



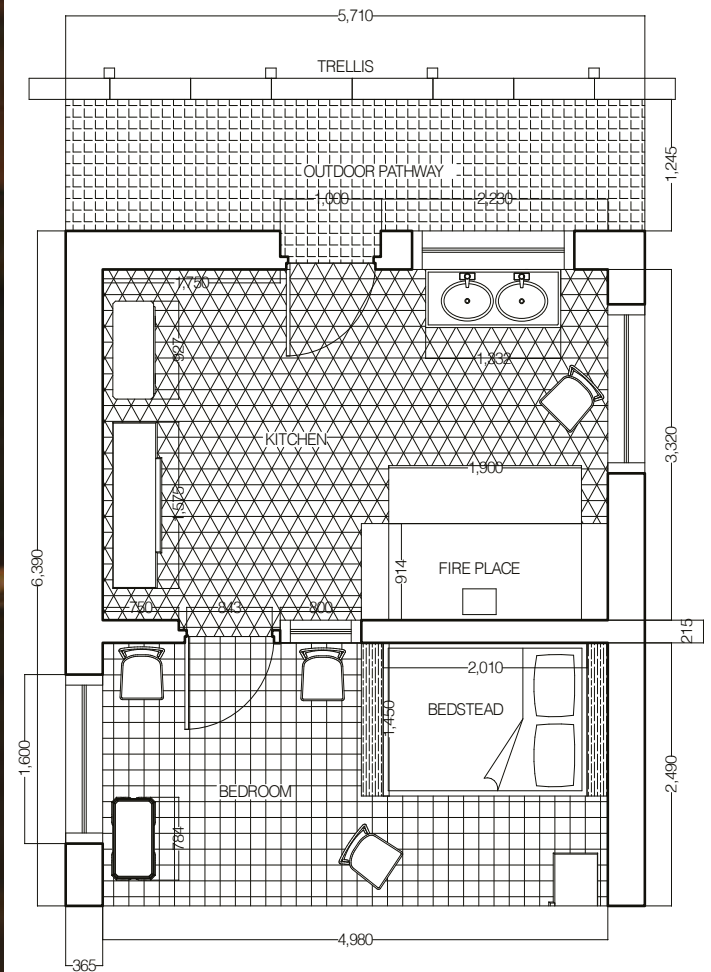
## THE HABITABLE FURNITURE

The design of the habitable bedstee apartment originates from a critical analysis of Pieter de Hooch's painting, revealing the potential of the traditional Dutch bedstee—a small, enclosed bed nook—reimagined as a contemporary solution to the current housing crisis and urban spatial shortages. This project, titled "Why Can't We Live Together," proposes a radical rethinking of shared living spaces, centering the bedstee structure as the core component. Constructed using sustainable Cross-Laminated Timber (CLT) within a large hardwood-framed building with a double ceiling height, these bedstees offer modular, flexible, and efficient living units.

Each bedstee unit functions as a self-contained micro-apartment, including a sleeping alcove, compact kitchen, and toilet. The design optimizes space efficiency and privacy while fostering a sense of community through shared spaces and visual connectivity. The double ceiling height allows for vertical integration, enhancing openness and light. Common areas are strategically distributed throughout the building, creating social interaction nodes that promote a sense of belonging among residents. The versatility of the bedstees, which can be customized by occupants, addresses the diverse needs and preferences of modern urban dwellers.

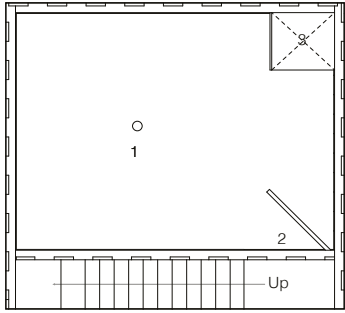
The project's title reflects its central inquiry into urban living and community. By reimagining the traditional bedstee, the design aims to create heavily convivial spaces that balance private and communal living. This strategic spatial configuration ensures intimate connections between private bedstees and communal areas, fostering a harmonious blend of solitude and social interaction. The habitable bedstee apartment design offers an innovative and sustainable housing solution, redefining the concept of home in the modern city and answering the question, "Why Can't We Live Together."

Trevor Bbanda  
Master of Architecture  
University of the Creative Arts  
2024

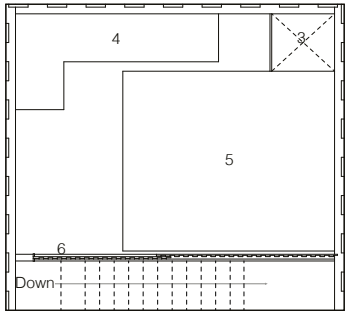


Pieter de Hooch's painting "The Bedroom" provides a captivating glimpse into 17th-century domestic life, with a keen focus on the interior architecture and furnishings of a typical Dutch home during that period. The central feature of the composition is undoubtedly the bedstee, a large and substantial piece of furniture that dominates the room. The bedstee, with its grand proportions, serves as a focal point, conveying a sense of comfort, privacy, and security within the domestic setting. The meticulous attention to detail in portraying the bedstee highlights its significance in the daily lives of the occupants, underscoring the importance of rest and repose in the context of the home. The inclusion of interior windows in the painting adds an interesting architectural dimension to the scene. These windows not only facilitate the flow of natural light but also create a sense of spatial depth within the composition. The play of light and shadows through these windows enhances the atmosphere of the room, making it feel warm and inviting. The bedstee led to the developmental design of a new habitable model where comfort, aesthetics, and modern functionality are all included. Following the comprehensive analysis of the apartment blocks, the architectural exploration delves into an intricate study of the painting to develop the foundation for the creation of a highly accurate and descriptive 3 dimensional model at a 1:10 scale. By navigating the intricacies of the de Hooch composition, this project transforms a two dimensional canvas into a tangible and immersive architectural manifestation pushing the boundaries of interpretation and representation.

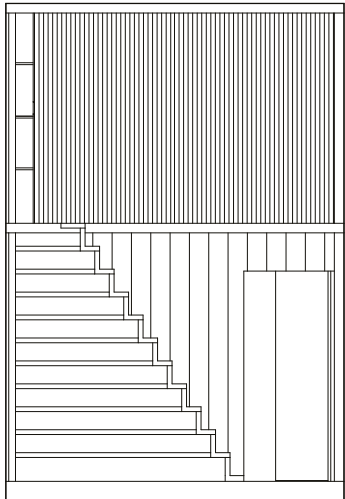




First Level Plan



Second Level Plan



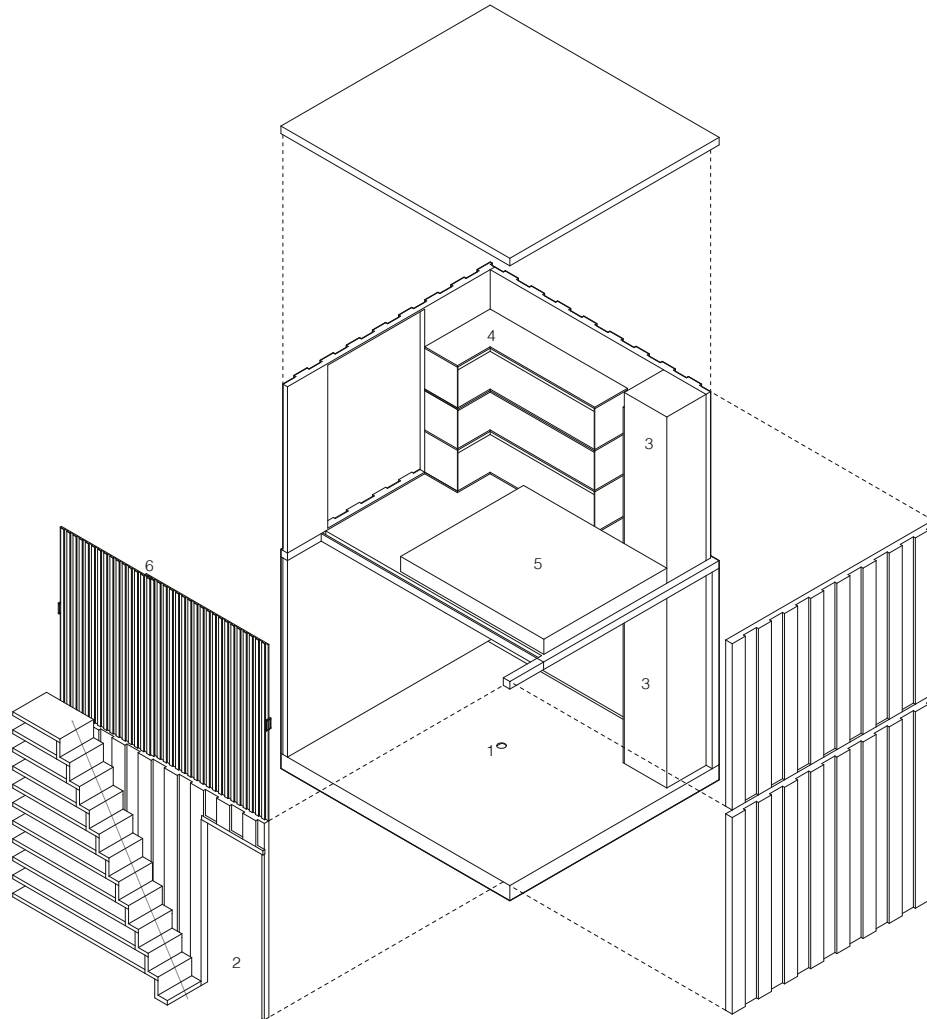
Front Elevation

**Key**

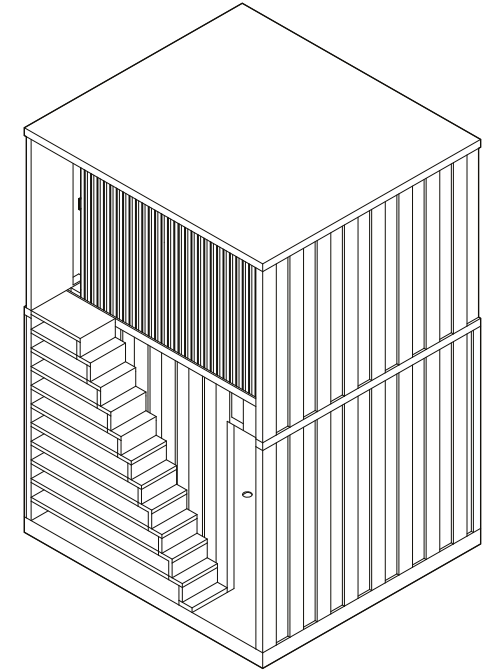
1. Toilet / Bathroom
2. Entrance
3. Technical Shaft
4. Storage
5. Sleeping Area
6. Sliding Door

