BALCONY For **EKBATAN**

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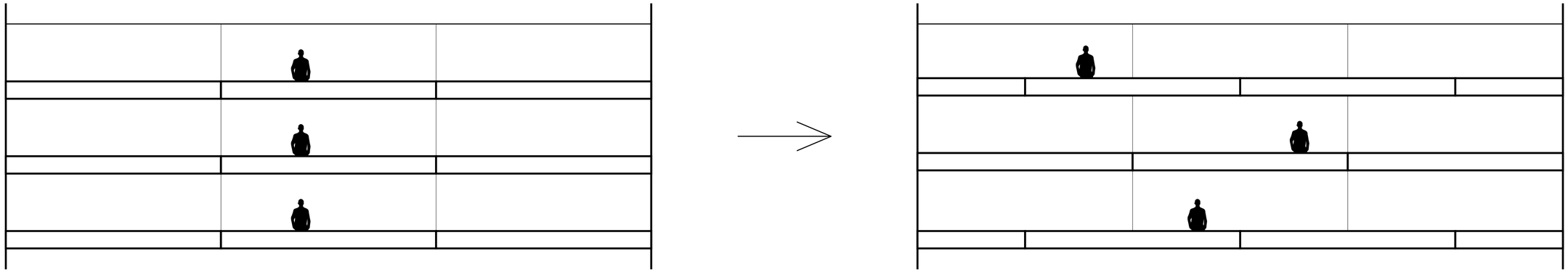
Growth Pattern of **Wild Mushrooms**

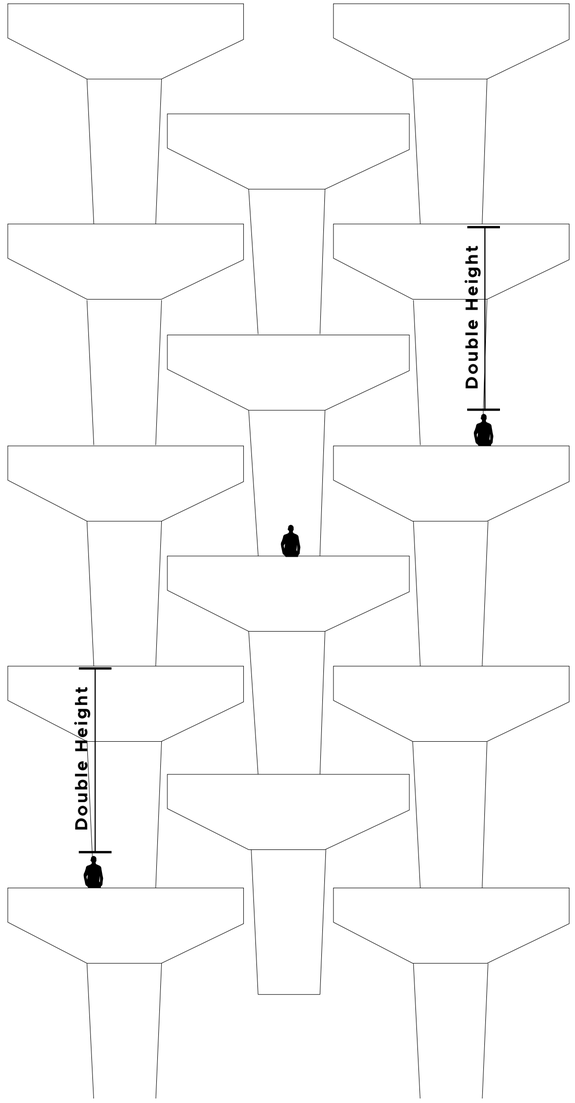
Modern urban life, with its fast pace and dense infrastructure, often leads to a growing disconnect between people and their natural surroundings. As individuals become more immersed in city living, their opportunities to engage with nature diminish, making it increasingly difficult to find moments of tranquility and connection with the environment. In this context, the home plays a crucial role—not just as a shelter but as a sanctuary where residents can pause, breathe, and experience a sense of harmony with the world outside.

One of the key architectural elements that can help restore this lost connection is the balcony. These semi-open spaces serve as transitional zones between the interior and the exterior, allowing residents to step outside while still remaining under shelter. A welldesigned balcony provides access to fresh air, natural light, and outdoor views, offering a space where individuals can unwind, reflect, and engage with their surroundings in a meaningful way.

Our concept takes inspiration from one of nature's most fascinating forms, **The Growth and Reproduction of Mushrooms**. Mushrooms, with their organic and non-linear growth patterns, symbolize adaptability, resilience, and interconnectedness. In forests, they thrive in clusters, expanding dynamically rather than following rigid, uniform structures. This natural principle guided our design, allowing us to create a balcony system that is both functional and aesthetically integrated with its surroundings.



Inspired by the natural pattern of wild mushrooms, we changed the routine arrangement of balconies and slid them on top of each other.



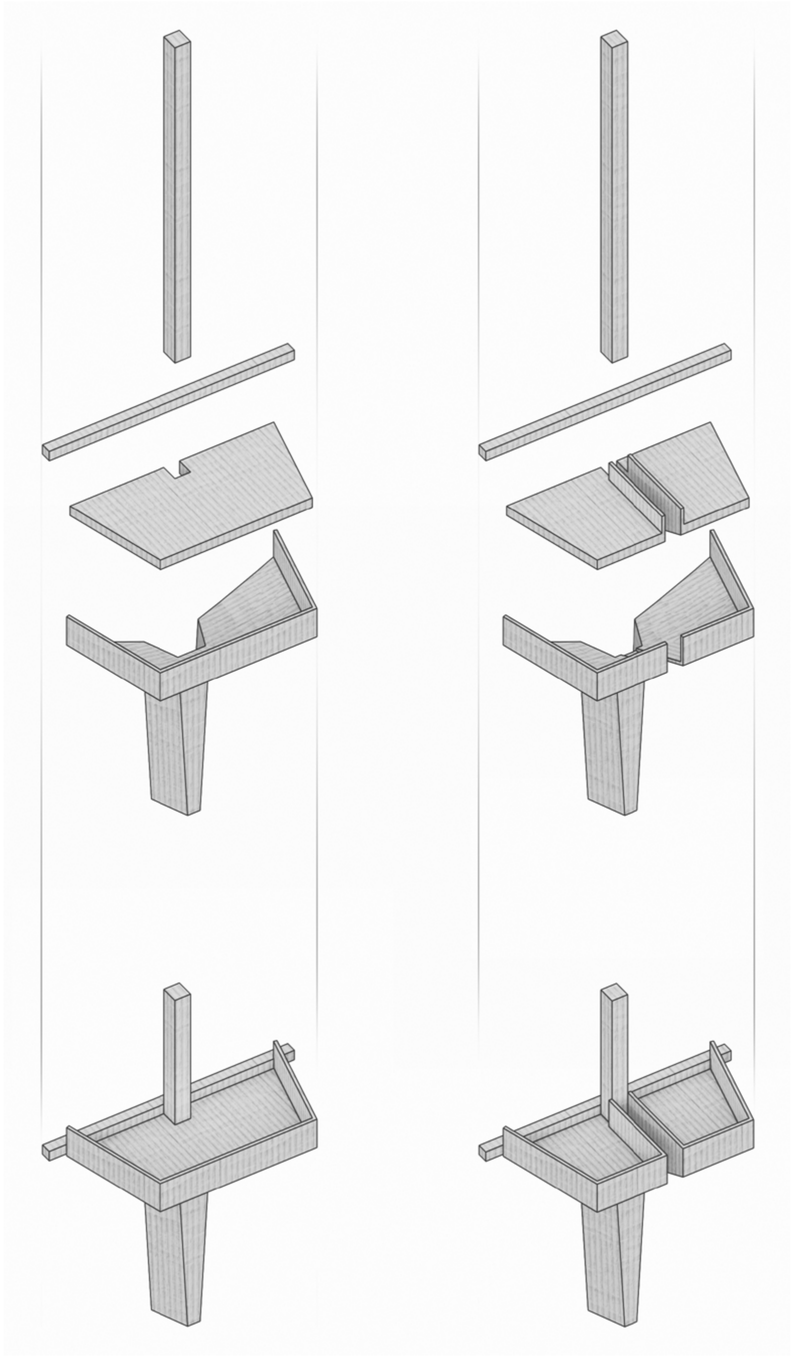
We design **Double Height** balconies to represent the timeless essence of a courtyard, seamlessly blending openness, natural light, & a sense of community within modern apartment living.

