

PORTFOLIO

SELECTED WORKS 2025-2026

YUTIAN ZHU

Columbia University | GSAPP
M.S. Advanced Architectural Design

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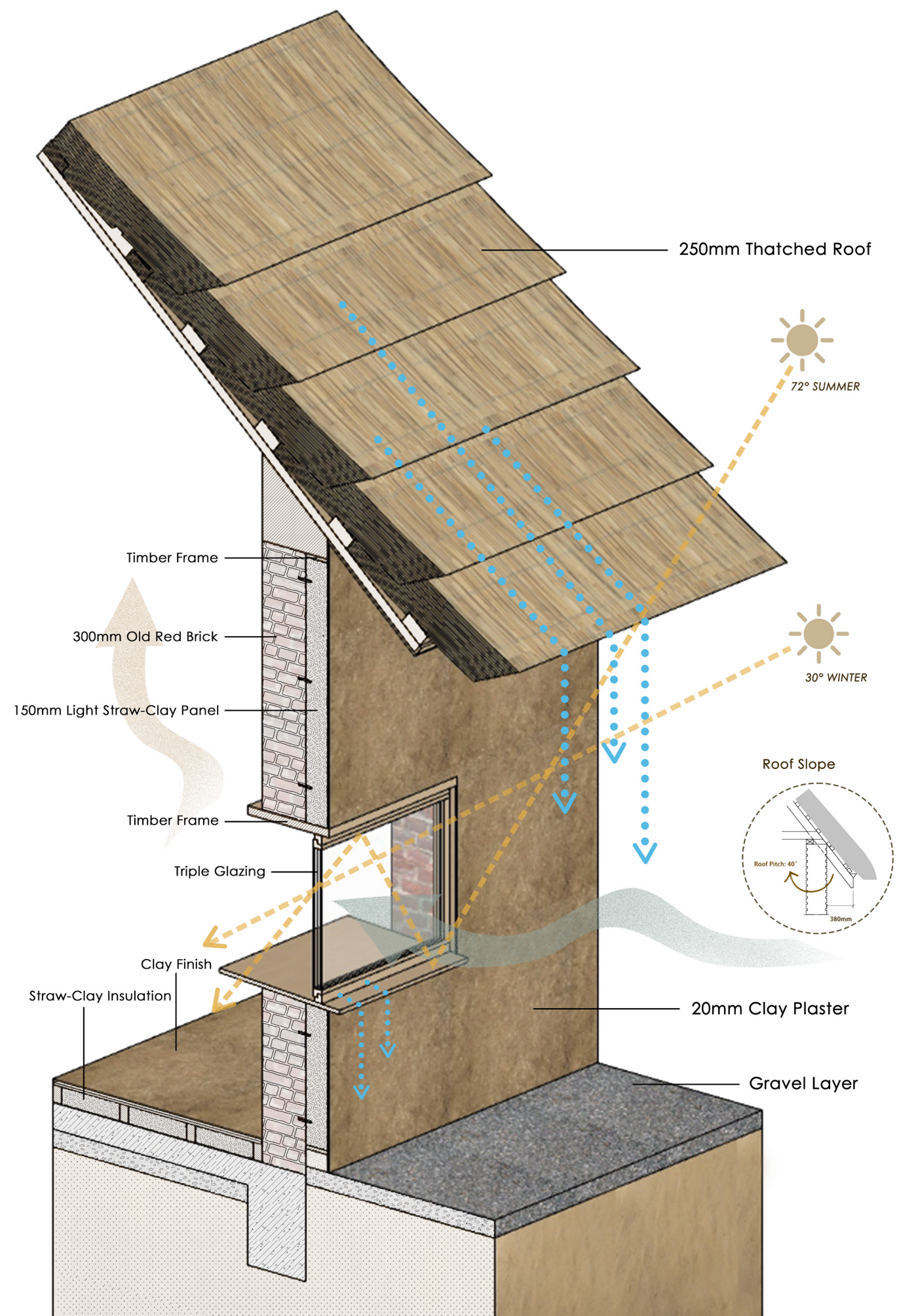
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Instructor: NZINGA B. MBOUP & NICOLAS RONDET

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01

OLD CLAY, NEW CYCLE

Low-Carbon Adaptive Reuse with Endogenous Materials in NYC

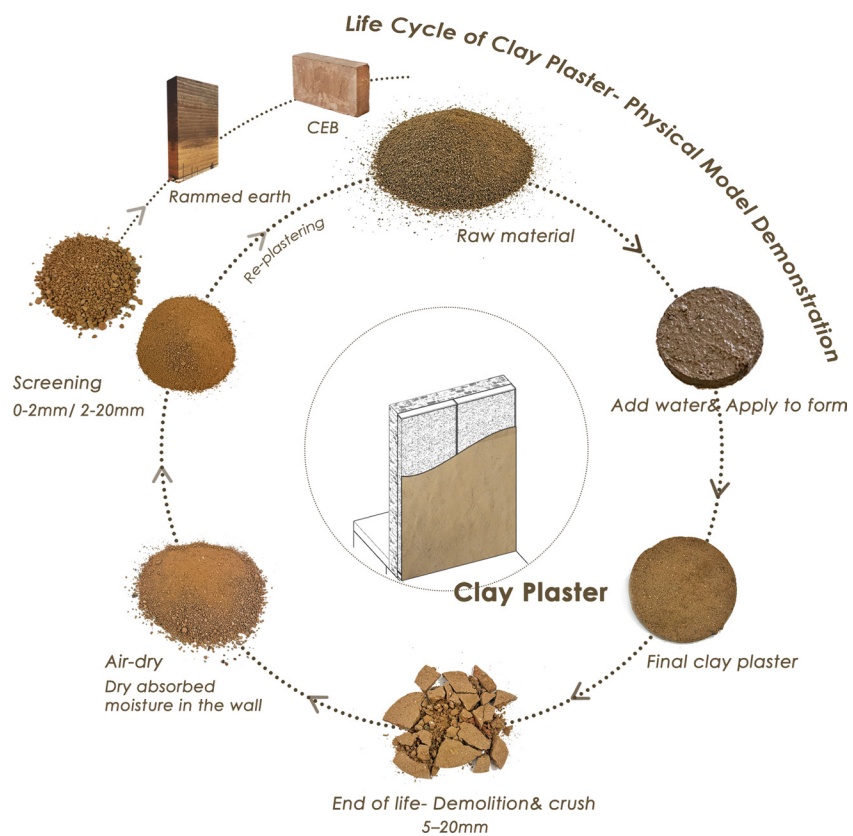
Columbia Summer 2025

Site: New York, US

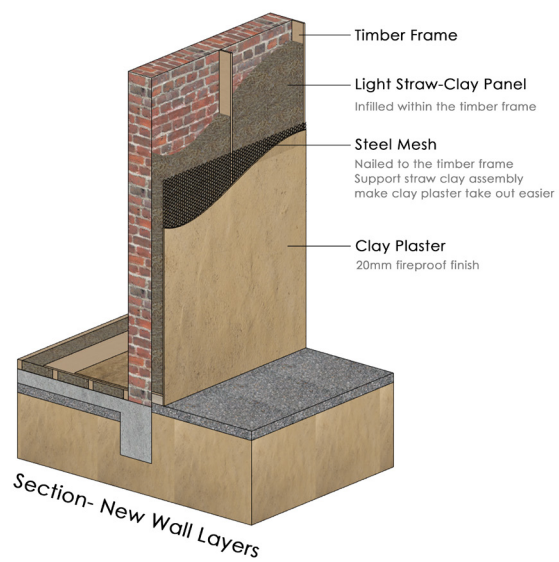
Instructor: NZINGA B. MBOUP & NICOLAS RONDET

