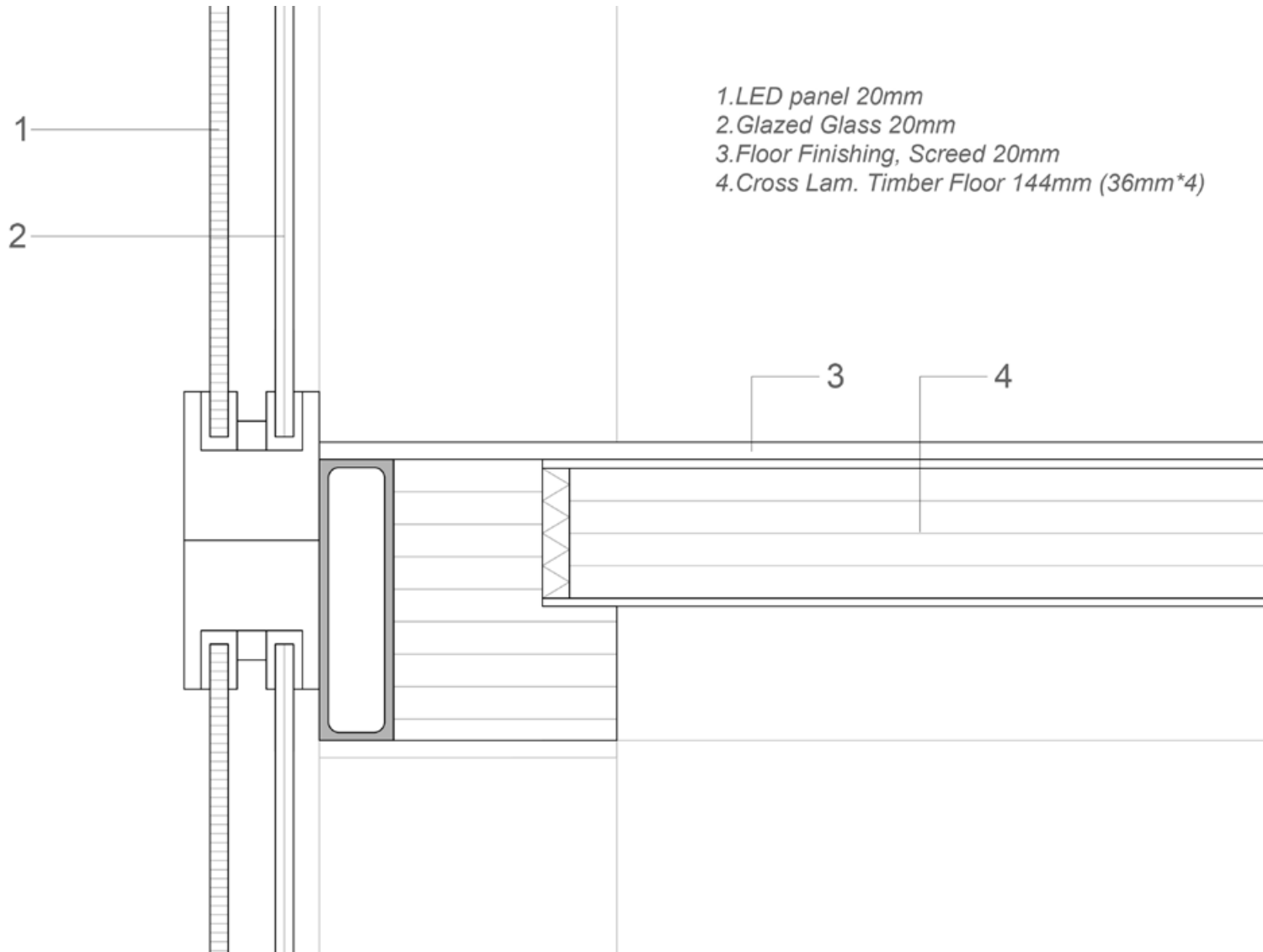
0 100 500 1000 (mm)

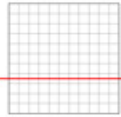
- 1. Triple Glazed Glass 60mm , Profile Depth 260mm
- 2. Electronic Roller Shutter Curtain
- 3. Translucent polycarbonate panel 30mm
- 4. Drainage Pipe
- 5. Vertical Cross Bracing Cables
- 6. Double Glazed Glass 40mm
- 7. Galvanized Grid 40 mm
- 8. Finishing, Screed 20mm
Cross Lam. Timber Floor 144mm (36mm*4)
- 9. Glulam Beam 330mm



