



VOLTSTATION

Recharge. Renew. Reimagine

Student: Han-Hsuan Lee

Instructor: Joris Putteneers

The VoltStation is a public building designed to address the modern reliance on electronic devices while offering a space for relaxation and escape from daily life. Inspired by Wall House 2, the design emphasizes the wall as a functional and structural element, integrating seating, charging outlets, and minimalist furniture into the architecture.

The building features three themed floors, each using a distinct color palette to evoke different emotions and provide a unique atmosphere. These spaces are designed to help users recharge mentally and physically, offering environments that range from energizing to calming. Open areas and ergonomic elements, such as built-in seating and hammock-like resting zones ensure comfort and foster moments of disconnection from screens and societal pressures.

VoltStation is powered entirely by renewable energy sources, including solar panels, wind turbines, and algae systems. This sustainable approach meets the building's high electricity demands while aligning with its mission to promote environmental consciousness. The project showcases how technology and sustainability can coexist harmoniously in modern public spaces.

While the building's primary function is to provide charging facilities for phones, laptops, and tablets, it also serves as a retreat for those seeking a break from their devices and the hustle of daily routines. Users may come with the simple excuse of charging their devices but find themselves immersed in a thoughtfully designed environment that encourages relaxation and mindfulness.

VoltStation transcends its practical purpose, becoming a sanctuary where technology meets emotional well-being. It offers a unique blend of functionality and serenity, inviting people to recharge both their devices and themselves in a space that prioritizes comfort, sustainability, and the modern need for a moment of escape.

DOMESTICITY: OUTLET

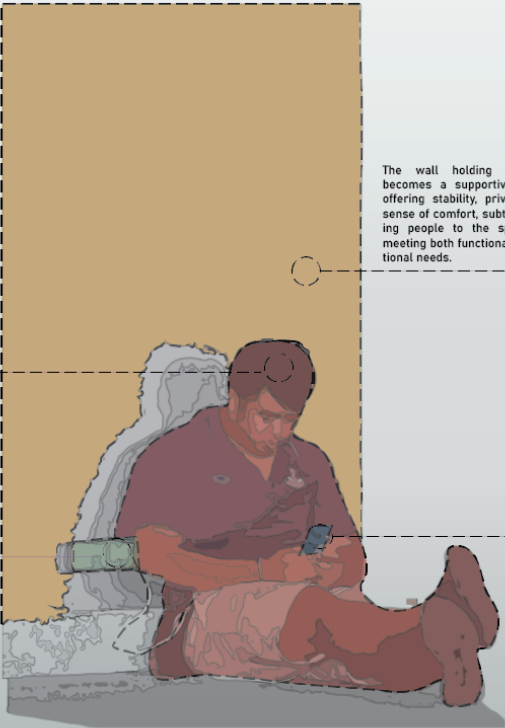
In today's world, electronic devices have become indispensable, making daily charging a necessity. Electricity is so essential that a home without outlets feels unimaginable. This dependency struck me when I noticed a man sitting on the floor near an outlet, charging his phone amidst a bustling crowd. Completely absorbed in his video, he seemed at ease, indifferent to his surroundings. That moment highlighted how an outlet can evoke a sense of comfort and familiarity, much like being at home. For him—and for many of us—an outlet represents a small but significant connection to the security of domestic life.

People who need public outlets include commuters, remote workers, students, digital nomads, and those in emergencies. For them, outlets offer more than power—they provide comfort, familiarity, and a small connection to the security of home.



An "outlet" symbolizes more than just a physical socket for charging devices. It represents a connection to comfort, familiarity, and the essentials of modern life. Outlets provide not only power but also a sense of security and a brief moment of home-like stability in public spaces, meeting both practical and emotional needs.

The wall holding the outlet becomes a supportive element, offering stability, privacy, and a sense of comfort, subtly connecting people to the space while meeting both functional and emotional needs.