TYPE 1

Each balcony functions as an extension of the living space, allowing residents to experience the benefits of outdoor living without leaving their homes. Whether used for relaxation, gardening, social interactions, or simply enjoying the view, these balconies offer a meaningful connection to nature within the urban fabric of Ekbatan.

By introducing these mushroom-inspired balconies, we aim to redefine the role of architecture in urban living. Instead of viewing buildings as mere shelters, we believe that architectural design should foster a deeper connection between humans and their environment. Our design transforms the Ekbatan complex from a rigid, enclosed structure into a living, breathing space—one that harmonizes with nature, encourages social interaction, and enhances the overall well-being of its residents.

A key feature of our design is that the balconies are not arranged in a single linear row. Just as mushrooms in nature grow in varied, overlapping clusters, our balconies are distributed across different levels and positions. This unconventional arrangement creates depth and variation in the building's façade, giving it a more organic and dynamic aesthetic. However, this also leads to a unique challenge,some balconies are naturally shared between two adjacent residential units.



TYPE 2

To address this challenge while maintaining both privacy and functionality, we devised a modular solution. Instead of compromising the usable area, we divided the main balcony module into two distinct sections, ensuring that each unit has its own dedicated outdoor space. Despite this division, both sections remain true to the original mushroom-inspired concept, preserving the visual unity and organic essence of the overall design.

To ensure that the newly designed balconies seamlessly integrate with the existing Ekbatan complex, special attention has been given to the material selection and construction technique. Since the main facade of the building is constructed from concrete, it was essential to use a similar material for the balconies to maintain visual harmony and structural cohesion.

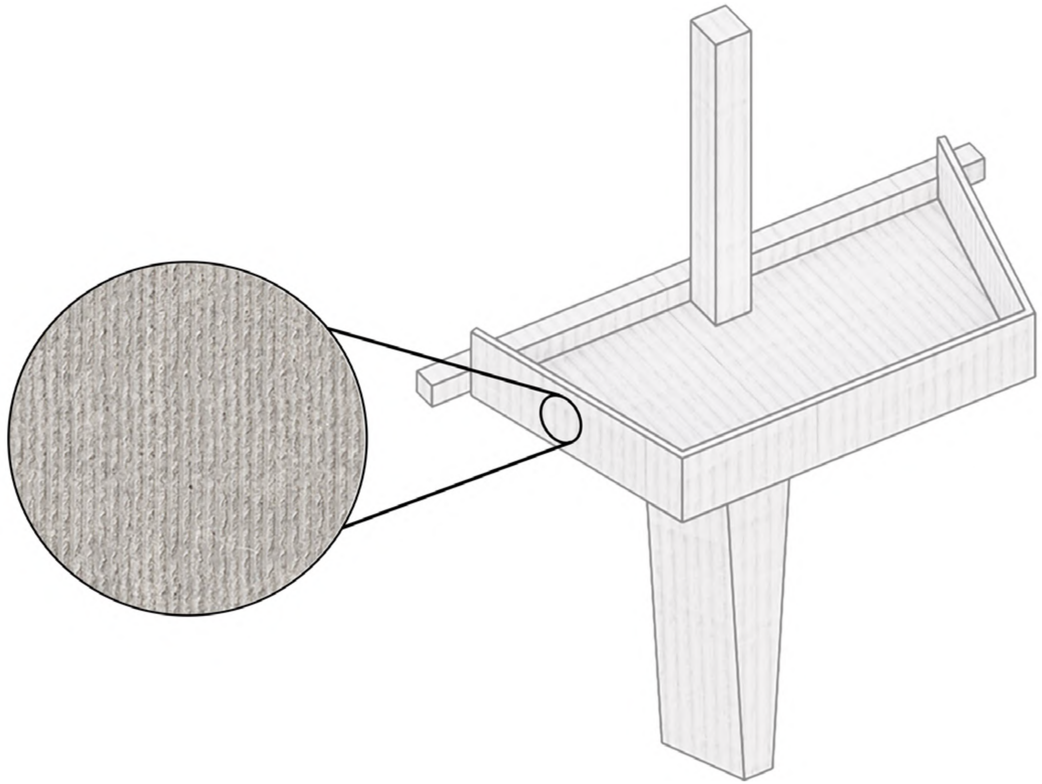
For this reason, the balconies have been designed using bush-hammered in situ concrete, a technique that enhances the texture and aesthetic quality of the surface while keeping the material in its natural, neutral color. This finish not only complements the original brutalist character of the Ekbatan complex but also provides a durable, weather-resistant surface that can withstand environmental conditions over time.

Balconies Material

Our selected material for the balconies is **precast bush hammered in-situ concrete**.

The primary reason for this choice is to maintain harmony with the overall project, whose main material is concrete. However, we opted for a lighter shade to create a subtle distinction, ensuring the balconies remain visually prominent while still complementing the overall design.

The vertical grooves in the bush-hammered finish introduce a sense of movement to the facade, reinforcing the vertical orientation of the design. This texture not only enhances the visual dynamics of the elevation but also further differentiates the balconies from the rest of the structure while maintaining a cohesive aesthetic.



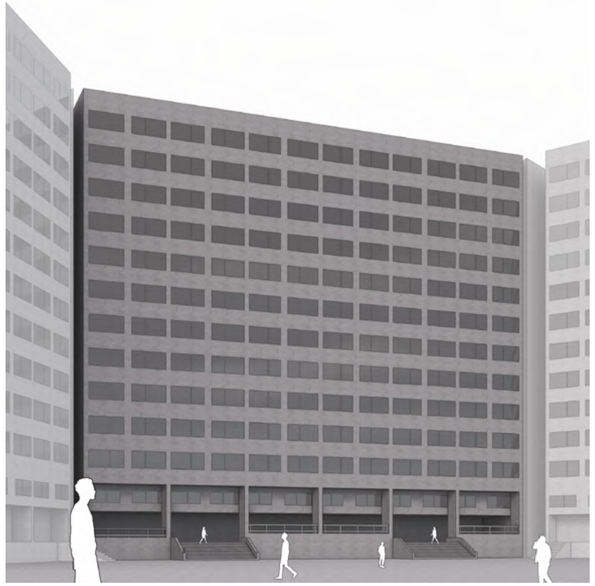
The selected material has also been used in the structure itself. Compared to other structural options, such as steel structures, it is more cost-effective, contributing to an overall reduction in construction costs. Additionally, its durability and structural efficiency make it a practical choice for long-term performance. Moreover, using a consistent material throughout the project enhances visual and architectural cohesion.

