APEX

SPACE STRUCTURES

PORTFOLIO

ABOUT US

INTRODUCTION

Incorporated in **2014** in India, APEX SPACE STRUCTURES is a leading manufacturer and supplier of premium luxury glamping tents. With a strong focus on innovation, quality, and design excellence, we specialize in creating world-class glamping solutions for resorts, commercial projects, and private retreats.

CREATE EXPERIENCES

APEX luxury glamps are designed to deliver unique, immersive, and unforgettable experiences. Unlike traditional hotels or conventional accommodations, our luxury four-season tents blend modern comfort with the raw beauty of nature. Guests can truly experience the outdoors—without compromising on elegance, privacy, or convenience.

ABOUT US

RECIPE FOR SUCCESS

Exclusive luxury tents set the stage for extraordinary experiences in breathtaking natural surroundings. Guests depart with lasting memories—and stories worth sharing. This leads to higher guest satisfaction, repeat bookings, positive reviews, and strong word-of-mouth promotion.
Glamping with APEX luxury tents is not just accommodation—it's an experience people love to talk about.

SUSTAINABILITY

Our luxury tents are an eco-friendly alternative to traditional brick-and-mortar hotels and resorts. Designed to seamlessly integrate into eco-sensitive environments, APEX structures minimize environmental impact while maximizing comfort. No other four-season structure offers such a perfect balance between sustainability and luxury.

MANUFACTURING EXCELLENCE

HANDCRAFTED WITH PASSION

Each APEX tent is handcrafted with dedication and pride. From concept to completion, our tents are not just manufactured—they are thoughtfully created. Every stitch, every cut of canvas, and every welded steel frame reflects our commitment to craftsmanship. To us, these are not merely tents, but functional works of art, built with passion and care.

CRAFTED IN TAMIL NADU

All our tents are designed and handcrafted in Tamil Nadu by highly skilled craftsmen and women. Their expertise, precision, and attention to detail bring every structure to life. Each tent is unique, making it special to us—so much so that parting with them is never easy.

Yet, as our creations travel to destinations like Kerala, Goa, the Himalayas, the Maldives, Sri Lanka, and beyond, we take pride in knowing that we are quietly beautifying landscapes across the world.

DESIGNED FOR REAL-WORLD CONDITIONS

Our tents are engineered by top-level professionals to perform in real-world environments. While we use modern technology and advanced engineering tools, we also respect traditional techniques—staying true to our roots while building for the future.

MANUFACTURING EXCELLENCE

BUILT FOR NATURE, ALONGSIDE NATURE

Our luxury tents are an eco-friendly alternative to traditional brick-and-mortar hotels and resorts. Designed to seamlessly integrate into eco-sensitive environments, APEX structures minimize environmental impact while maximizing comfort. No other four-season structure offers such a perfect balance between sustainability and luxury.

UNCOMPROMISING ATTENTION TO DETAIL

We believe that small details make the biggest difference. Extra time and care are invested at every stage of manufacturing to prevent even the smallest issues. Any imperfection, no matter how minor, is identified during quality control and corrected immediately.

QUALITY CHECKED. THEN CHECKED AGAIN.

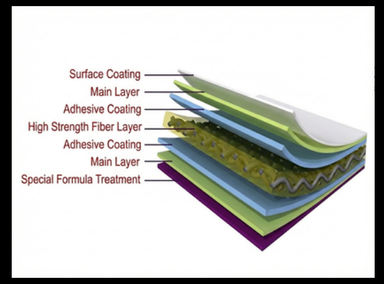
Before any tent leaves our facility, it is fully assembled and inspected multiple times. Even if something escapes the first review, it will not pass the next. Our goal is simple: when your tent arrives, it should be nothing short of perfect.

ABOUT FABRIC

TYPE-II (940 GSM)

TECHNICAL DATA	BASE	WEAVE	TOTAL WEIGHT	MAX. TENSILE STRENGTH (WARP /	TEAR STRENGTH (WARP / WEFT)	ADHESION	FLEX RESISTANCE	TEMPERATURE RESISTANCE	FLAME RETARDANCY
STANDARDS	DIN 60001	ISO 9354	EN ISO 2286-2	EN ISO 1421	DIN 53363	EN ISO 2411	DIN 53359 A	DIN EN 1876-1	EN 13501-1
TYPE II	PES low-wick	Panama	940 GSM	4200 / 4000 (N / 5 cm)	500 / 500 (N)	140 (N / 5 cm)	At least 1,00,000 bends	-30°C to +70°C	B-s2, d0

FABRIC LAYER DIAGRAM



FABRIC COLOURS

FABRIC MATERIAL

The base fabric is a PVC-coated fabric, which provides the majority of the strength and mechanical performance.

The PVC layer binds the fabric through warp and weft yarn construction, ensuring structural stability while enhancing overall mechanical properties.

In addition to the base fabric, advanced surface coatings protect the material from:

- UV radiation
- Environmental pollution
- Humidity and moisture
- Chemical substances
- Weathering and ageing

These protective layers significantly improve durability, performance, and long-term outdoor usability.

MAJOR FABRIC COATINGS

- Acrylic Coating
- ▸ Warranty: 5–7 Years
- Single-Side PVDF Lacquered Coating (Top Side Only)
- ▸ Warranty: 10 Years
- Double-Side PVDF Lacquered Coating (Both Sides)
- ▸ Warranty: 15 Years

INSULATION MATERIAL

The insulation layer uses air-filled bubbles, which act as an excellent thermal insulator by creating a barrier that reduces heat transfer between surfaces.
Trapped air minimizes heat conduction, helping to maintain a comfortable interior temperature in both hot and cold conditions.
This insulation principle is commonly used in everyday products such as coffee mugs, double-pane windows, and thermos flasks, proving its effectiveness and reliability.

MAJOR POLYESTER LAYERS

- 1st Layer: Reflective Foil Sheet
- 2nd Layer: Air-filled Polyethylene Bubble Layer
- 3rd Layer: Reflective Foil Sheet

KEY BENEFITS

- Superior thermal insulation
- Helps reduce heat gain and heat loss
- Improves energy efficiency
- Lightweight and moisture resistant
- Suitable for all-weather outdoor applications

FUR FABRIC (INNER LINING MATERIAL)

The fur fabric is used as an interior lining to enhance thermal comfort and insulation performance.

Its soft, dense fiber structure traps air within the fabric, creating an additional insulating layer that helps maintain a comfortable indoor temperature.

The fur lining also improves condensation control, reduces heat loss during cold conditions, and adds a premium interior finish to the structure.

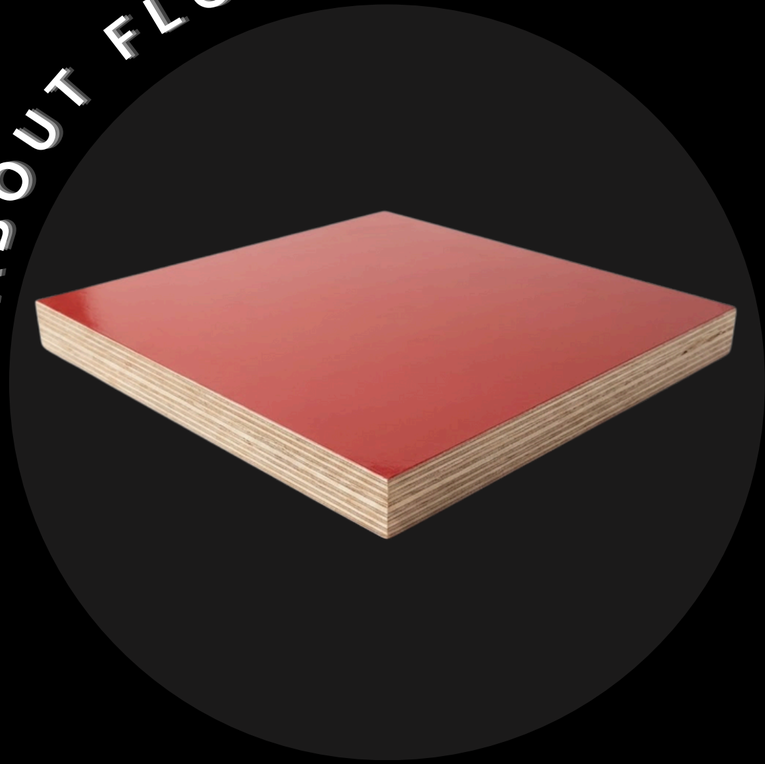
KEY FEATURES & BENEFITS

- Excellent thermal insulation
- Helps maintain warmth in cold climates
- Reduces condensation and moisture build-up
- Soft, comfortable, and premium interior feel
- Lightweight and easy to install
- Suitable for luxury tents, glamping units, and cold-weather applications

