



Winners Announced for “Tiny House 2022 Architecture Competition”

Archetype team - 04/04/2023

International design competition

Home is a space that is intimate to all of us. A home goes beyond its everyday function of being a physical shelter for people and their activities; a home connects with its users at a personal and emotional level. Our humble abodes are being redefined with every passing day. The world is changing constantly, and along with it, our homes are seeing us spend more time within them. The built form of a home is evolving rapidly, its design adapting to various other needs that were not limited to this space before. Homes today are versatile entities – doubling up as offices, play areas, work-out zones, and spaces for interaction and recreation, transformative, multi-purpose, and evolving to adapt to us, not the other way around.

A Home is no longer just a place you live in but is a place that lives with you.

Volume Zero Competition thanks all the competitors for participating in this competition and for contributing to this competition's research.

Participants from more than 50 countries contributed valuable concept ideas to the contest, which was evaluated by a panel of international experts. The winning projects have been awarded a total cash prize of

\$4,500 distributed to the first 3 team winner and student award.

The esteemed jury for judging this competition consisted of **Sangeeta Merchant** (Spasm Design Architects), **Sanjeev Panjabi** (Spasm Design Architects), **Widhi Nugroho** (Studio WNA), **Todd Saunders** (Saunders Architecture), **Tiago Rebelo De Andrade** (Rebelo Andrade), **Nguyen Hoang Manh** (MIA Design Studio), **Marco Lavit** (Atelier LAVIT), **Luis Rebelo De Andrade** (Rebelo Andrade), **Dipen Gada** (DG Associates), **Jun Sekino** (JUNSEKINO architect and design), **Hardik Shah** (Studio Lagom), **Demetri Lampris** (SO-IL), **Craig Steely** (Craig Steely Architecture)

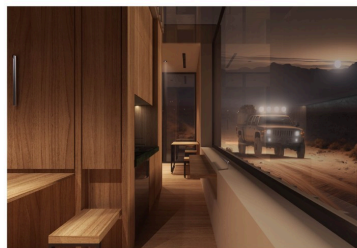
The top three winners and best student were awarded total prize money of \$4,500 while ten entries received Honorable Mentions. Here are the winning entries. The full result for the competition **Tiny House 2022 Architecture Competition** can be found on -<https://volumezerocompetitions...>

FIRST PLACE

YOU DECIDE

Mohammad Saeed Maaleki and Amir Mohammad Hassani

Iran



YOU DECIDE, What state it should be in.

ADAPTATION
It is designed to adapt to the environment, and for the airflow, it can rotate in the central axis to receive energy and to receive natural ventilation from the ground to the building in a strategic way.

ACCESS
The main access to the interior was designed. The door opens through the rotation of the structure, and the house is on the ground and the access is through vertical ladders when the house is separated from the ground.

INTERIOR SPACE VARIATIONS
Living, dining, recreation and dining space with an area of 18 square meters. Interior and front entrance with large windows. If necessary, together by a door provided for the kitchen area is created.

THREE DIMENSIONAL SECTION + DETAILS

1. SOLAR CITY PANELS
2. SOLAR BATTERY
3. AIR CONDITIONING SYSTEM
4. INSULATION AND DRAINAGE SYSTEM
5. WATER TANK
6. WASTE COLLECTION SYSTEM
7. CENTRAL CORE STRUCTURE
8. MAIN STRUCTURE
9. VERTICAL ELEVATOR (FRONT-LOAD MATERIAL)
10. HEAT INSULATING GLASS
11. LIGHT CONTROL SYSTEM
12. DYNAMIC HYDROPHONE
13. AIR CIRCULATION CHANNEL
14. DYNAMIC HYDROPHONE
15. DYNAMIC ENTRANCE STAIRS
16. CHIMNEY-BED

CORE SYSTEM
The central core structure is equipped with rack and pinion systems.

ENERGY RESOURCES FOR OUR TINY HOUSE
The energy required for the living space of the living and dining area is provided by the solar panels and solar storage.

FOOTPRINTS ON THE GROUND
The footprint of this house on the ground is only the size of a wheel, which is the same as the footprint of a car.

ELEVATION / FACADE
The facade of this house is made of a hand-drawn fabric that is resistant and light weight.

ROTATION AND HEIGHT CHANGE
THREE LIFTING AND RETRACTION SYSTEMS:
RETRACTABLE ROOF
DYNAMIC ENTRANCE
DYNAMIC HYDROPHONE

FLOOR PLAN / Total area 27 m², Scale 1:100

SECTION A-A / Core area 17 m², Scale 1:100

SECTION B-B / Core area 17 m², Scale 1:100

BACK AND FRONT DRIVE SYSTEM
It can rotate 360 degrees and the rotation is controlled by a central axis. The rotation is controlled by a central axis. The rotation is controlled by a central axis.