Using Concrete as Material with these features:

+ **In-Situ**
+ **Hammered**

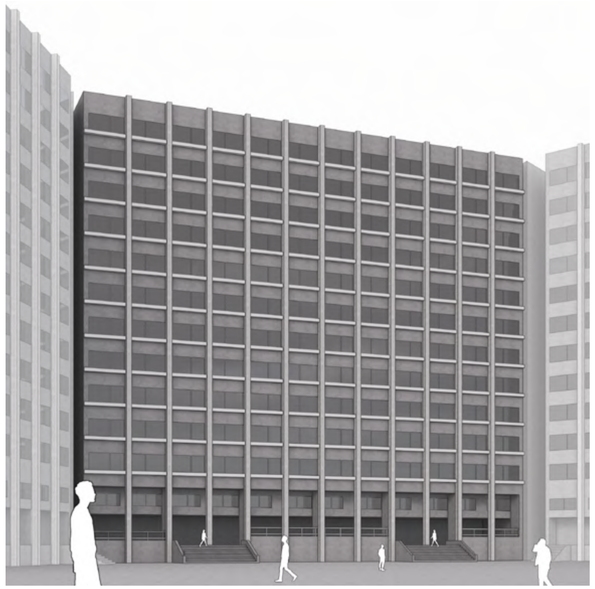
Leads To

+ **Low Cost** Material
+ Emphasis On **Vertical Axes**



1. Ekbatan Block

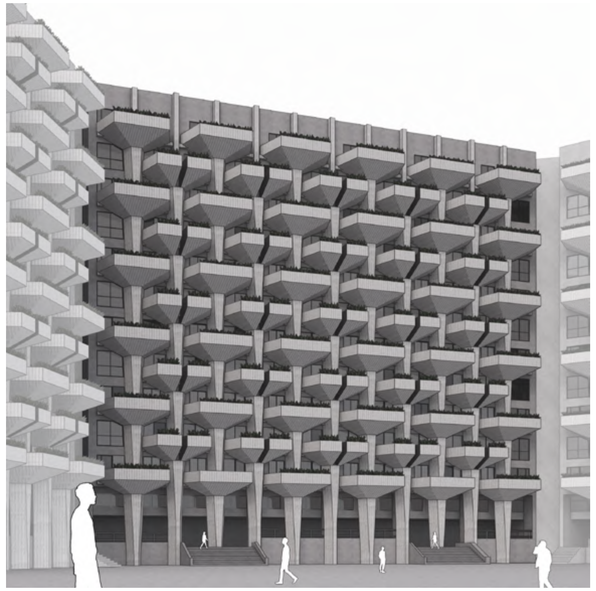
Despite its monumental scale and historical significance, the Ekbatan complex has primarily functioned as a self-contained residential environment, designed to provide security, stability, and efficiency in an urban setting. As one of the largest modernist housing projects of its time, Ekbatan embodies the principles of function-driven, high-density architecture, characterized by repetitive geometric forms, raw concrete facades, and a focus on structural durability. While this approach successfully addressed the need for mass housing, it resulted in an architectural landscape that prioritizes function over fluidity, leaving little room for dynamic interaction with the surrounding environment.



2. Columns & Beams

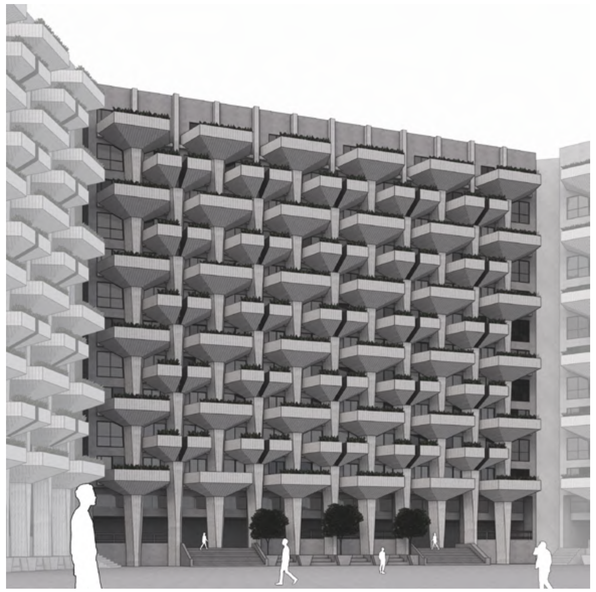
These balconies are self-supporting structural additions, independent yet seamlessly integrated with the building. A network of columns and beams provides stability, ensuring loads are managed without stressing the main structure.

Forces are directed to the ground through supporting columns, preserving the Ekbatan building's integrity. This design maintains architectural harmony while enhancing functionality. Additionally, the materials used are chosen for durability and aesthetic compatibility. Such an approach allows for long-term stability and minimal maintenance requirements.