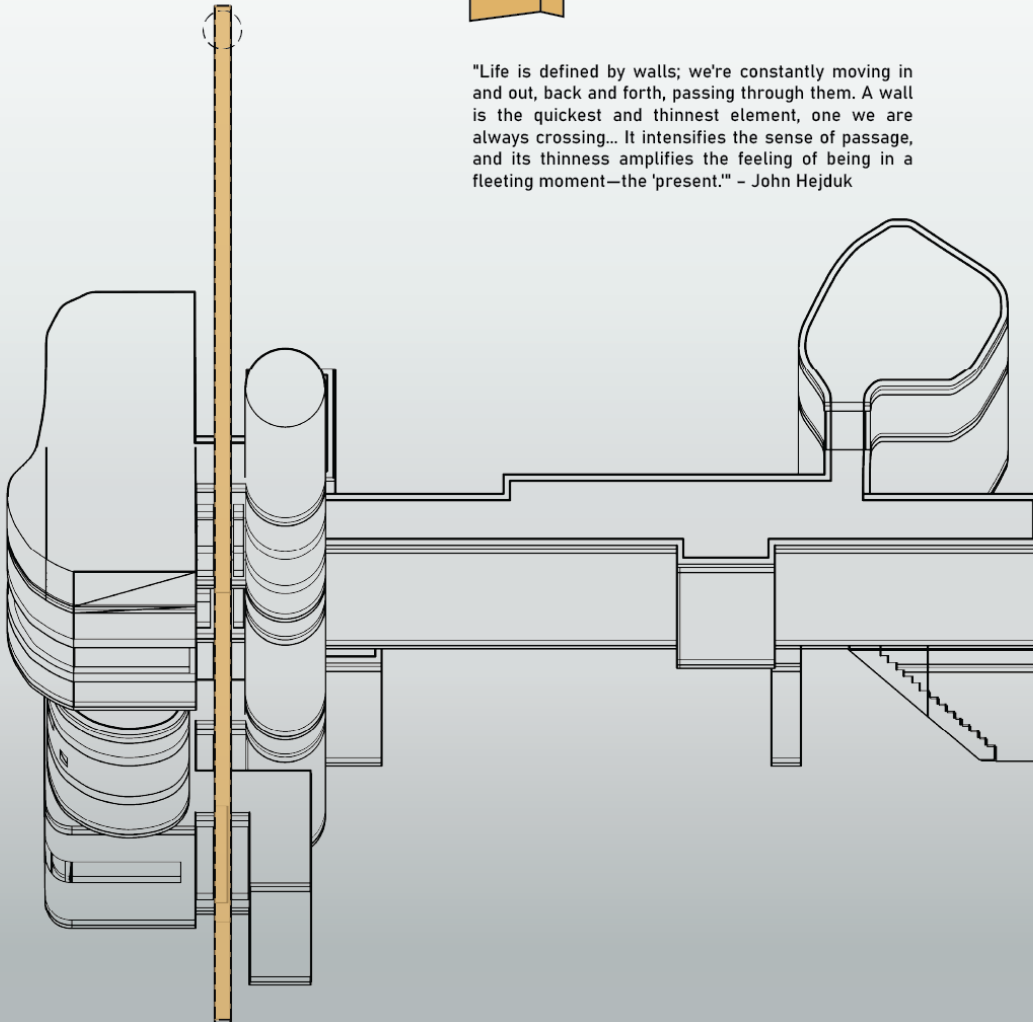


In this situation, the phone represents a lifeline to communication, entertainment, and personal identity. It connects people to their digital world, offering continuity and security. It also serves crucial functions such as mobile banking, emergency calls, and information searches, providing a sense of reassurance and control in a public space.

WALL HOUSE #2 BY JOHN HEJDUK



"Life is defined by walls; we're constantly moving in and out, back and forth, passing through them. A wall is the quickest and thinnest element, one we are always crossing... It intensifies the sense of passage, and its thinness amplifies the feeling of being in a fleeting moment—the 'present.'" – John Hejduk



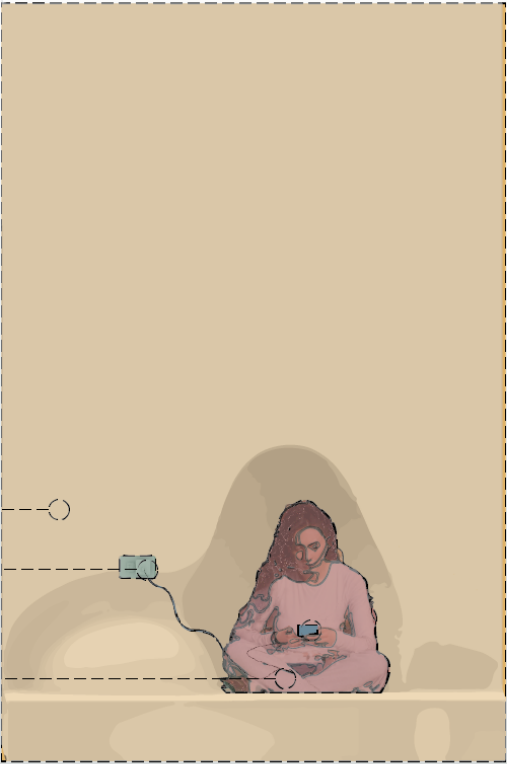
The house has three floors: the ground floor, the second floor, and the third floor. The ground floor includes a single entrance and one room. The second floor features two rooms—one at the front and the other at the back. The back room serves as a study, with a ceiling height of 4.5 meters. The third floor contains a single room, which serves as the bedroom.

