



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.

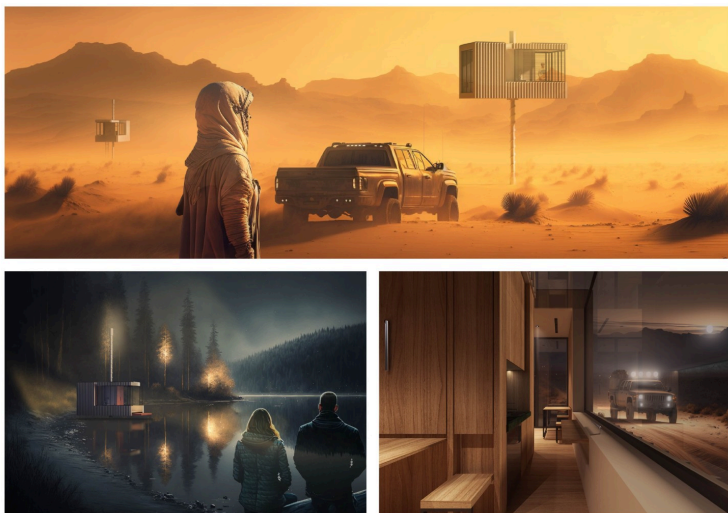
Volume Zero Competition thanks all the competitors for participating in this competition and for contributing to this competition's research.

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

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)

FIRST PLACE
YOU DECIDE

Iran



THE SQUARE

THERE ARE 360 DEGREES,
SO 90 DEGREES IS
ONE-FOURTH OF THE WAY.

John Mee

What makes it difficult to move something? Surface? Load? Culture? Demographics? Organization? The human brain is wired to find the answer to these questions in the most obvious way possible. The answer is to look at the top edge of the object and see what it looks like. The brain is wired to find the answer to these questions in the most obvious way possible. The answer is to look at the top edge of the object and see what it looks like.

FOOTPRINTS ON THE GROUND

The footprint of this house on the ground is just the area of a rectangle. The footprint of this house on the ground is just the area of a rectangle. The footprint of this house on the ground is just the area of a rectangle.

ELEVATION + FACADE

Different views of facade in the view of a facade element due to rotation and height change.

ROTATION AND HEIGHT CHANGE

INDOOR Can rotate and change height
OUTDOOR Can rotate and change height

On the ground
Height of 1.50 meter

CROSS SECTION

The cross-section drawing shows a vertical slice of the building. It features a central core with a staircase and a large open space on the right. The building is supported by a series of columns. The ground level is indicated by a dashed line. The drawing is labeled with dimensions and scale.

ELEVATION PLANT / Total area 27 x 40, Scale 1:100

- 1. Entrance
- 2. Lounge and dining area
- 3. Corridor
- 4. Kitchen
- 5. Bar
- 6. Office
- 7. Reception
- 8. Storage
- 9. Staircase
- 10. Elevator
- 11. Corridor
- 12. Corridor
- 13. Corridor
- 14. Corridor
- 15. Corridor
- 16. Corridor
- 17. Corridor
- 18. Corridor
- 19. Corridor
- 20. Corridor
- 21. Corridor
- 22. Corridor
- 23. Corridor
- 24. Corridor
- 25. Corridor
- 26. Corridor
- 27. Corridor
- 28. Corridor
- 29. Corridor
- 30. Corridor
- 31. Corridor
- 32. Corridor
- 33. Corridor
- 34. Corridor
- 35. Corridor
- 36. Corridor
- 37. Corridor
- 38. Corridor
- 39. Corridor
- 40. Corridor
- 41. Corridor
- 42. Corridor
- 43. Corridor
- 44. Corridor
- 45. Corridor
- 46. Corridor
- 47. Corridor
- 48. Corridor
- 49. Corridor
- 50. Corridor
- 51. Corridor
- 52. Corridor
- 53. Corridor
- 54. Corridor
- 55. Corridor
- 56. Corridor
- 57. Corridor
- 58. Corridor
- 59. Corridor
- 60. Corridor
- 61. Corridor
- 62. Corridor
- 63. Corridor
- 64. Corridor
- 65. Corridor
- 66. Corridor
- 67. Corridor
- 68. Corridor
- 69. Corridor
- 70. Corridor
- 71. Corridor
- 72. Corridor
- 73. Corridor
- 74. Corridor
- 75. Corridor
- 76. Corridor
- 77. Corridor
- 78. Corridor
- 79. Corridor
- 80. Corridor
- 81. Corridor
- 82. Corridor
- 83. Corridor
- 84. Corridor
- 85. Corridor
- 86. Corridor
- 87. Corridor
- 88. Corridor
- 89. Corridor
- 90. Corridor
- 91. Corridor
- 92. Corridor
- 93. Corridor
- 94. Corridor
- 95. Corridor
- 96. Corridor
- 97. Corridor
- 98. Corridor
- 99. Corridor
- 100. Corridor