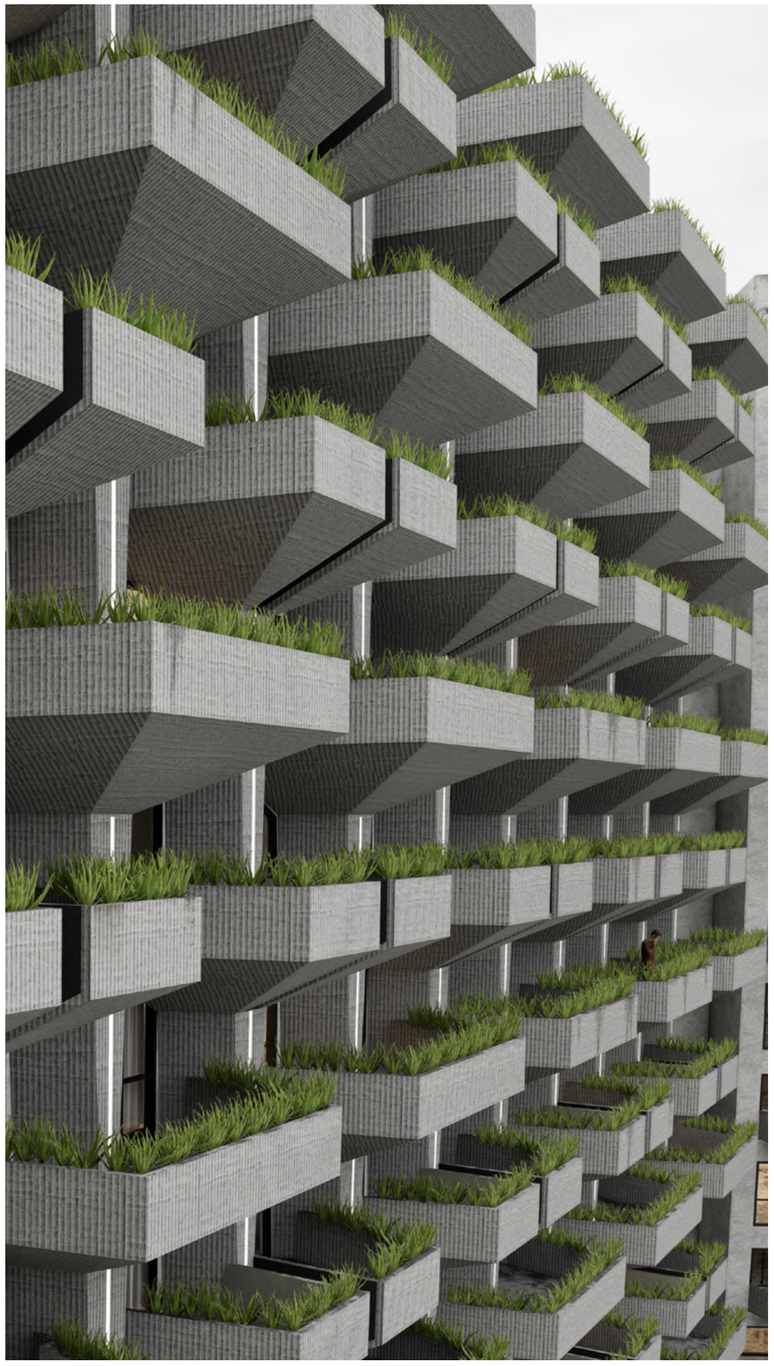
3. Adding Organic Balconies

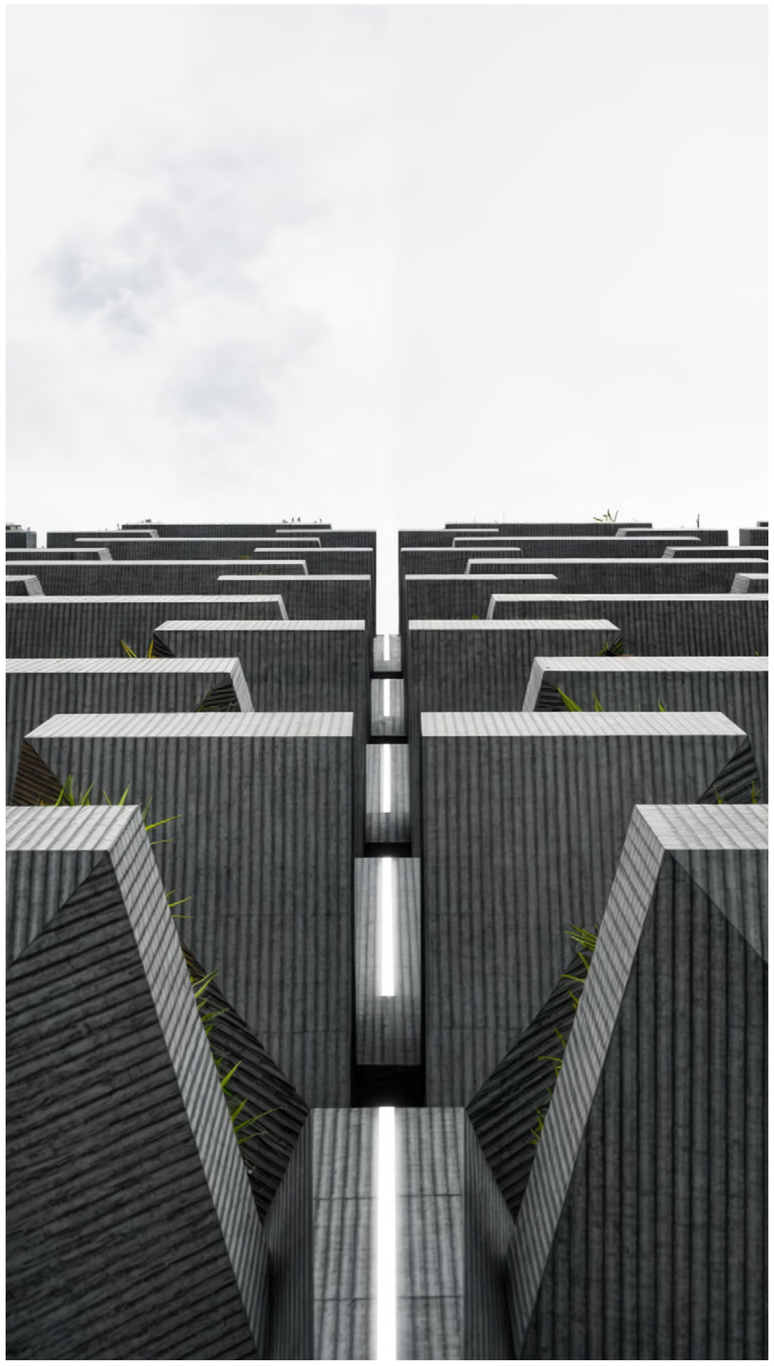
Our design introduces a separate structural framework for Ekbatan's balconies, ensuring independence from the main building. Inspired by mushrooms, these balconies feature fluid, organic forms that emphasize adaptability and interconnectedness.
Like mushrooms in nature, which grow dynamically and respond to their surroundings, our design integrates seamlessly with its environment. This approach enhances both functionality and aesthetics, creating outdoor spaces that foster a connection between residents, nature, and the architectural landscape. Additionally, the structure promotes sustainability by optimizing material use and reducing environmental impact.