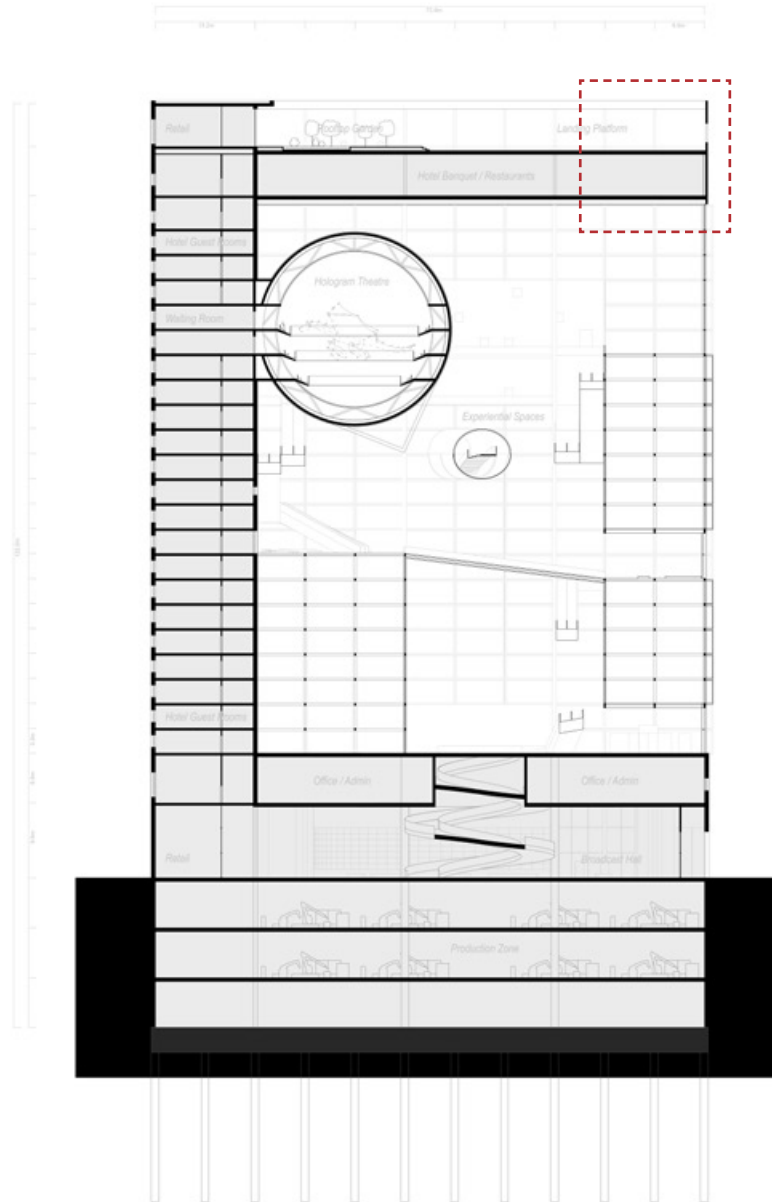


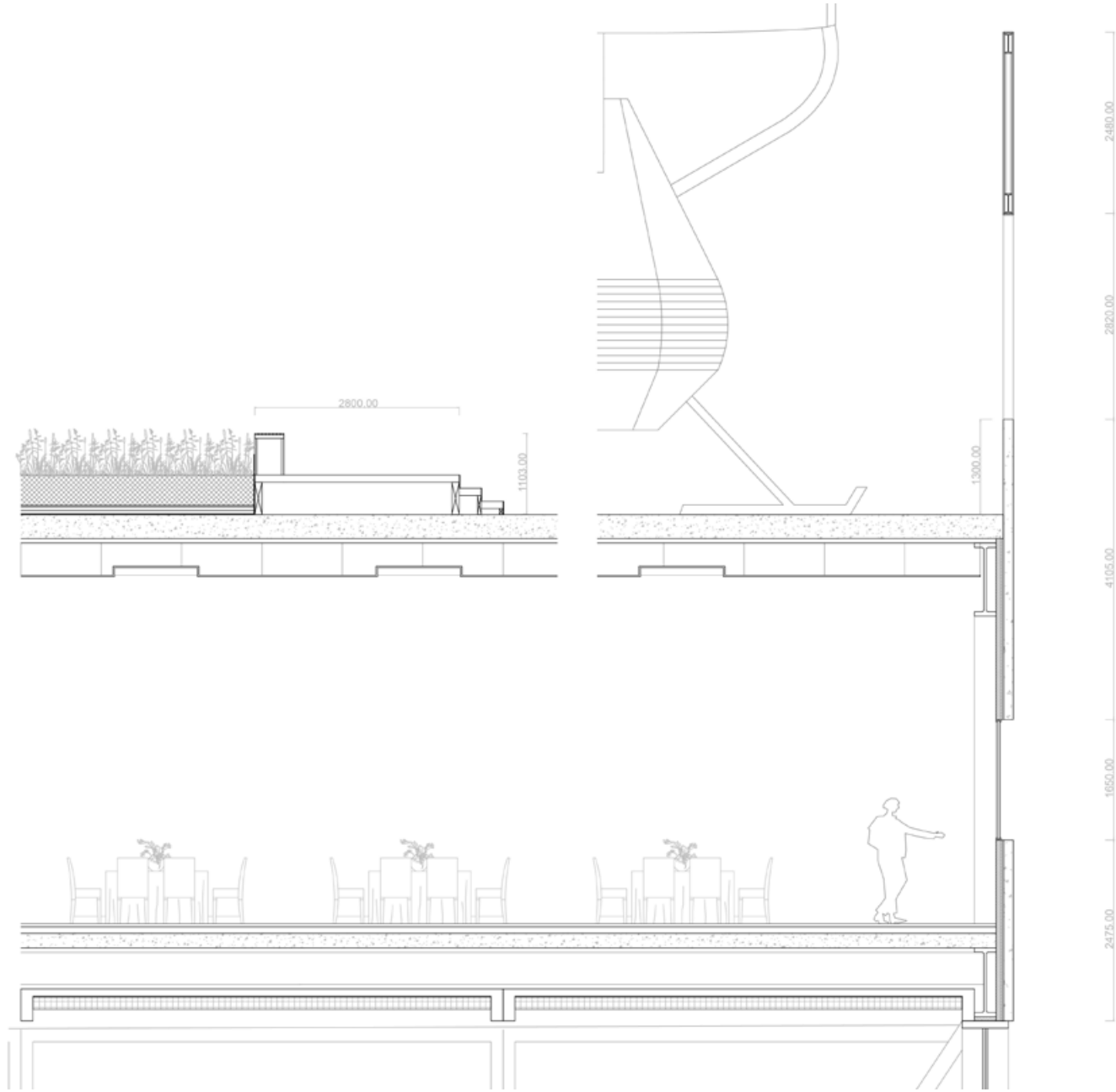


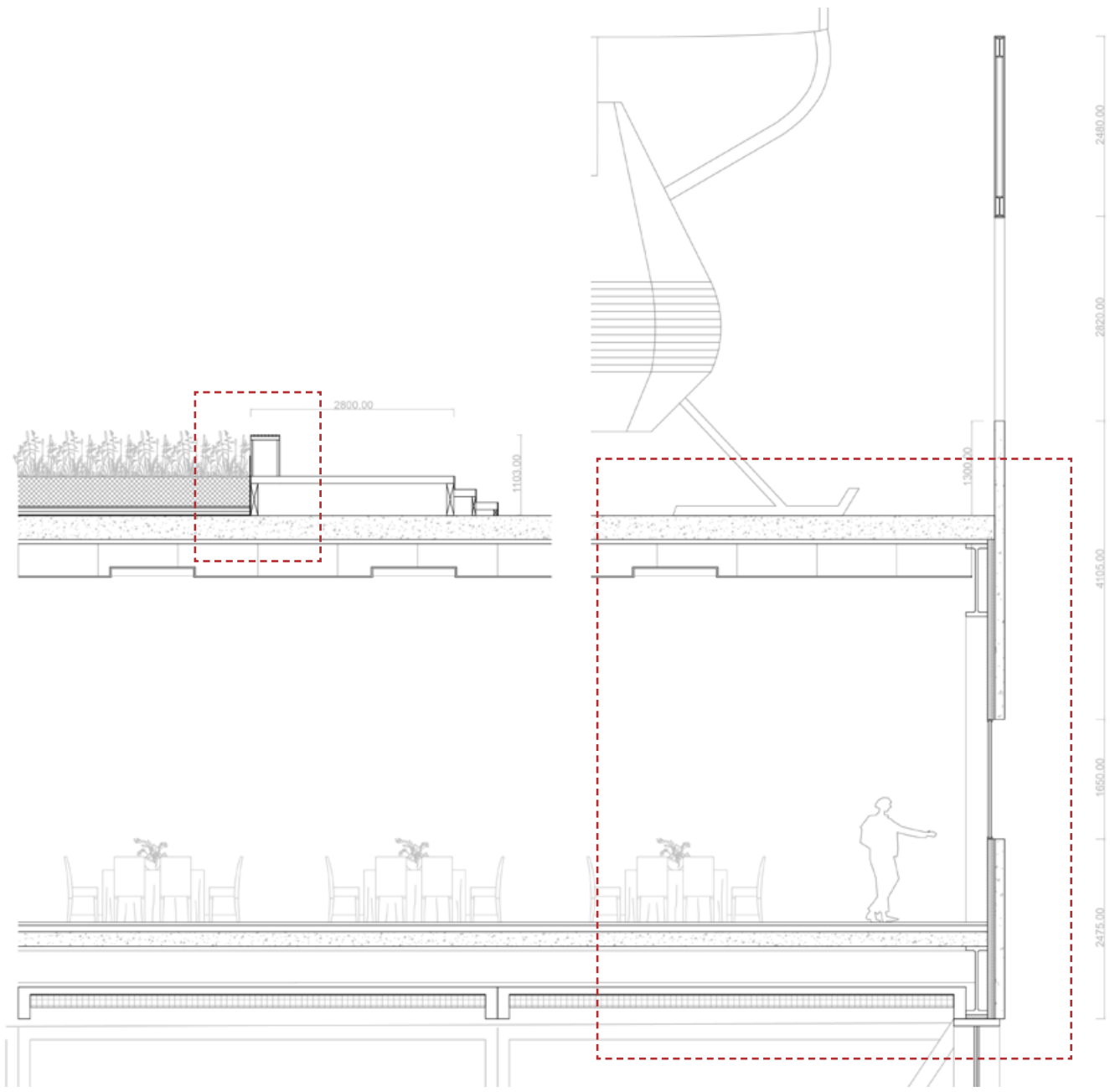