RECOMMENDED APPLICATIONS

- Luxury glamping tents
- Cold-climate tent structures
- Eco-resorts and premium outdoor accommodations
- All-season tent interiors

ABOUT FLOORING



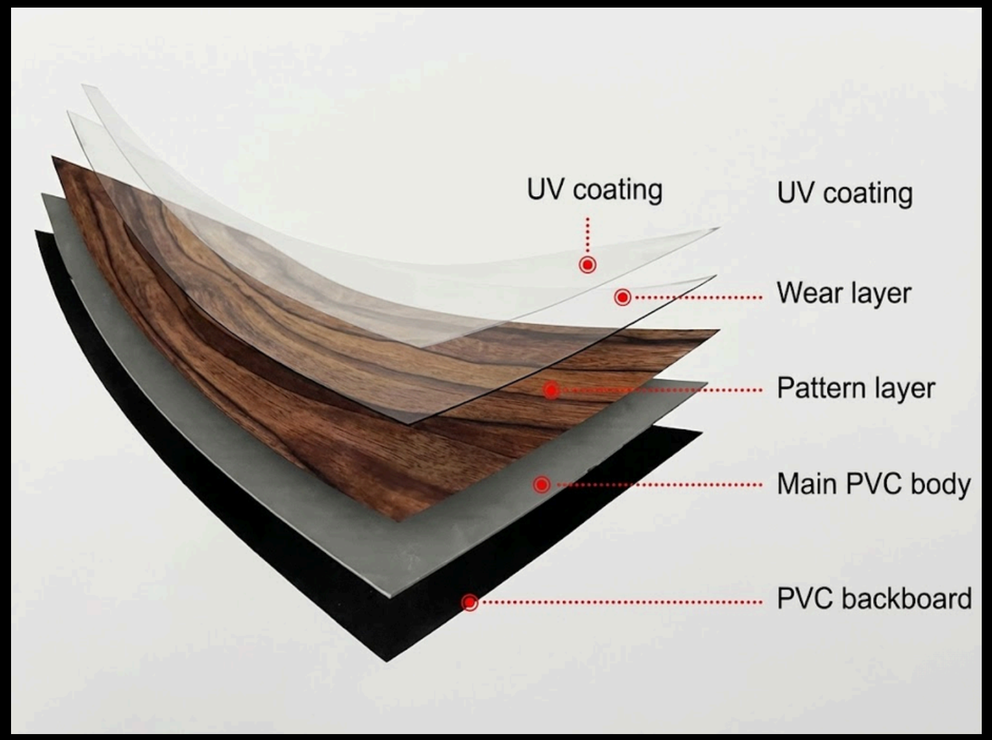
WATERPROOF PLYWOOD

Waterproof plywood is a high-durability engineered wood panel designed to withstand moisture, humidity, and water exposure without warping, swelling, or delamination. It is manufactured using high-quality hardwood veneers bonded with water-resistant synthetic resins, ensuring long-term strength and reliability.

This plywood is ideal for applications where moisture resistance and structural stability are essential.

KEY FEATURES & BENEFITS

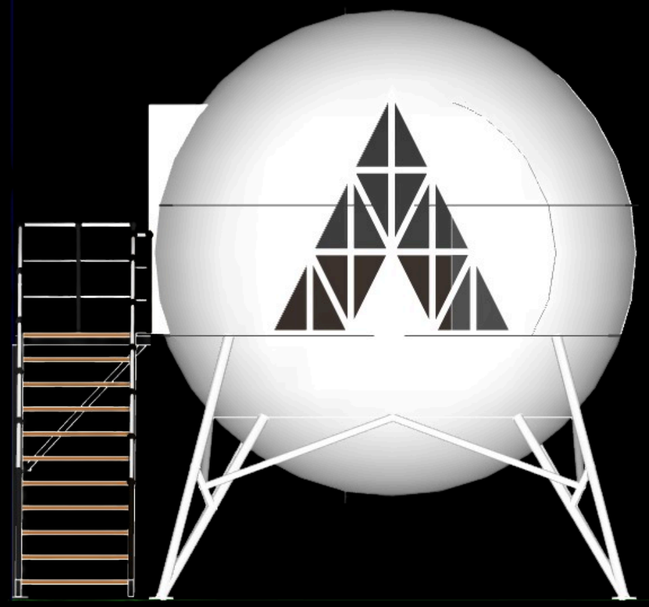
- Highly water resistant
- Boiling Water Proof (BWP) grade
- Strong and durable construction
- Resistant to warping, swelling, and cracking
- Termite and borer resistant
- Smooth surface finish
- Long service life
- Low maintenance



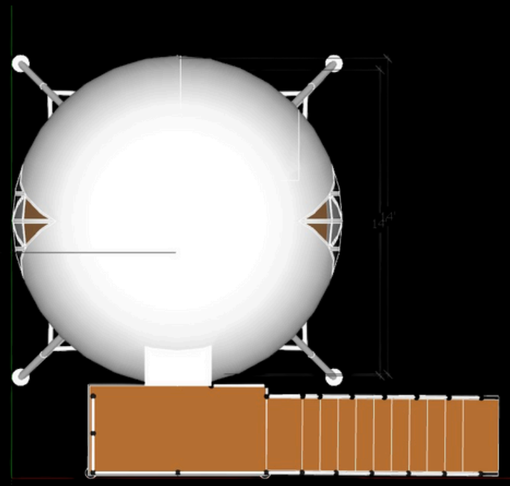
VINYL LAYER DIAGRAM

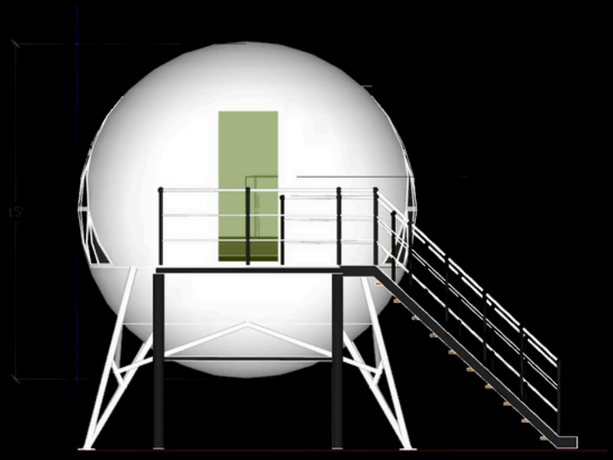
LAYER COMPOSITION & FUNCTIONS

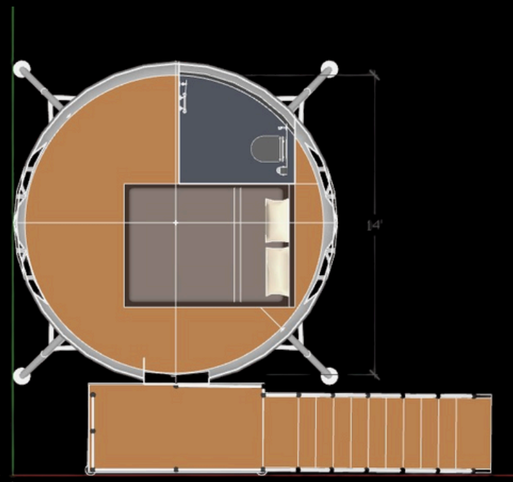
- UV Protective Layer
- Protects the surface from scratches, dirt, stains, and chemicals, ensuring easy cleaning and long-lasting surface appearance.
- Wear Layer
- Provides enhanced durability, abrasion resistance, and corrosion resistance, ensuring a long service life.
- Printed Design Layer
- Adds aesthetic appeal with a wide variety of designs, textures, and patterns, replicating natural finishes.
- Base Layer
- LVT Flooring: Equipped with an LVT base layer for added flexibility and comfort



MOON SPACE







Based on the architectural drawings provided, this design represents a modular, elevated micro-dwelling (often referred to as a "Moon Station" or "Orbital Pod" concept). It prioritizes a minimal footprint and biomimetic aesthetics.

