

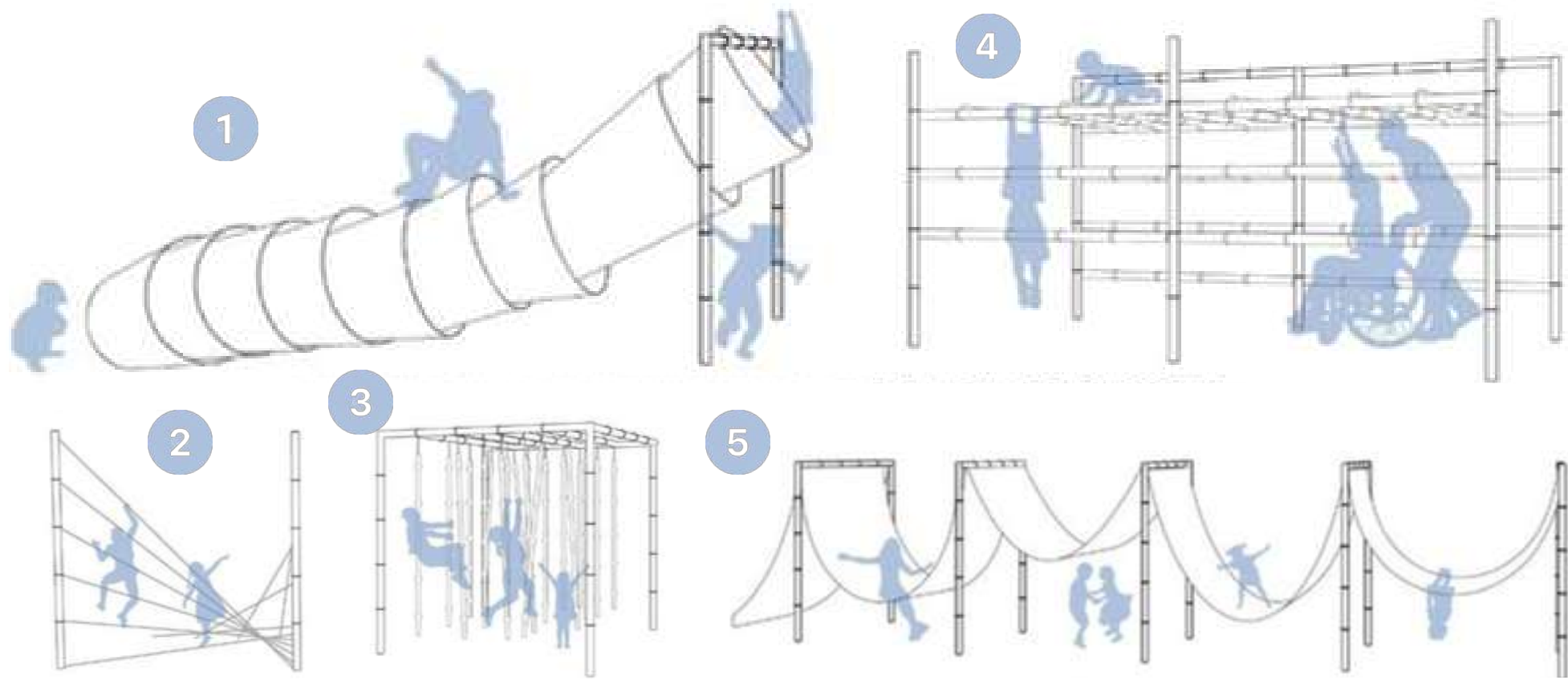


IDEATION

SENSORY PLAY

Introducing sensory play in the structure allows the users to learn about:

- 1. Gravity, body awareness and perception
- 2. Parabolic curves and shapes
- 3. How combination of wind and natural materials creates music
- 4. Balance and motor skills
- 5. Exploring forces - fabric responds to weight added and effects along the whole sheet



GENERAL IDEA

The main idea is to **attract people to the site**, especially mothers. Based on survival instincts, it is in our blood to always follow where our children go. Hence, dedicating a building space for children would entertain and occupy the attention of high energy children while the mothers of USJ 7 would be able to cultivate urban farming in their neighbourhood. As children have a tremendous amount of energy that needs to be exerted out somewhere, this energy must be converted into the spaces around them. Thus, in order to create a space that allows the children to be themselves and exert their energy to their surroundings, the site must be big enough and spark interest to them in one way or another.