Individual Work

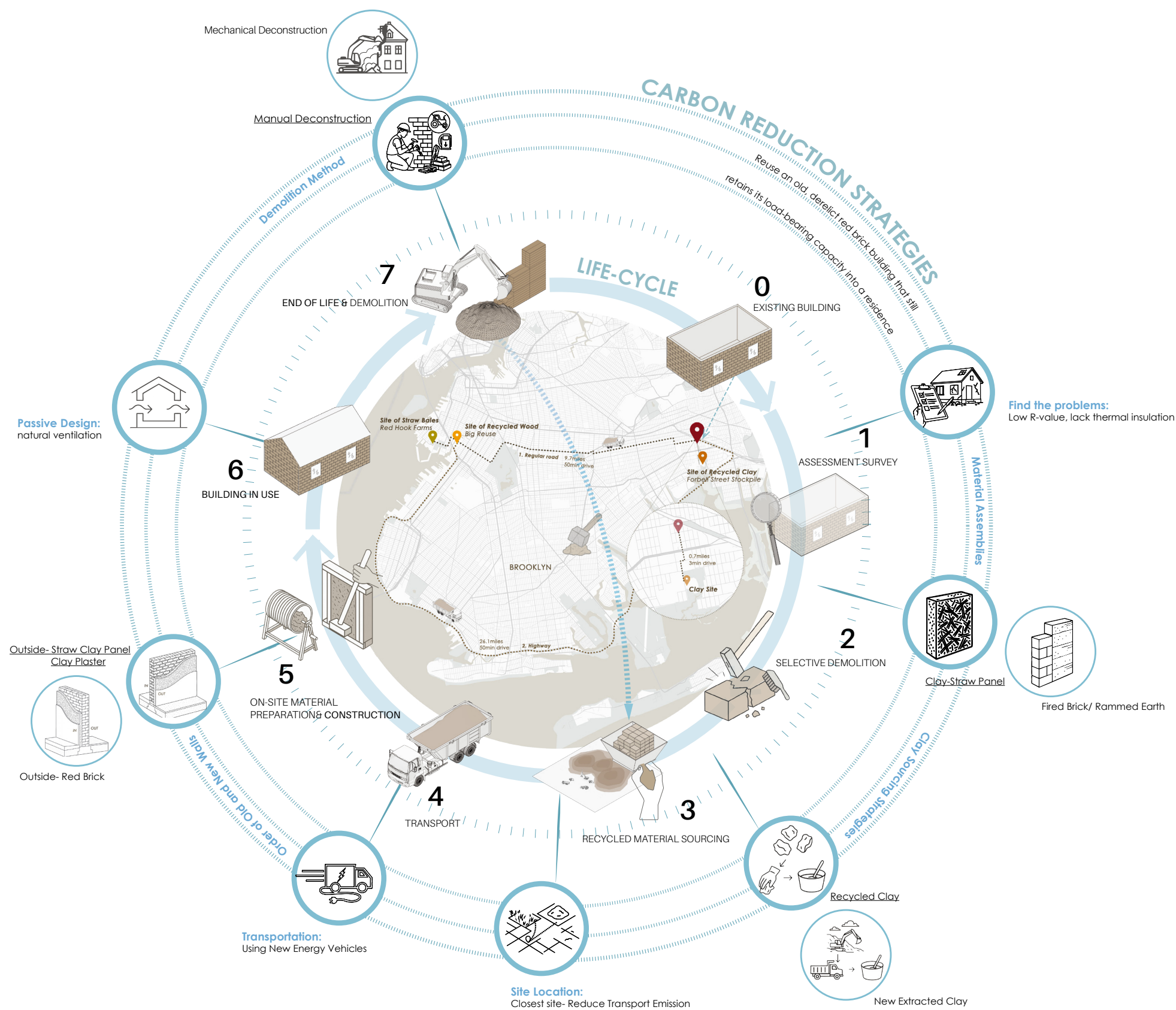
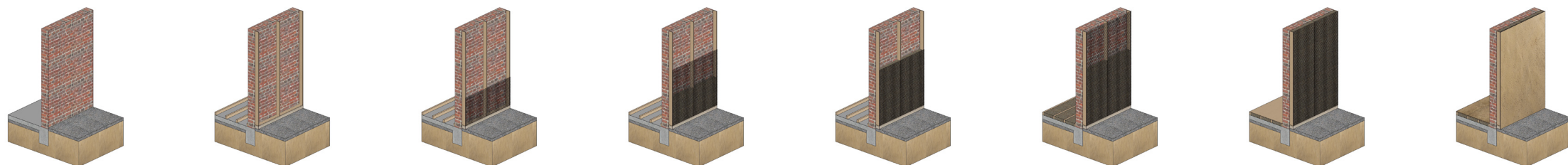
In today's context of global warming, buildings account for a significant share of global carbon emissions. Traditional design often focuses only on operational energy use, but addressing embodied carbon from the outset is essential for a truly low-carbon, sustainable building ecosystem. This project reuses a derelict red brick building in Brooklyn, integrating locally sourced recycled clay and light straw-clay panels for insulation, selective demolition, passive design, and end-of-life recyclability. By mapping the entire life cycle, the design minimizes embodied carbon, reduces transport emissions, and ensures all new materials can return to nature or be reused.