THE RECHARGE RETREAT

The Recharge Retreat is a public space designed to seamlessly combine comfort and functionality. In today's fast-paced urban environments, where technology is indispensable, finding a place to sit, rest, and charge devices is both practical and valuable. This project aims to offer a convenient solution by providing comfortable seating integrated with personal charging stations.

- 1. Ergonomically designed to provide comfort and seamless seating.
- 2. Strategically placed for convenient charging access.
- 3. Supports uninterrupted connectivity by accommodating device use
- 4. Prioritizes user comfort and digital needs.

WALL
OUTLET
DEVICES
USER



More than just a utility, the Recharge Retreat serves as a temporary haven for individuals to recharge both their devices and themselves. It enhances public spaces by meeting the growing demand for charging points while offering a moment of rest in an increasingly connected world.



AIRPORT

MRT STATION

LIBRARY

UNDERPASS

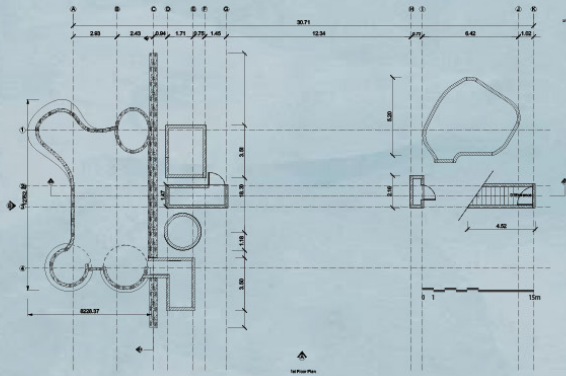
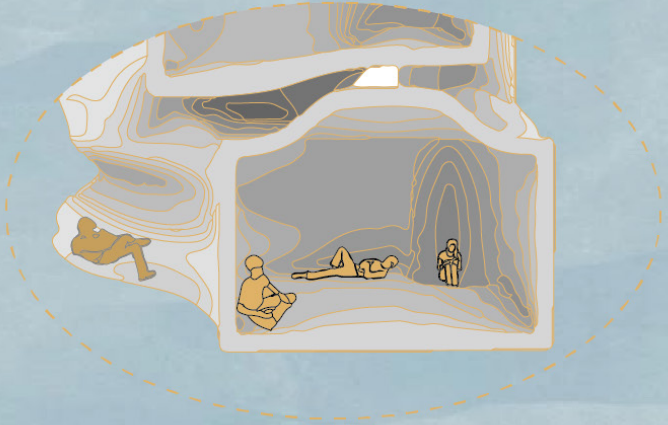
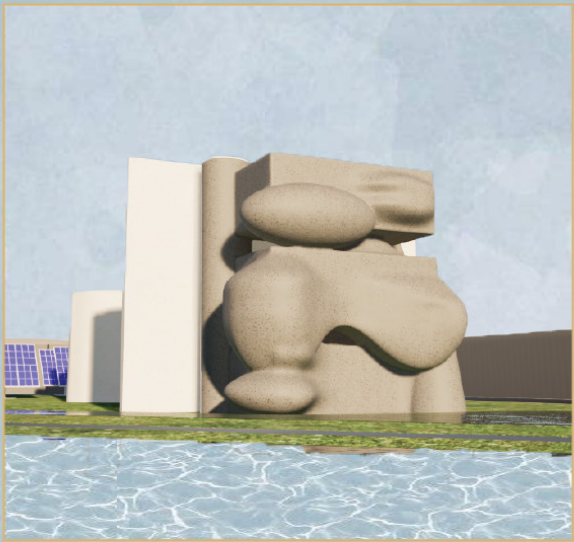


In Phase 1, the project was born from observing a small but significant act: I saw a man sitting in a public space, leaning against a wall to charge his phone. His position, comfortably seated with his phone in hand, inspired me to think about outlets as a central aspect of domesticity. The act of charging in public, especially in a crowded area, emphasized the importance of access to power. This led me to select Wall House 2 as my case study, as it revolves around the concept of the wall as a structural core. In Wall House 2, the wall is not only a boundary but the primary element shaping the entire space. I adopted this concept for my project by positioning the wall at the center of my building's structure, turning it into a functional element that provides seating, charging outlets, and support for the entire design.

Phase 2, I focused on developing a device or furniture piece that could enhance this domesticity. This led to the creation of The Recharge Retreat, a space designed to blend comfort with functionality. In today's fast-paced world, particularly in urban environments, electronic devices have become essential. Finding a place to sit and charge devices in public spaces is increasingly important. The Recharge Retreat addresses this by offering comfortable seating equipped with personal charging stations, making it ideal for high-traffic areas such as airports, train stations, or malls. The materials used for this project can vary depending on the location, but they could include concrete, glass, wood, or even superadobe, ensuring the design adapts to different environments.