Here is a step-by-step analysis of the design concept:

1. Geometric & Structural Form

The primary volume is a perfect sphere, which is the most efficient geometric shape for volume-to-surface area ratio

Elevation: The structure is raised off the ground by a tripod/quadrapod leg system. This suggests a "Touch the Earth Lightly" philosophy, suitable for uneven terrain, flood zones, or environmentally sensitive sites

Dimensions: The 15-foot height and 14-foot diameter indicate a compact, high-density living solution.

2. Spatial Organization (The Floor Plan)

The interior maximizes a circular footprint through zonal partitioning

The Service Core: A quadrant is dedicated to a "wet cell" (bathroom/mechanical), maintaining a clear separation from the living area.

The Living/Sleeping Zone: A central bed placement suggests a 360-degree experiential design, where the inhabitant is the focal point of the sphere.

Circulation: The external deck and staircase act as a "transition bridge" between the vast outdoors and the intimate, enclosed sphere.

3. The "Lunar" or Sci-Fi AestheticThe design heavily borrows from Retro-Futurism and Aerospace Architecture:

Leg Supports: The white, angled struts mimic the landing gear of a lunar module.

Fenestration: The triangular, geodesic-patterned windows on the sides provide privacy while allowing fractured light to enter, creating a "kaleidoscope" effect inside.

Design Analysis DiagramsTo further understand the mechanics of this "High-Rise" (Elevated) Pod, we can look at the following conceptual frameworks:

A. Structural Load PathBecause the sphere is heavy and the legs are angled, the design must manage lateral stability.

B. Thermal and Airflow DynamicsSpherical buildings have unique heating and cooling patterns. In a micro-dwelling, air tends to circulate in a toroidal (donut-shaped) flow.

Site Integration (The Elevated Concept)

The primary "concept" here is the disconnection from the ground plane to preserve the landscape below .

Key Design Takeaways

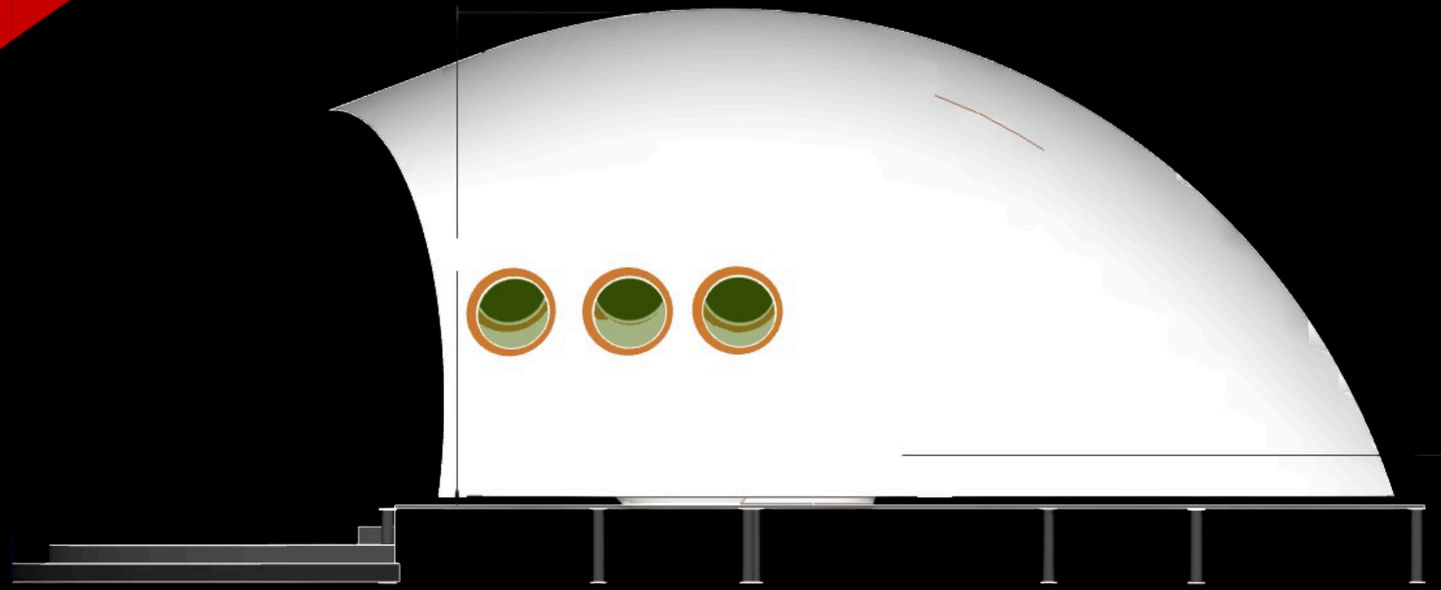
Feature /Concept Goal

Spherical Shell /Strength and Material Efficiency

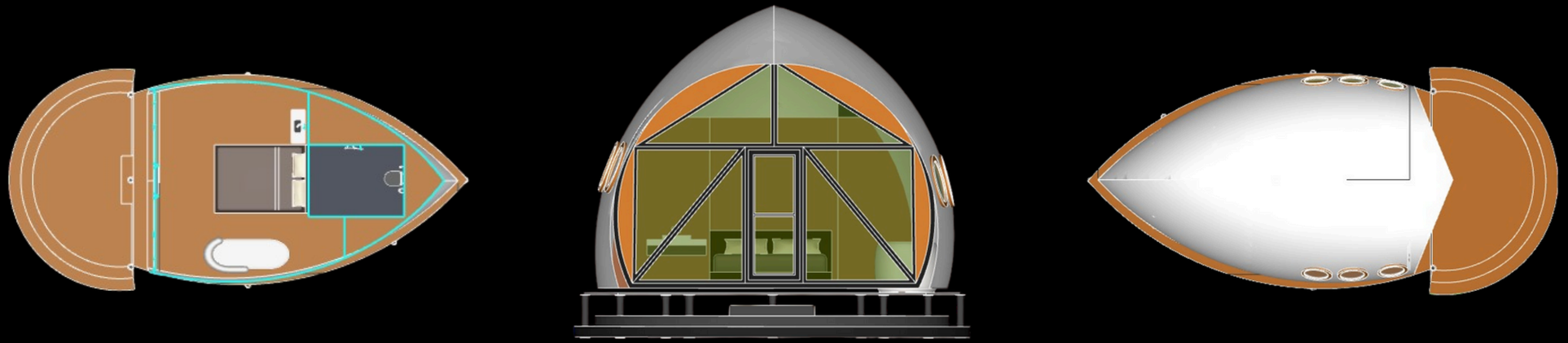
Elevated Base /Adaptability to diverse or harsh terrains

Modular Stairs /Separation of public (ground) and private (Glamping) space.