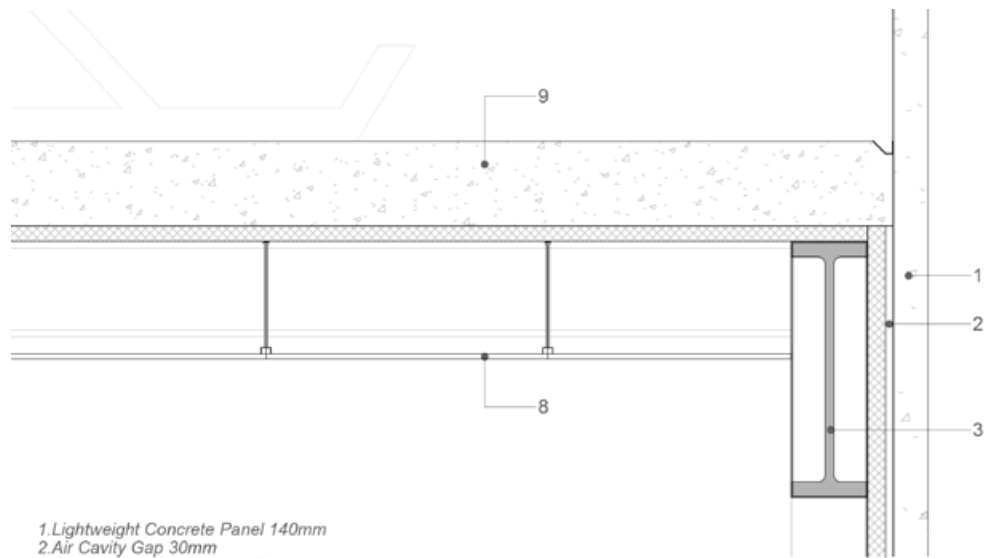


0 6.6 13.2 26.4

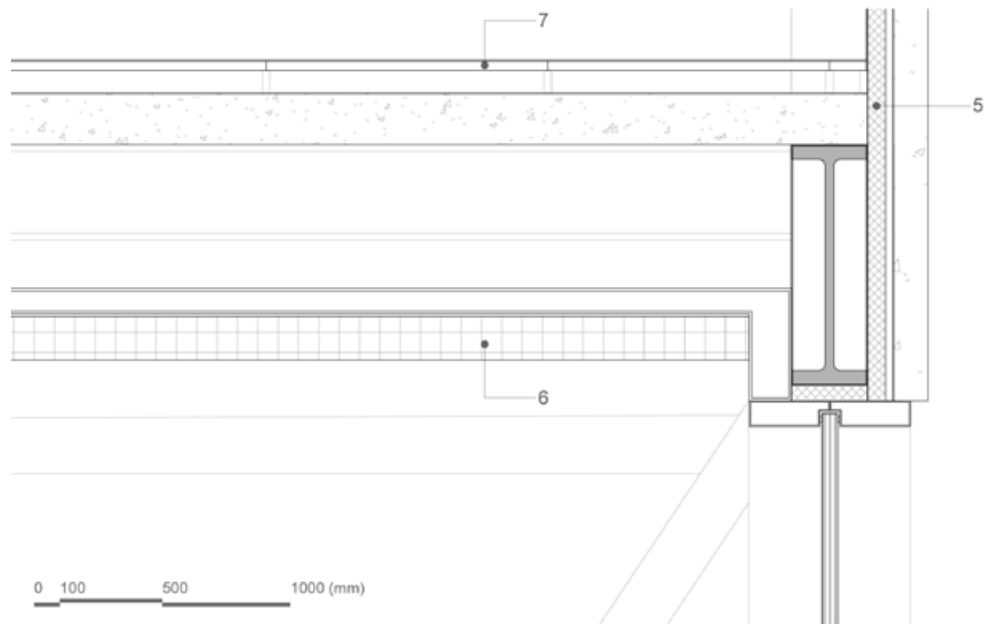
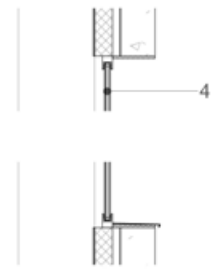