**Bedstee Design 1**

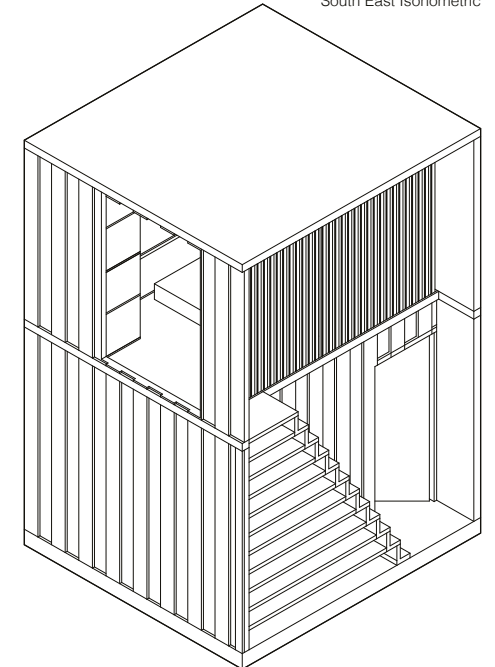
Introducing a modern two-story bedstee, seamlessly blending elegance with functionality. The ground floor features a black and white tiled bathroom with essential amenities and a discreet technical shaft. Thin wooden stairs lead to the first-floor sleeping alcove with inbuilt closets, thin wooden sliding doors for privacy, and a glass cutout for light. Extra storage or book shelves are cleverly tucked under the stairs, maximizing space and maintaining a minimalist design. This bedstee redefines contemporary living, offering a stylish and efficient solution for a compact, wooden and functional bedroom.



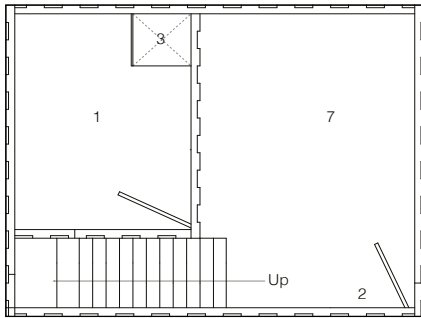
Exploded Isonometric



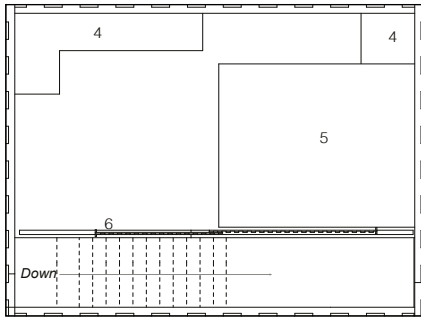
South East Isonometric



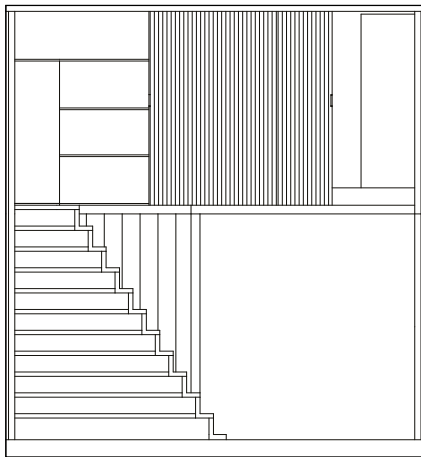
South West Isonometric



First Level Plan



Second Level Plan



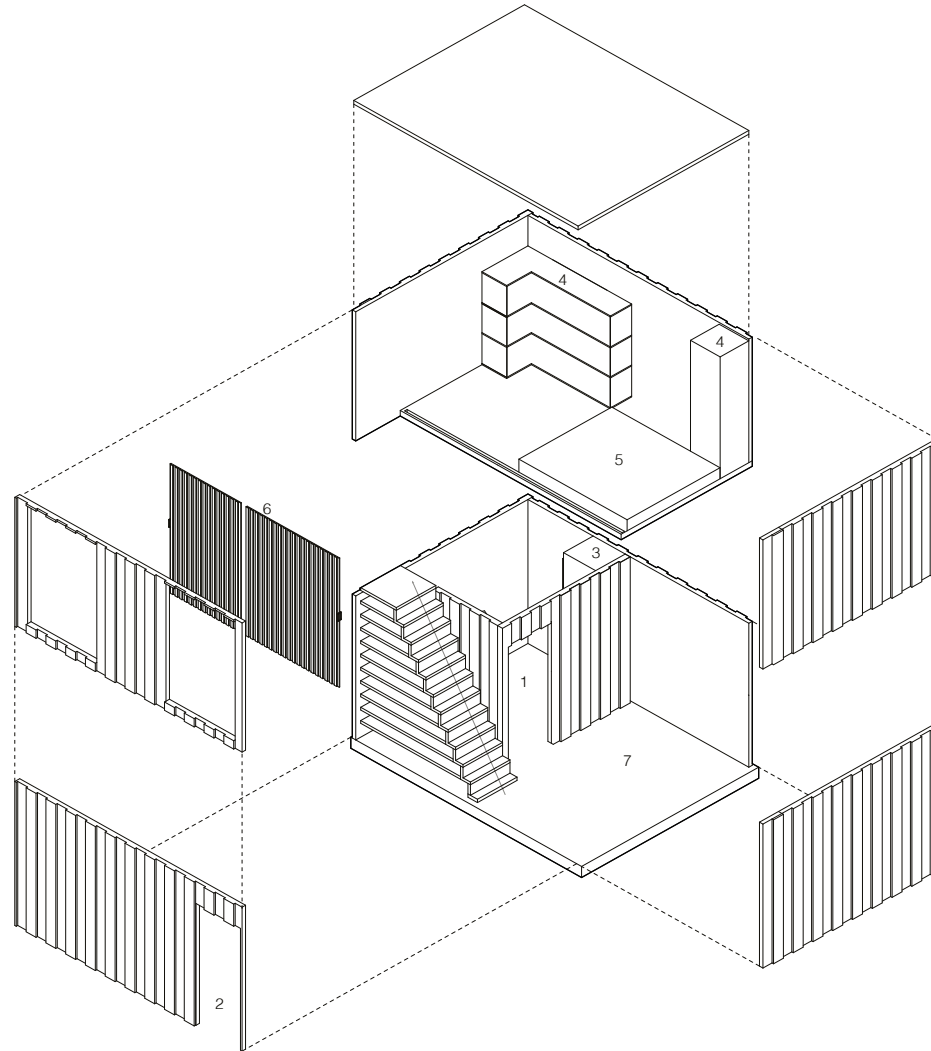
Front Elevation

**Key**

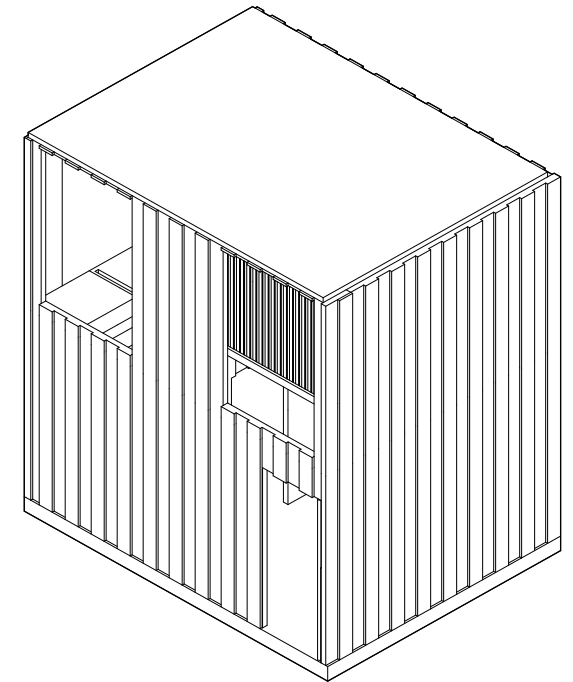
1. Toilet / Bathroom
2. Entrance
3. Technical Shaft
4. Storage
5. Sleeping Area
6. Sliding Door
7. Kitchen Space

**Bedstee Design 2**

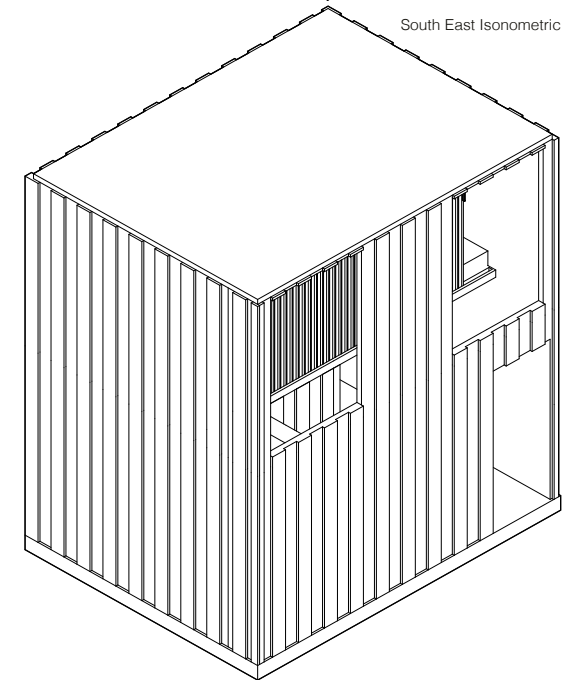
The ground floor features a black and white tiled bathroom and an open kitchen space with acrylic-designed tiles, providing a versatile cooking area. A set of wooden stairs leads to the first floor, where a sleeping alcove with inbuilt closets is complemented by thin wooden sliding doors that offer warmth, privacy, and multifaceted functionality. Large windows strategically cut into the wooden wall above the stairs create a visual connection with the external environment, enhancing the bedstee's openness. Additional storage beneath the stairs, in the form of bookshelves, maximizes space utilization, contributing to the bedstee's efficiency.