Physical Model



Construction Process



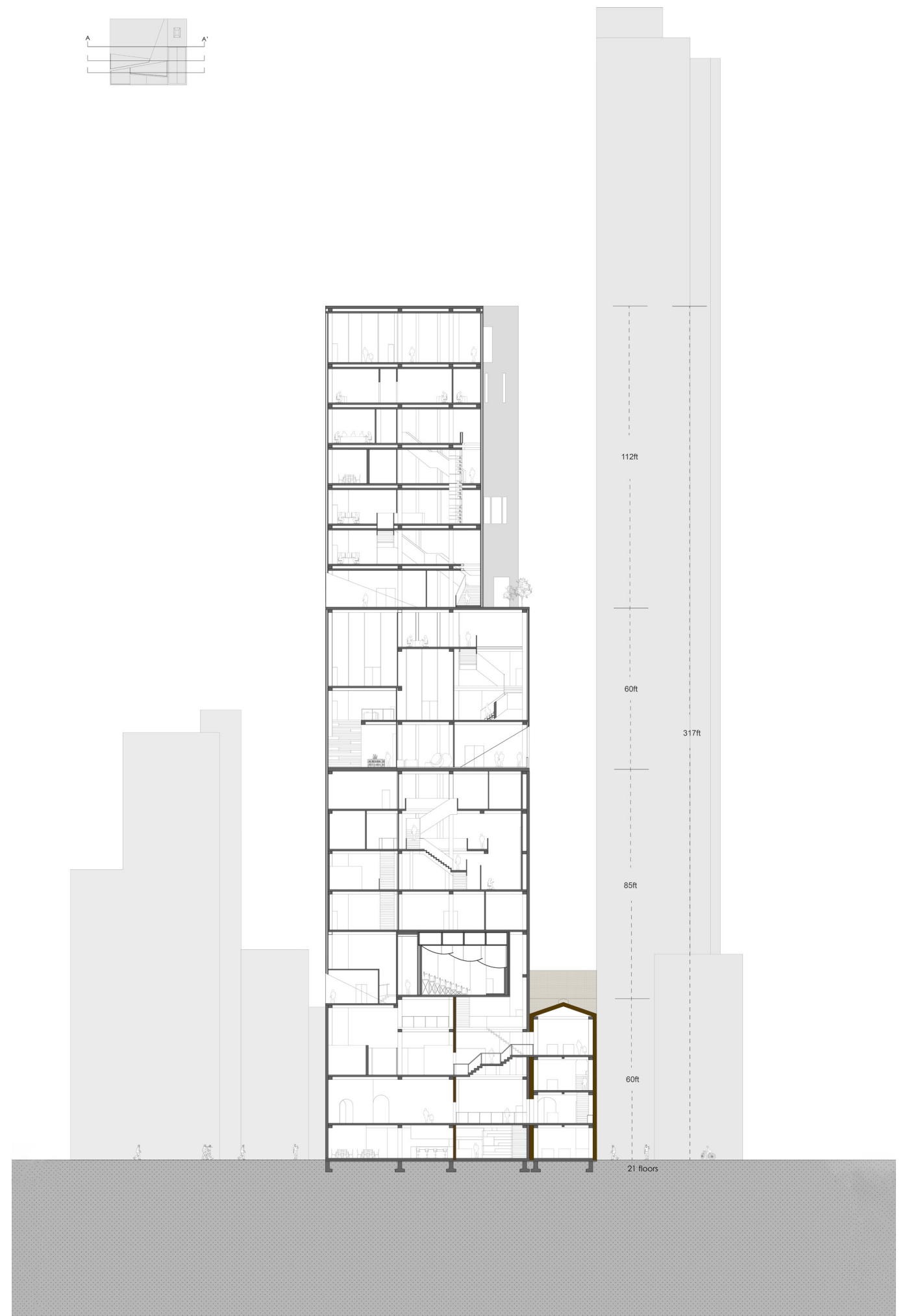


02

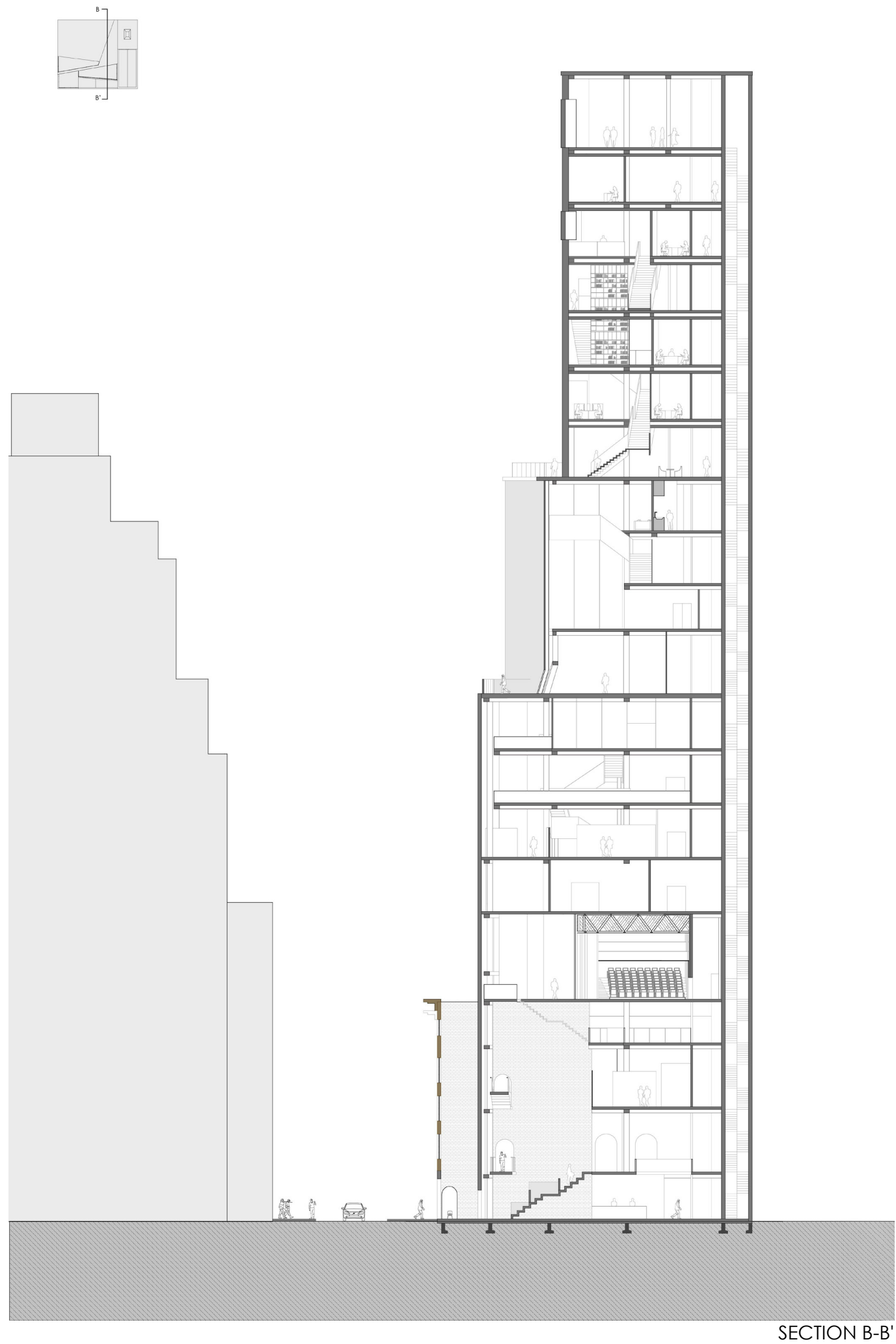
CONTINUUM: AN ARAB-AMERICAN MUSEUM IN NEW YORK

*Columbia Fall 2025
Site: New York, US
Instructor: Amale Andraos
Individual Work*

The project envisions an Arab-American Museum composed of three interrelated blocks — Cultural Display, Cultural Exchange, and Cultural Production. Together, they form a continuous loop that allows culture to be seen, shared, and re-created. The circulation moves from exhibition to dialogue to making, turning the museum into a living ecosystem of memory and creation — a place where Arab-American identity is not only preserved, but continually renewed.



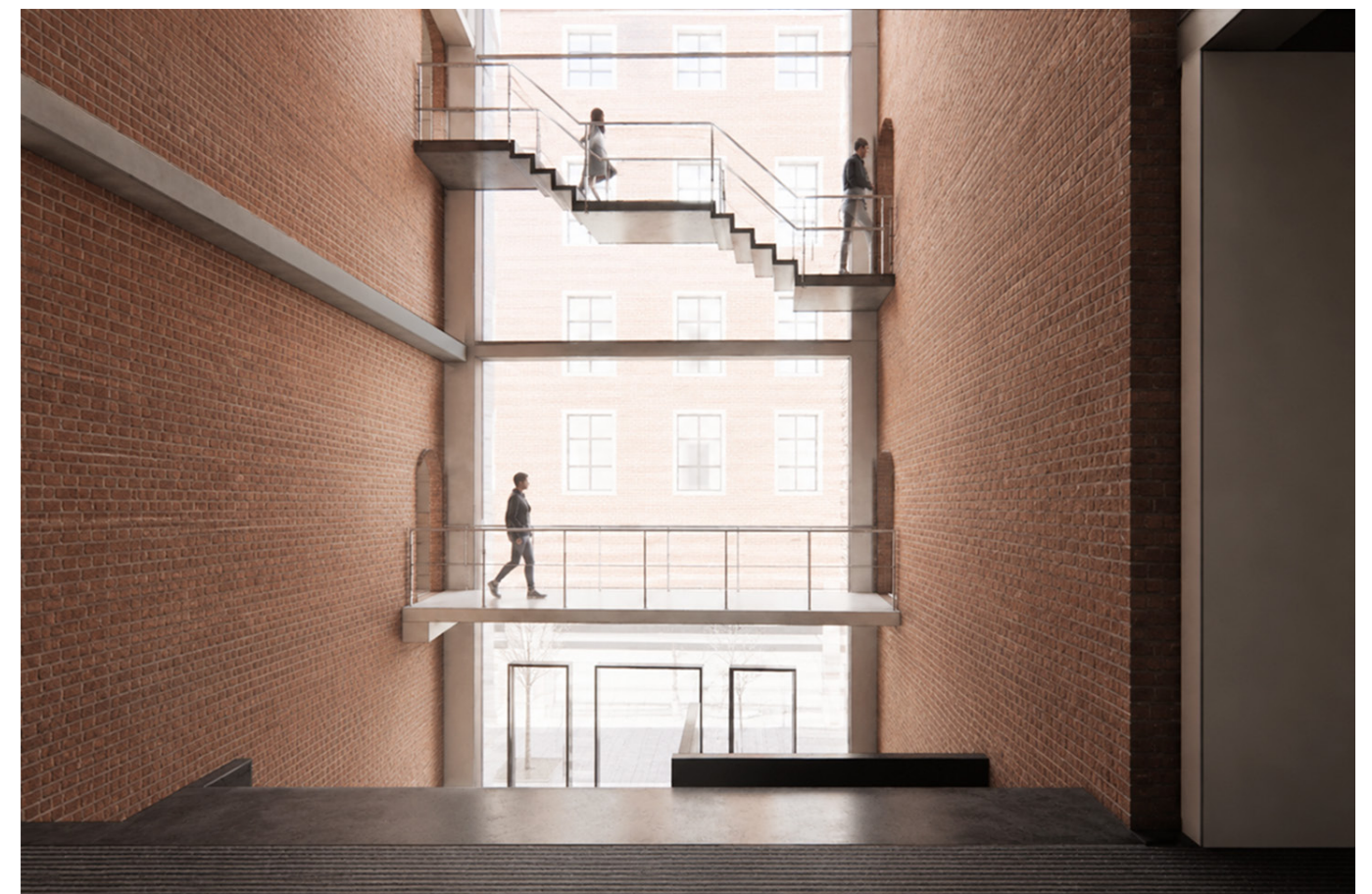
SECTION A-A'