DYNAMIC PLANT / Total area 27 x 40, Scale 1:100

The elevation drawing shows the front facade of the building. It features a series of columns and a large open space. The drawing is labeled with dimensions and scale.

SECTION A-A

The section drawing shows a vertical slice of the building. It features a central core with a staircase and a large open space on the right. The building is supported by a series of columns. The drawing is labeled with dimensions and scale.

SECTION B-B

The section drawing shows a vertical slice of the building. It features a central core with a staircase and a large open space on the right. The building is supported by a series of columns. The drawing is labeled with dimensions and scale.

The diagrams illustrate the Heliport system's components and assembly process:

- Access:** Shows three methods of access to the interior:
 - Top access: A screw is inserted into the top of the vertical tube.
 - Side access: A screw is inserted into the side of the vertical tube.
 - Bottom access: A screw is inserted into the bottom of the vertical tube.
- Back and Front Drive System:** A side view showing the internal drive mechanism with a central shaft and two sets of gears (one for the back, one for the front) connected to the wheels.
- Handling and Transportation:** Shows the system being moved by a hand truck and a forklift. A note states: "Thanks to the ability to transport the unit in a preassembled form, the time and money for installation is saved in most cases."
- Outdoor Drive System:** A vertical view showing the system's connection to an outdoor drive system. It includes a "RIGID" section at the top and a "FLEXIBLE" section at the bottom, with a "WHEEL MOUNTED DRIVE" at the base.

INTERIOR SPACE VARIATIONS

Seating, sleeping, relaxation and dining spaces with an area of 4 square meters together with a small apartment with kitchen and bathroom are contained.

BEDROOM / DINING ROOM / CHILLING ROOM / LUNDSIDE

Alternative 1a

Alternative 1b

ENTRANCE / HALLSPACE / KITCHEN AND BATH

Alternative 1c

SYSTEM

1. 3D model
2. 3D model

THREE DIMENSIONAL

1. SOLAR CITY PANELS
2. TUBULAR TRAP
3. AIR CONDITIONER UNIT
4. PURIFICATION SYSTEM
5. WATER TANK
6. WAREHOUSE STRUCTURE
7. CENTRAL CORE STRIP
8. MAIN STRUCTURE
9. PLYWOOD CLADDING
10. HEAT INSULATION SYSTEM
11. WINDSTOPPING SYSTEM
12. LIGHT CIRCULATION SYSTEM
13. AIR CIRCULATION SYSTEM
14. DYNAMIC ARTICULATION
15. DYNAMIC ENTRANCE
16. DYNAMIC BELT

Technical drawing illustrating a modular building system. The drawing includes a perspective view of a frame structure and a cross-section of a wall and roof assembly.