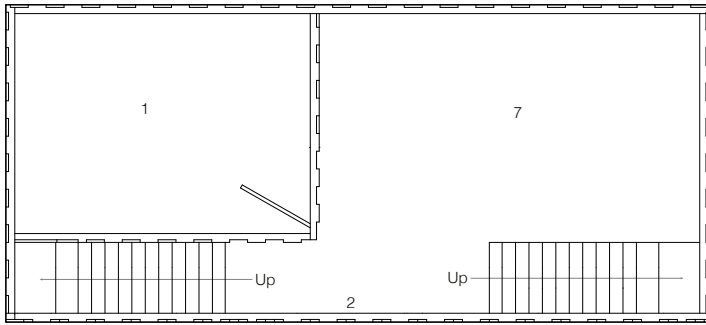
Exploded Isonometric



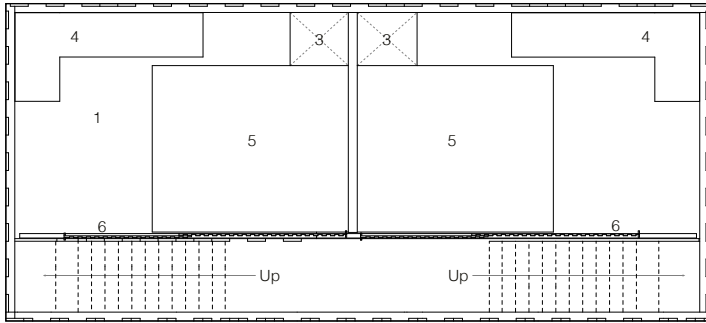
South East Isonometric



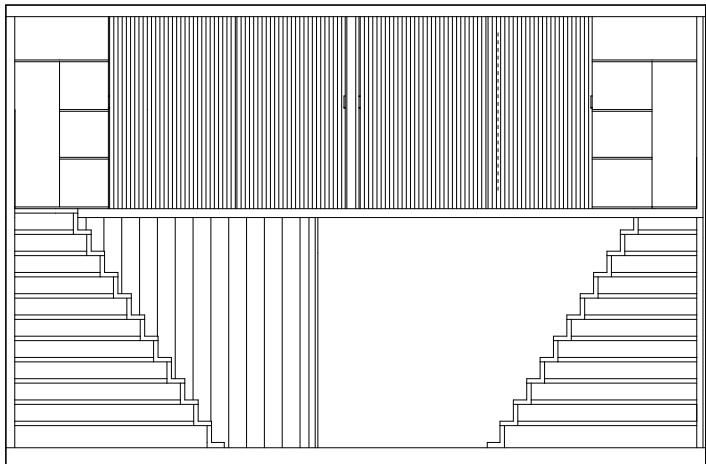
South West Isonometric



First Level Plan



Second Level Plan



Front Elevation

**Key**

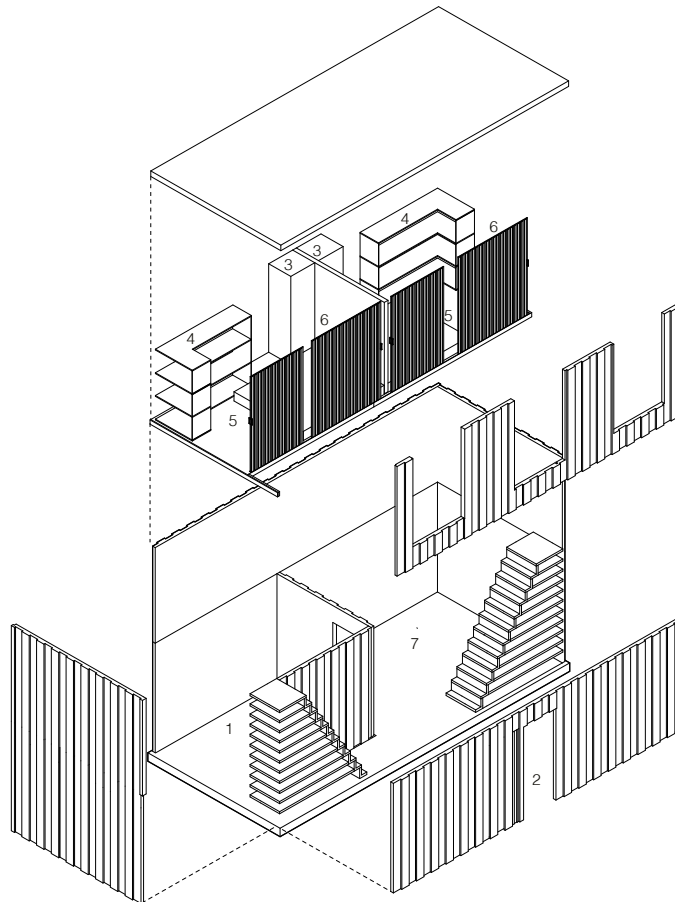
- 1. Toilet / Bathroom
- 2. Entrance
- 3. Technical Shaft
- 4. Storage
- 5. Sleeping Area
- 6. Sliding Door
- 7. Kitchen Space

**Bedstee Design 3**

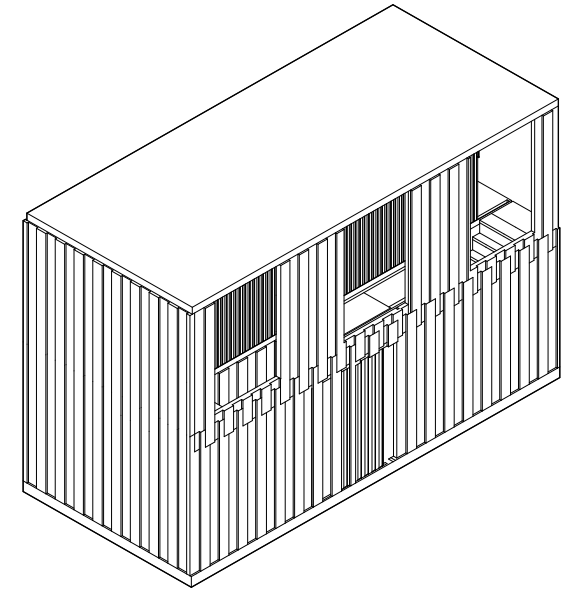
The two-story modern bedstee design is a carefully crafted architectural solution for shared living, balancing functionality and aesthetics. The ground floor hosts a shared black and white tiled bathroom with a bath, toilet, and sink. Adjacent to the entrance, an open kitchen space is designed for two occupants, featuring acrylic-designed tiles.

Wooden stairs ascend to the first floor, leading to separate sleeping alcoves on the left and right, each equipped with inbuilt closets or storage space. Thin wooden sliding doors offer versatility, providing warmth, privacy, and more. Large window chunks strategically cut out above the stairs, fitted with glass, allow occupants to enjoy a visual connection with the external surroundings while inside the bedstee.

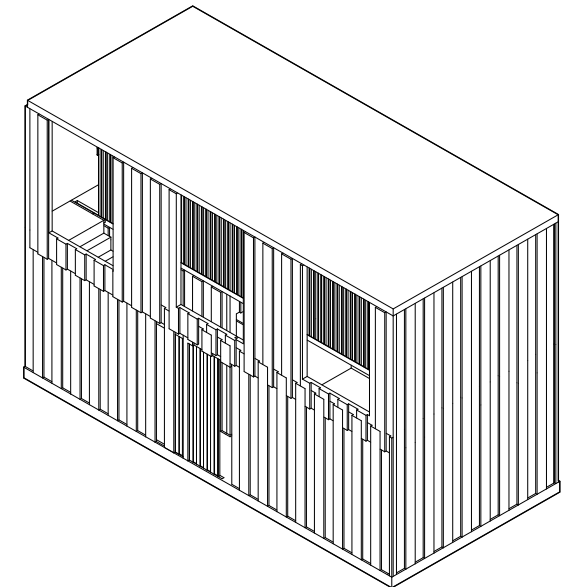
Extra storage or book shelves under the stairs maximize space utilization. The sleeping alcoves are divided by a wooden wall, ensuring privacy for each occupant. This architectural concept exemplifies a modern, shared living arrangement within a bedstee, where thoughtful design elements enhance the overall experience of the space.