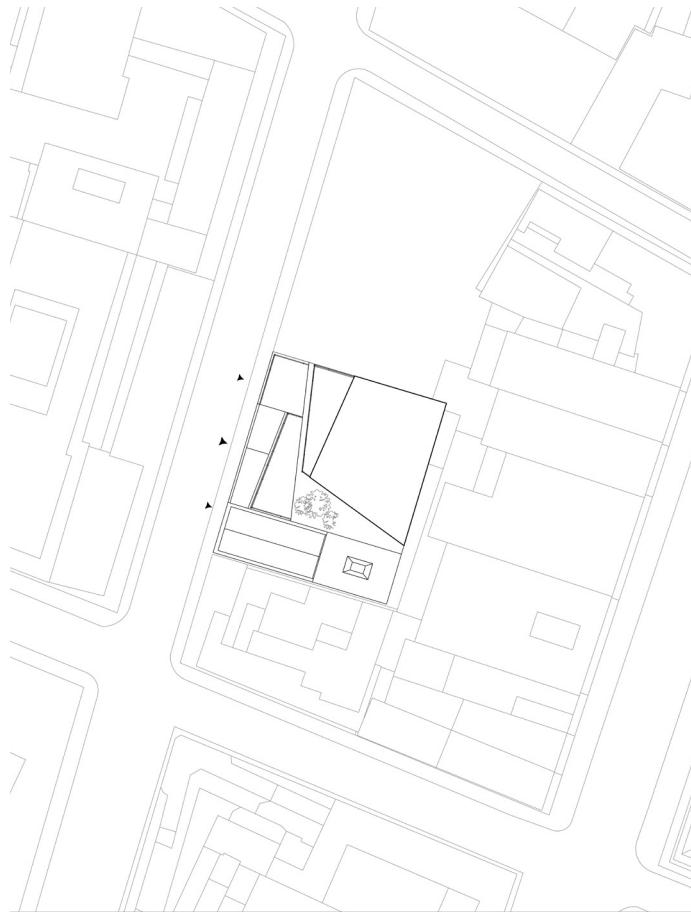
SECTION B-B'



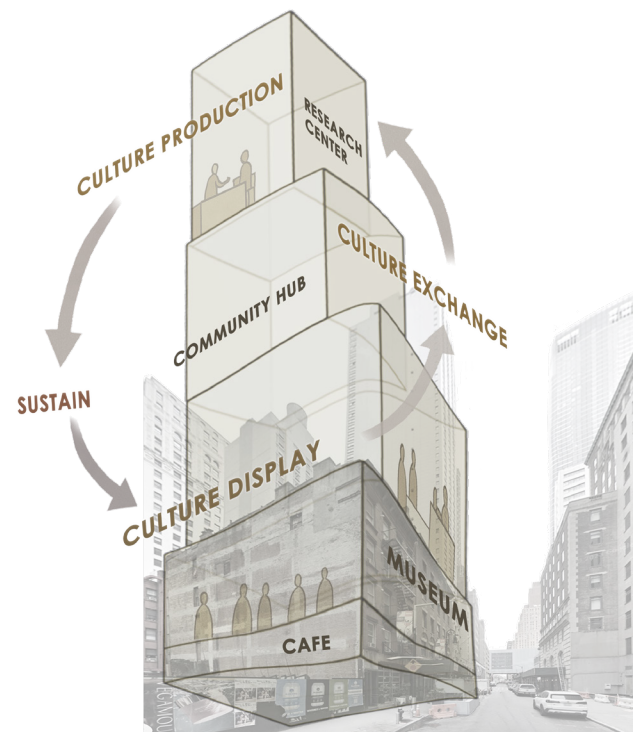
Interior- Exhibition Space



Interior- Entrance lobby



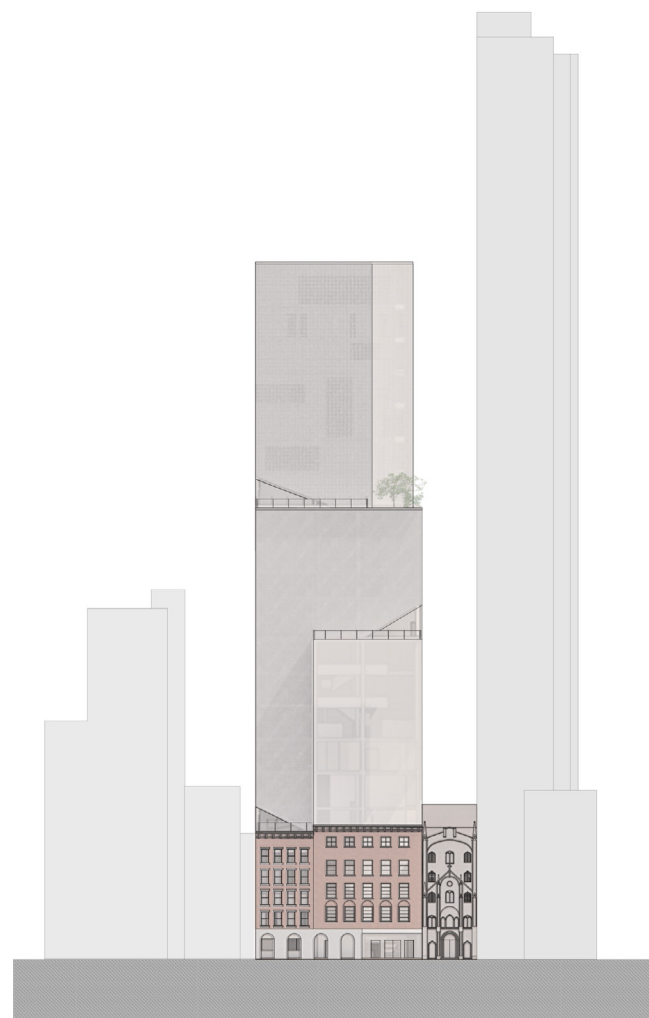
Site Plan



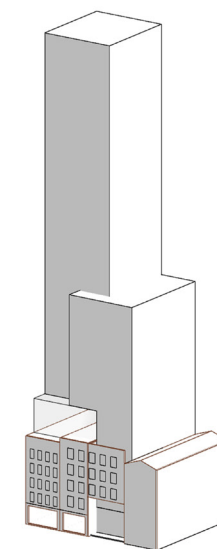
Concept Diagram



Interior- New&old connection

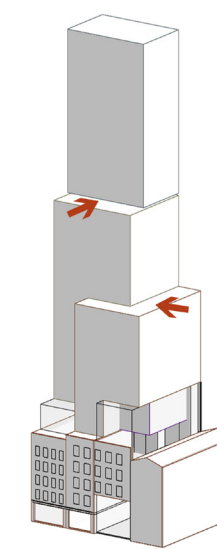


Elevation



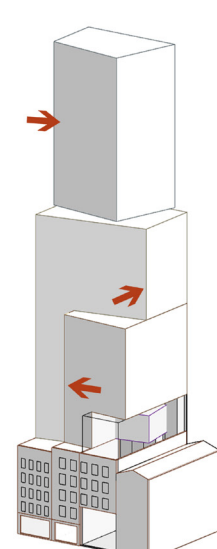
Preservation and Entrance Formation

Three historic facades are preserved, while the central facade is partially removed to form a new entrance threshold. A taller tower is placed on the west side in response to the sun path and surrounding skyline



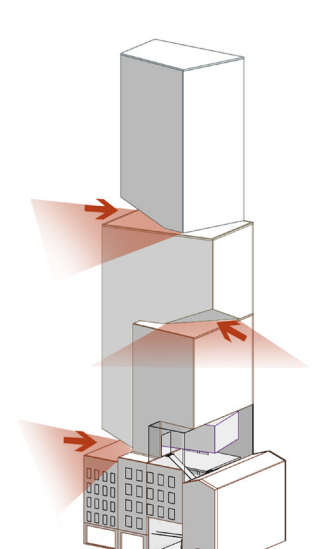
Volumetric Composition and Setback

Based on the design concept, three main volumes are established and stepped back according to the sky exposure plane regulation, forming a terraced urban profile