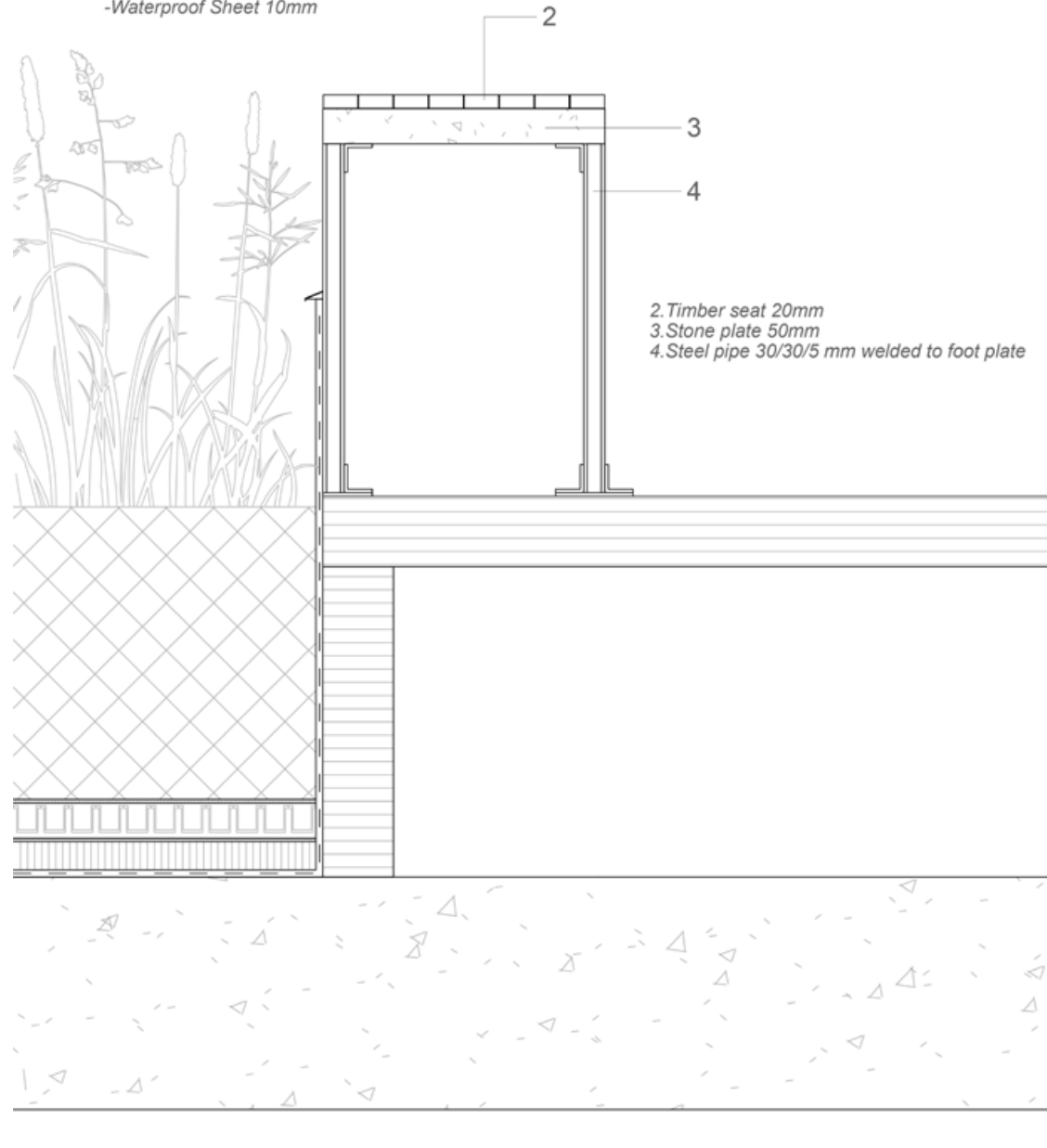


- 1. Lightweight Concrete Panel 140mm
- 2. Air Cavity Gap 30mm
- 3. Fibre Reinforced Polymer Truss
- 4. Glazing 20mm
- 5. Rigid Air Permeable Thermal Insulation 70mm
- 6. LED Ceiling Lighting Panels 170mm
- 7. Carpet Finishing, Timber Floorboard 36mm
- 8. Ceiling Gypsum Board 20mm
- 9. Reinforced Concrete Slab 330mm

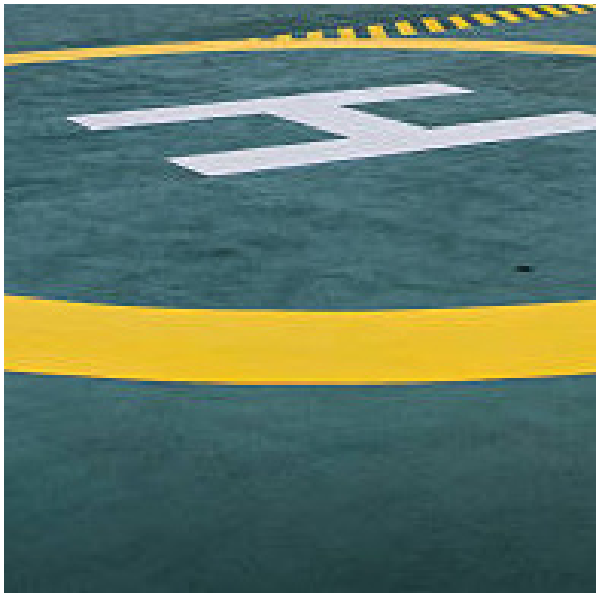


0 100 500 1000 (mm)

1.
-Growing medium 415mm
-Filter 5mm
-Drainage 50mm
-Root Barrier 5mm
-Thermal insulation 40mm
-Waterproof Sheet 10mm