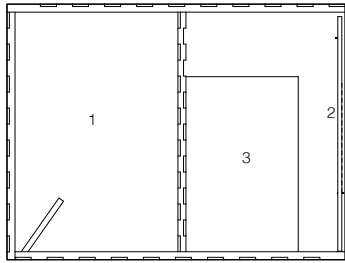
Exploded Isonometric



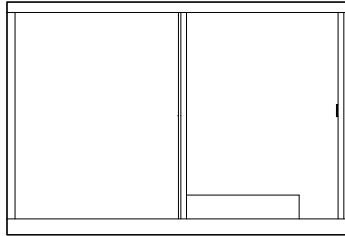
South West Isonometric



South East Isonometric



Floor Plan



Front Elevation

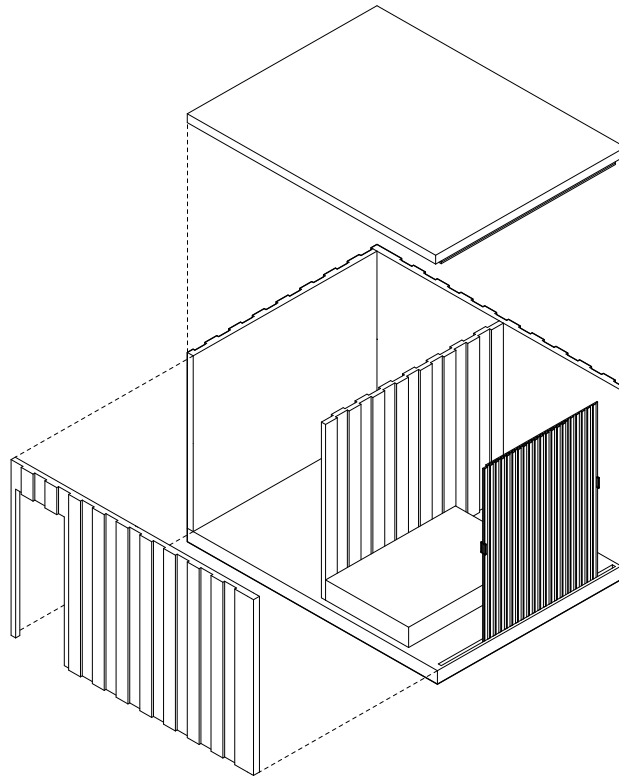
**Key**

- 1. Toilet / Bathroom
- 2. Sliding Door
- 3. Sleeping Area

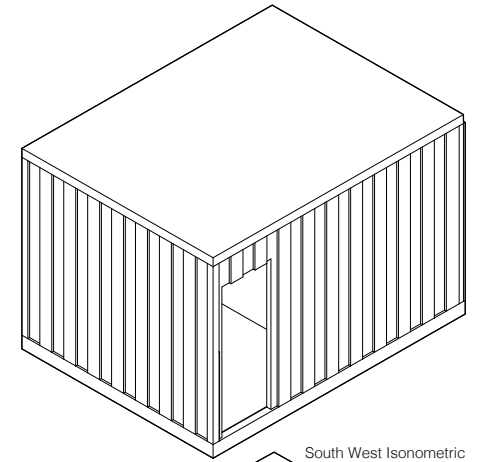
**Bedstee Design 4**

The bedstee design is an inclusive architectural solution tailored for individuals with limited mobility seeking independent living. It features a black and white tiled bathroom equipped with a bath, toilet, and sink, designed to be wheelchair accessible. The sleeping alcove is strategically arranged to allow ample space for wheelchair users to navigate and access the bed with ease. The bed itself is slightly raised, facilitating straightforward entry and exit for individuals.

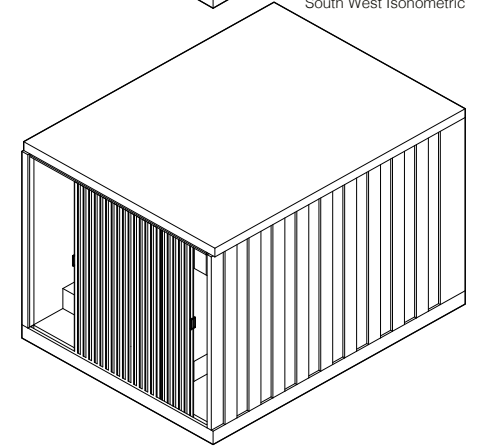
Thin wooden sliding doors offer privacy and warmth to the occupant, ensuring a comfortable living environment. The bedstee is set within a room, occupying a significant portion of the space, and is complemented by other essential furniture such as closets and tables arranged outside its design. This arrangement maximizes functionality and accessibility, creating a living space that enables independent living for those with mobility limitations.



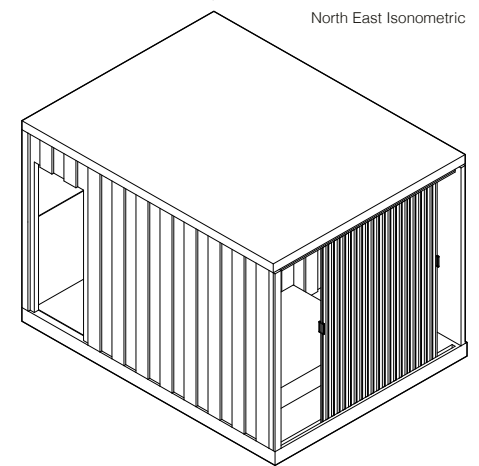
Exploded Isonometric



South West Isonometric



North East Isonometric



South East Isonometric

SITE 4 / WELLINGTON DOCK / DOVER, KENT

Wellington Dock Car Park in Dover, Kent, stands as a key component within the comprehensive vision of the Dover Harbour Board's masterplan for the Western Docks. Owned by the Dover Harbour Board, this car park plays a pivotal role in the strategic development of the surrounding area.

Positioned within the historic Wellington Dock, the car park seamlessly integrates into the maritime context of Dover. The design reflects a careful balance between functionality and aesthetics, providing essential parking facilities while contributing to the overall revitalization of the Western Docks. As part of the masterplan, the Wellington Dock Car Park serves as a gateway to the evolving landscape, aligning with the broader vision for the transformation of Dover's waterfront.

Its strategic location and thoughtful design make it an integral element in the ongoing efforts to enhance Dover's maritime and urban experience.

- Area Key
- Article 4's
  - Conservation Areas
  - Listed Buildings
  - Section 106