ACTIVITIES

With the many other functionalities and agendas of this space, this project aims to target the women as well as the younger generation to start farming and creating importance to living an environmentally healthy lifestyle in their neighbourhood. If successful, a community of urban farmers will blossom and expand within the Kebun Komuniti in USJ 7, starting from the children in the community.



DESIGN CONCEPT 1 - STACKING

With mind of relating this project to children, it goes to say that children typically enjoy stacking objects. Whether it is to create a tall structure, or to just see what shapes they can create with random objects around them...stacking is a universal response that calls for creativity.

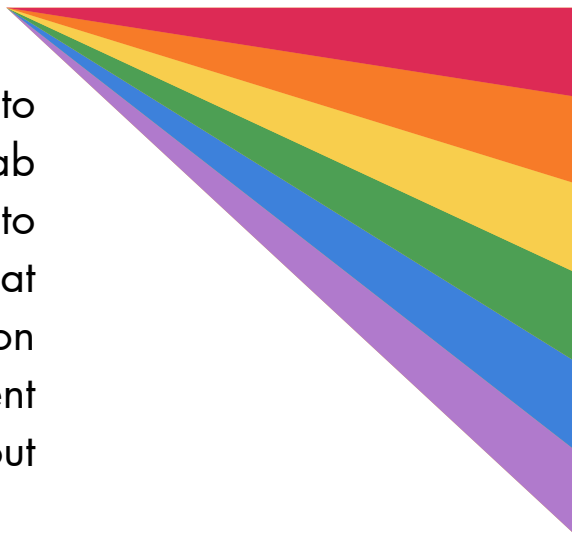


DESIGN CONCEPT 2 - SHAPES AND SIZES

Shapes and sizes help guide the user through a structure, and it can be striking for the younger ones. Creating a sizeable shape that triggers the minds of children will help them figure out what spaces they would like to go, and what spaces are not meant for them. For example, children would much rather enter through a smaller entrance as it shows that the space was dedicated to them.

DESIGN CONCEPT 3 - COLOUR

When something has colour, it sparks interest to any living thing. Colour is a great way to grab any user's attention, as it is almost impossible to ignore something that is staring right back at you. Children tend to have very short attention spans, therefore introducing colour will prevent the targeted users to be distracted throughout their journey in the structure.



PRECEDENT STUDIES

MIND CRAFT

JAN SIKORA, EWA SIOSTRZONEK, AND KATARZYNA MALISZEWSKA

Mind Craft is a way to let people design their own environment manually from scratch. You can choose shapes, colors assigned to specific features and build together for yourselves and for others. The blocks are made from recycled plastic and are free to take in places located around the cities, next to public spaces.

The idea shows child’s play and how the building can be **fully customized to their own liking**. Also, the buildings do represent building blocks that children play with. The simple shapes and colours allow people to visualize their understanding of reality, with the building blocks and their creativity.



SEMIRAMIS INSTALLATION

GRAMAZIO KOHLER RESEARCH + ETH ZÜRICH + MÜLLER ILLIEN
LANDSCHAFTSARCHITEKTEN + TIMBATEC TIMBER CONSTRUCTION
ENGINEERS SWITZERLAND + URBAN ASSETS ZUG AG

Semiramis is an architectural installation designed with artificial intelligence that was constructed in 2022 at the entrance of a new Tech Cluster Zug, Switzerland. As a herald for the increasingly interwoven collaboration between machines and humans, it aims to go beyond usual urban programs and it will rise as a vertical urban habitat reserved for plants and small local animals.

The concept of **stacking and layering** in this precedent can relate to the layers of a forest in the “kebum rimba” from the master plan, therefore it would be an interesting approach to go ahead with this **idea of the play of levels and nature**.