Rotation and Interaction

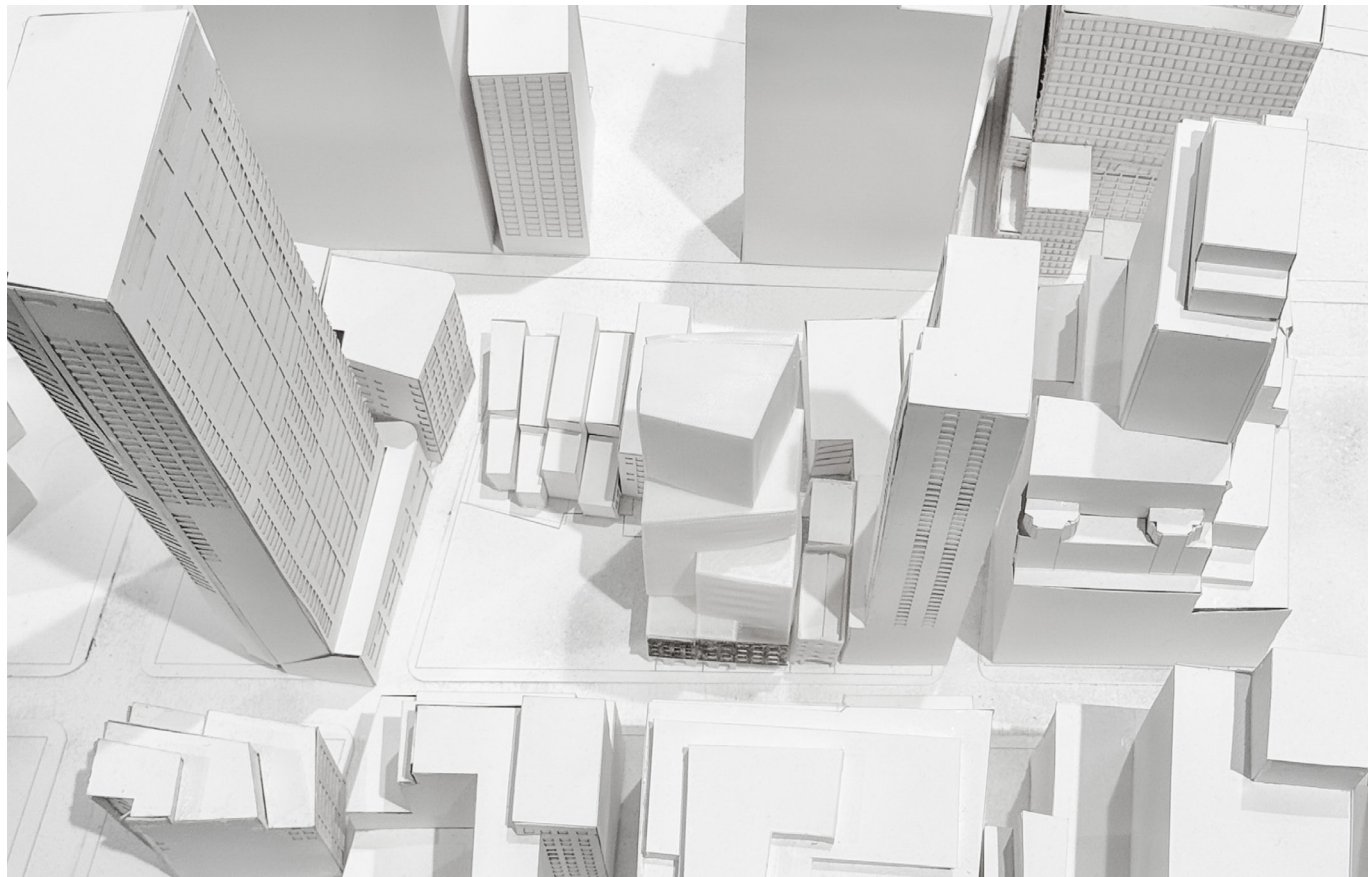
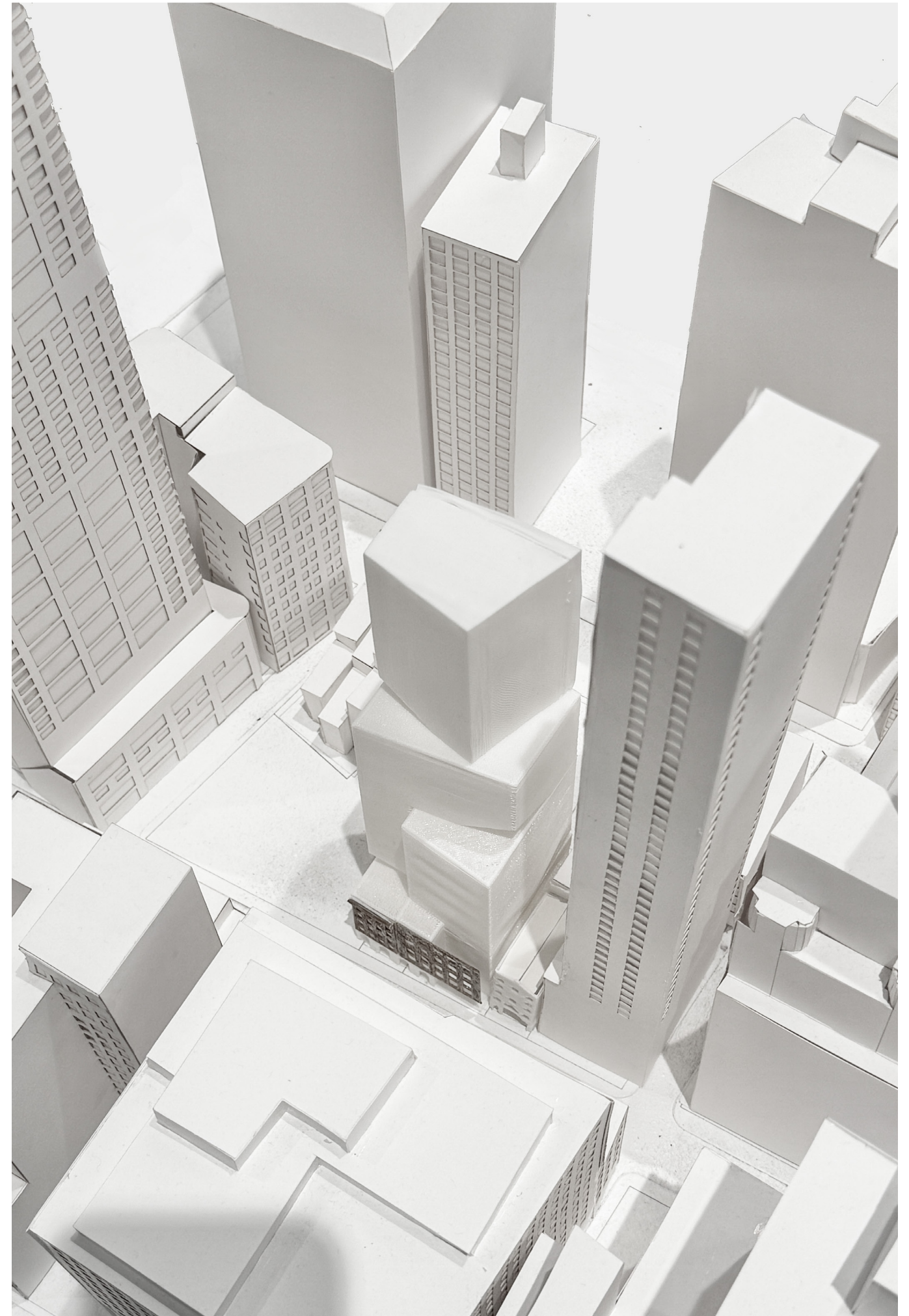
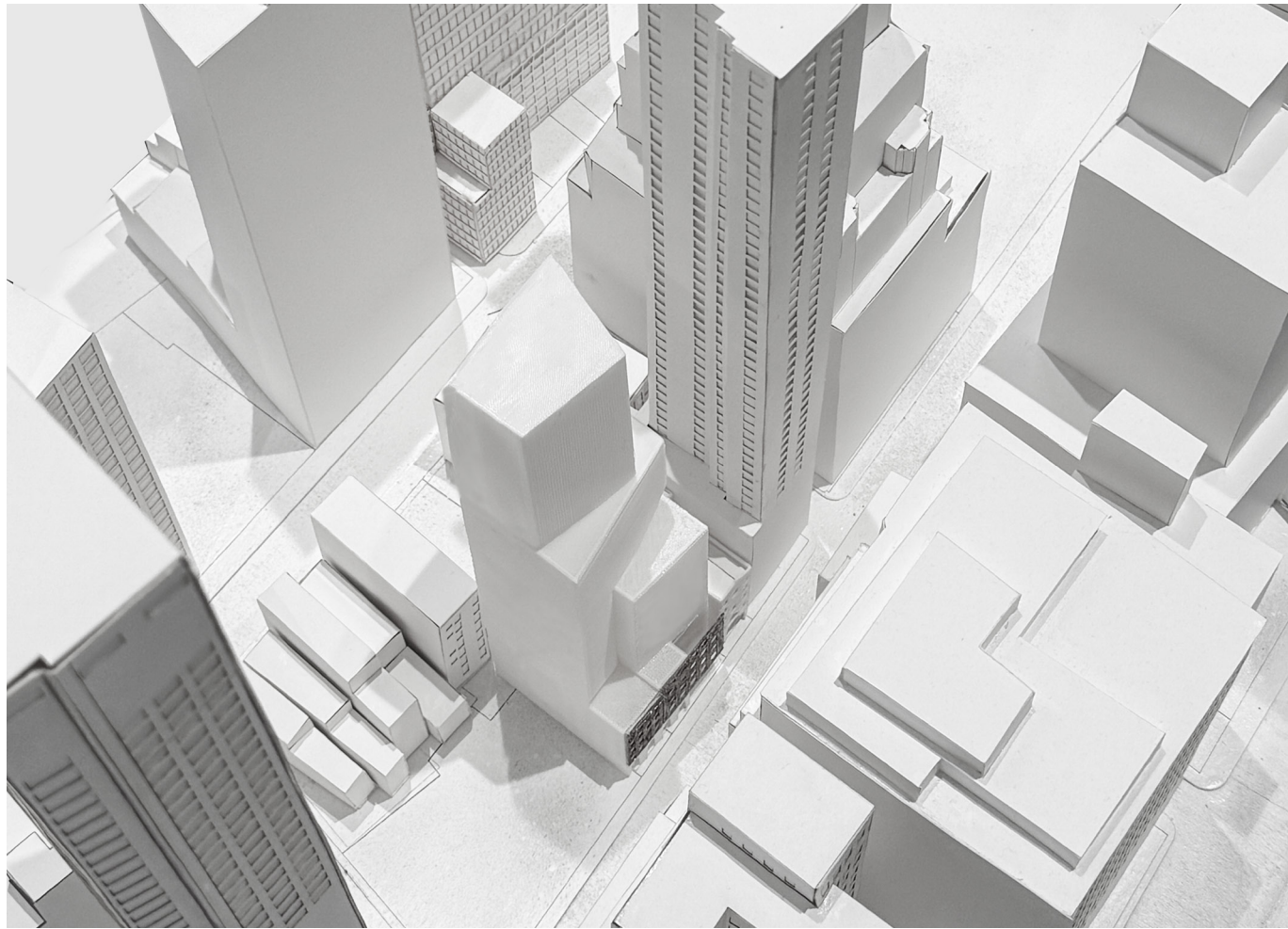
The facades of the three volumes are slightly rotated and twisted to enhance spatial interaction and dialogue with the surrounding context