- General Key
- Site Location
  - Surrounding Buildings
  - Entrance Locations

- Sun Path Key
- Sun Path
  - Sun Rise
  - Sun Set

- Access Key
- Vehicle Access and Public Routes

- Wind Key
- Prevailing Wind Direction

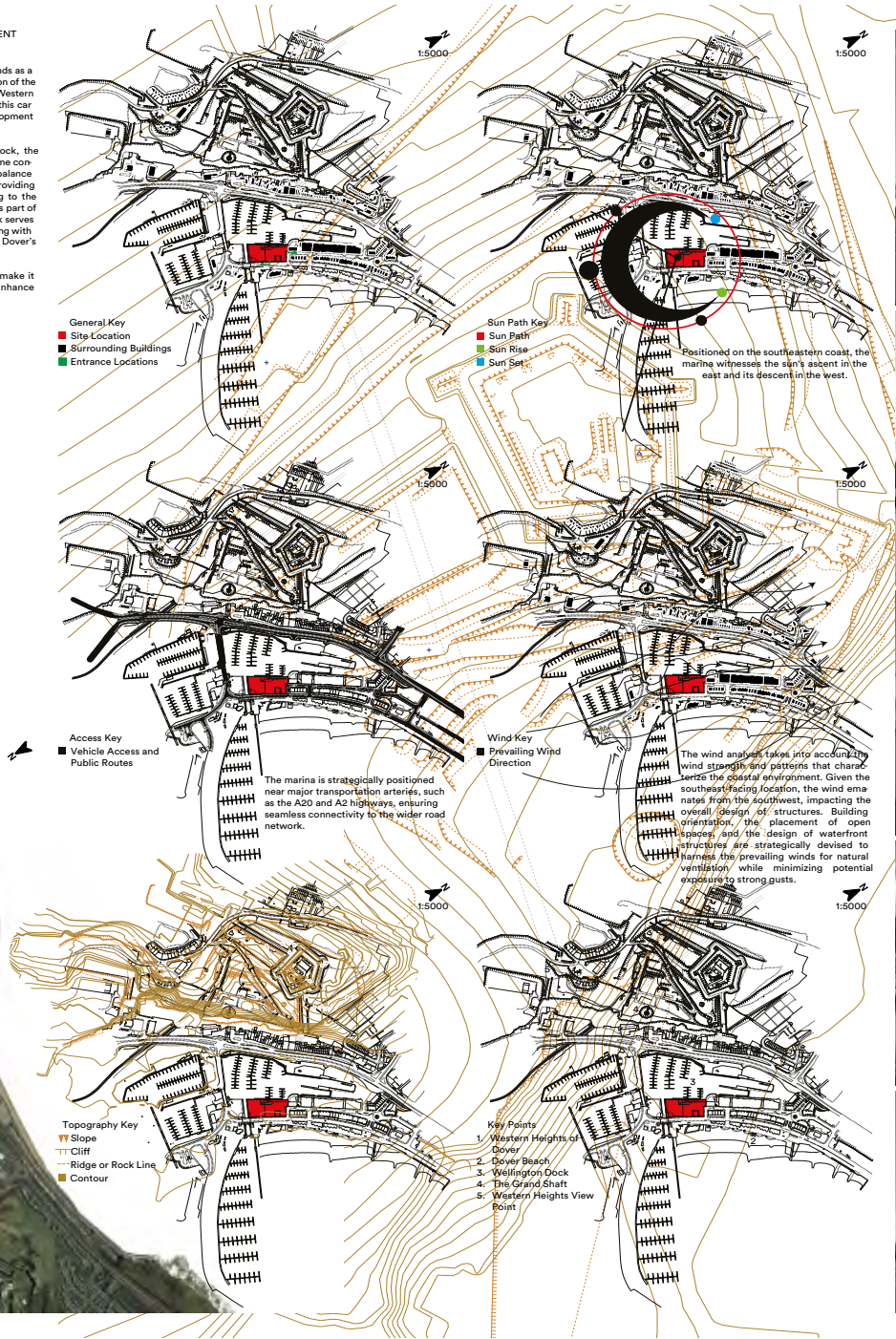
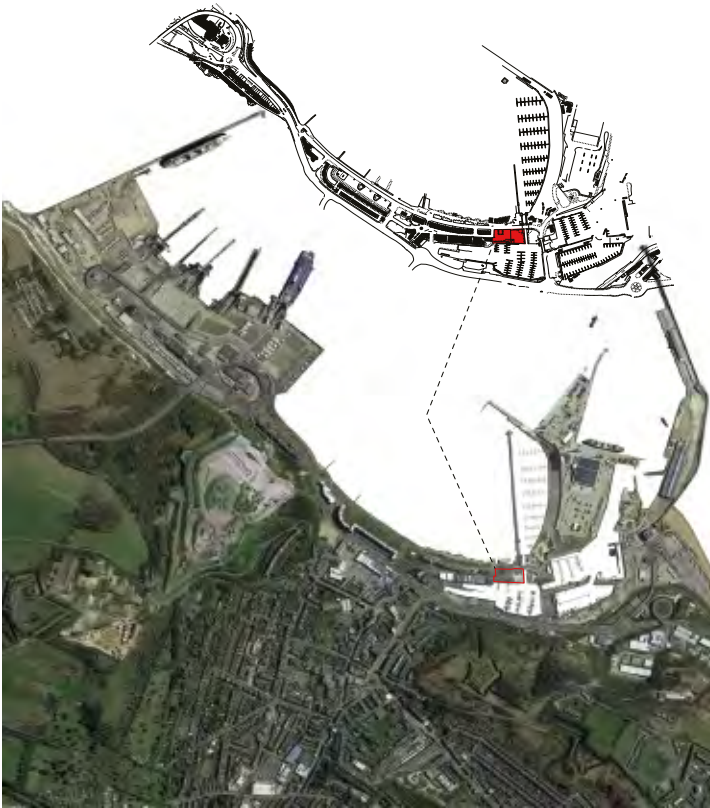
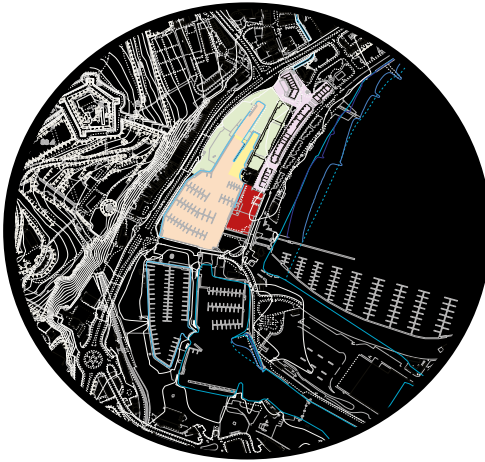
- Topography Key
- Slope
  - Cliff
  - Ridge or Rock Line
  - Contour

- Key Points
1. Western Heights of Dover
  2. Dover Beach
  3. Wellington Dock
  4. The Grand Shaft
  5. Western Heights View Point

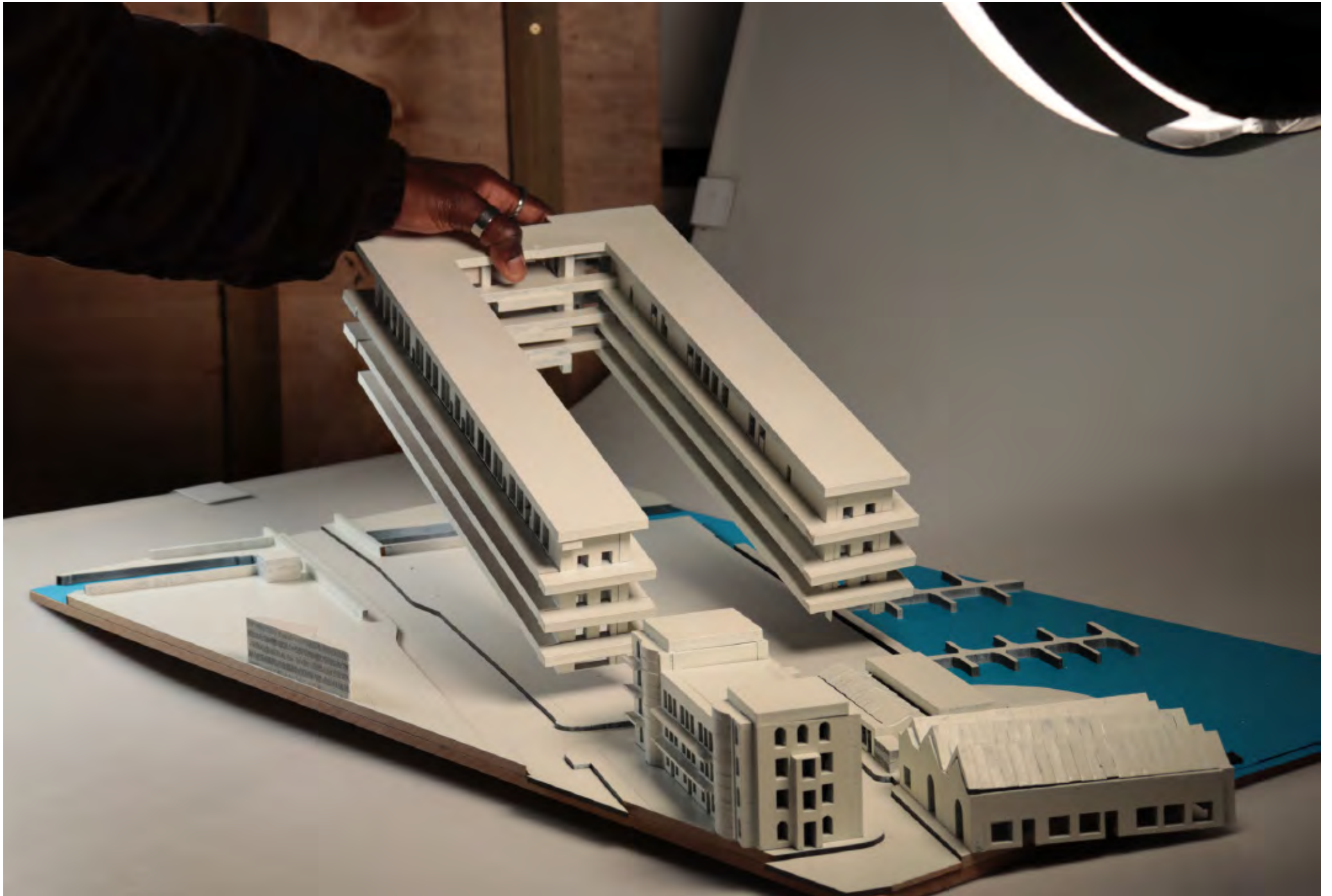
The marina is strategically positioned near major transportation arteries, such as the A20 and A2 highways, ensuring seamless connectivity to the wider road network.

The wind analysis takes into account the wind strength and patterns that characterize the coastal environment. Given the southeast-facing location, the wind emanates from the southwest, impacting the overall design of structures. Building orientation, the placement of open spaces, and the design of waterfront structures are strategically devised to harness the prevailing winds for natural ventilation while minimizing potential exposure to strong gusts.

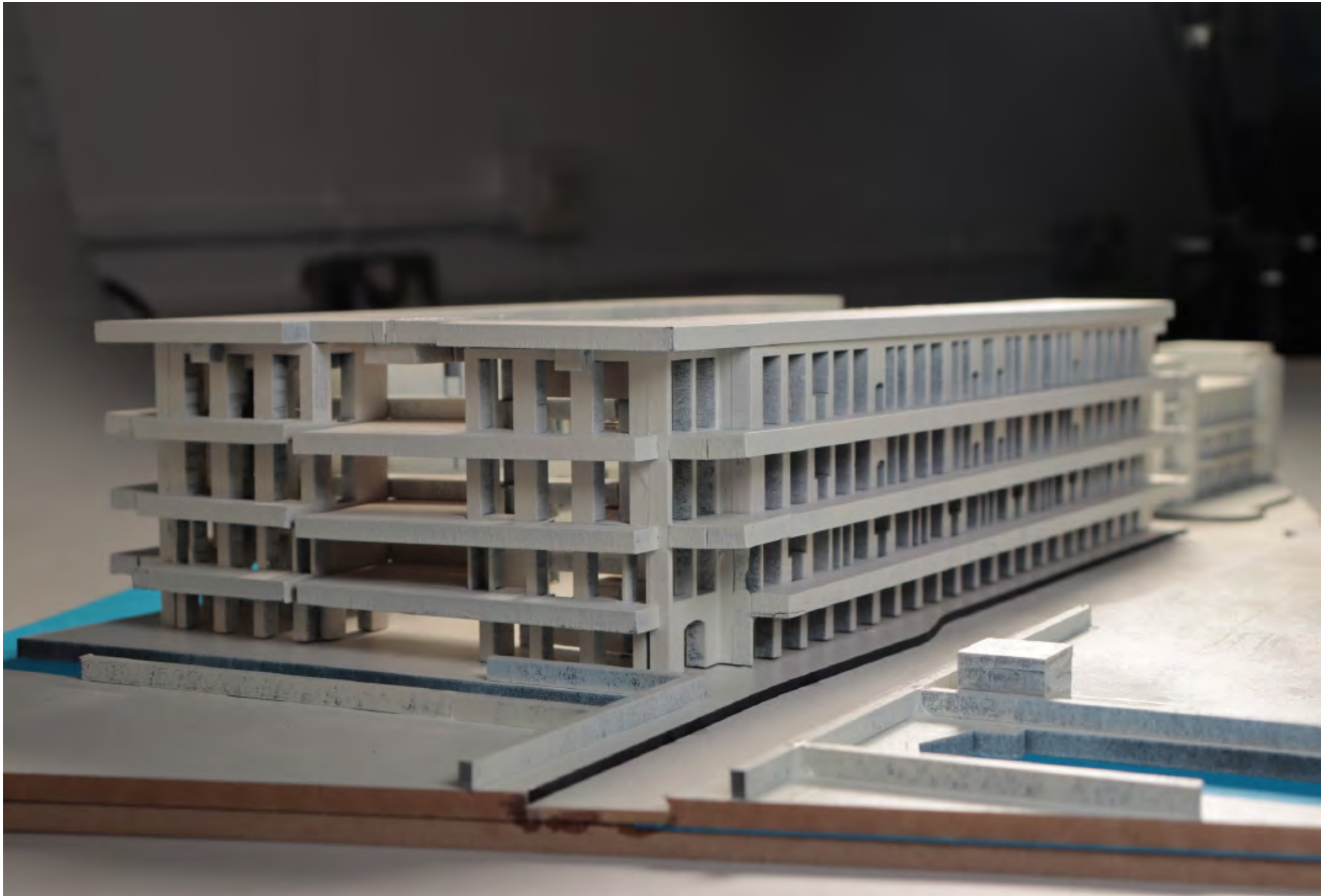
Positioned on the southeastern coast, the marine witnesses the sun's ascent in the east and its descent in the west.