Triangle Windows /Balancing structural integrity with natural light

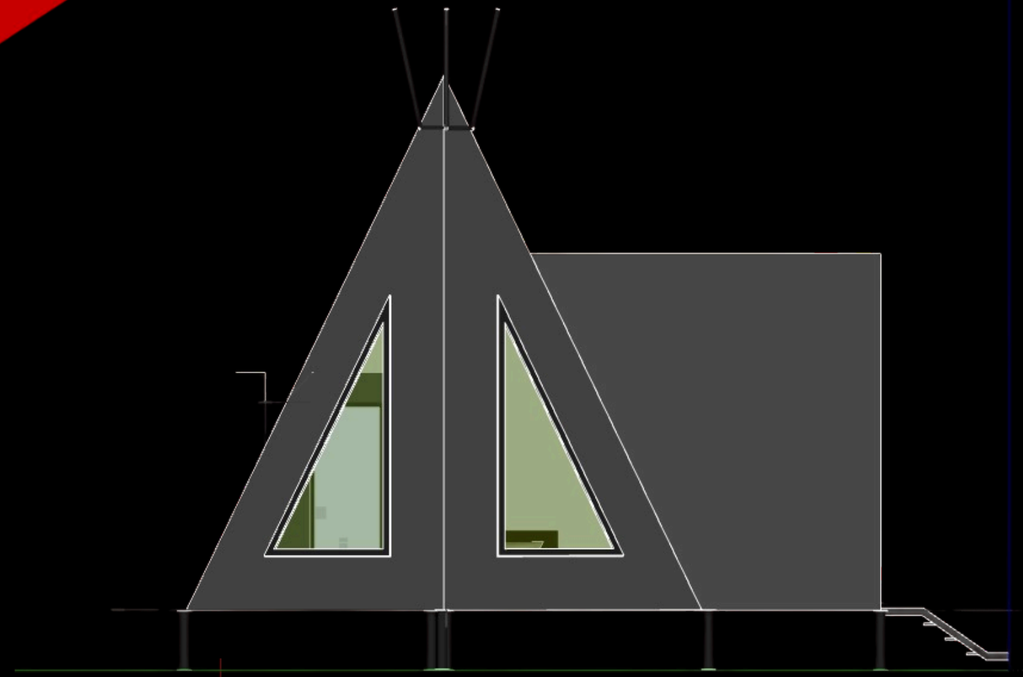


COCOON

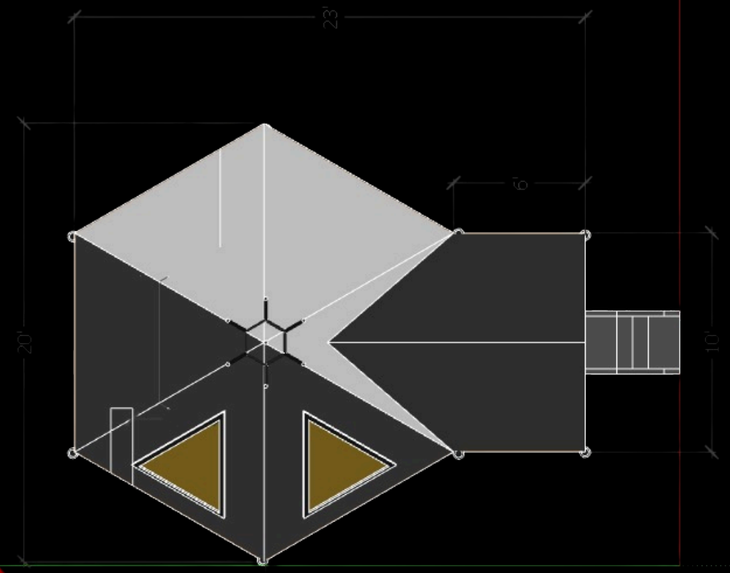


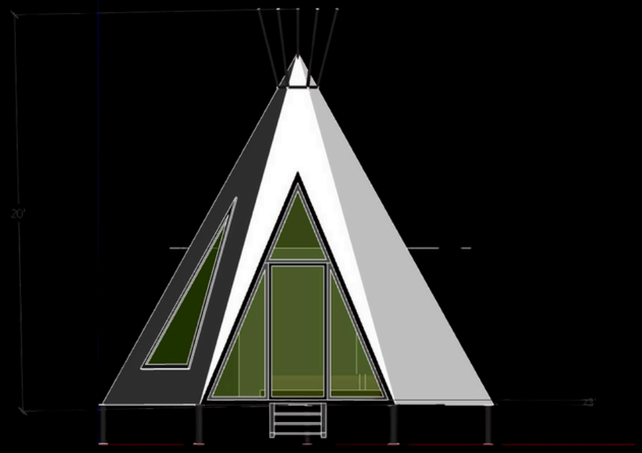
This structure, titled "Coco," appears to be a biophilic glamping pod or modular cabin rather than a high-rise building. Its organic, seed-like form and scale (15' x 25') suggest a focus on intimate, nature-integrated living.
Here is a step-by-step analysis of the design concept:
1. Biomimetic Form & Geometry
The design is rooted in Biomimicry, specifically mimicking the aerodynamic and protective shape of a seed pod, coconut (as hinted by the name), or a weaver bird's nest.
Aerodynamics: The tapered, pointed "prow" and curved shell are designed to shed wind and rain efficiently.
Structural Efficiency: The parabolic arch shown in the "front" and "side" views is inherently strong, allowing for a large internal volume without the need for heavy internal load-bearing walls.
2. Spatial Organization (The "Nautilus" Layout)
The floor plan follows a functional gradient from private/utilitarian at the narrow tip to open/social at the wide base.
The Service Core: The bathroom and storage are tucked into the narrowest part of the "hull," maximizing the use of awkward corner space.
The Sleeping Sanctuary: The bed is centrally located, acting as the heart of the pod.
Indoor-Outdoor Fluidity: The wide end of the pod features a massive glass facade and a semi-circular deck, creating a seamless transition to the surrounding environment.
3. Lighting and Ventilation Concept
The design employs two distinct types of fenestration (window placement) to balance privacy with views:
Porthole Windows: The side views show three circular portholes. These provide "framed views" and cross-ventilation while maintaining the structural integrity and privacy of the side shells.
The "Great Eye": The front elevation is almost entirely transparent, designed to face a primary view (like a forest or ocean), acting as a giant lens for natural light.
4. Materiality and Elevation
Based on the smooth, white exterior and wooden interior decking:
The Shell: Likely a lightweight composite (like GRP) or a high-tension fabric membrane over a timber/steel rib frame.
The Base: The structure is raised on stilts (as seen in the side/front views). This "light touch" on the earth minimizes site impact and protects the structure from ground moisture.

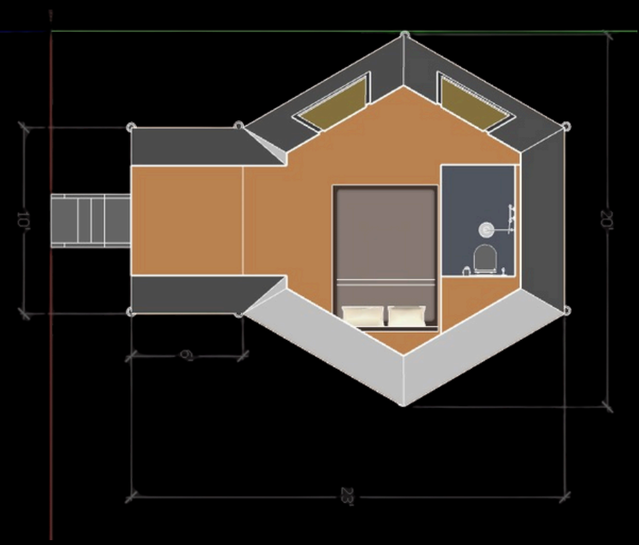
Design Analysis Summary Table
Feature /Design Intent
Teardrop Shape /Weather resistance and organic aesthetic.
Raised Platform /Minimal ecological footprint and site adaptability.
Glazed Frontage /Maximizing passive solar gain and visual connection to nature.
Compact Core /Efficient use of square footage.