Urban Terraces and Views

Small openings are carved beneath each volume to create terraces, framing views toward different parts of the city and providing public resting spaces

Massing Process



Physical Model



03

TO FOLD

Berggruen Institute Hudson Valley

Columbia Spring 2026

Site: New York, US

Instructor: Steven Holl / Garrick Ambrose

Group Work: Yutian Zhu & To Quynh Pham

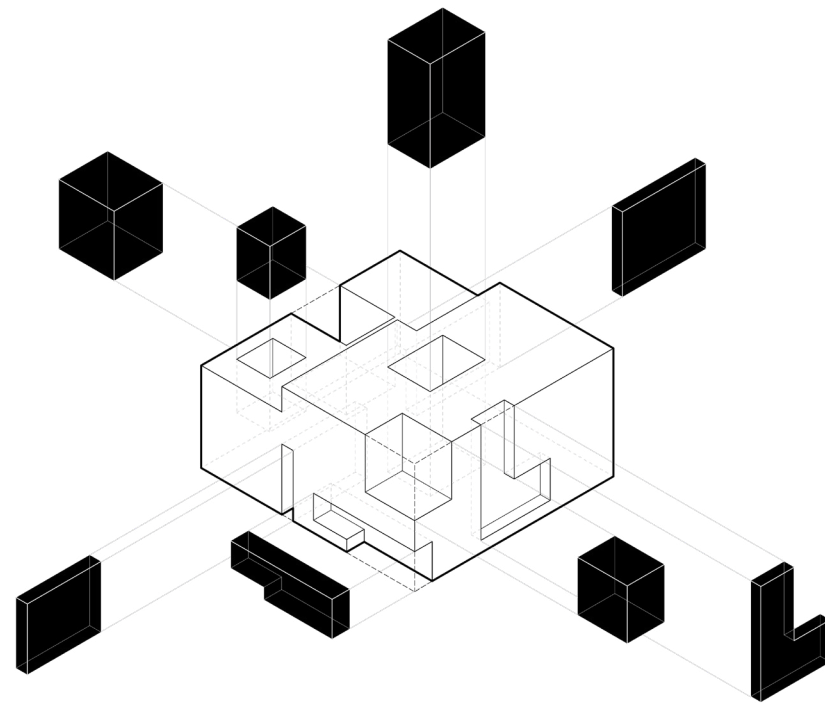
To Fold explores folding as a spatial and atmospheric language for structure and light. The project proposes a Hudson Valley branch for the Berggruen Institute, where art, architecture, literature, music, and ideas meet within a retreat like environment.

Folding creates voids for light, air, water, and vertical connection. Courtyards, stairs, and circulation spaces are carved from the mass, connecting public programs such as gallery, library, and auditorium with more private residences, studios, and offices. These courtyards maintain visual continuity while preserving separation between programs.

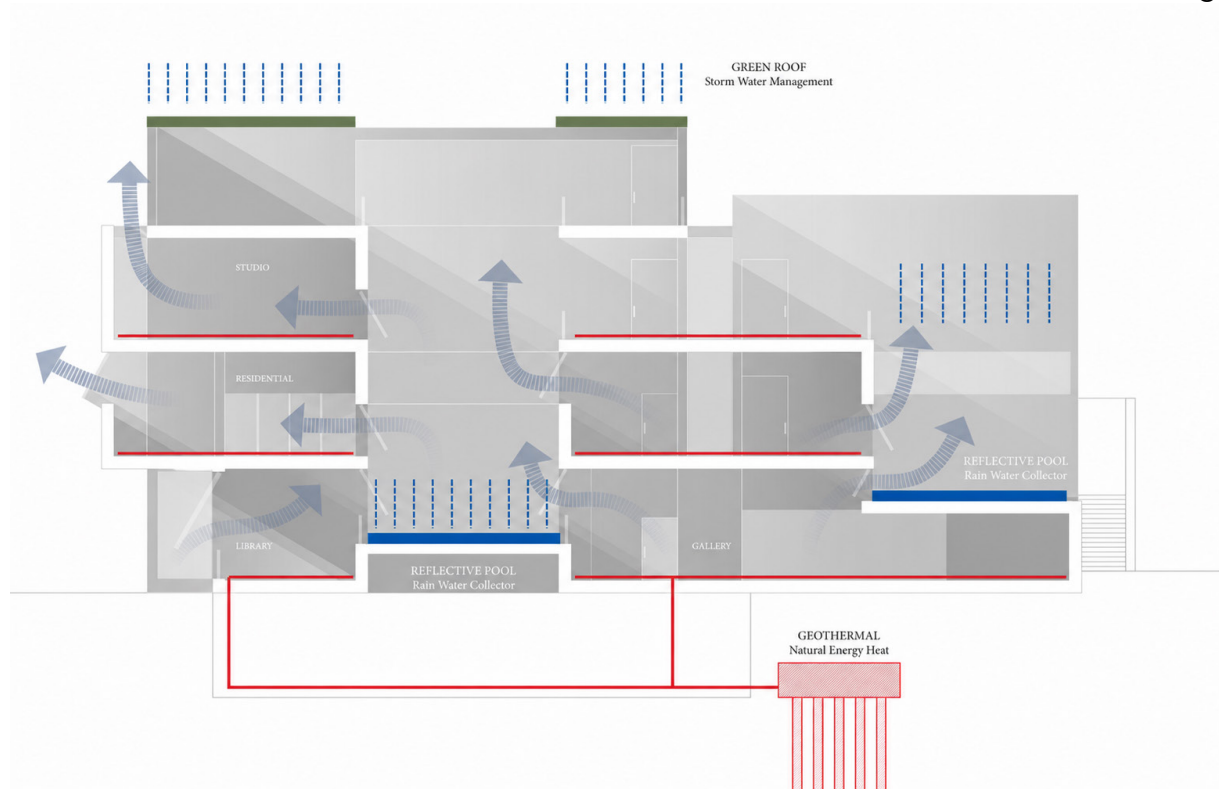
Built with Cross Laminated Timber and wrapped in corrugated metal, the project responds to the horizontal patterns of the surrounding neighborhood. Water gardens, natural ventilation, green roofs, and geothermal systems turn the courtyard into both an environmental device and the atmospheric core of the building.