The Recharge Retreat serves as a temporary haven where people can sit, rest, and recharge both their devices and themselves. It also enhances public spaces by offering a practical solution to the growing demand for charging points in increasingly connected societies. The need for such spaces was a central element of my design, which informed the overall building layout in later phases.

VOLTSTATION : GROUND FLOOR

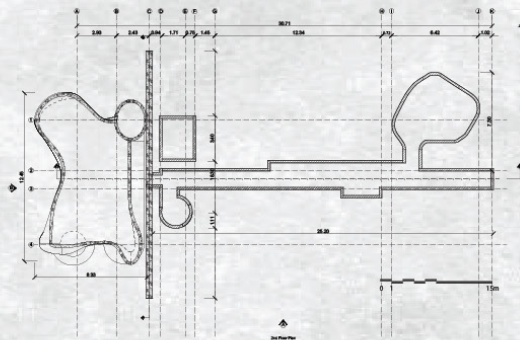
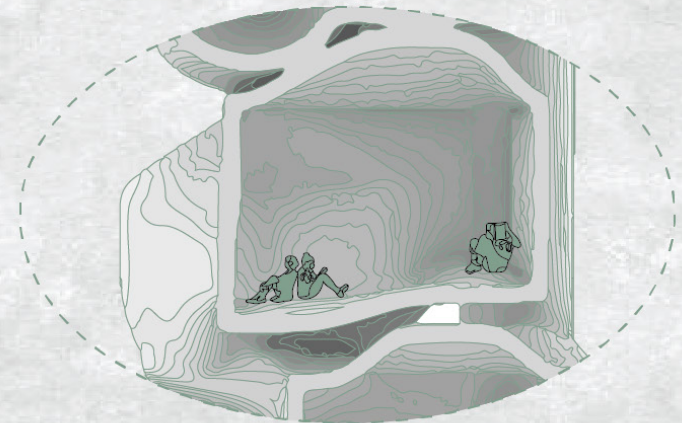
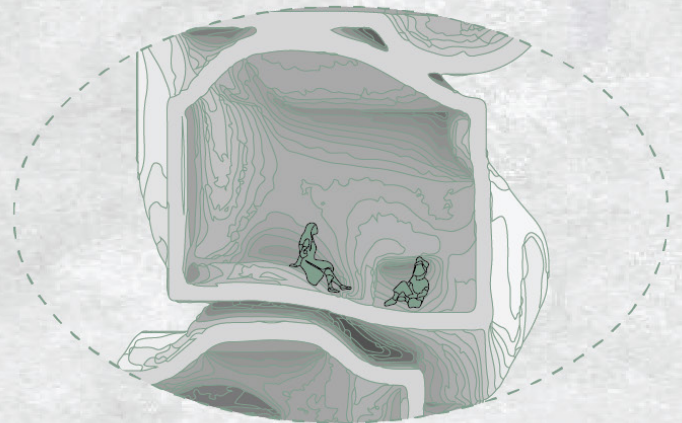


PURPOSE & CONCEPT

Designed to meet the needs of modern device users while offering a place for mental and physical relaxation. Inspired by Wall House 2, emphasizing walls as structural and functional elements.