HANGING AND TRANSPORTATION
There is the ability to transport the project in a container on top of the truck and suitable for the environment.

FRACASE MATERIAL
Applied PVC material will only be used about 10% of the project, and the rest will be made of natural materials to keep the project in a better fit to the environment.

RECORD DRIVE SYSTEM
RETRACTABLE ROOF
DYNAMIC ENTRANCE

OUTDOOR DRIVE SYSTEM
On-site ladder
DYNAMIC ENTRANCE

ENTRANCE / WORKSPACE / KITCHEN AND BATH

RECORD DRIVE SYSTEM
RETRACTABLE ROOF
DYNAMIC ENTRANCE

YOU DECIDE, What state it should be in.

"THERE ARE 360 DEGREES, SO WHY STICKS TO ONE?" -Zaha Hadid

Which needs of clients are more important? Spiritual needs? Cultural? Geographical? Operational? This house

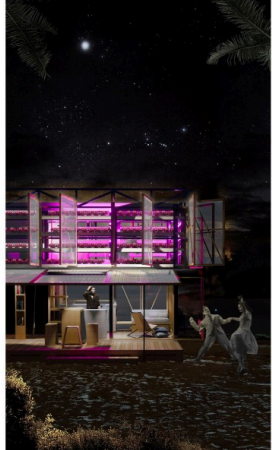
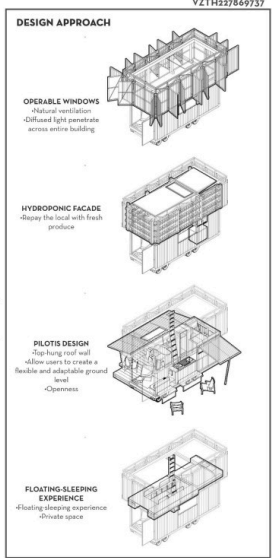
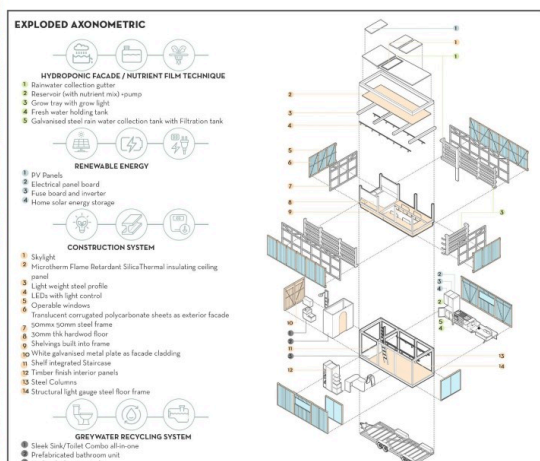
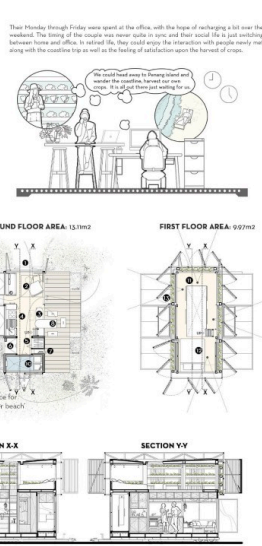
has a simple answer for all these needs... The main issue in the design of this project in the first stage is the lowest level of land occupation, and the second is to be compatible not only with the internal functional needs but also with the surrounding environment. In the sea, in the desert, in the city, in the forest, in the mountains, it occupies only 80 square centimeters of land. The footprint of this house on the ground is only the size of a column in the role of the central core of the structure, it has the same impact in the forest as a tree in the soil and no more. Different modes of facade in the view of a fixed observer due to rotation and height changes. It dances to adapt to the environment, just like the sunflower. It can rotate in the central axis to provide energy and to look around, it moves away from the ground for its safety. It changes for life.

SECOND PLACE

Lilac Cloud

Ooi Yong Rong

Malaysia



A mobile house with flexible screens and walls that integrated scenery, designed with the goal to embody the philosophy of simplicity and convenience, built as a self-sufficient building, completing the demand of an early-retired couple from the city.

The concept was to design a house with folding translucent screens with hydroponic system and reflective faces to connect the building seamlessly to the clear coastal sky line and to spill the multi-functional spaces out on to the expandable terrace and down to the horizon above a calm blue sea.

The house also appears a new focus and social vision of the development of mobile self-sufficient building that

manifest the shifting relationships between cities, where the couple worked for a living and the island to retire on, as well as the relationship between food and urbanism.