Labels:

- 1. STEEL
- 2. DISTO
- 3. E
- 4. COKE MATERIAL
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.
- 21.
- 22.
- 23.
- 24.
- 25.
- 26.
- 27.
- 28.
- 29.
- 30.
- 31.
- 32.
- 33.
- 34.
- 35.
- 36.
- 37.
- 38.
- 39.
- 40.
- 41.
- 42.
- 43.
- 44.
- 45.
- 46.
- 47.
- 48.
- 49.
- 50.
- 51.
- 52.
- 53.
- 54.
- 55.
- 56.
- 57.
- 58.
- 59.
- 60.
- 61.
- 62.
- 63.
- 64.
- 65.
- 66.
- 67.
- 68.
- 69.
- 70.
- 71.
- 72.
- 73.
- 74.
- 75.
- 76.
- 77.
- 78.
- 79.
- 80.
- 81.
- 82.
- 83.
- 84.
- 85.
- 86.
- 87.
- 88.
- 89.
- 90.
- 91.
- 92.
- 93.
- 94.
- 95.
- 96.
- 97.
- 98.
- 99.
- 100.

CORE SYSTEM

The central core structure is equipped with racks and girder systems.

The diagram shows a vertical cutaway of a building's central core. On the left is a large, grey, spiral-shaped column. To its right is a rectangular structure with a wooden interior floor and walls. Various components are labeled with numbers: 1 (spiral column), 2 (door), 3 (top panel), 4 (floor), 5 (lower floor), 6 (base), 7 (top panel), 8 (base), 9 (door), 10 (interior wall), 11 (interior wall), 12 (interior wall), 13 (door), 14 (door), 15 (door), 16 (door), 17 (door), 18 (door), 19 (door), 20 (door), 21 (door), 22 (door), 23 (door), 24 (door), 25 (door), 26 (door), 27 (door), 28 (door), 29 (door), 30 (door), 31 (door), 32 (door), 33 (door), 34 (door), 35 (door), 36 (door), 37 (door), 38 (door), 39 (door), 40 (door), 41 (door), 42 (door), 43 (door), 44 (door), 45 (door), 46 (door), 47 (door), 48 (door), 49 (door), 50 (door), 51 (door), 52 (door), 53 (door), 54 (door), 55 (door), 56 (door), 57 (door), 58 (door), 59 (door), 60 (door), 61 (door), 62 (door), 63 (door), 64 (door), 65 (door), 66 (door), 67 (door), 68 (door), 69 (door), 70 (door), 71 (door), 72 (door), 73 (door), 74 (door), 75 (door), 76 (door), 77 (door), 78 (door), 79 (door), 80 (door), 81 (door), 82 (door), 83 (door), 84 (door), 85 (door), 86 (door), 87 (door), 88 (door), 89 (door), 90 (door), 91 (door), 92 (door), 93 (door), 94 (door), 95 (door), 96 (door), 97 (door), 98 (door), 99 (door), 100 (door).