Roof Materialization



Painted Concrete Floor

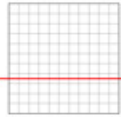


Vegetation

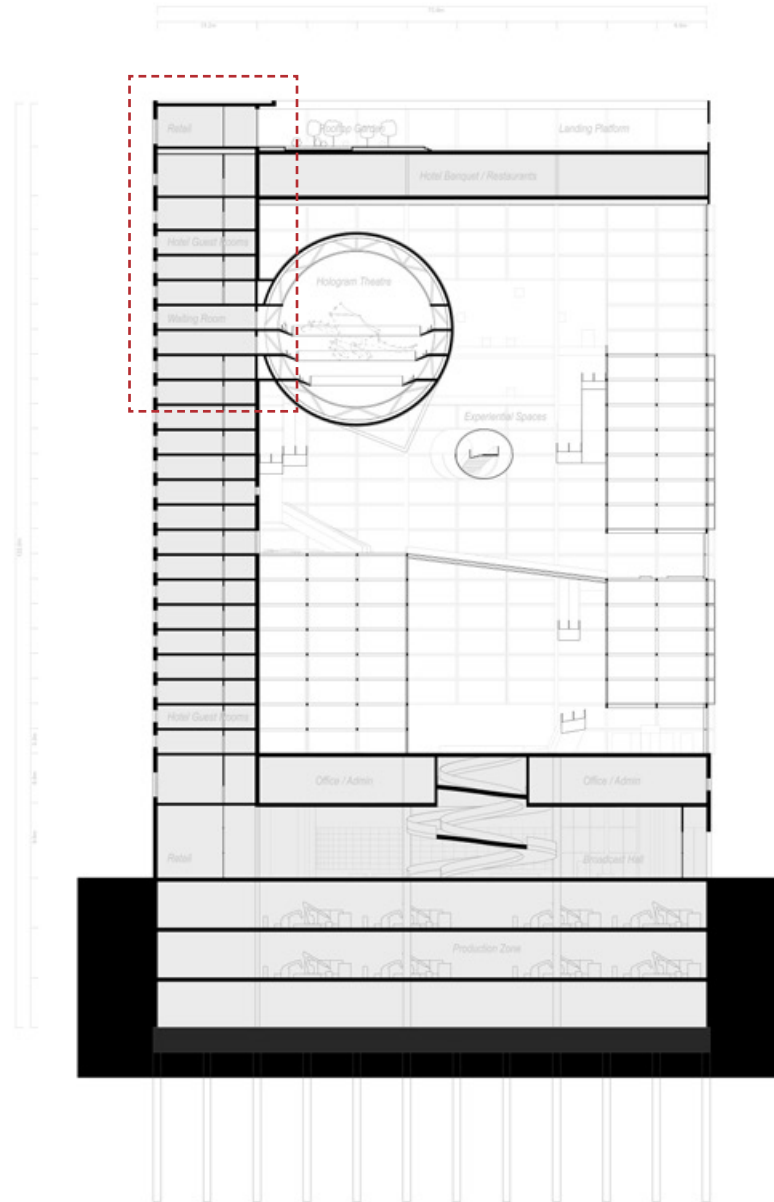


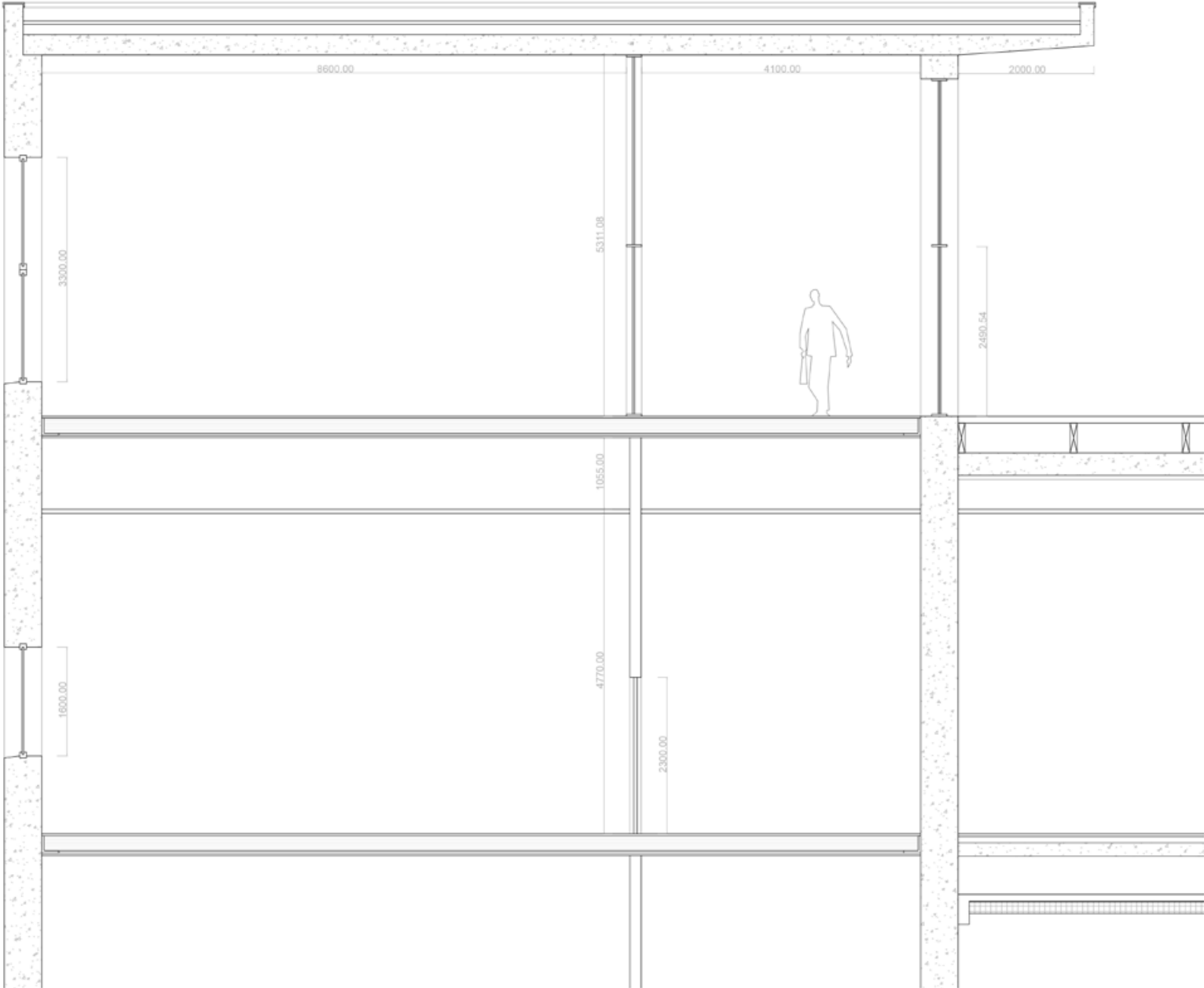
Timber Deck

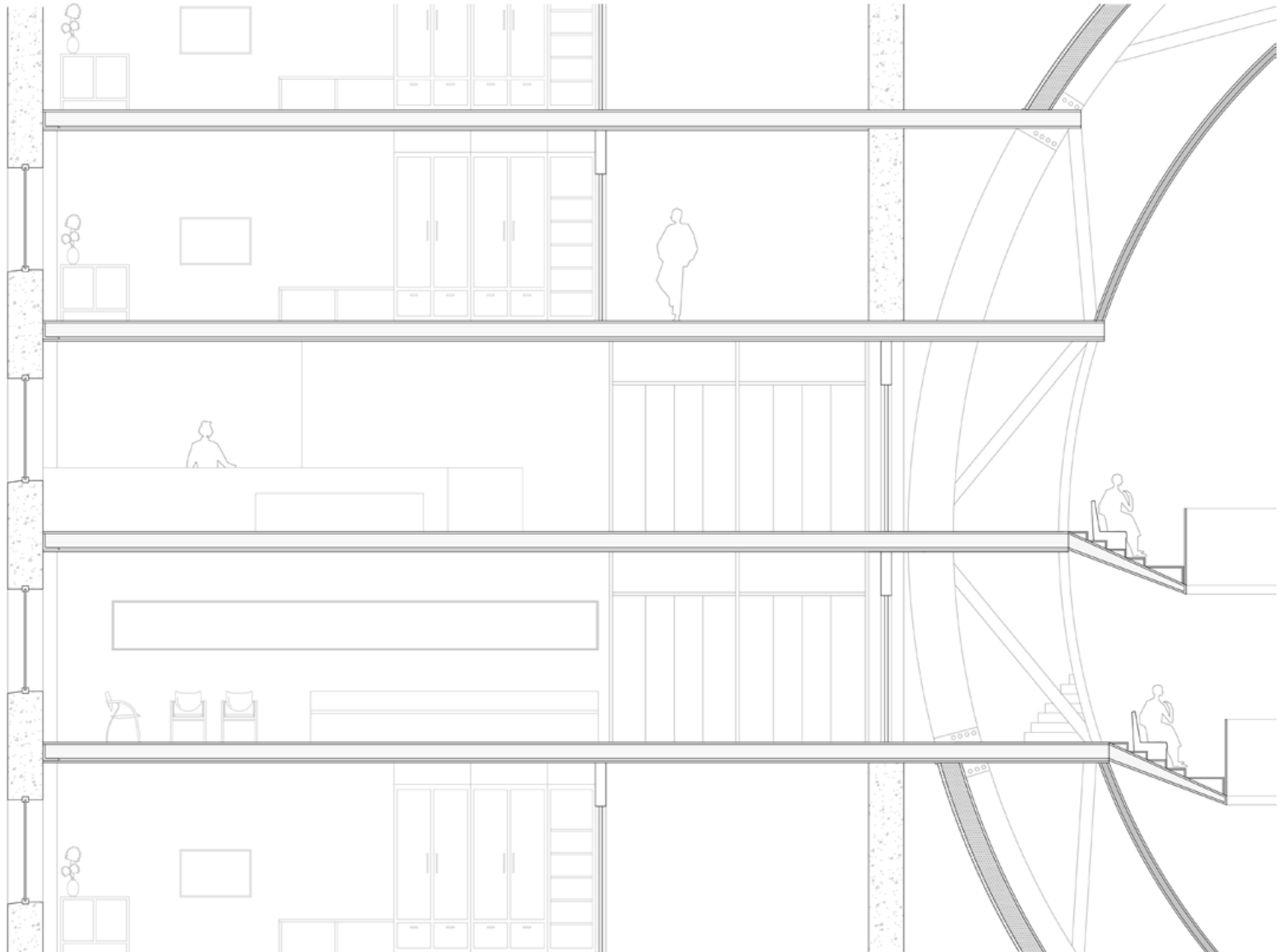