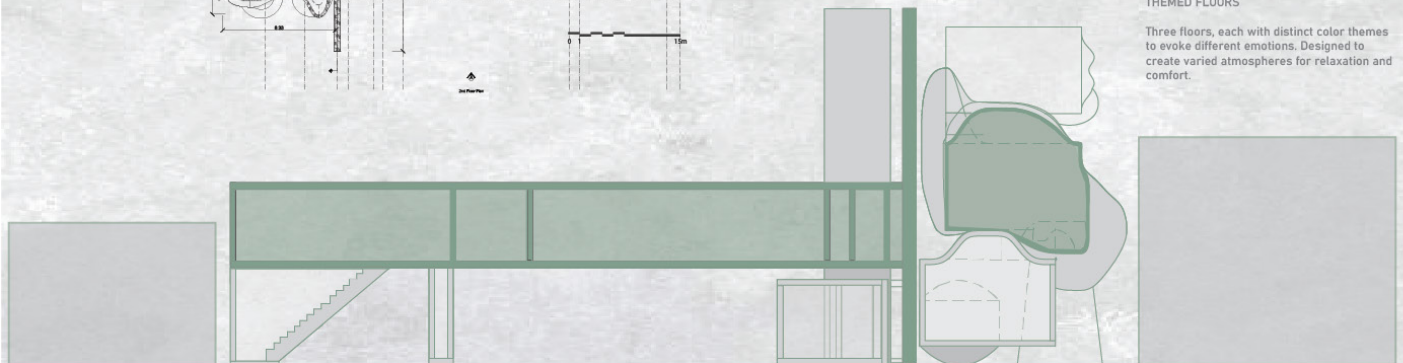


VOLTSTATION : SECOND FLOOR

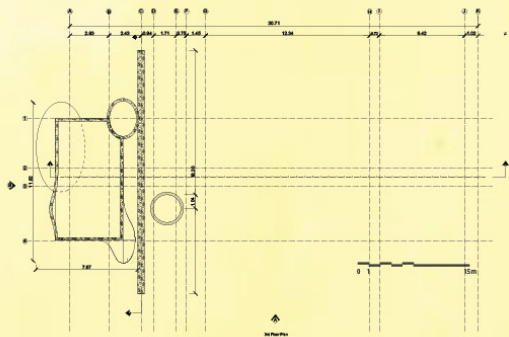
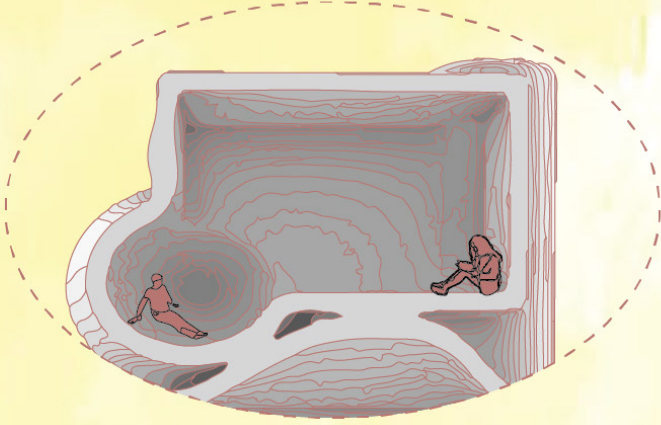
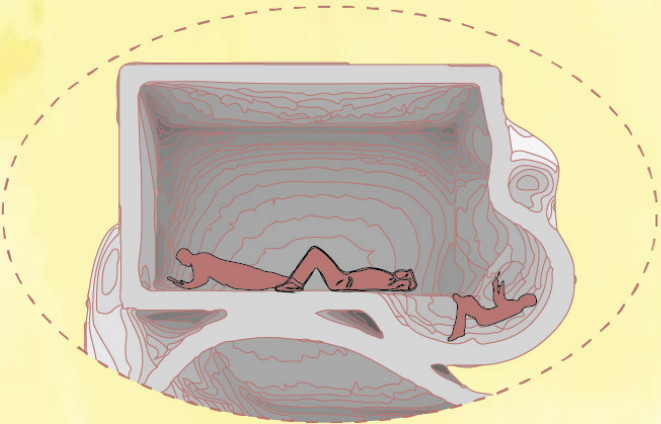
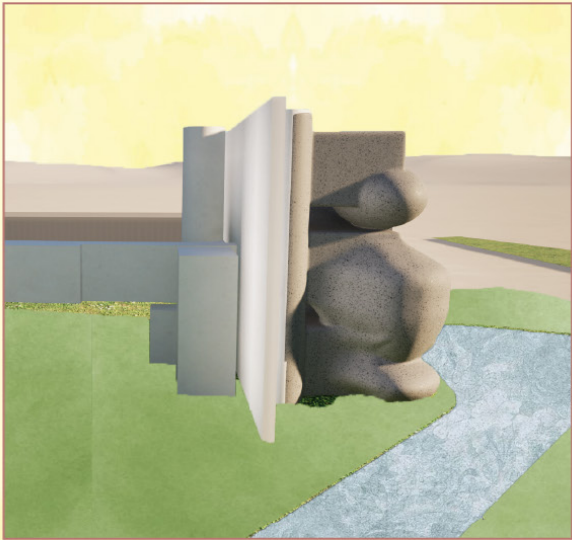


THEMED FLOORS

Three floors, each with distinct color themes to evoke different emotions. Designed to create varied atmospheres for relaxation and comfort.