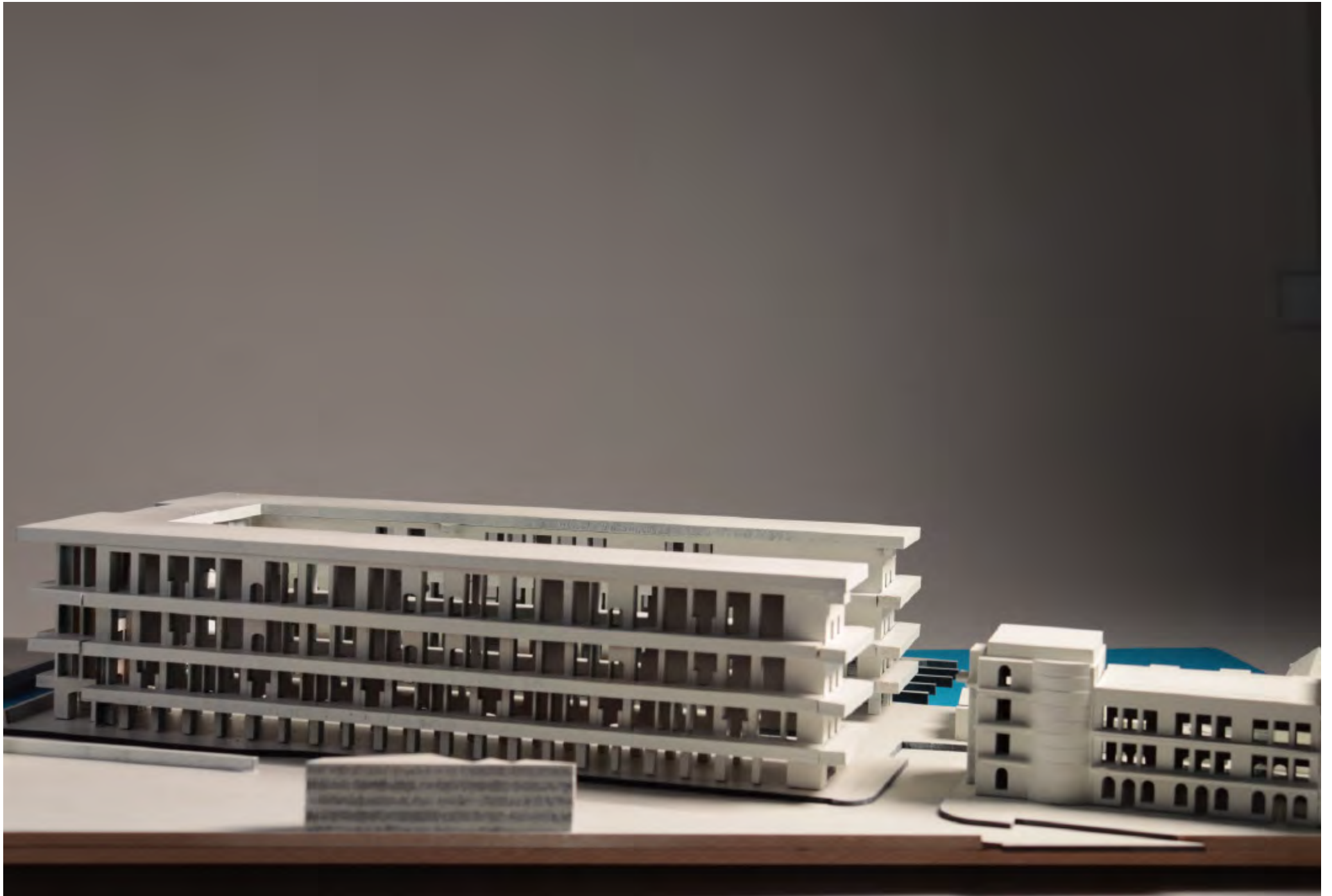




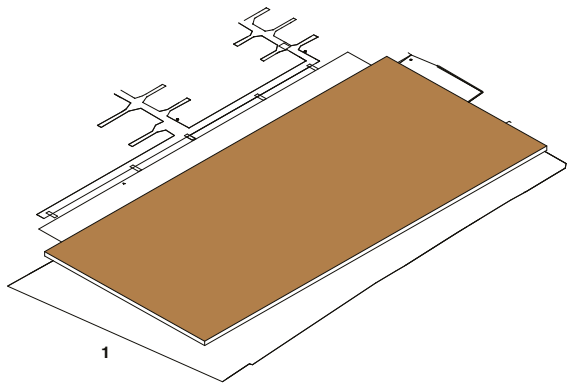
Site Model 1:250



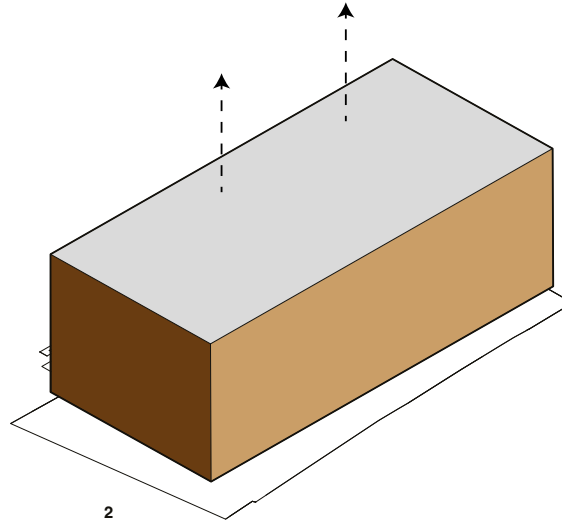
Site Model 1:250



Site Model 1:250

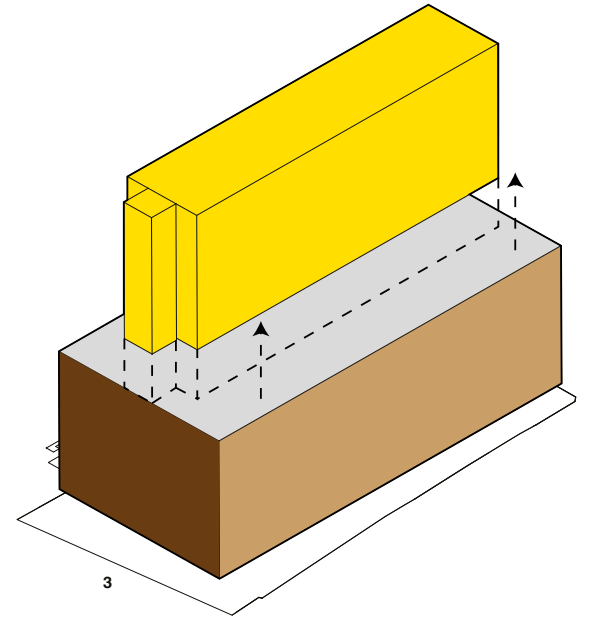


1



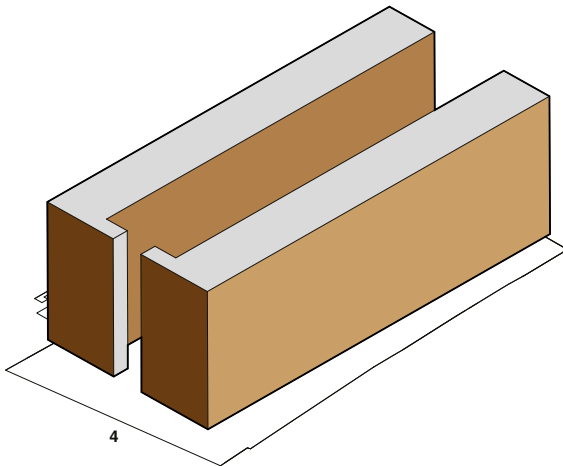
2

Form Extrusion and development



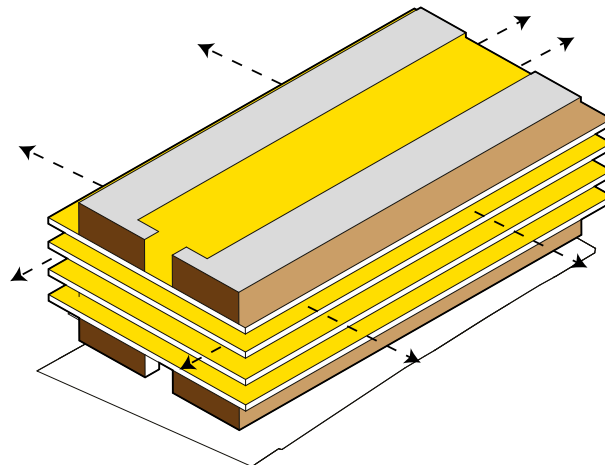
3

Creation of the centered outdoor space and removal of unwanted building form



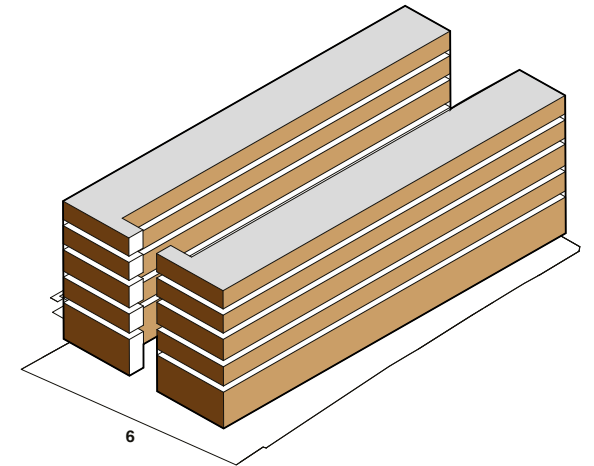
4

Building Shape Development



5

Division of spaces and creation of individual spaces



6

Building Integration - The Habitable Furniture Development



**Ground Floor and Landscaping**

Layout On Site 1:200