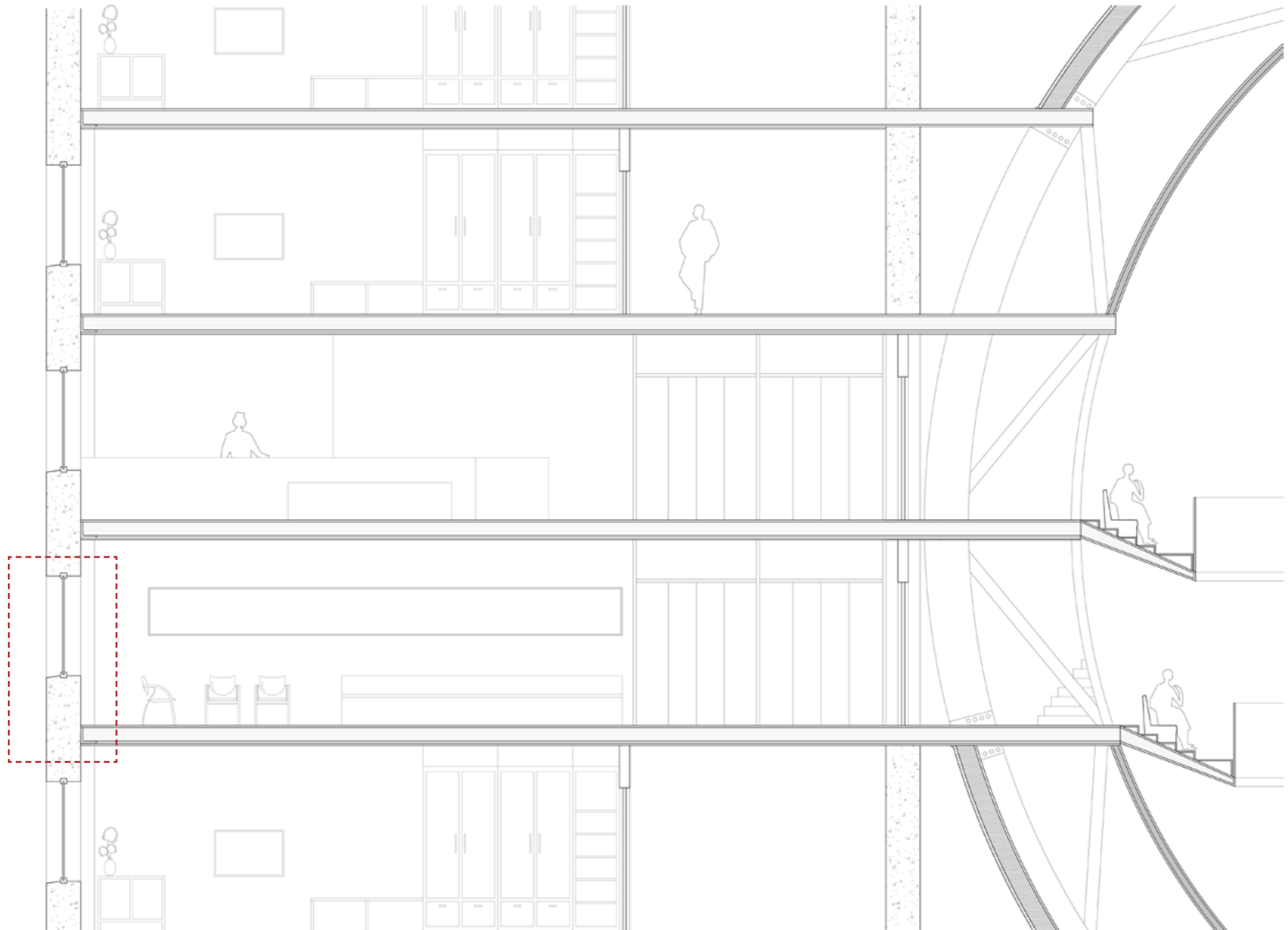


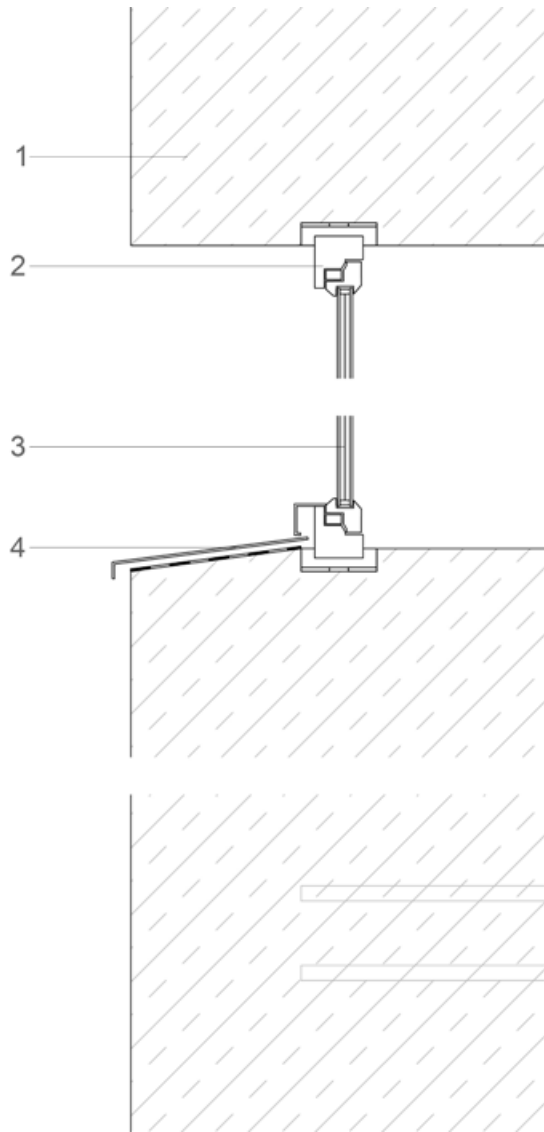
0 6.6 13.2 26.4







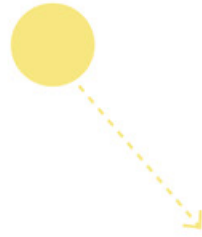




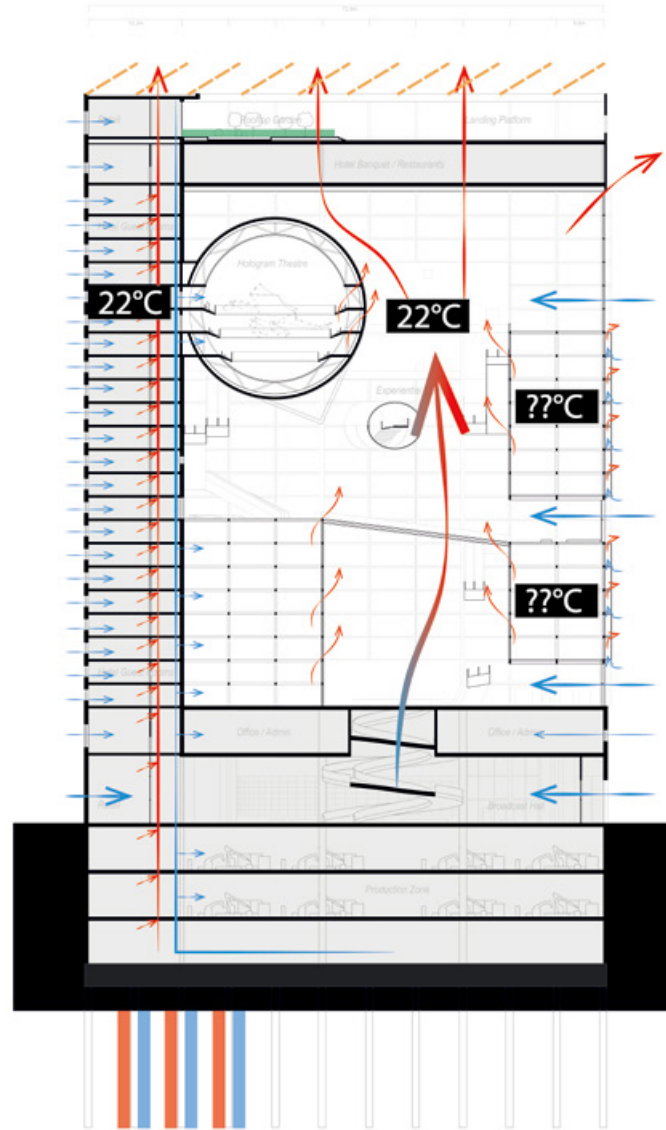
- 1. Insulating concrete as exposed concrete min. 550 mm
- 2. Wooden windows Larch
- 3. Triple glazed glass 20mm
- 4. Steel sheet coated 3 mm

- 5. Floor finishing screed 40 mm
- 6. Separating layer cross laminated timber decking 200 mm
- 7. Plasterboard moisture resistant 16 mm
Gypsum plaster board 16 mm , Interior painting