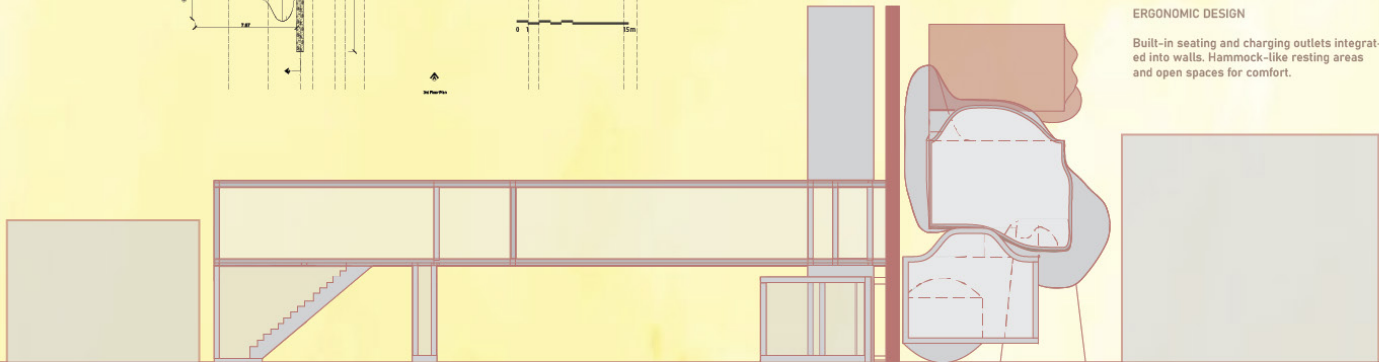


VOLTSTATION : THIRD FLOOR

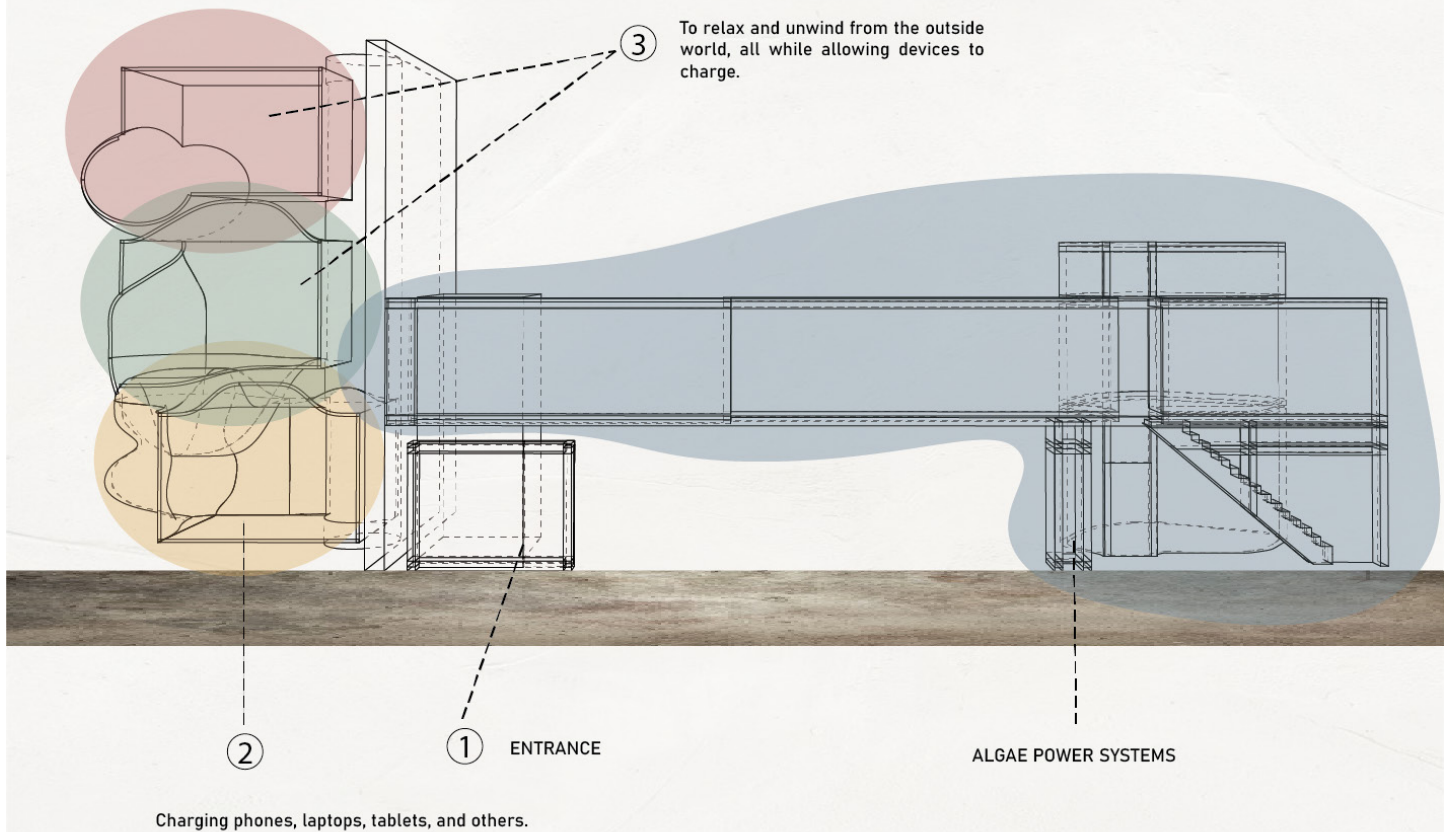


ERGONOMIC DESIGN