THIRD PLACE

The Funnel Hut

Omaatla Charlesfinney Moilwa and Gwafila Leon Tema

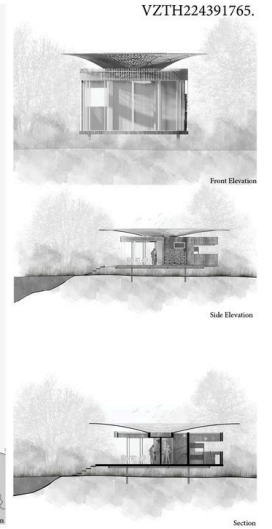
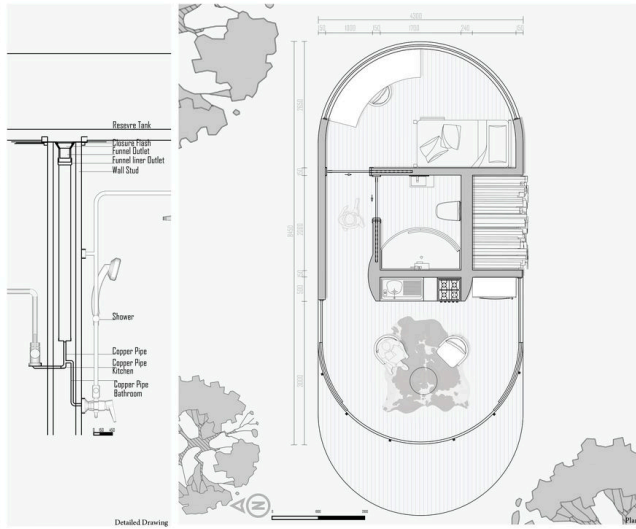
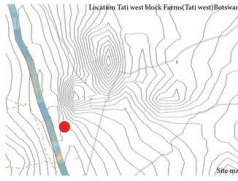
Botswana

The Funnel Hut

In Botswana, farming is a practice that is woven to the lifestyles of many families. Farm land visits are mostly done during weekends and holidays as most families are formally employed in cities and towns. Consequently, African farm house assumes a character of a holiday home in this context which functions as both a work house and an escape from the city life. Fortunately, this has made us return back the simple/natural way of living.

Nature being the greatest architect and it's influence felt in both vernacular and contemporary design. The design features a prominent overhanging canopy mimicking a tree, designed to funnel water to a service core which we refer to as the 'trunk' consisting of the water storage, Kitchenette and a generous shower while also sheltering served spaces consisting of the living room and bedroom kept at the ends of the plan to appreciate of the views.

The canopy is thought of as a canvas for light and shadow creating dynamic effects on the interior space hence being made of steel running with a translucent skin covering the structure, and the wooden shading elements allow interior spaces to be lit up while controlling solar gain.



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STUDENT AWARD

Retractable Tent

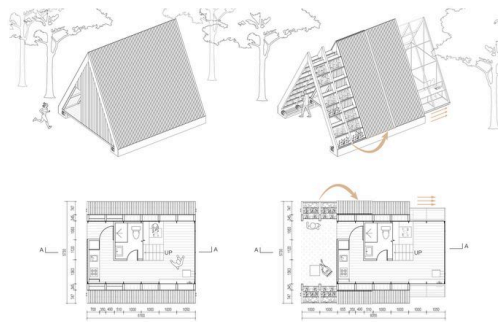
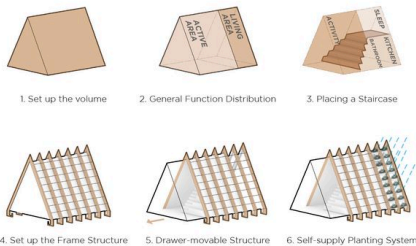
Zhaoheng Wang and Jiale Huang

Sweden

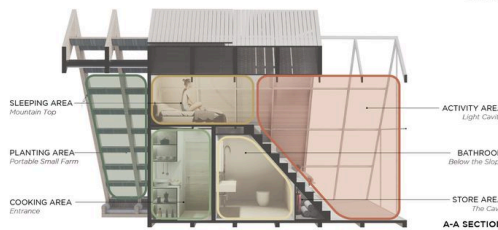
RETRACTABLE TENT

Inspired by the most intelligent invention of people living in the wild - the tent - we offer a new solution for tiny house. It follows the stable structure of the triangular support in form, but takes into account the material and spiritual needs of contemporary human living space in function: a living space to meet the needs of daily life, and an adequate space for rest. It was challenging to fit these two spaces into a 28 sqm house, which is a composite of separate functional rooms in a modern house. So, we set up a large staircase in the room and thus brought a diagonal element to redefine the use of this composite space.