TEPE



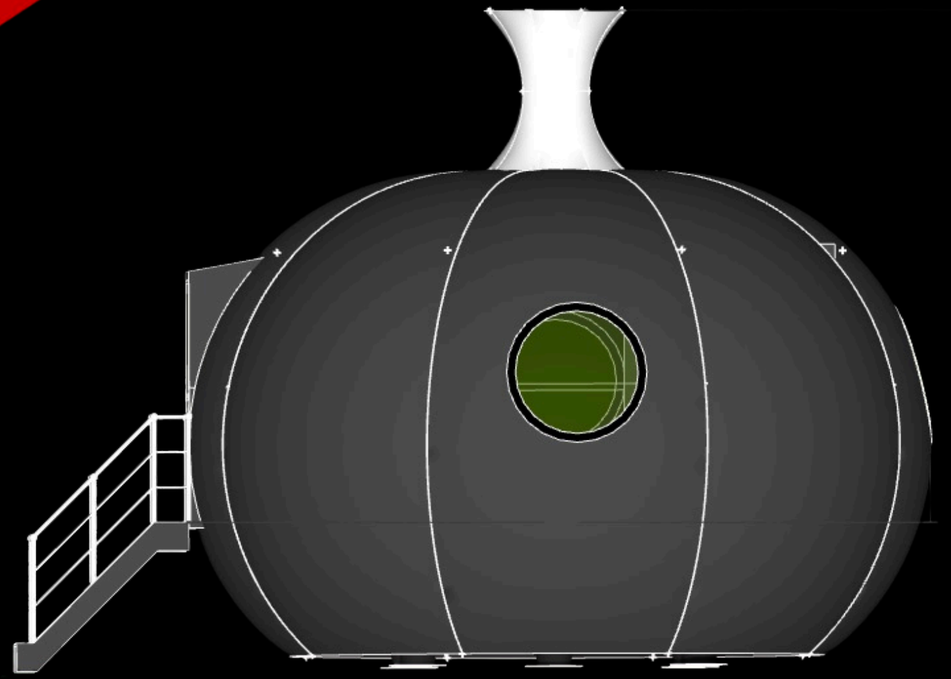




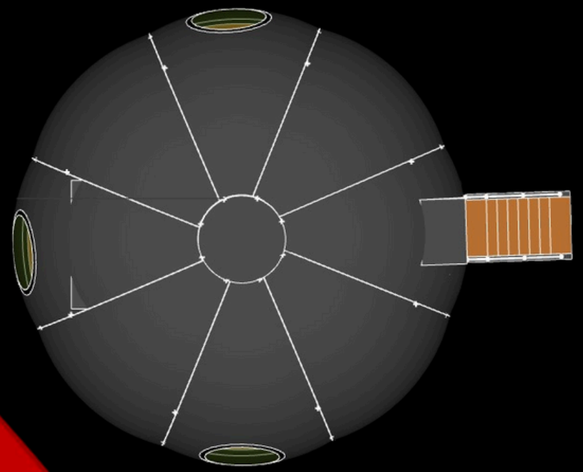
This is a fascinating architectural concept. However, there is a slight technical distinction to clarify first: based on the dimensions provided (20' height), this is actually a low-rise micro-dwelling or "glamping" unit rather than a "high-rise" building.
It blends the ancestral Tipi (Tepee) form with a modern A-frame extension, creating a hybrid geometric structure. Here is a step-by-step analysis of the design concept.
1. Geometric Fusion: The Hybrid Form
The core concept is the intersection of two distinct geometries: a Hexagonal Pyramid (the Tipi) and a Rectangular Prism (the rear extension).
The Tipi Section: Serves as the primary living/sleeping area. The 20' height allows for dramatic verticality, which is essential in small-footprint living to prevent claustrophobia.
The Linear Extension: This 6' deep section provides a functional "utility block," housing the bathroom and the entrance transition.
2. Spatial Efficiency & Zoning
The floor plan reveals a "Pod" living concept where every square foot is optimized.
The Central Core: The bed is placed at the heart of the hexagonal space, utilizing the widest part of the footprint (20').
The Wet Wall: By grouping the toilet and shower in the rear corner, the design minimizes plumbing runs and keeps the "utility" side of the building opaque for privacy.
Circulation: The 10' wide entrance deck creates a clear axial path from the stairs directly into the living space.
3. Fenestration & Light Play
The window placement is highly strategic to follow the angularity of the walls:
Front Facade: Large triangular glazing follows the A-frame line, acting as a "shopfront" to the view.
Side Facades: Sharp, scalene triangular windows are cut into the sloping walls. These aren't just for light; they create dynamic shadows that move across the floor as the sun travels.
4. Structural Narrative
The design pays homage to traditional Tipi construction through its Exposed Structural Poles.
Verticality: The poles extending past the apex of the roof are purely symbolic in this modern iteration but serve to break the silhouette against the sky.
Elevation: The structure is raised on piers/stilts. This reduces the site impact (touching the earth lightly) and allows the building to be placed on uneven terrain, such as a forest floor or a hillside.

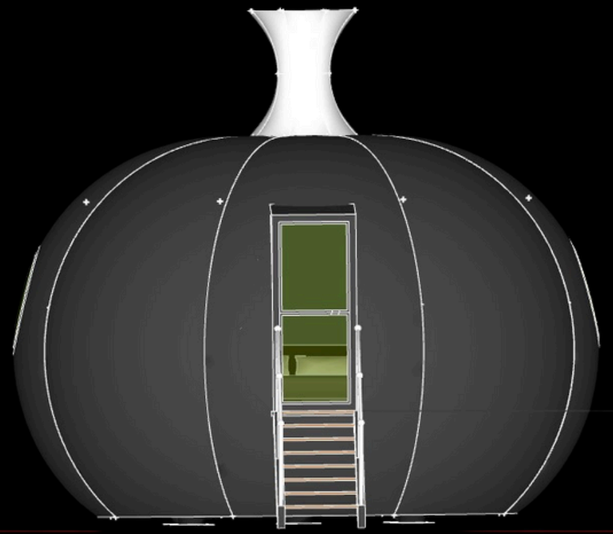
Design Analysis Summary Table
Feature /Design Intent
Hexagonal Base/ Maximizes internal volume vs. perimeter wall surface.
Stilts/Piers //Minimizes site disturbance and provides a "floating" aesthetic.
Pitched Roof (A-Frame) /Efficient snow/rain shedding and high internal ceilings.
Triangular Glazing /Maintains the "sharp" visual language of the structure.