Key

- A - Games Room
- B - Boat Rental Offices
- C - Boat Storage
- D - Motorcycle and Bicycle Parking
- E - Car Park
- F - The Green
- G - M.U.G.A
- H - Skatepark
- I - Gym
- J - Restaurant and Pub
- K - Extended Dockside



**First Floor**

Layout On Site 1:200

Key

- A - Private Balcony
- B - Shared Balcony
- C - Studio Bedstee Apartments
- D - Shared Kitchen Space
- E - Lift
- F - Private Gardens



**Second Floor**

Layout On Site 1:200

Key

- A - Shared Bedstee
- B - Private Bedstee
- C - Lift



**Third Floor**

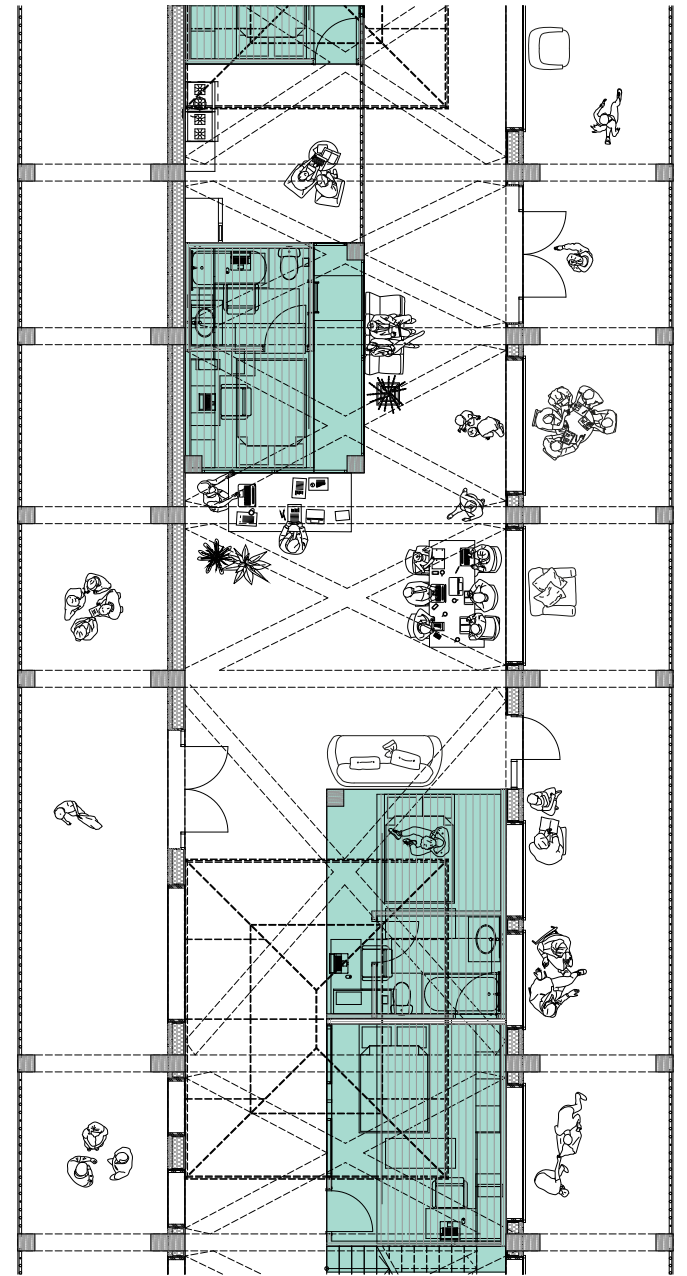
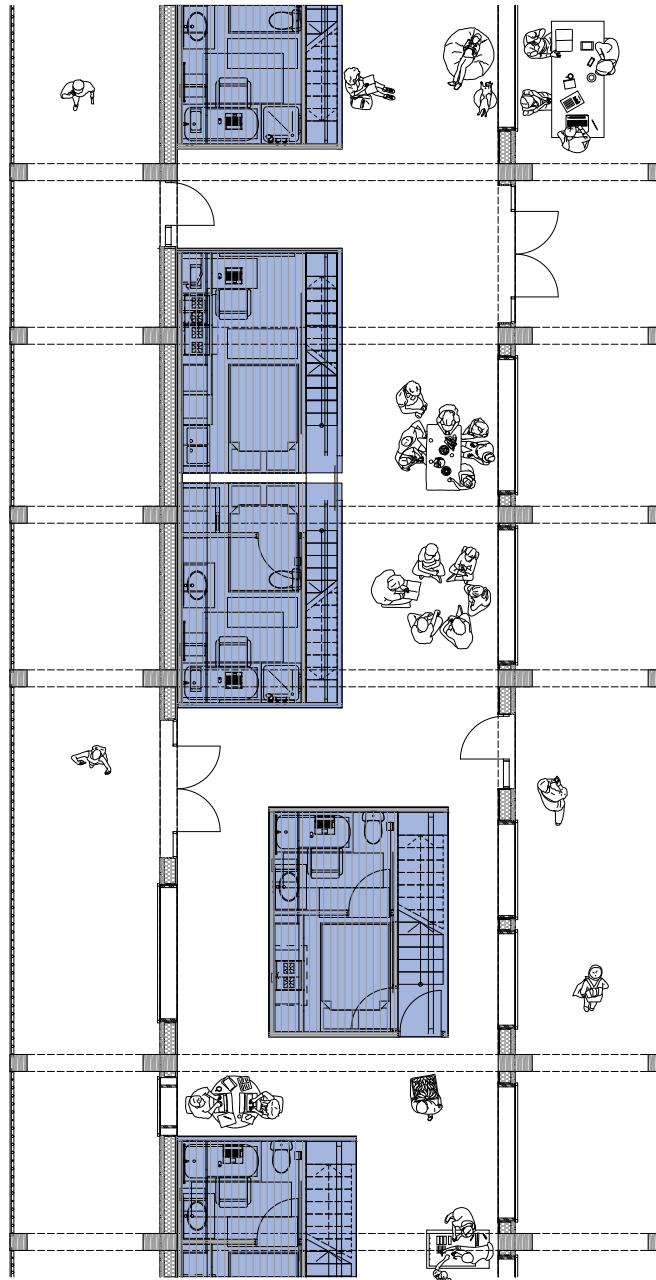
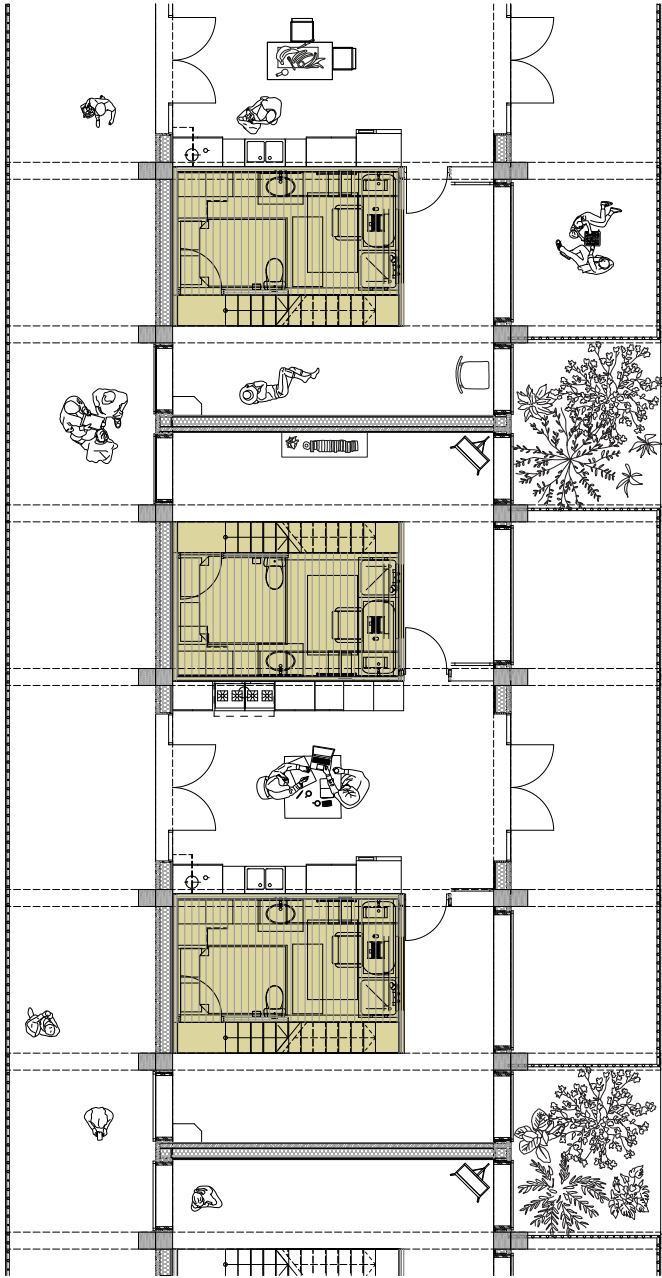
Layout On Site 1:200