Program Diagram



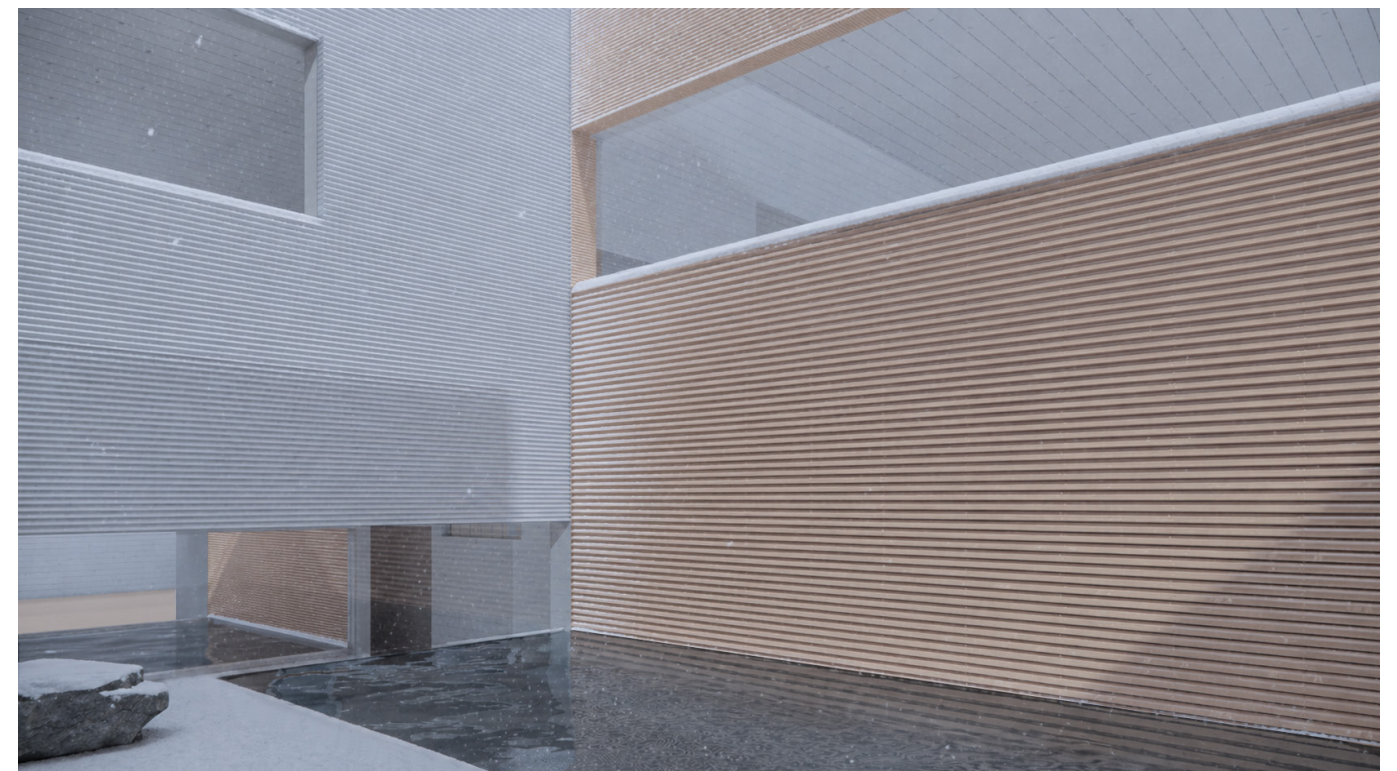
Geometric Diagram



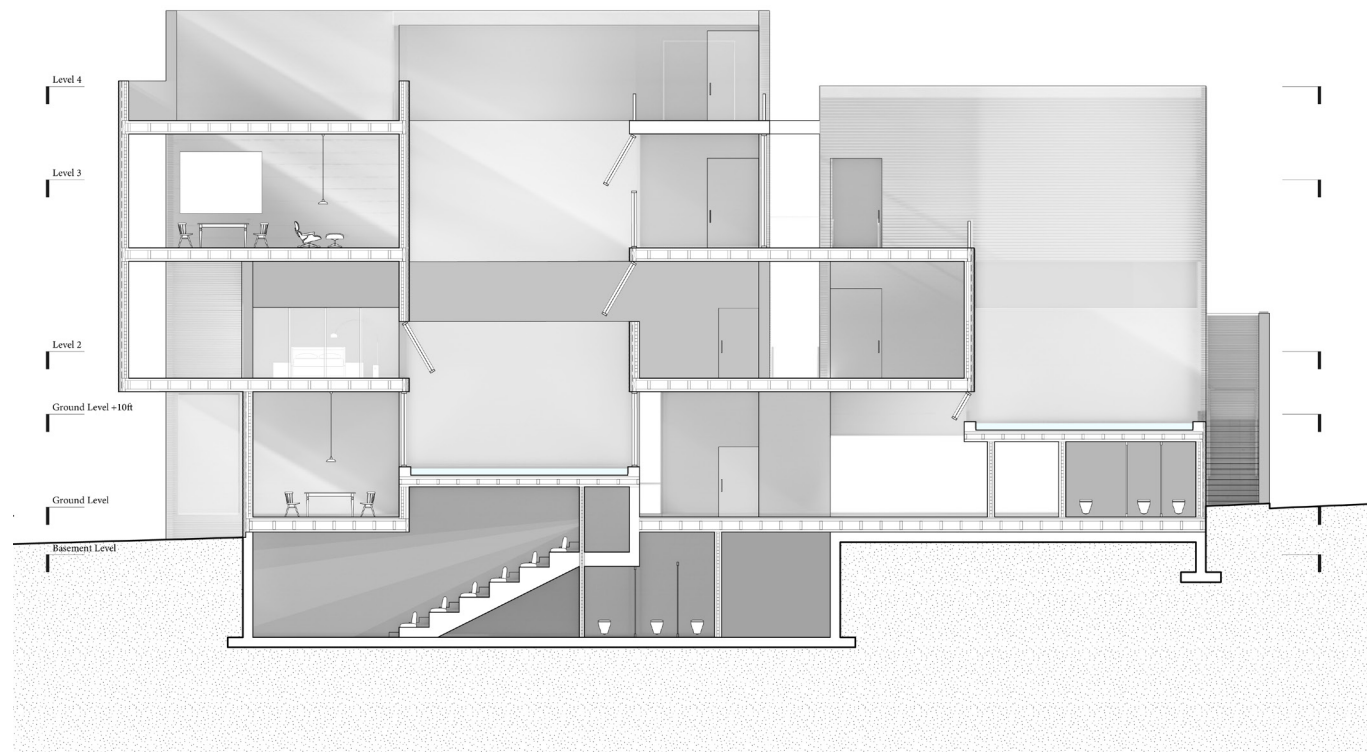
Sustainability Diagram



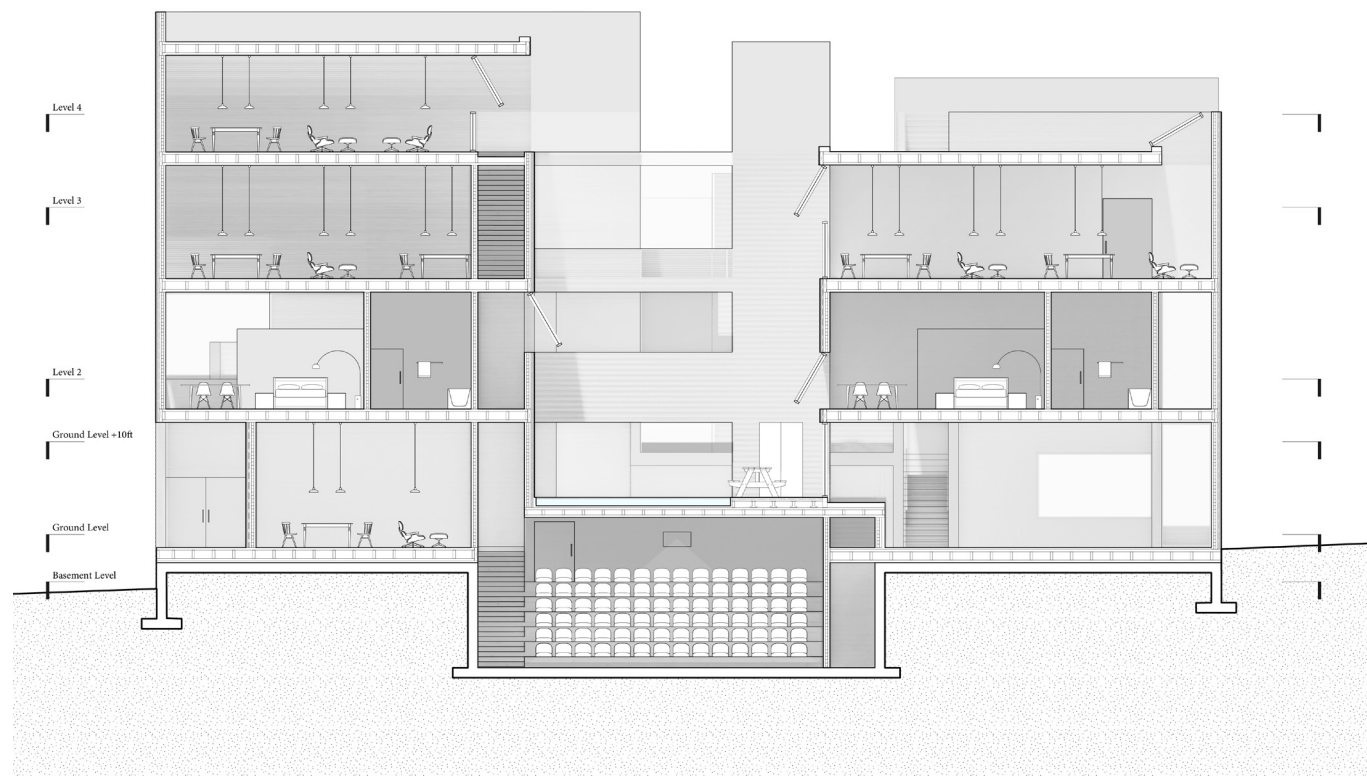
Exterior- Entrance



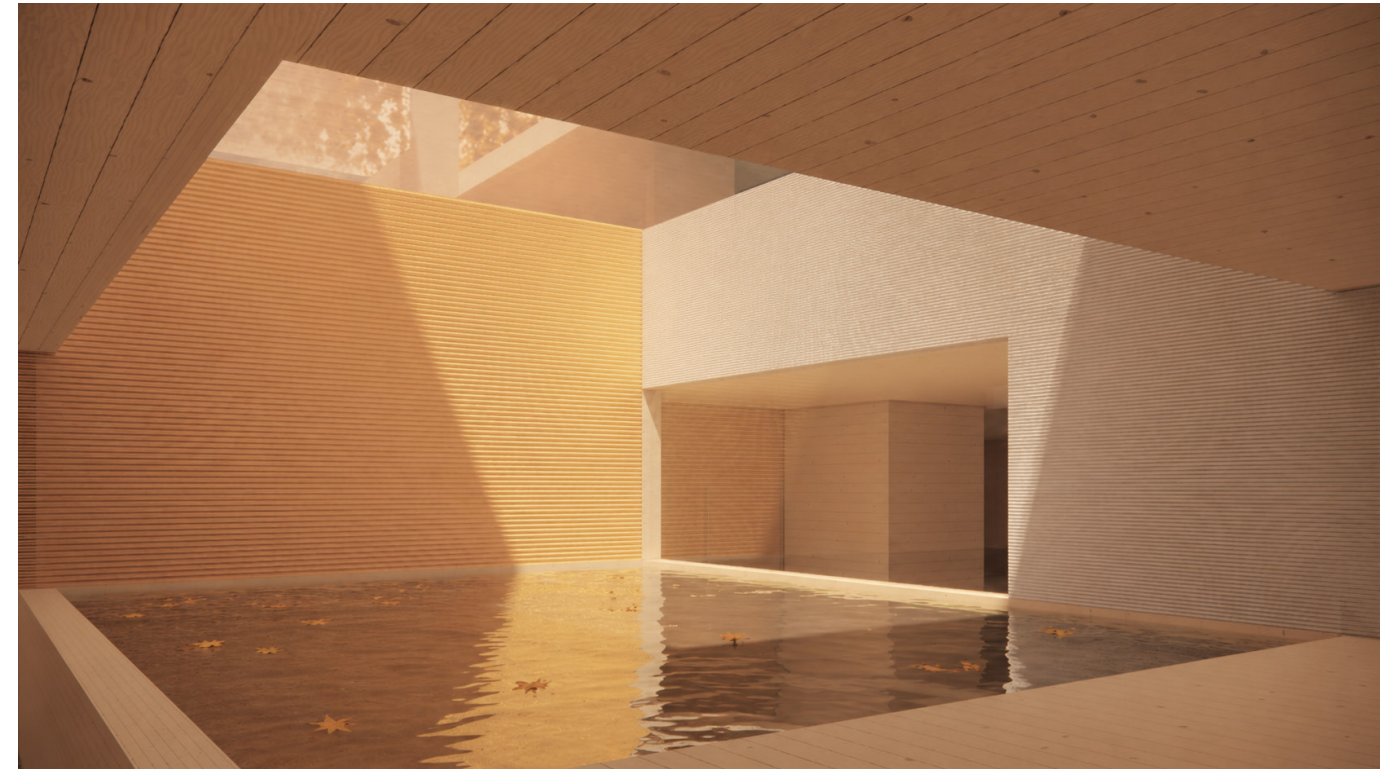
Interior- Courtyard



SECTION A-A'



SECTION B-B'



Interior- Courtyard



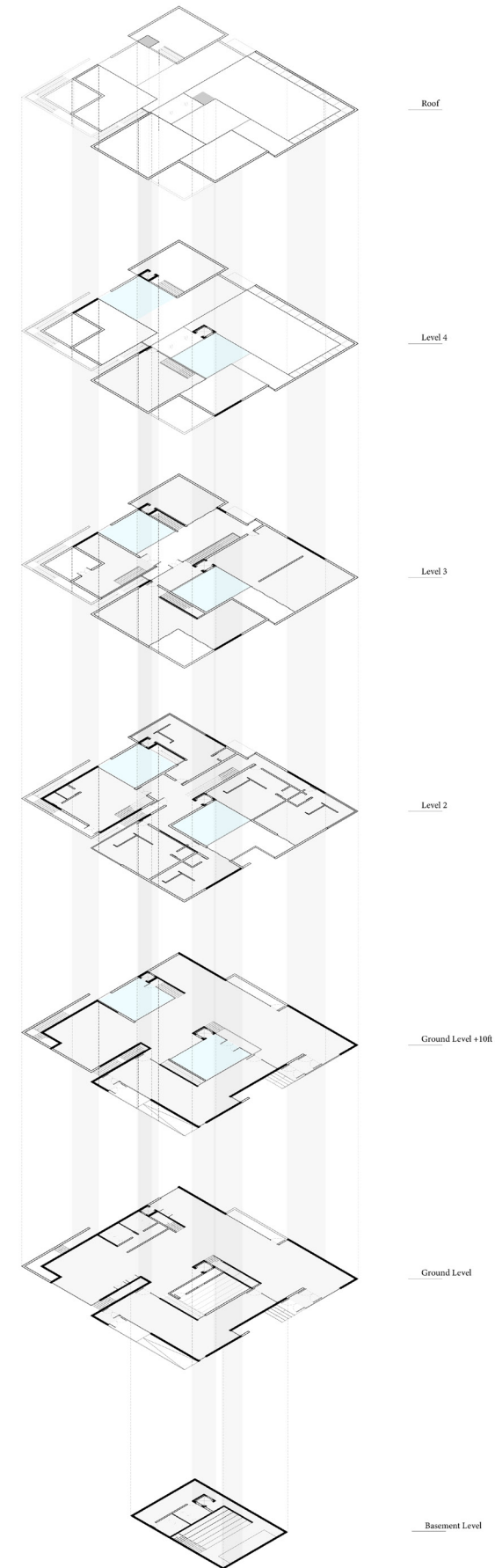
Interior- Courtyard



Site Plan



1. Reception
2. Library
3. Gallery
4. Auditorium
5. Restroom
6. Office
7. Living Studio
8. Working Studio

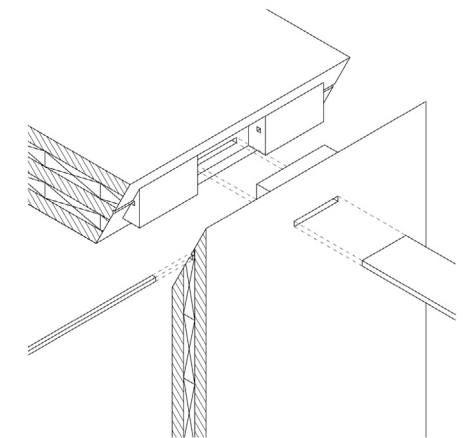
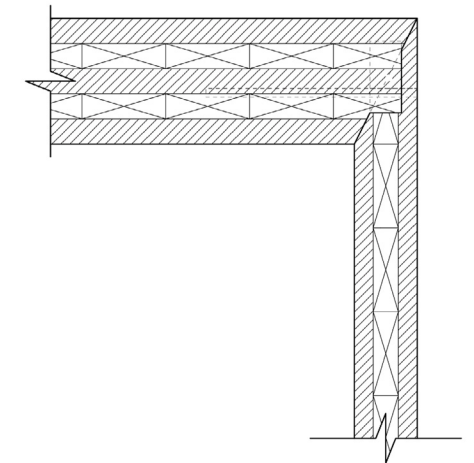


Exploded Axon

With the material choice of Cross-Laminated Timber. The structural idea is marked load-bearing in black. While some make it to the top level to bare loads, other raise as tall as they could get to support the upper level.

We intend to make the joints as invisible as possible. One of the ideas is learning from the Japanese master of wood joinery to perfectly fit within one another, all while remaining hidden.

This idea of concealing developed into the way we make the physical model - Cover the edges with a continuous, overlapping corner.



Structure Detail- CLT