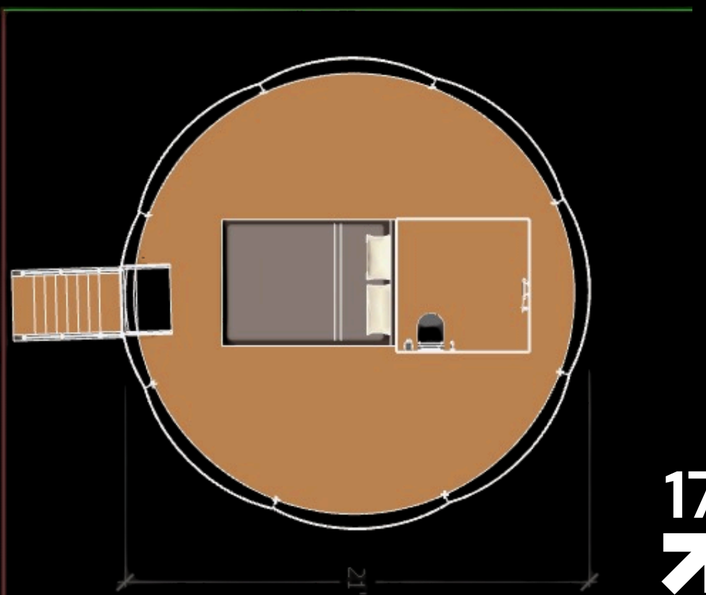
APEX
SPACE STRUCTURES



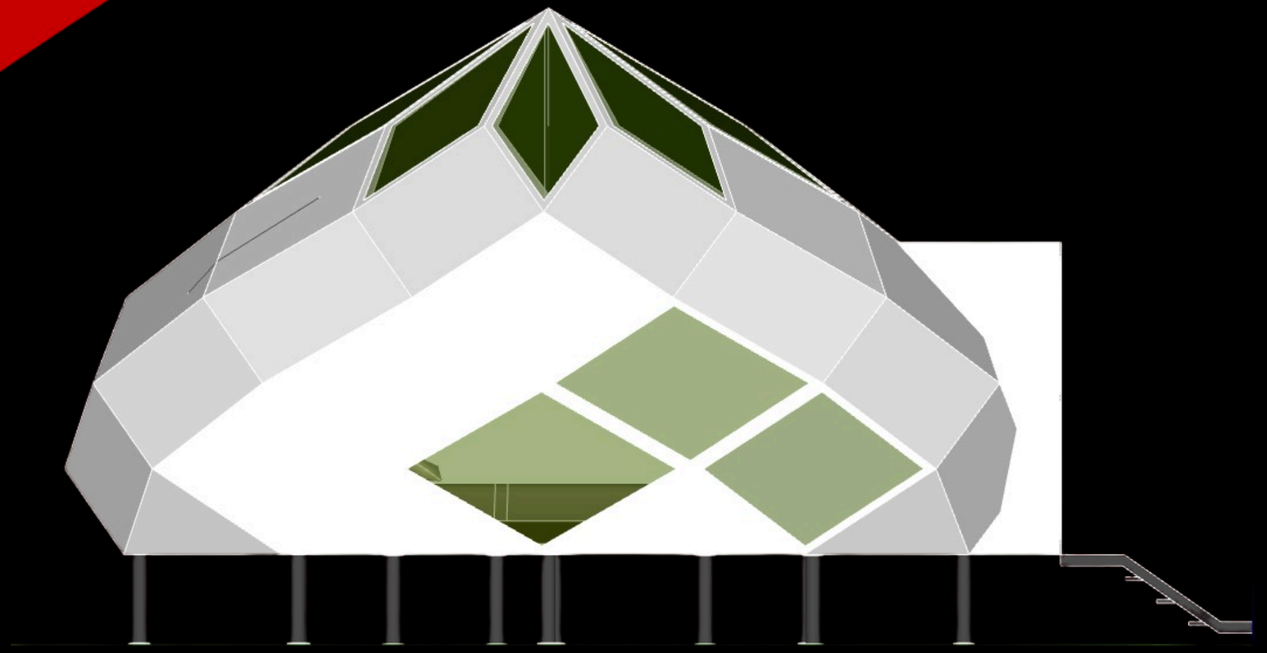
GARLIC



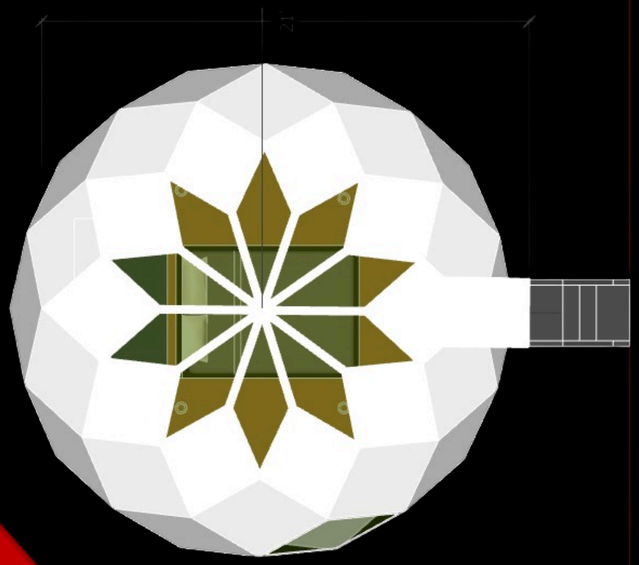


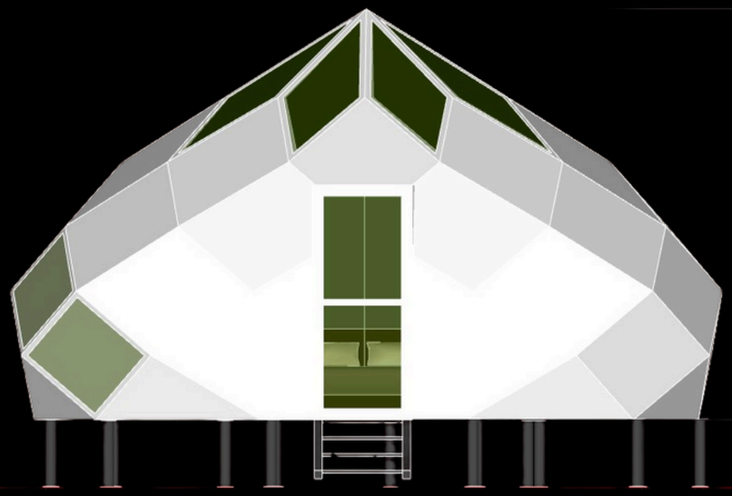


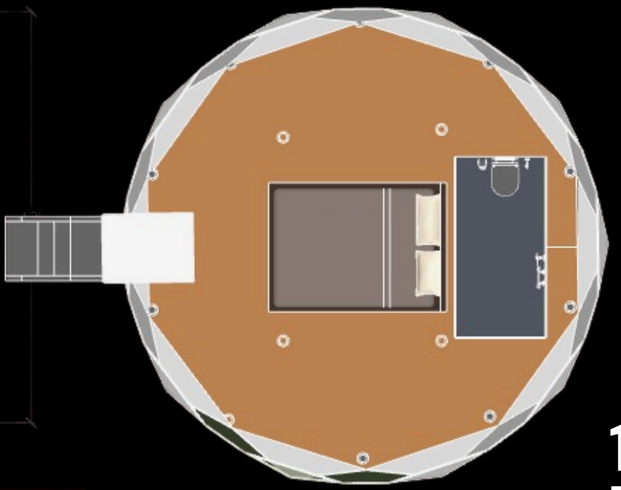
This is a fascinating design. While you referred to it as a "high-rise," the proportions and floor plan suggest a modular, spherical micro-dwelling or a specialized pod (perhaps for glamping, research, or eco-housing).
Its "garlic" or "pumpkin" geometry is rooted in biomimicry and high-efficiency structural principles.
Here is a step-by-step analysis of your design concept:
1. Geometric & Structural Logic
The building is a prolate spheroid (a sphere stretched vertically).
The Shell: The vertical white lines indicate a "ribbed" structural system. In a real-world application, these would likely be glulam beams or steel members that transfer loads along the curvature to the base.
The Crown: The flared white funnel at the top serves two likely purposes: it acts as a vertical axis wind turbine (VAWT) mount or, more likely, a stack effect ventilator to pull hot air out of the living space.
The Base: Notice the small footings in the "front" view. This indicates the structure is intended to have a light footprint, hovering slightly above the terrain to minimize environmental impact.
2. Spatial Organization (The "Core" Concept)
The floor plan reveals a centralized living strategy. By placing the "wet" areas (bathroom) and the heavy furniture (bed) in the center, you maximize the perimeter for movement and light.
Diameter: At 21 feet, you have roughly 346 square feet of floor area. This fits perfectly into the "Tiny Home" or "ADU" (Accessory Dwelling Unit) category.
Verticality: With an 18-foot height, there is significant unused volume above the bed. This suggests the potential for a loft or a high-ceiling "cathedral" feel that makes a small footprint feel much larger.
3. Environmental & Aperture Strategy
The placement of the windows (portholes) is rhythmic.
Circular Windows: These reinforce the nautical or aerospace aesthetic. They provide "framed" views rather than panoramic ones, which helps with privacy and thermal insulation.
Natural Light: The top-down view shows windows at the 9, 12, and 3 o'clock positions relative to the door. This ensures cross-ventilation and light throughout the day.
4. Design Analysis Diagrams
To further develop this concept, you should look into the following diagrammatic types to validate the "High-Rise" or "Pod" logic:
A. The "Stack Effect" Ventilation DiagramThis would show how cool air enters through the floor or door and escapes through the top "funnel."
B. The Structural Rib DiagramSince your design uses vertical segments, a diagram showing the "load path" from the top ring down the ribs to the foundation pins would be essential.
C. Programmatic Zoning (Bubble Diagram)
Your floor plan is currently a single room. A zoning diagram would help you decide if a "mezzanine" level is possible given the 18' height.
Summary Table: Concept Strengths
Feature /Design Benefit
Spherical Shape/Maximum interior volume with minimum exterior surface area (highly energy efficient).
Elevated Entry/Protects against local flooding and allows for air circulation under the structure.
Centralized Core /Keeps plumbing and heavy loads concentrated, allowing for lighter exterior walls.



ZOMES







This design is for a Zome—a geometric building form that combines the properties of a dome and a zonohedron. While the scale (12' height) classifies it as a low-rise micro-structure or pavilion, its modular geometry is often explored in conceptual "vertical forest" high-rise proposals.

Here is the step-by-step analysis of the design concept based on your provided images.