GEORGETOWN DAY SCHOOL PLAYGROUND

EARTHSCAPE + LEMON BROOKE

LOCATION: WASHINGTON, DC
COMPLETION DATE: 2020

The narrative of the Georgetown Day School (GDS) playground design takes its cue from the school mascot, the grasshopper and has a strong focus on the concept of biophilia: the love of nature. Designed in collaboration with Lemon Brooke, and GDS staff and students, the playground for both lower and middle school students is spread over four complex and distinct areas. The playground at GDS fosters an environment of **wonderment, imagination, and creativity as well as a deep-rooted connection to nature**.

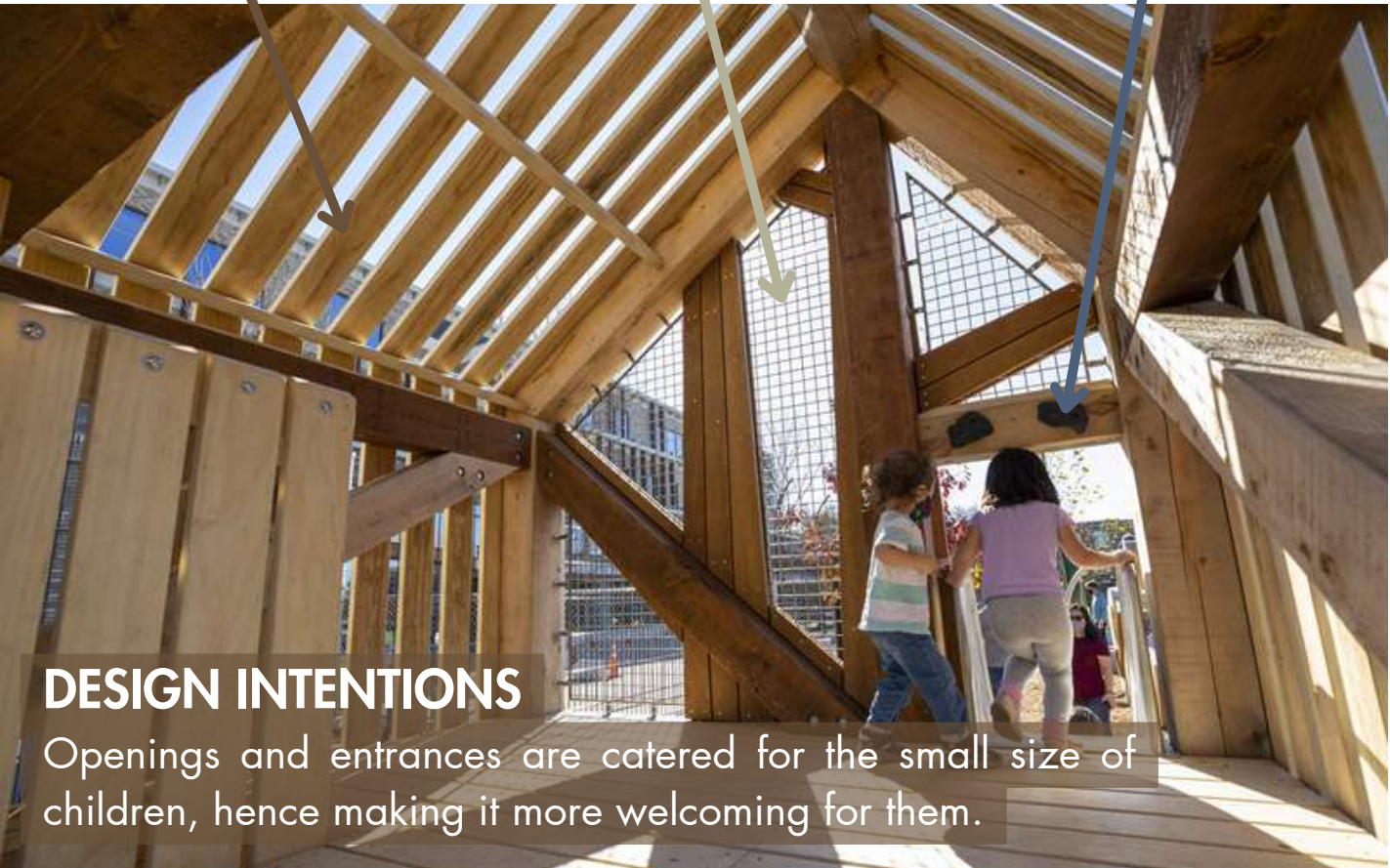
FUNCTION

Most importantly, the complexity of the play pieces in this design reinforce the capacities that the school strives to teach every student. Consequently, the unpredictability and challenge presented in the playground engage cognitive function that **provide opportunities for creative thinking and risk assessment**. Accordingly, every play piece at GDS includes these challenges to give students the freedom to make choices during play. They can push their boundaries, take risks, learn from failure, and build their confidence – all valuable lessons that they will carry into adulthood.