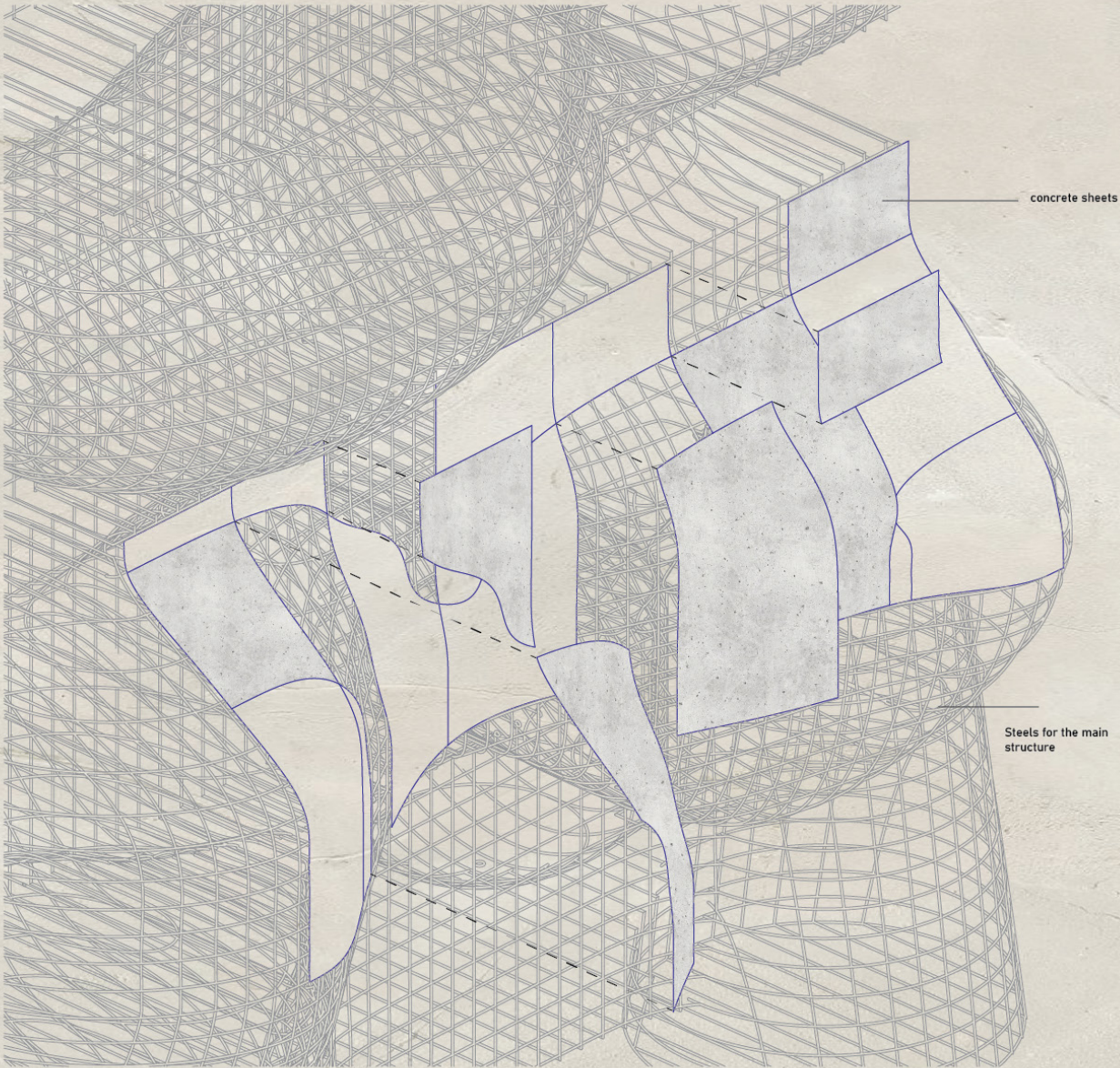
Built-in seating and charging outlets integrated into walls. Hammock-like resting areas and open spaces for comfort.