1. Geometric Concept: The Rhombic Zome

The primary design concept is based on polar zonohedra geometry. Unlike a standard geodesic dome made of triangles, this structure is composed of rhombic (diamond-shaped) facets.

Symmetry: The top view reveals a 12-fold rotational symmetry, where rhombic panels spiral toward a central apex.

Structural Efficiency: The double-curvature of the zome allows for a self-supporting shell, meaning no internal load-bearing walls are required, leaving the floor plan entirely open.

2. Spatial Organization: Centralized Living

The floor plan utilizes a radial layout centered around the structure's highest point.

The Core: A queen-sized bed is placed centrally to take advantage of the 12' vaulted ceiling.

Functional Zoning: The "wet zone" (bathroom/shower) is pushed to the rear perimeter, occupying a rectangular footprint that contrasts with the circular floor.

Threshold: The entrance is marked by a 10' wide transition block and external stairs, creating a clear "public-to-private" gradient.

3. Light & Pattern: The "Petal" Skylight

A defining feature of this concept is the rhythmic fenestration (window placement).

Zenith Lighting: The top panels are glazed to form a flower-like skylight. This creates a "sundial" effect where the pattern of light on the floor shifts throughout the day.

Aperture Variation: Diamond-shaped windows are strategically placed at eye level on the sides to provide specific "framed" views of the landscape while maintaining privacy elsewhere.

4. Ground Connection: Light-Touch Foundation

The side and front elevations show the building elevated on a multi-point pier system.

The Stilt Concept: By raising the 21' diameter floor on slim pillars, the design achieves a "floating" aesthetic.

Environmental Adaptation: This foundation style is ideal for uneven terrain or sensitive ecosystems, as it minimizes the concrete footprint and allows for natural water drainage beneath the building.

Design Analysis Summary

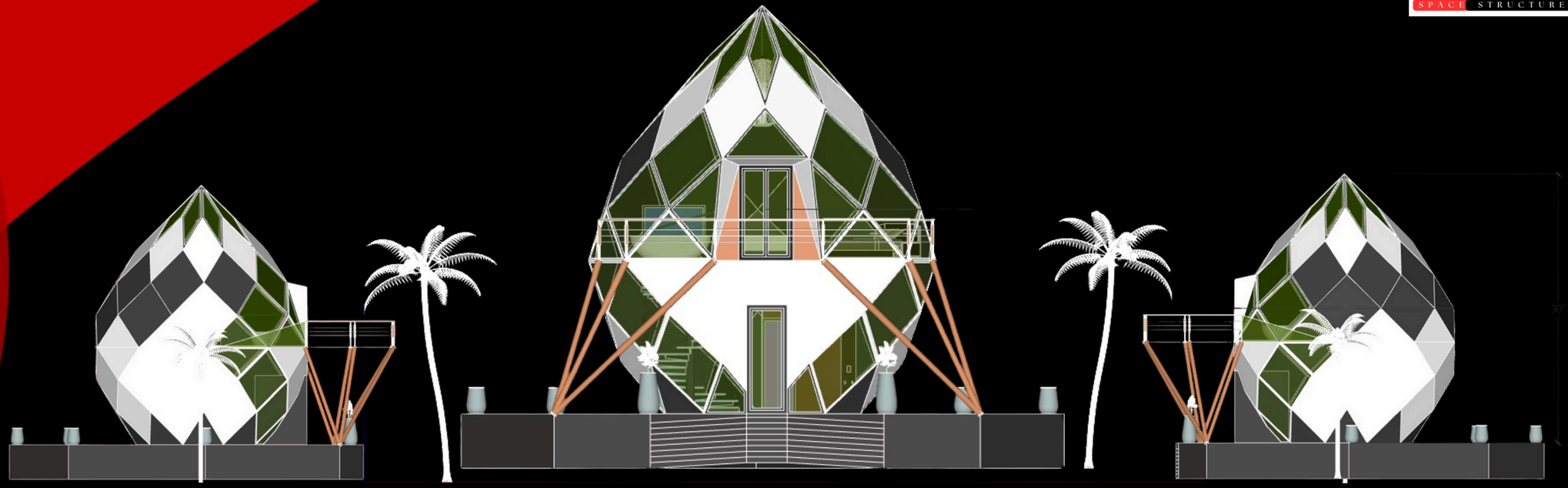
Feature/Design Concept/Benefit

Form/Zonohedral Shell/High strength-to-weight ratio; unique aesthetic.

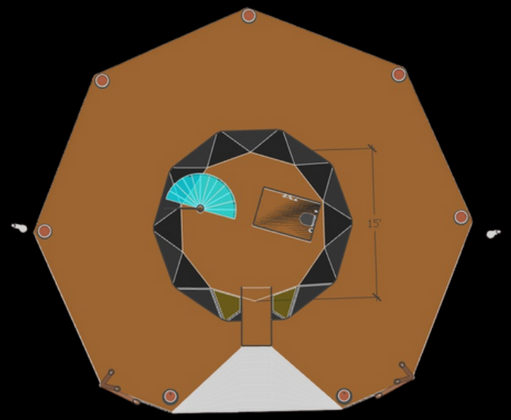
Interior/Vaulted Open Plan/Feels much larger than its actual square footage.

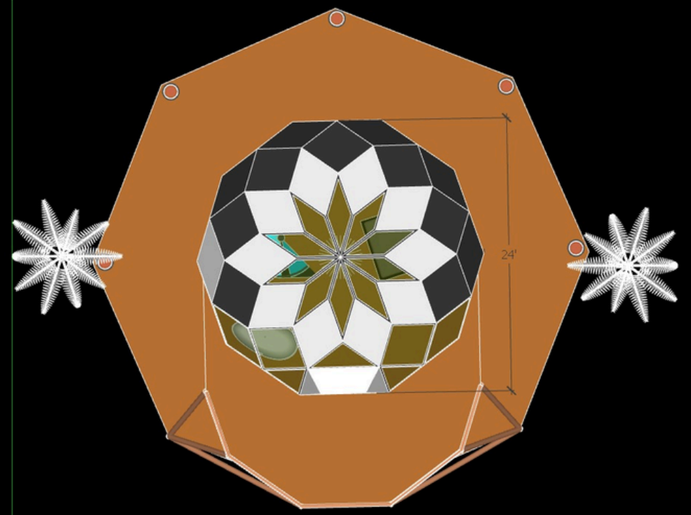
Windows/Rhombic Glazing/Integrates structural lines with natural light patterns.

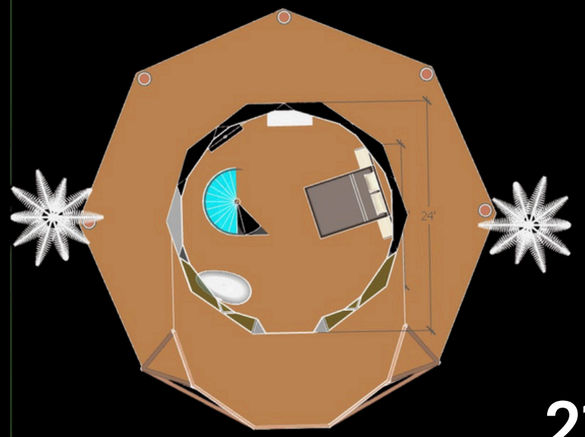
Base/Pier Foundation/Allows for rapid deployment and minimal site impact.