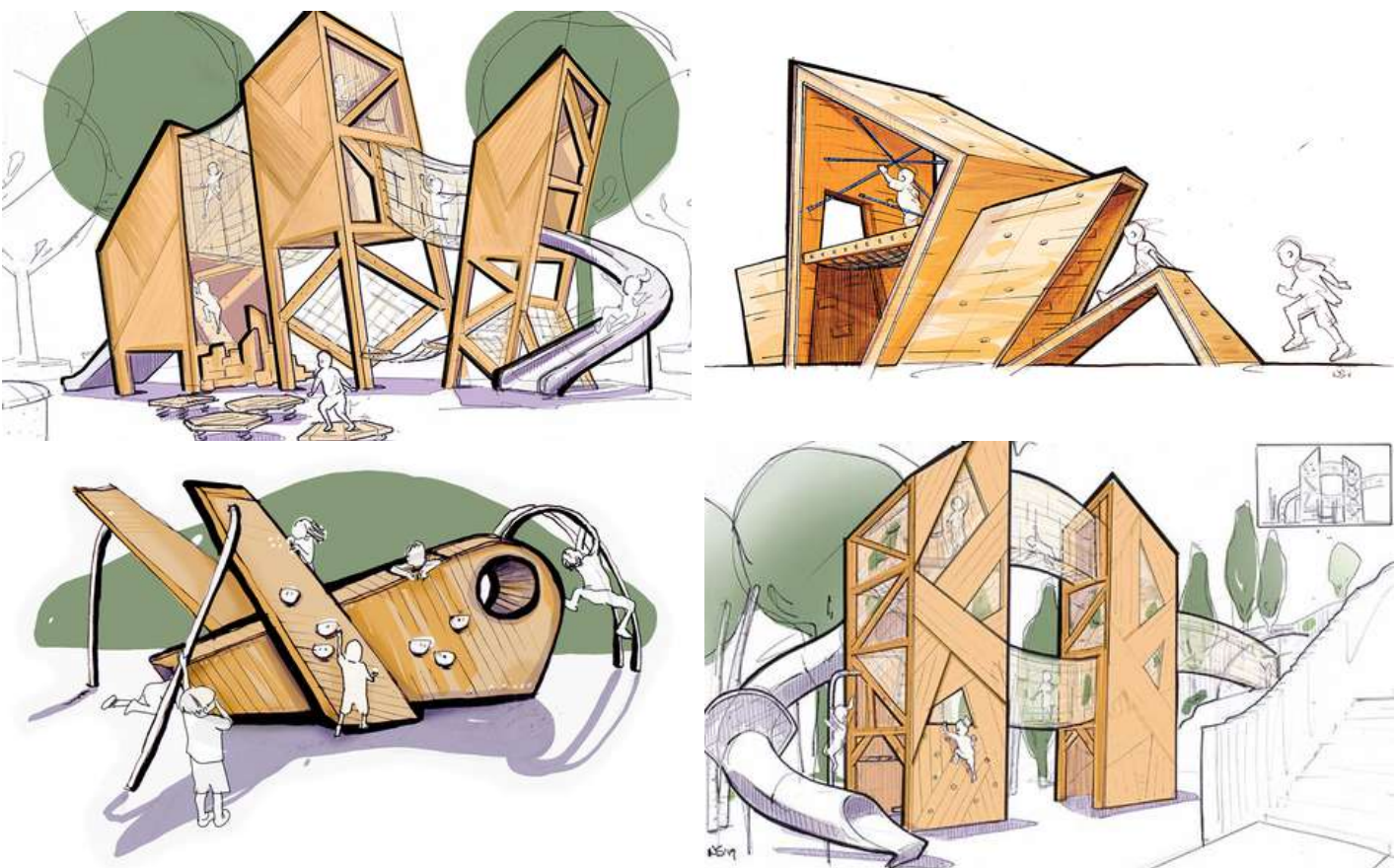
MATERIALITY

The structure mainly comprises from **wood, steel and plastic**.

WOOD PLANKS STEEL BARS PLASTIC HANDLES



CONCEPT SKETCHES



VAC-LIBRARY
FARMING ARCHITECTS

In present-day Hanoi, Vietnam, people tend to create small landmarks in their homes, including the placement of fish ponds, which may be small aquariums or Koi ponds with higher investment. In addition, the situation of vegetable contaminants in the city also causes the desire to plant fresh vegetables right in resident homes became imperative. Nowadays, many families organize planting vegetable at home, however, mostly following spontaneous methods, without a strategic planning or architectural aesthetics. These are vegetable foam boxes that are placed in a narrow space in the house, or in the garden area of the balcony and top terrace.



HOW DOES VAC-LIBRARY WORK?

The core feature for the design of VAC is the Aquaponics, it is a system that combines conventional aquaculture (raising aquatic animals) with hydroponics (cultivating plants in water) in a symbiotic environment. Aquaponics uses circulating water from a fish pond to provide nutrients to plants. Nitrite/nitrite bacterium will transfer the waste from the aquarium into a suitable nutrient-rich crop for plants. Water is also purified by plants and supplied to the aquarium. The system is designed with energy conservation in mind, using renewable energy (by transferring solar energy) and a reduced number of pumps by letting the water flow downwards naturally as much as possible. Besides, electricity for lighting and pumps are also provided - saved from solar panels on the roof.