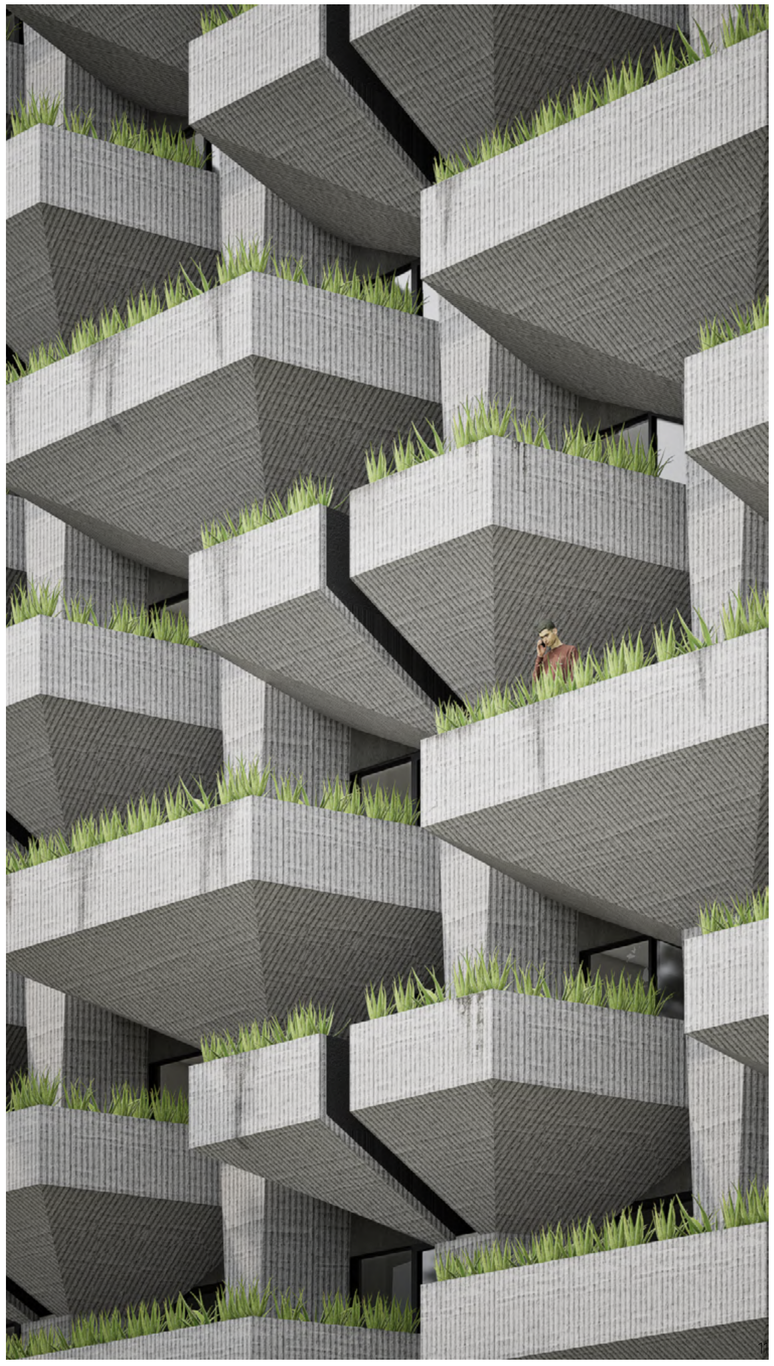


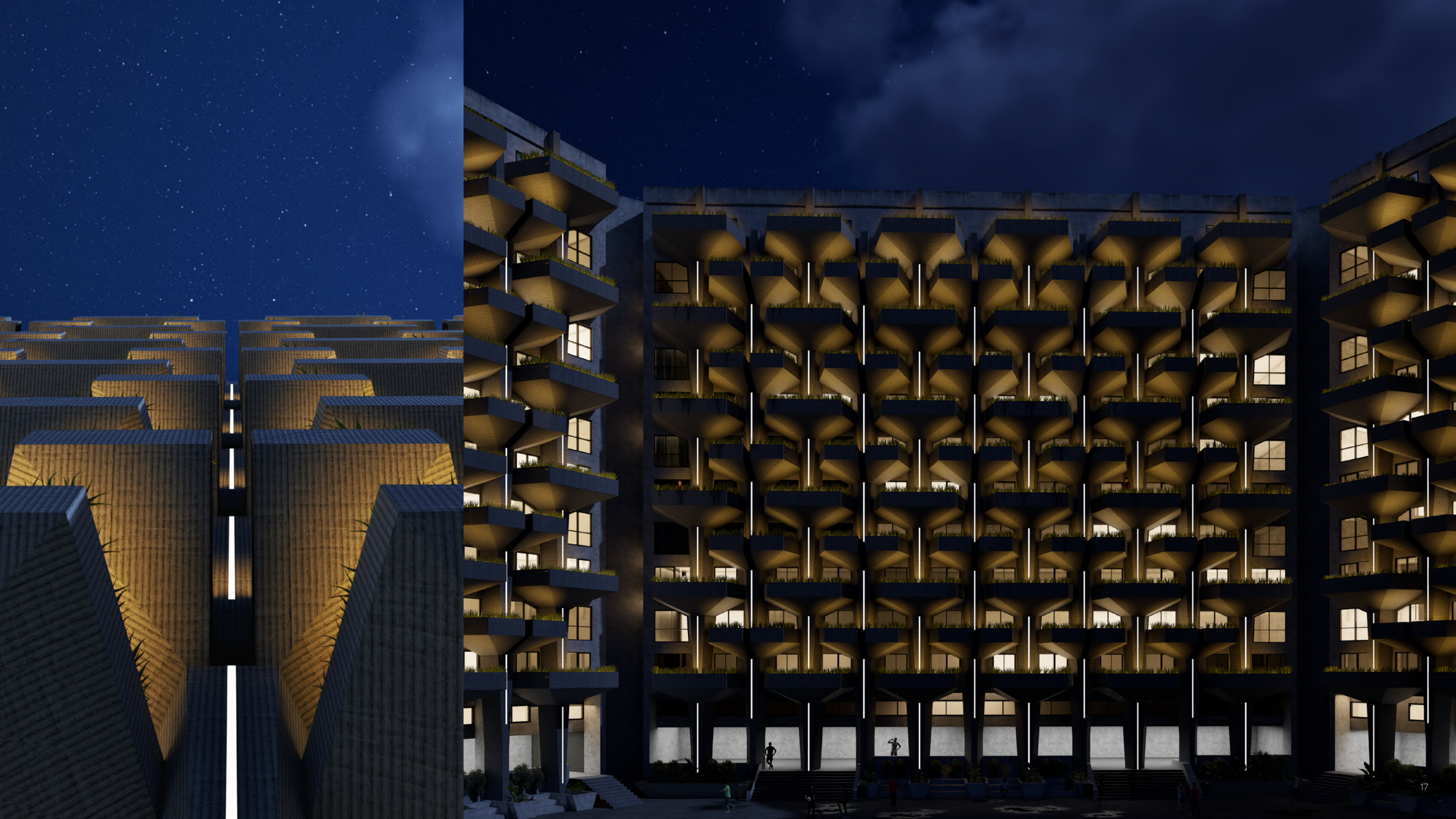
4. Landscape

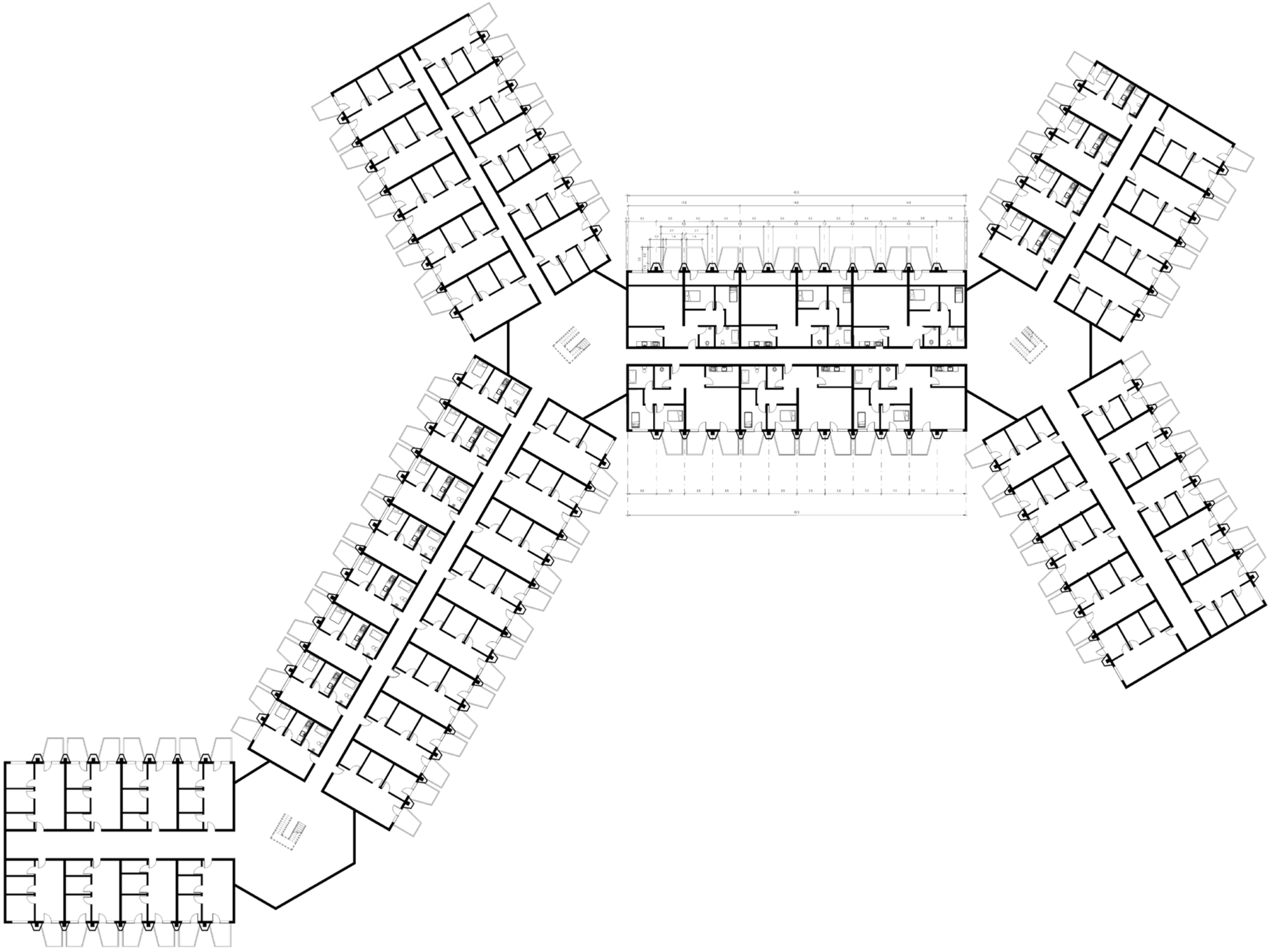
One key aspect of our design is how the balconies interact with the ground level, transforming underutilized space into a vibrant communal area. Given the lack of public seating and social spaces in Ekbatan, we redefined balconies as more than just private outdoor extensions.
Inspired by mushrooms, we extended this concept to sculpted concrete seating at ground level, fostering community engagement. The exposed concrete maintains Ekbatan's brutalist identity while organic forms soften its rigid aesthetic, creating a more inviting atmosphere. This intervention enhances livability, strengthens social connections, and revitalizes the relationship between private and public spaces.