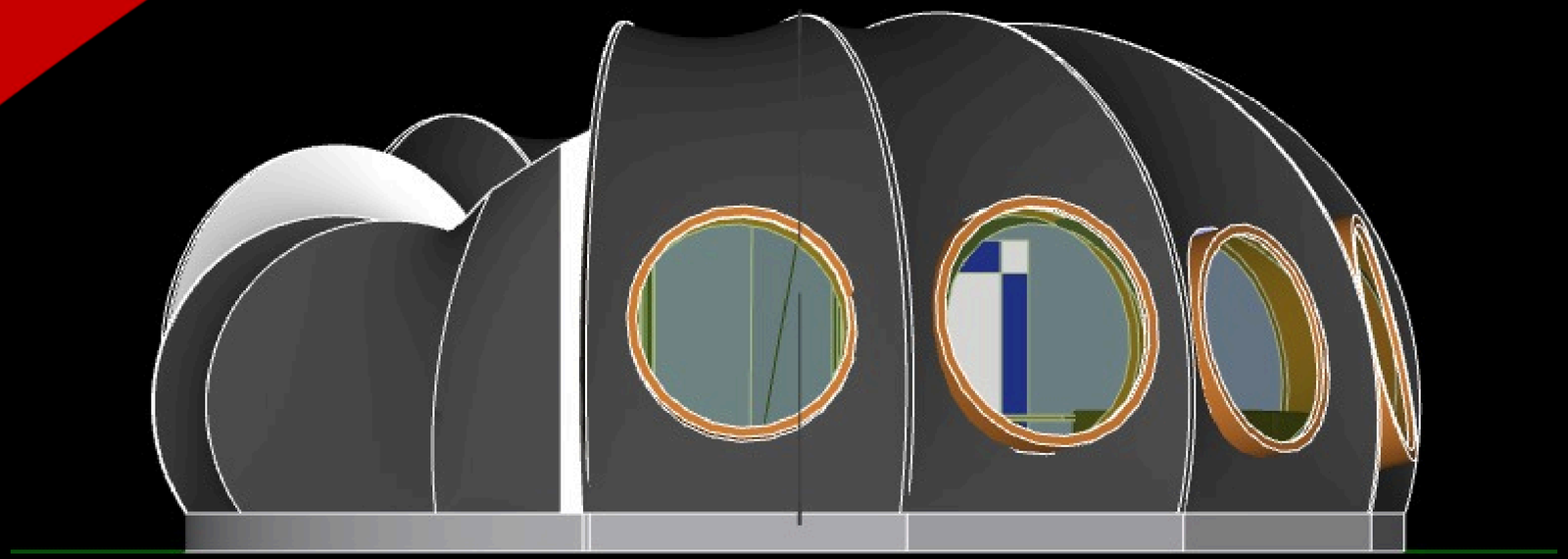
ZOME ONX



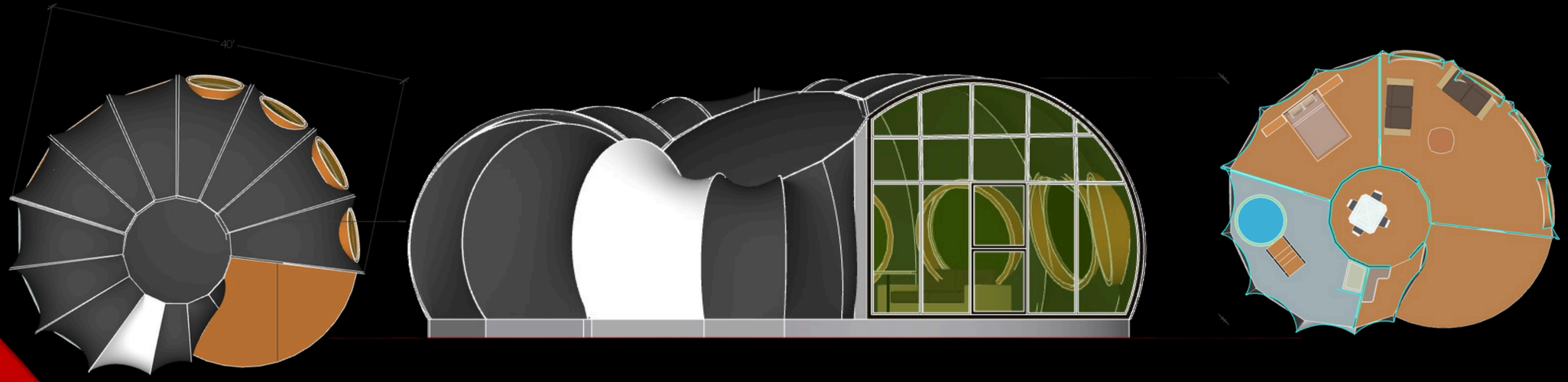




This is a fascinating architectural concept.
Based on the diagrams provided, this isn't a traditional "high-rise" in the sense of a skyscraper, but rather a biophilic, multi-level glamping or luxury eco-pod designed with a teardrop or "seed" geometry.
Here is a step-by-step analysis of the design concept:
1. Geometric Form: The Rhombic Hexecontahedron
The primary design concept is based on a geodesic-style teardrop. Unlike a standard dome, this structure tapers toward a point at the top, mimicking organic shapes like a pinecone, an artichoke, or a seed.
Analysis: The skin is composed of diamond-shaped (rhombic) facets. This allows for a modular assembly of glass and solid panels.
Visual Impact: The verticality (30' height) creates a sense of loftiness within a relatively small footprint (15' base diameter).
2. Spatial Organization: Vertical Zonation
The design utilizes a "living pod" concept where functions are stacked vertically to maximize the view and minimize the ground footprint.
Ground Floor (The Core): A 15' diameter space containing the entrance and primary utilities (bathroom/storage).
Upper Floor (The Sanctuary): A 24' diameter cantilevered section. Because the teardrop widens in the middle, the bedroom and lounge areas actually have more square footage than the base.
The Terrace: An external deck supported by "V" shaped stilts, extending the living space into the environment.
3. Structural Support: The Tripod/Stilt SystemThe design uses a hybrid support system. While the core sits on a solid base, the external balcony is supported by angled, tree-like pillars.
Concept: This mimics the "roots" of a plant. It allows the heavy upper deck to "float" over the landscape.
Analysis: By using these stilts, the building reduces its impact on the soil, making it ideal for sensitive ecological sites like tropical beaches or forests.
4. Environmental Integration (Biophilia)The choice of colors (forest green, white, and wood tones) and the inclusion of palm trees in the renders suggest a Tropical Modernism influence.
Feature/Design Intent
Glass Paneling/Strategically placed to provide 360-degree views while maintaining privacy in the bedroom area.
Spiral Staircase /A light, cyan-colored spiral stair minimizes floor-space usage and adds a kinetic, sculptural element to the center.
Octagonal DeckThe large 8-sided platform provides a transition zone between the artificial structure and the natural world.
5. Design Analysis Diagramming
If you were to create formal diagrams for this project, I recommend focusing on these three specific "exploded" views:
Massing Diagram: Show the transformation from a simple sphere to a stretched teardrop.
Solar Path Diagram: Show how the diamond facets act as "shades" or "windows" depending on the sun's angle (2026 eco-standards prioritize passive cooling).
Circulation Diagram: A vertical section showing the flow from the ground entry, up the spiral stairs, and out onto the elevated terrace.
Note: Based on the dimensions provided (24' width, 30' height), this structure is perfectly scaled for a luxury "Treehouse" hotel suite or a private backyard studio.



SNAIL



Rchitectural concept. However, looking at the dimensions provided in your images (13' height and 40' diameter), this structure is currently designed as a pavilion or a single-story residence rather than a "high-rise."
To treat this as a high-rise building design concept, we have to imagine scaling this organic, "Snail Shell" (fibonacci spiral) geometry vertically.
1. Design Concept Analysis: The "Snail Shell" Biophilia
The design follows Biomorphic Architecture—specifically inspired by the Nautilus or common snail.
The Fibonacci Spiral: The floor plan reveals a central core with living spaces radiating outwards in a logarithmic spiral. In a high-rise, this suggests a central structural spine (elevators/stairs) with floor plates that expand or rotate as they go up.
The Segmented Shell: The exterior is composed of segmented, bulging panels. This mimics the growth rings of a shell, providing a rhythmic, organic aesthetic that breaks the "flat glass box" monotony of traditional high-rises.
Segmented Fenestration: The circular "porthole" windows and the large gridded glass section suggest a play between private, protected areas and wide-open communal viewing decks.
2. Structural & Functional Evolution
If we scale this into a high-rise, several technical elements come into play:
Feature/Analysis for a High-Rise Scale
Central Core/The circular center in your floor plan becomes the vertical circulation hub (elevators/HVAC).
Aerodynamics/The curved, organic exterior is excellent for wind shedding, reducing the "vortex shedding" effect that causes tall buildings to sway.
Terracing/The "snail" shape naturally allows for stepped-back terraces, providing green space at every level.

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