ARTIST RESIDENCY FARM8
STUDIO ARRAY

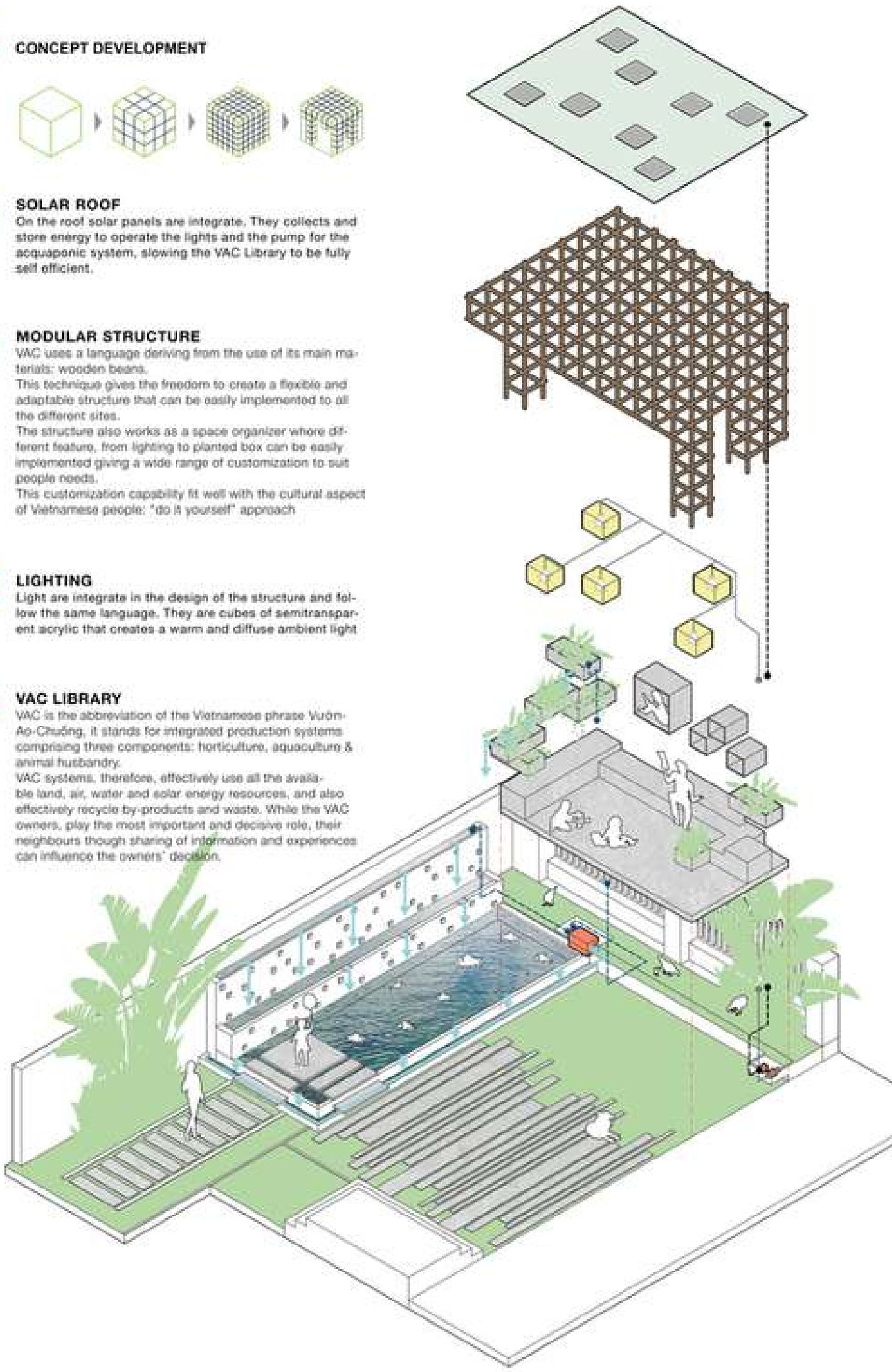
Located in Arjanghar, New Delhi, The artist residency, Farm 8 is nestled in a verdant oasis, within an otherwise densely packed urban village. Almost a decade ago, the clients, Ranbir and Rashmi Kaleka intended to use the site as an artist's studio space for themselves. Foundations and columns were thus cast at the time, unfortunately, the on-site work was stalled for unforeseen reasons. In 2020, with evolving needs and lifestyles, the artist-clients began using the 5-acre farm for sustainable farming and experimental permaculture practices as part of an artist collective called Farm8.



LOCATION: DUONG NOI, VIETNAM
COMPLETION DATE: 2020

VAC LIBRARY SCHEMATIC EXPLANATION

- CONCEPT DEVELOPMENT**
The concept development process is shown through a series of diagrams illustrating the integration of the building, the pond, and the library.
- SOLAR ROOF**
On the roof solar panels are integrate. They collect and store energy to operate the lights and the pump for the aquaponic system, allowing the VAC Library to be fully self efficient.
- MODULAR STRUCTURE**
VAC uses a language deriving from the use of its main materials: wooden beams. This technique gives the freedom to create a flexible and adaptable structure that can be easily implemented to all the different sites. The structure also works as a space organizer where different feature, from lighting to planted box can be easily implemented giving a wide range of customization to suit people needs. This customization capability fit well with the cultural aspect of Vietnamese people: "do it yourself" approach.
- LIGHTING**
Light are integrate in the design of the structure and follow the same language. They are cubes of semitransparent acrylic that creates a warm and diffuse ambient light.
- VAC LIBRARY**
VAC is the abbreviation of the Vietnamese phrase 'Vườn- Ao- Chuồng', it stands for integrated production systems comprising three components: horticulture, aquaculture & animal husbandry. VAC systems, therefore, effectively use all the available land, air, water and solar energy resources, and also effectively recycle by-products and waste. While the VAC owners, play the most important and decisive role, their neighbours though sharing of information and experiences can influence the owners' decision.



LOCATION: NEW DELHI, INDIA