"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

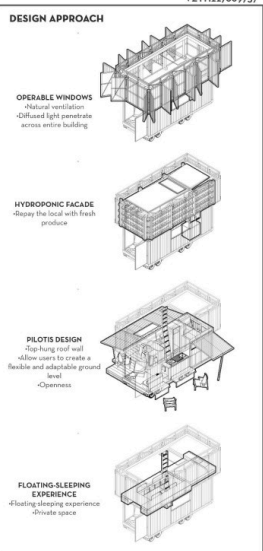
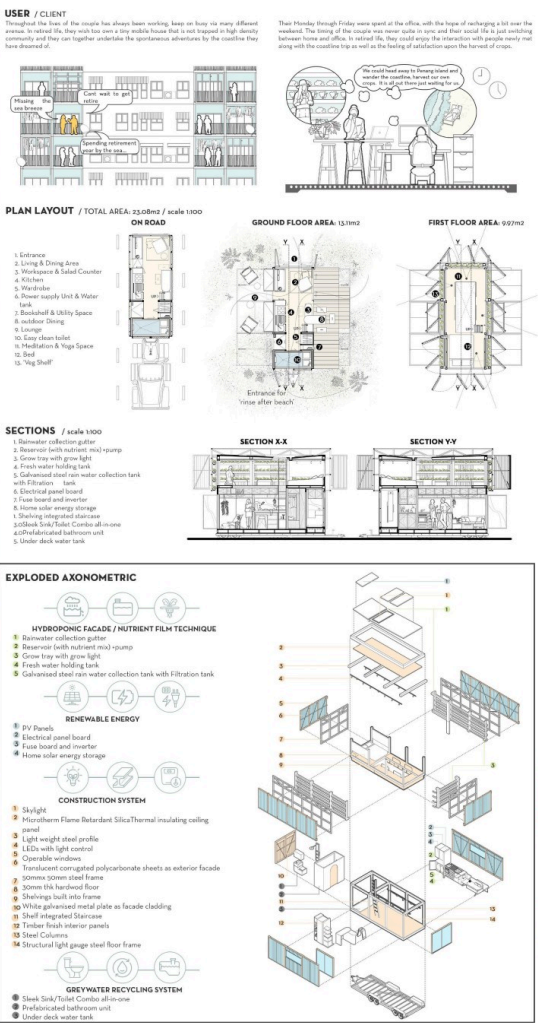
has a simple answer for all these needs... The main issue in the design of this project in the first stage is the lowest level of land occupation, and the second is to be compatible not only with the internal functional needs but also with the surrounding environment. In the sea, in the desert, in the 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