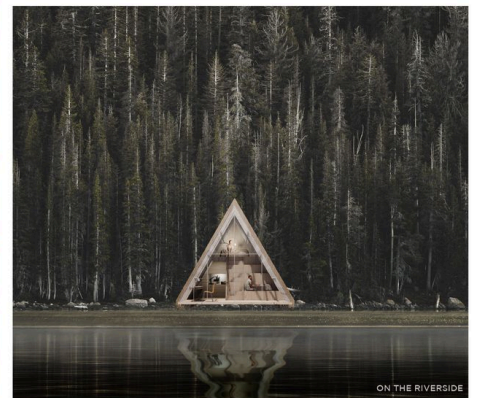
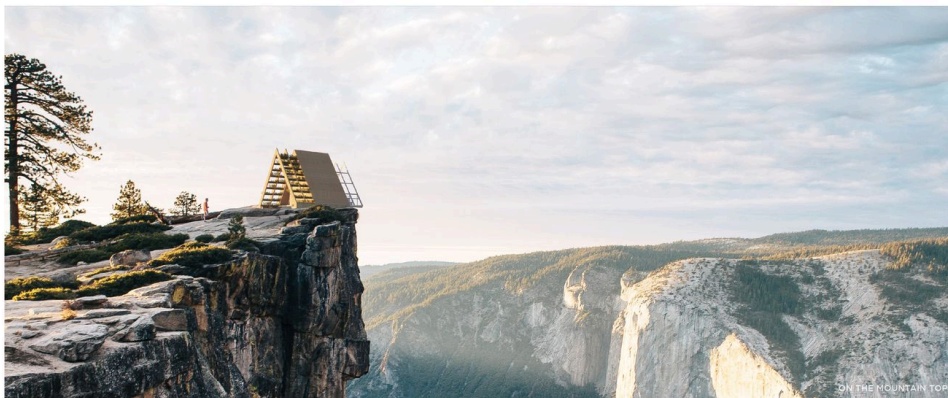
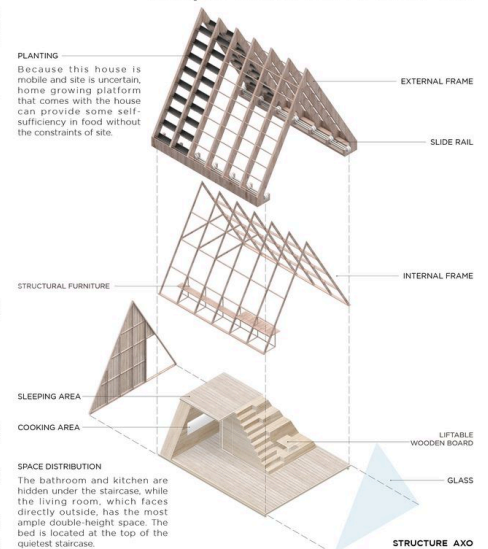
And considering another attribute that this tiny house has, which is usability and mobility in any kinds of environment, we propose a drawer type movable structure which can be retracted when it needs to be transported in order to save space. And after placement, the transparent volume under the frame structure can be pulled out of it, which on one hand extends the usable range of the tiny house, and on the other hand, the overhanging of the glass volume allows one to be immersed in a 360-degree surround environment, while on the other side of the frame structure, we constructed a home planting platform using a rainwater harvesting system, which can solve a certain degree of self-supply problem.



PLAN AND AXONOMETRIC
Scale 1:500



Unique Code:VZTH22827435



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Honourable Mentions:

Honourable Mention 1 - Awas

Chandrima, Vignesh G and Sanjai Haridas | India

Honourable Mention 2 - Puzzle House

Jero Idarraga, Cristina Harker and Maria Sofia Mancera | Colombia

Honourable Mention 3 - Solitary Melody

Yongquan Chen, Junjia Liang and Zhuoran Cheng | China

Honourable Mention 4

Cai Yujing, Lin Yuzhen and Wu Menglan | China

Honourable Mention 5 - Permanent Camping 1

Rob Brown | Australia

Honourable Mention 6 - Frozen Foothold

Justin V Jose and Ashwini Chacko | India

Honourable Mention 7 - Dhajji House

Rahul Bhushan | India

Honourable Mention 8 - Dream House

Ustiuzhanina Ekaterina, Abezinov Temirbulat Dzhambulatovich and Nikita Demidov Andreevich | Russia

Honourable Mention 9 - El Nido

Marc Etienne Lebeau Levesque and Walter Leone Santos | Costa Rica

Honourable Mention 10 - Floating House For Two Artisans

Amelia Nowak and Alma Isabella Castellanos Pardo | Italy