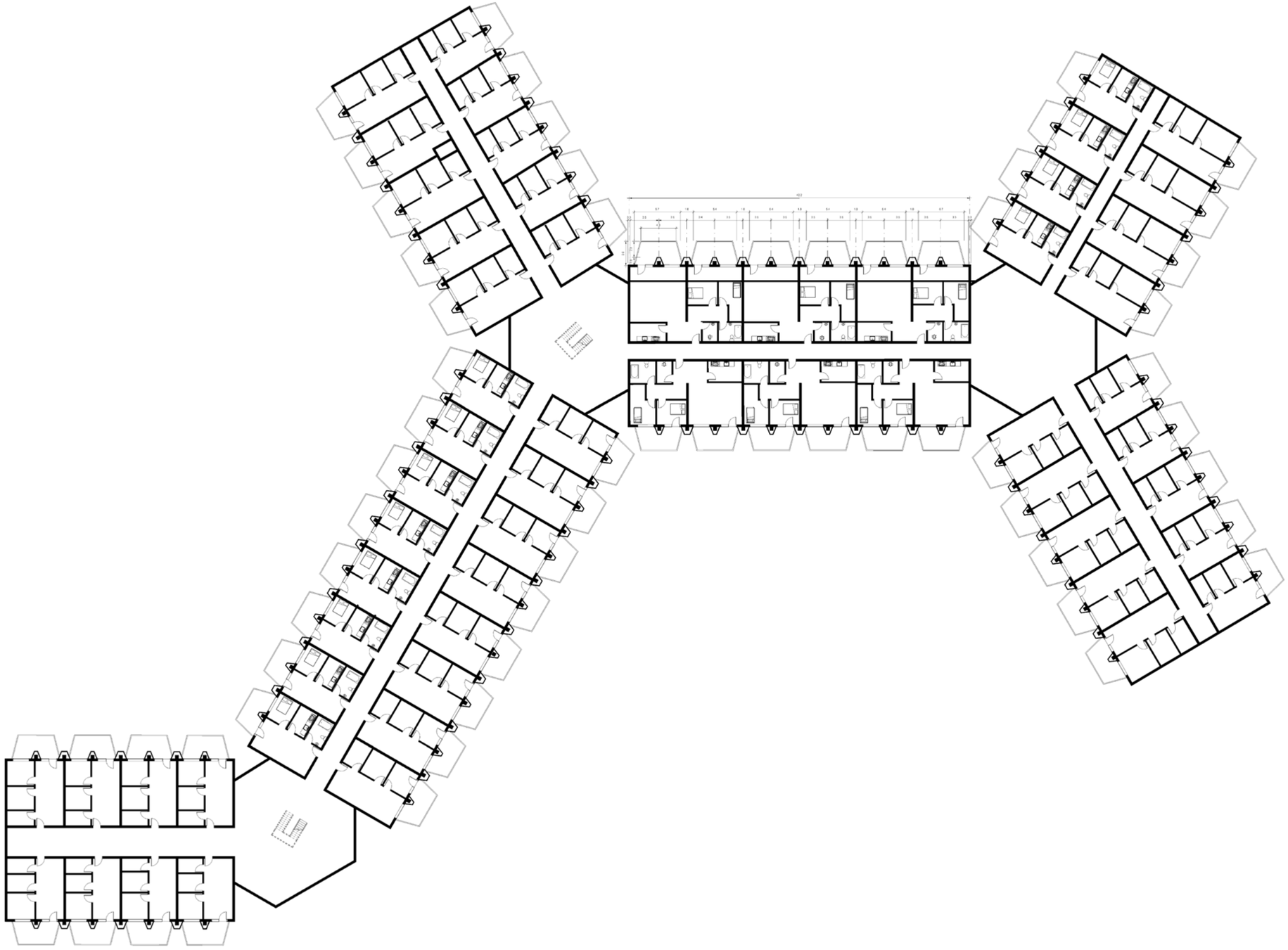


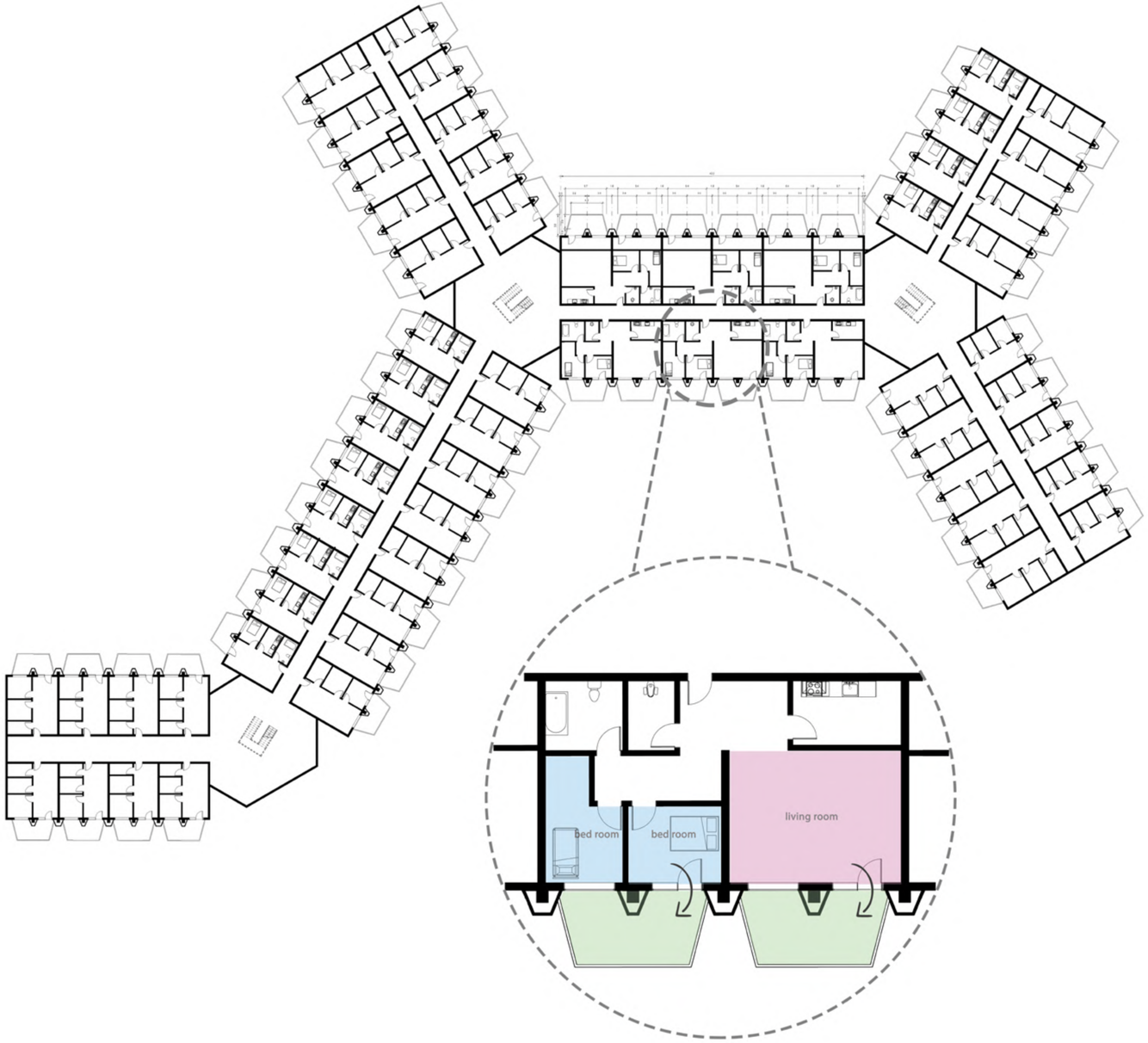








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