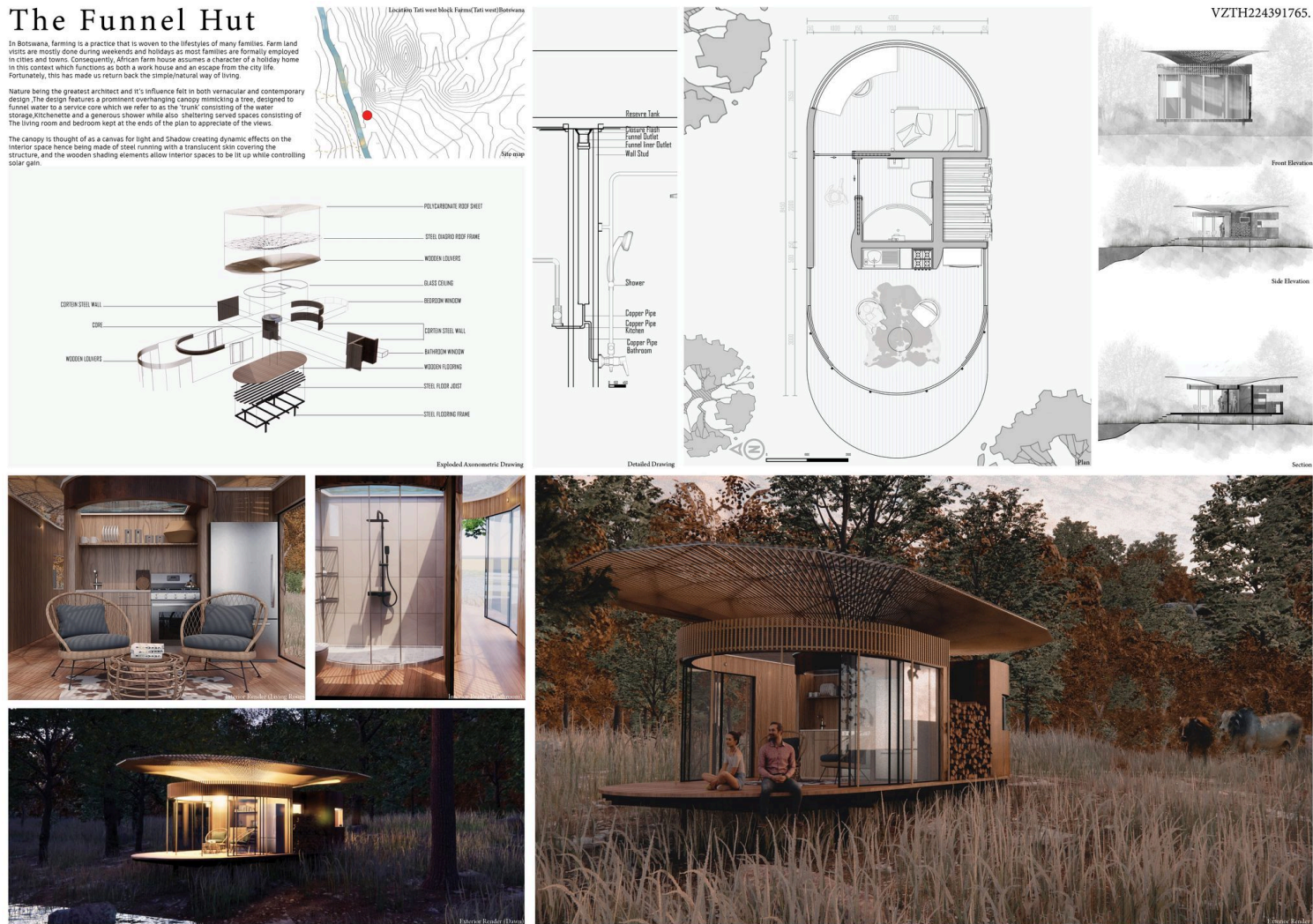
Botswana

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.



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 its 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.

STUDENT AWARD

Retractable Tent

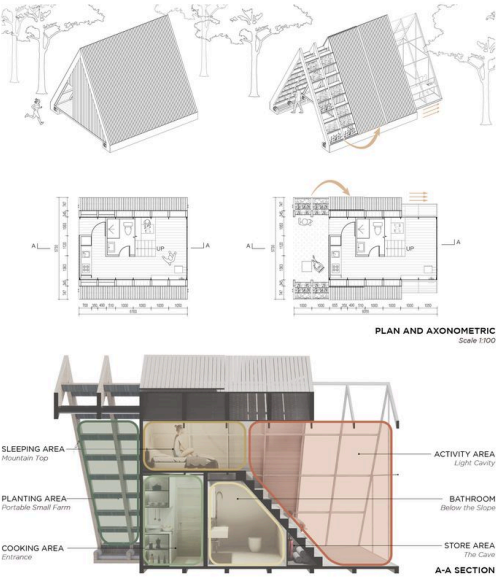
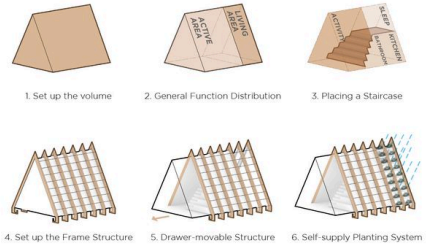
Zhaoheng Wang and Jiale Huang

Sweden

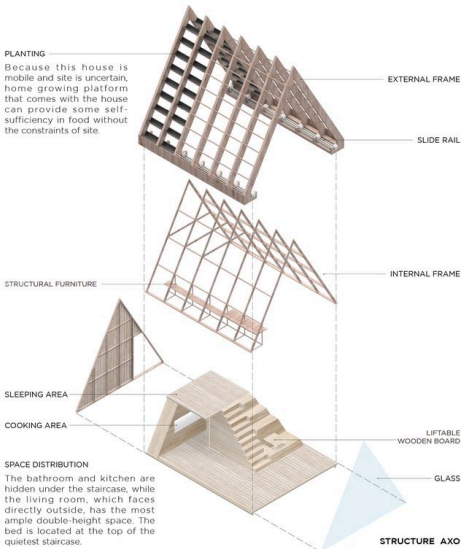
RETRACTABLE TENT

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.



Unique Code:VZTH22827435



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 fame 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.

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