Climate - Summer

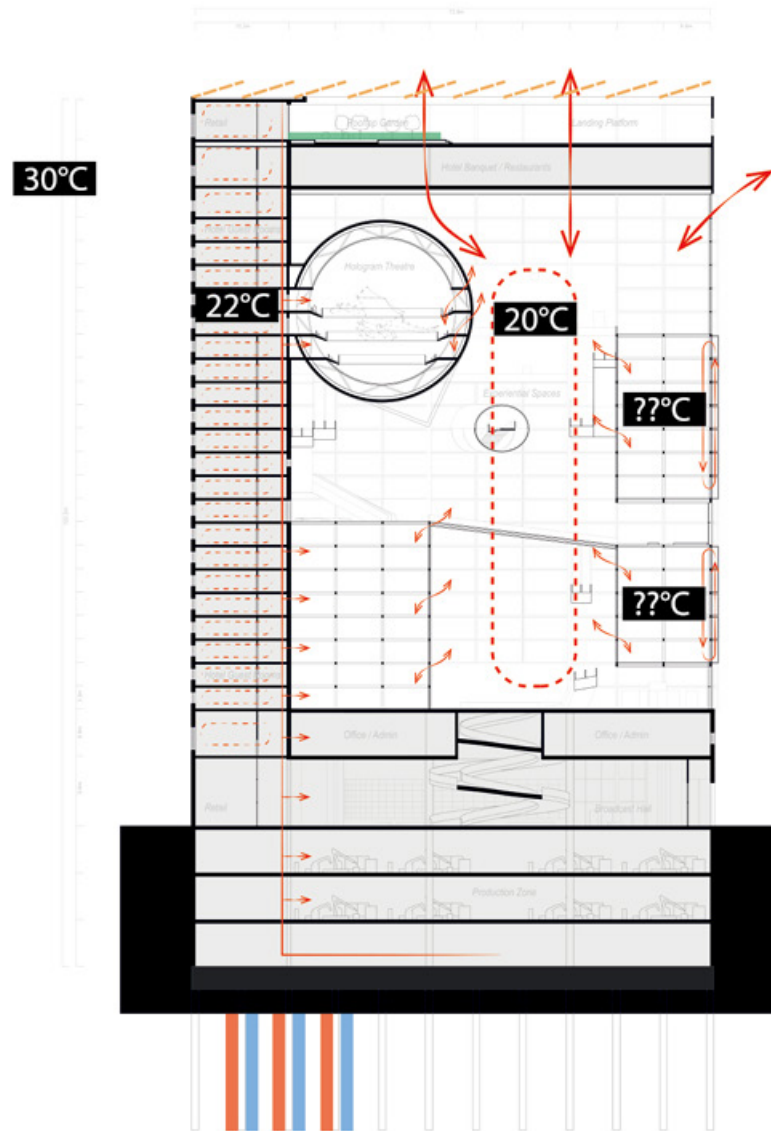


30°C

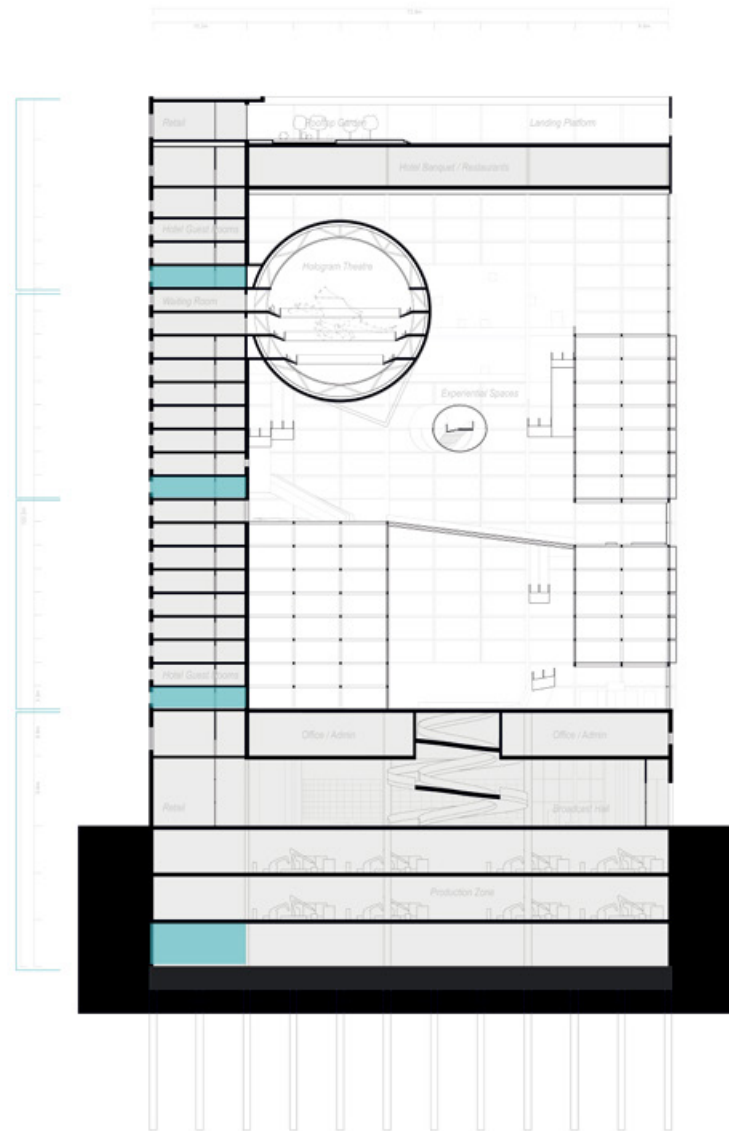


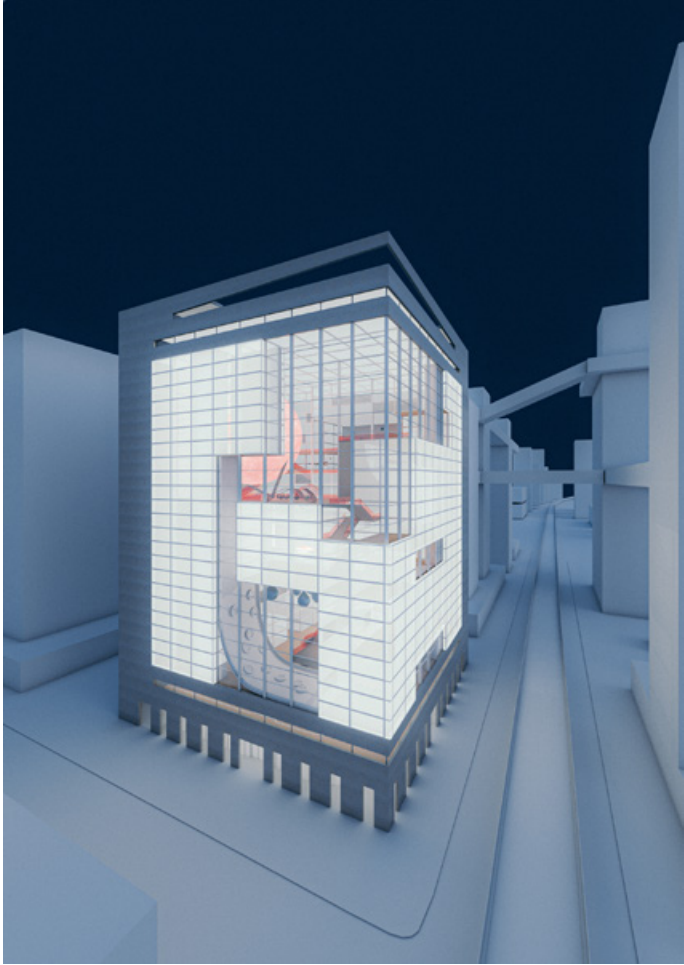


Climate - Winter

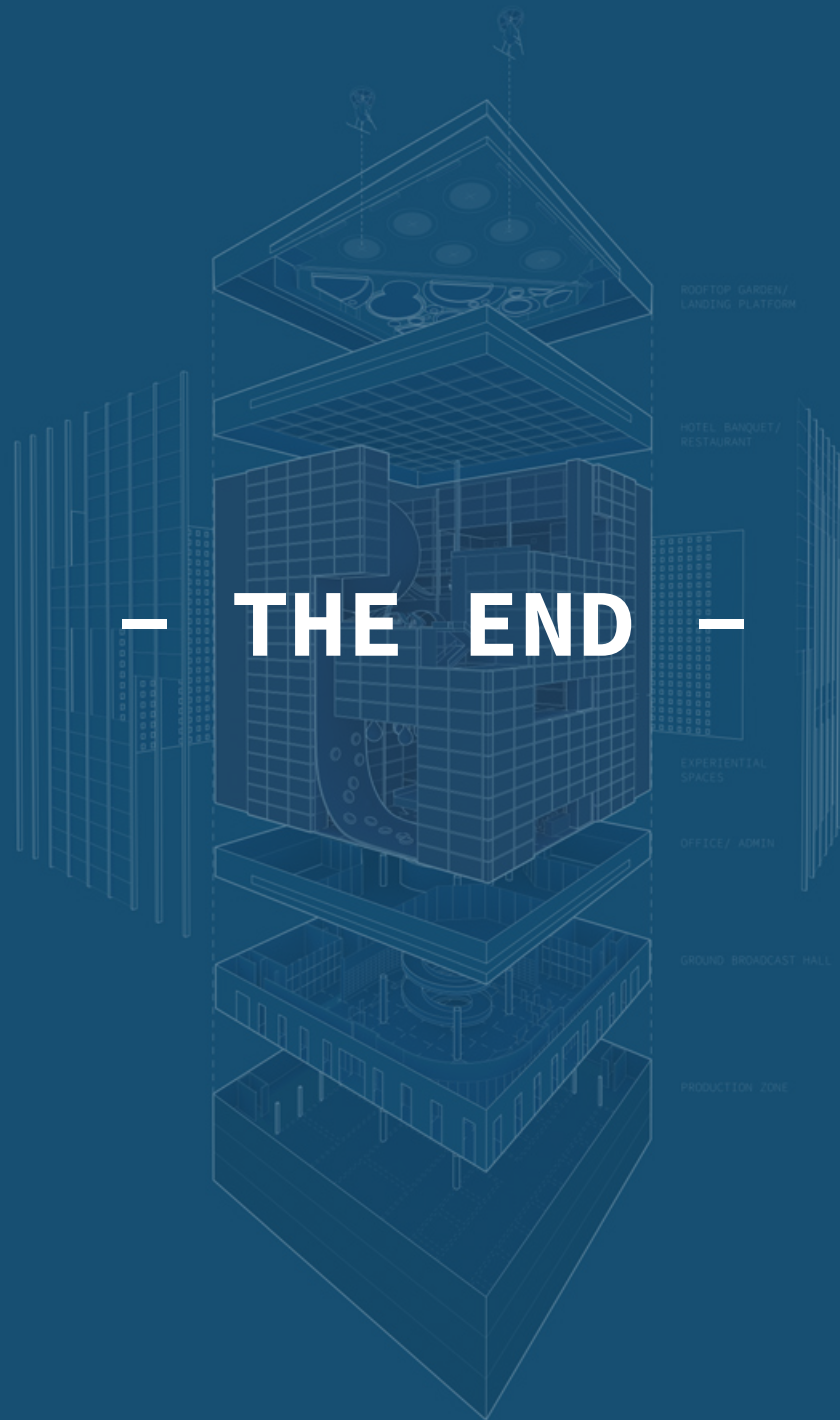


Air Conditioning System





— THE END —



ROOFTOP GARDEN /
LANDING PLATFORM

HOTEL BANQUET /
RESTAURANT

EXPERIENTIAL
SPACES

OFFICE / ADMIN

GROUND BROADCAST HALL

PRODUCTION ZONE