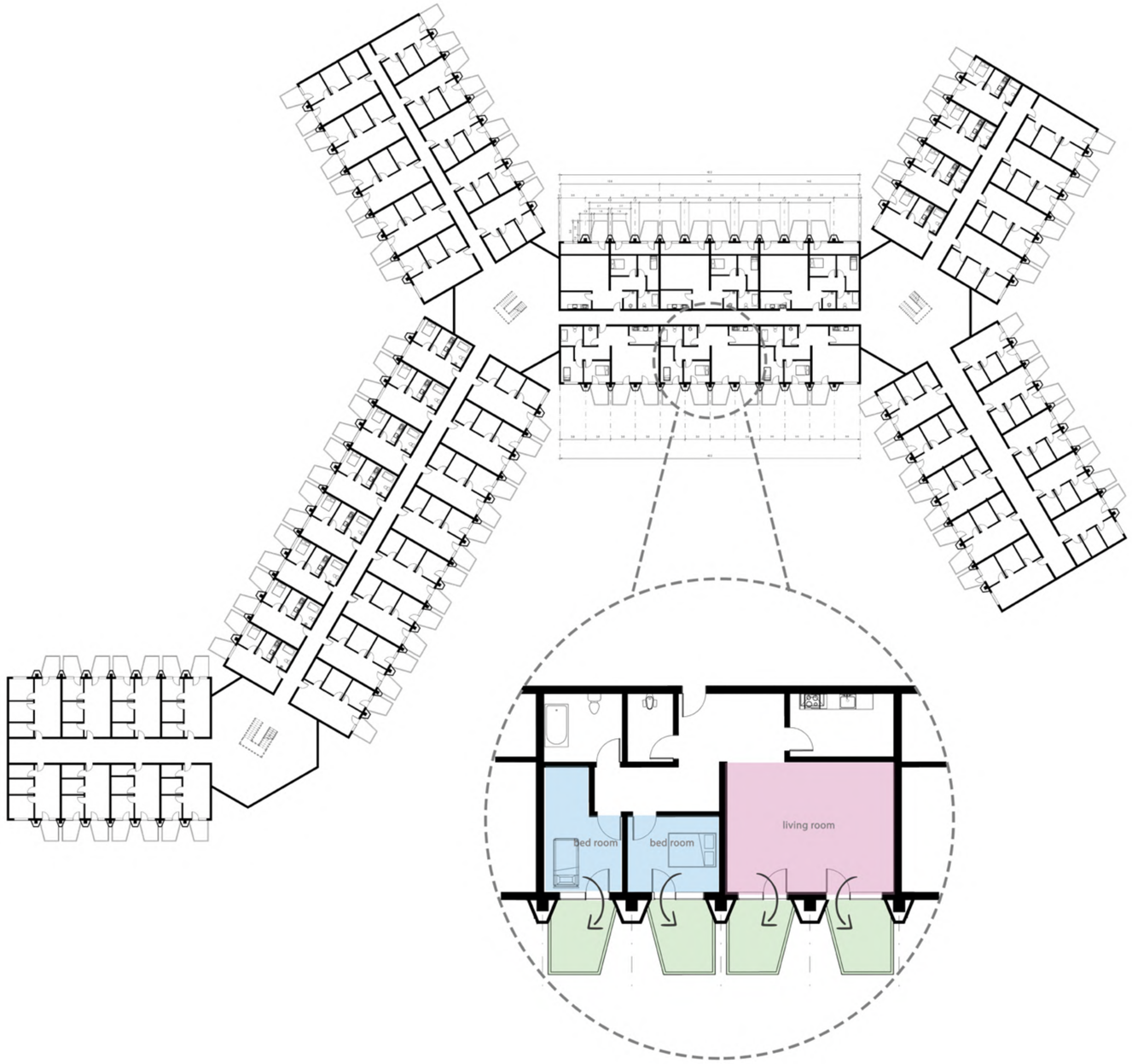
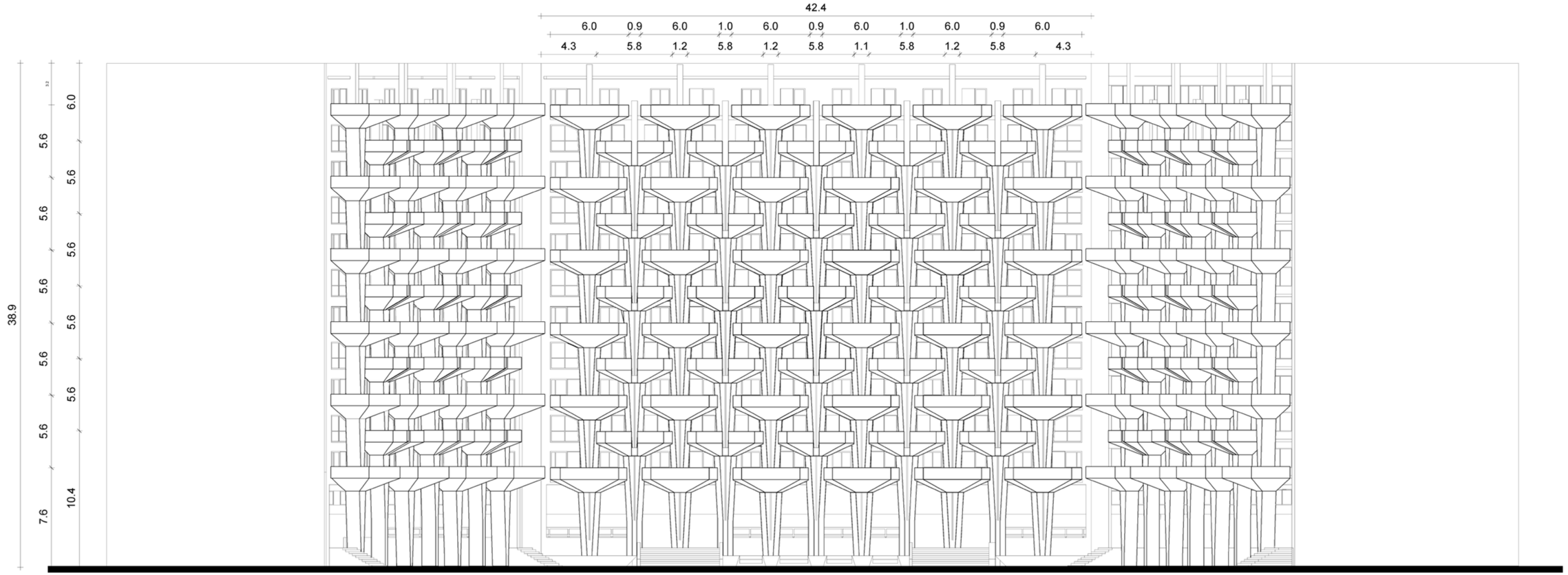
bed room
living room