Key

- A - Convivial Space
- B - Private Bedstee
- D - Shared Bedstee

C





- Studio Bedstees Apartments - First Floor
- Private Habitable Furniture Bedstees - Second Floor
- Shared Habitable Furniture Bedstees - Third Floor



Dockside View



Section Perspective



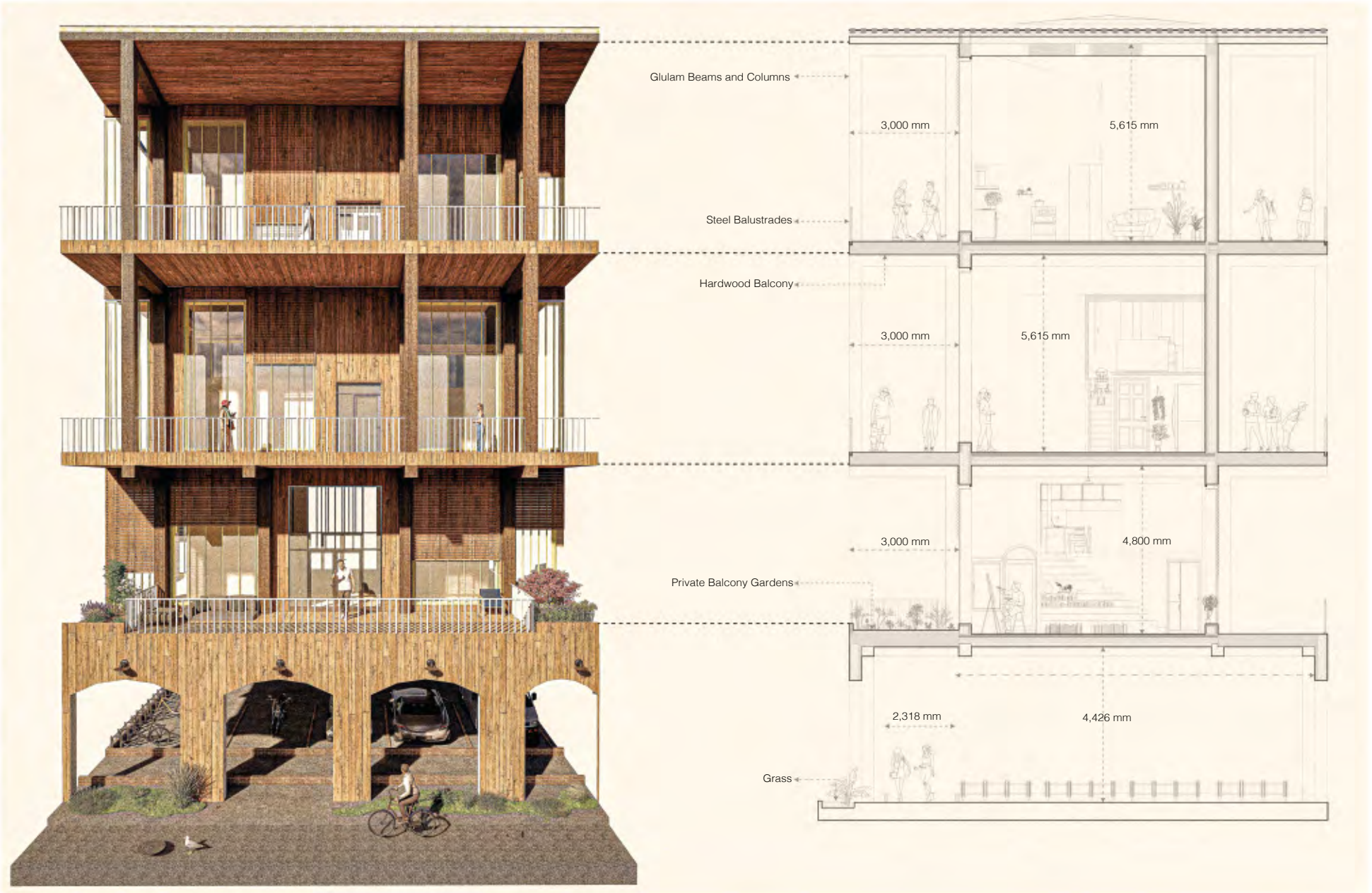
Section Perspective



Orthographic Section



Front Elevation

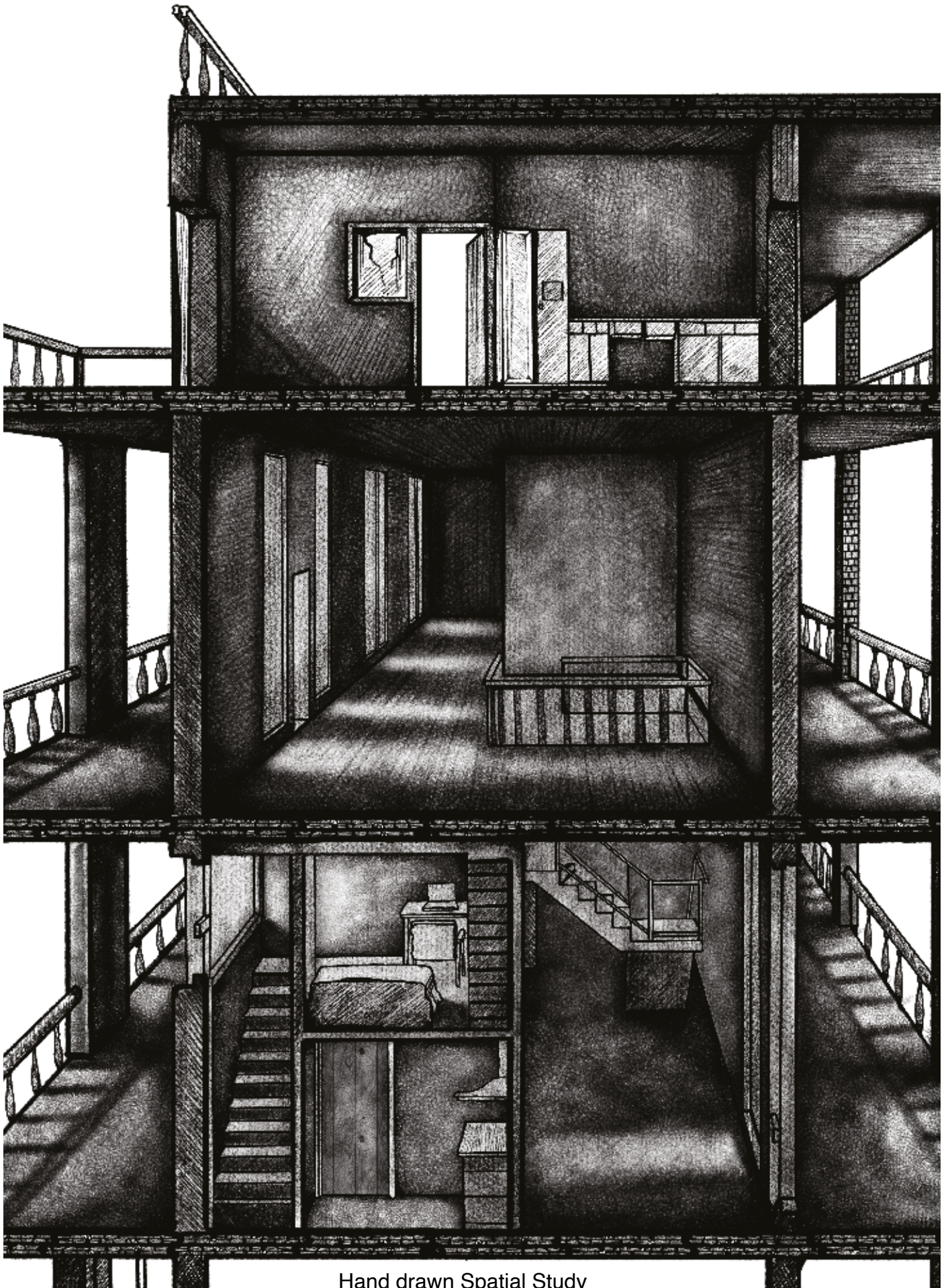


1:50 Section Details



Bedstee View





Hand drawn Spatial Study



Bedtsee Studio View



Why Can't We Live Together



Convivial Living View



Isometric View



Car Park View



Centred Garden Space View



Multi Use Games Area





Street View