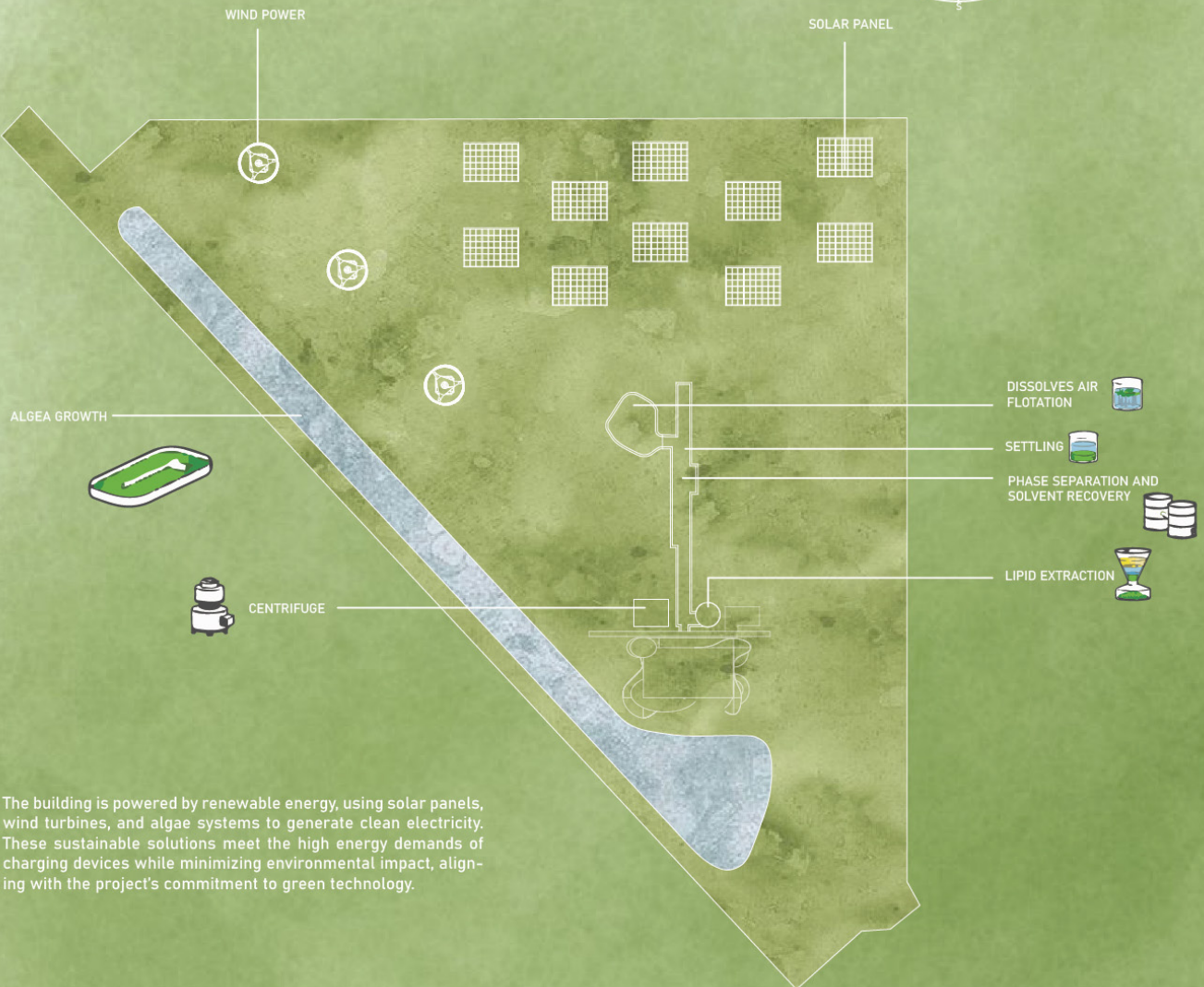
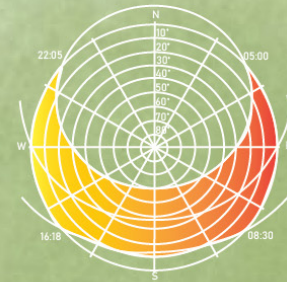
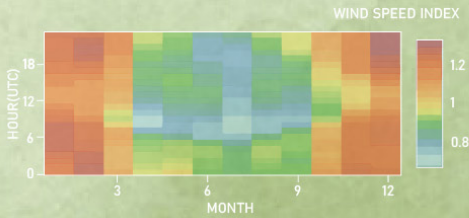
The building serves as a retreat where individuals can disconnect from their digital devices and find relaxation. It acts as a sanctuary for emotional and mental recharging, encouraging mindfulness and providing an opportunity for personal disconnection from the demands of daily life.



STRUTCTURE



RENEWABLE POWER



The building is powered by renewable energy, using solar panels, wind turbines, and algae systems to generate clean electricity. These sustainable solutions meet the high energy demands of charging devices while minimizing environmental impact, aligning with the project's commitment to green technology.