bed room
bed room
living room

Elevation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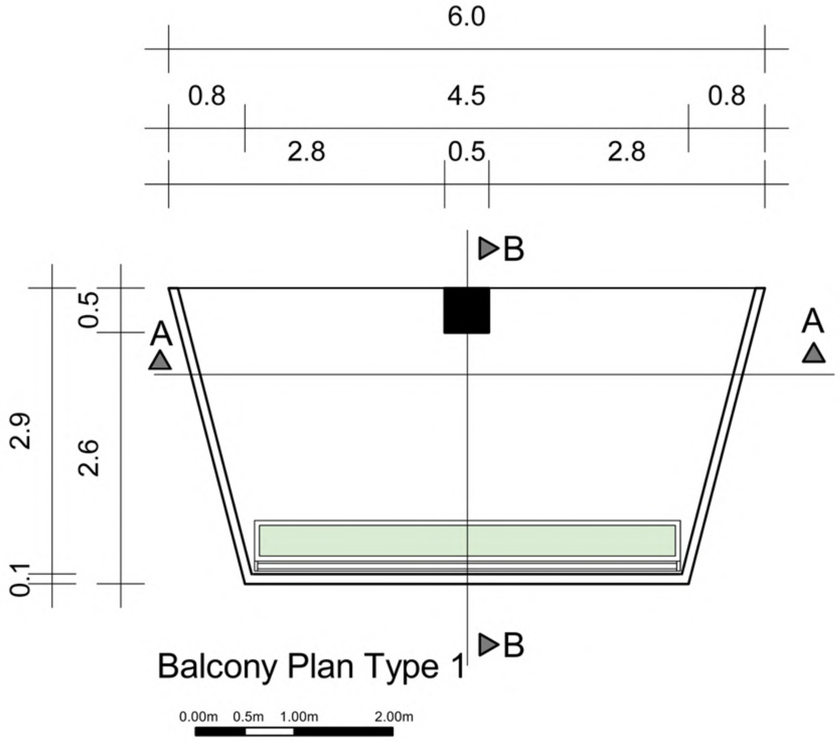
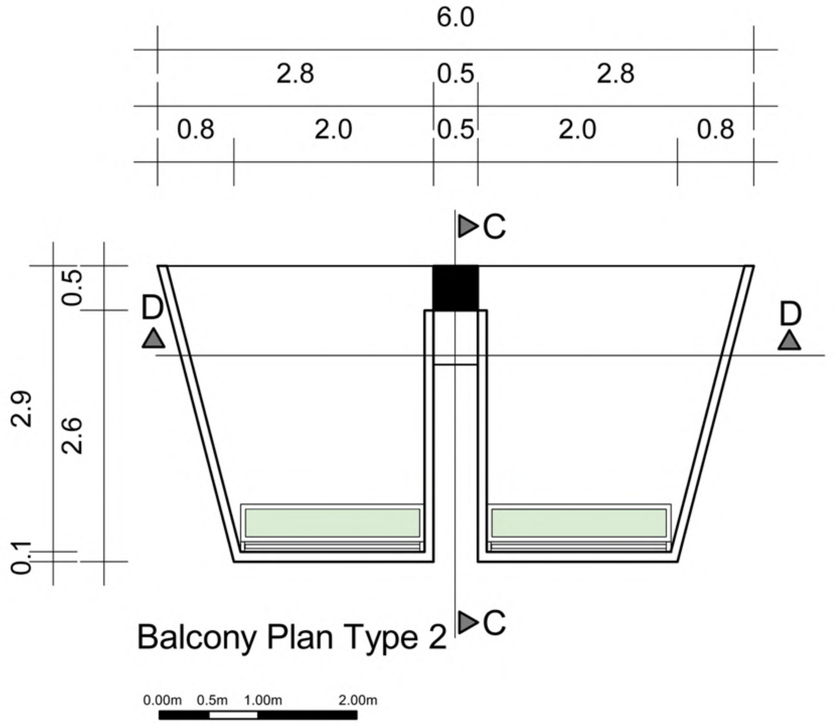
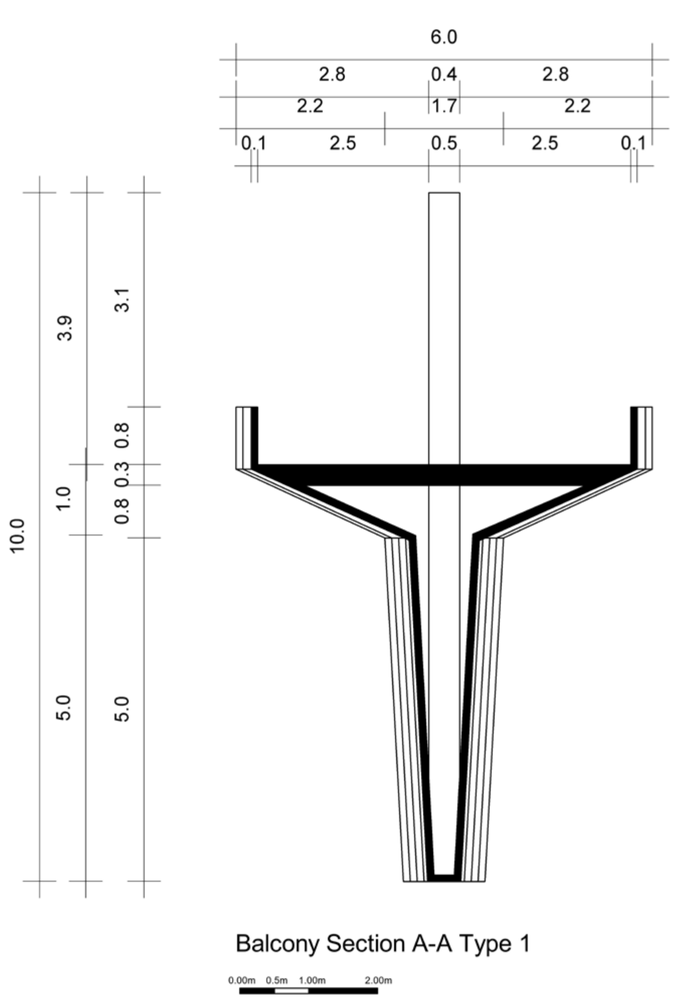


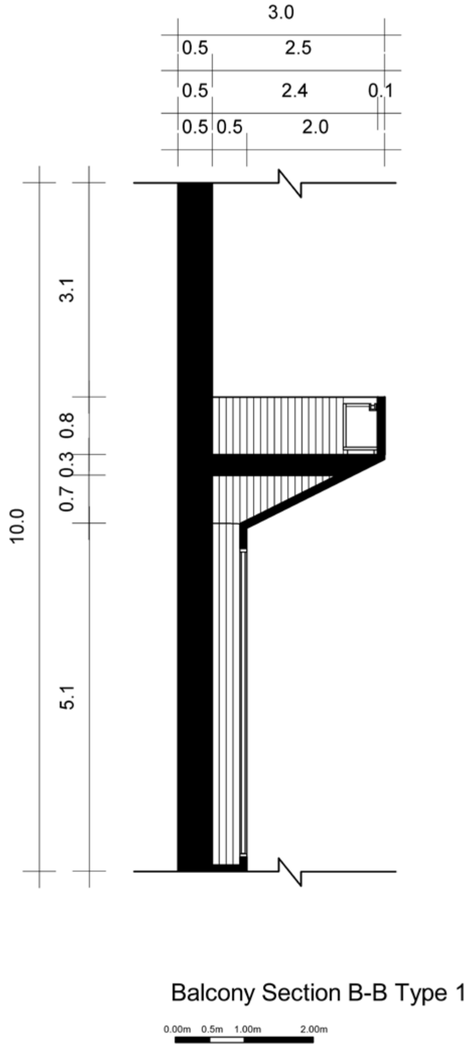
Balcony Plan Type 1



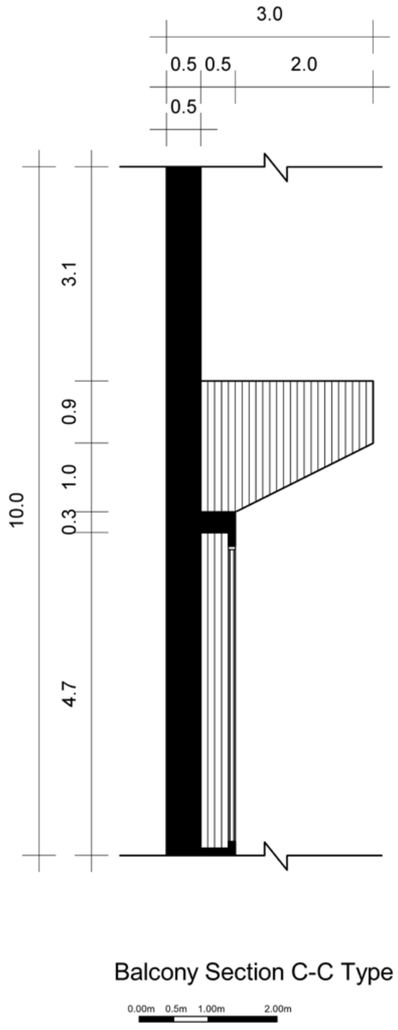
Balcony Plan Type 2



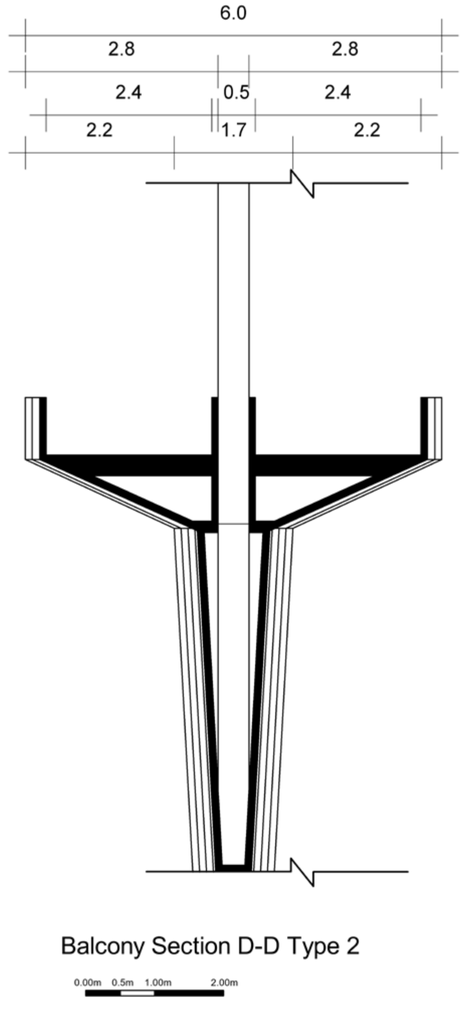
Balcony Section A-A Type 1



Balcony Section B-B Type 1



Balcony Section C-C Type 2



Balcony Section D-D Type 2

Winter **2025**