DELICIOUS VERTICA NEIGHBOURHOOD COURSE: ARC362 - Architecture Studio IV EX3: Maturing Instructor: Mauricio Quiros Pacheco Teaching Assistant: Muskan Goel Student: Daniel Hyunsu Kim Winter Term 2024

▼ Model photograph; facade detaches to reveal the structure as well as 3 critical moments in plan layout





Bonding Community through Food

Vertical buildings, while space-efficient, often face challenges such as social disconnection, lack of community, and increased feelings of loneliness. To address these issues and create a vertical neighborhood, one effective approach is to focus on communal activities centered around food. Food naturally brings people together and encourages healthy habits like cooking. For students, cooking is also a cost-effective necessity, making it a practical communal activity.

▼ Model photograph



Promoting Mingling by Scrambling Programs

To enhance community connection, each residential unit is designed with a kitchen that connects to the building's main circulation paths through a perforated design. This setup encourages interaction among residents. Double-layered curtains are used in the kitchens to allow residents to personalize their spaces and balance privacy with openness.

The building design features a gradient of privacy, transitioning from public corridors to semi-public kitchens and living rooms, and finally to private bedrooms. Communal amenities are strategically placed throughout each floor, including living rooms near laundry facilities, grocery stores, multipurpose spaces for activities like yoga and dance, small concert and lecture halls, various restaurants, cafes, prayer rooms, barbecue and party rooms, rooftop greenhouses for fresh produce, secure bike parking, and sheltered gardens. These amenities encourage residents to move through the building and interact with one another.







▲ Typical Floor Plan; 5th floor

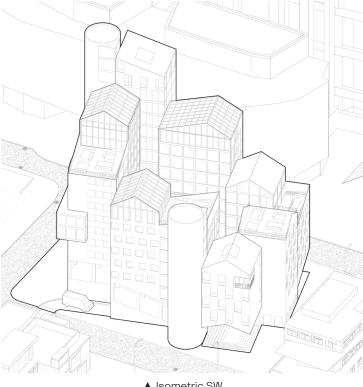












▲ Isometric SW









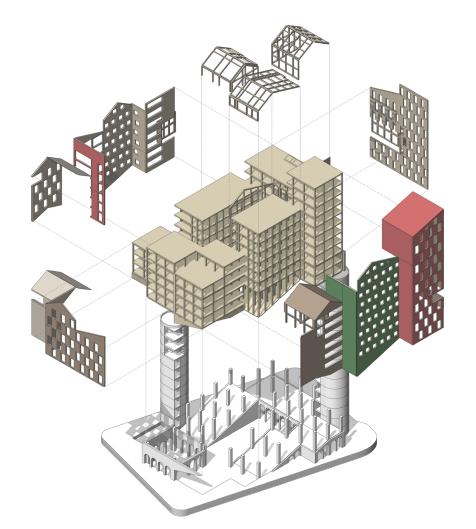








▲ Unit plans; 8 different types were made ▼ Public programs are littered around the building to encourage mixing through floors



Sustainability

Architecturally, the building's form is shaped by its site. The volume is chamfered to match the roof heights of adjacent buildings, creating a smooth visual transition. The grid is rotated to maximize sun exposure, offsetting approximately 15 degrees from Toronto's city grid. This rotation adds depth and breaks the flatness of the facade. Public and private spaces are separated through stilts, with a concrete base supporting the structure.

The residential volume is constructed with cross-laminated timber (CLT), and the facade features a combination of timber on the upper floors and concrete and lime on the lower floors. This design references traditional gabled roofs common in Canadian residential architecture, scaled up for a modern, vertical community.



▲ Elevation N



▲ Elevation E ▼ Elevation S



