

Geodesic Temple - The City of Dreams 2011 Pavilion

Overview

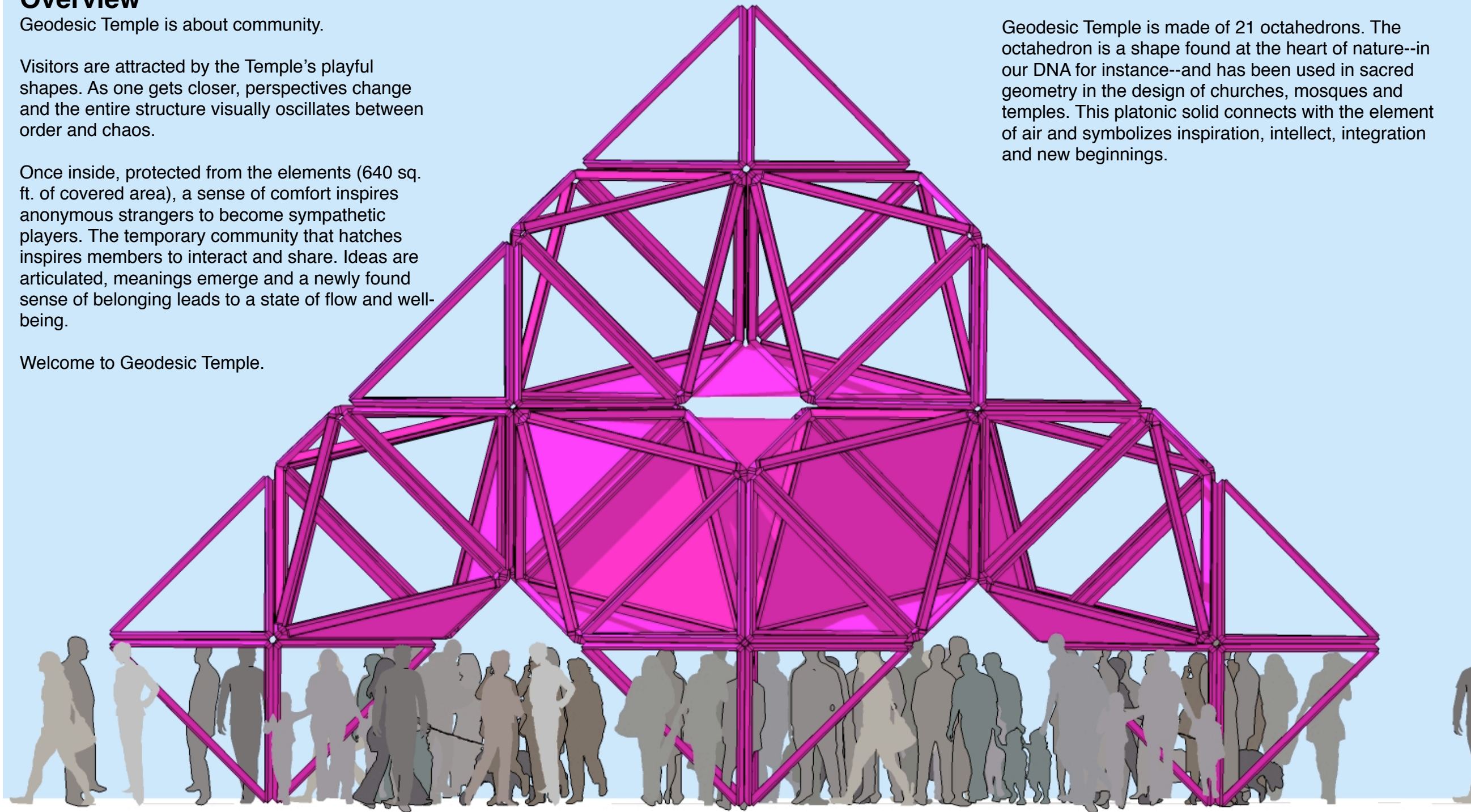
Geodesic Temple is about community.

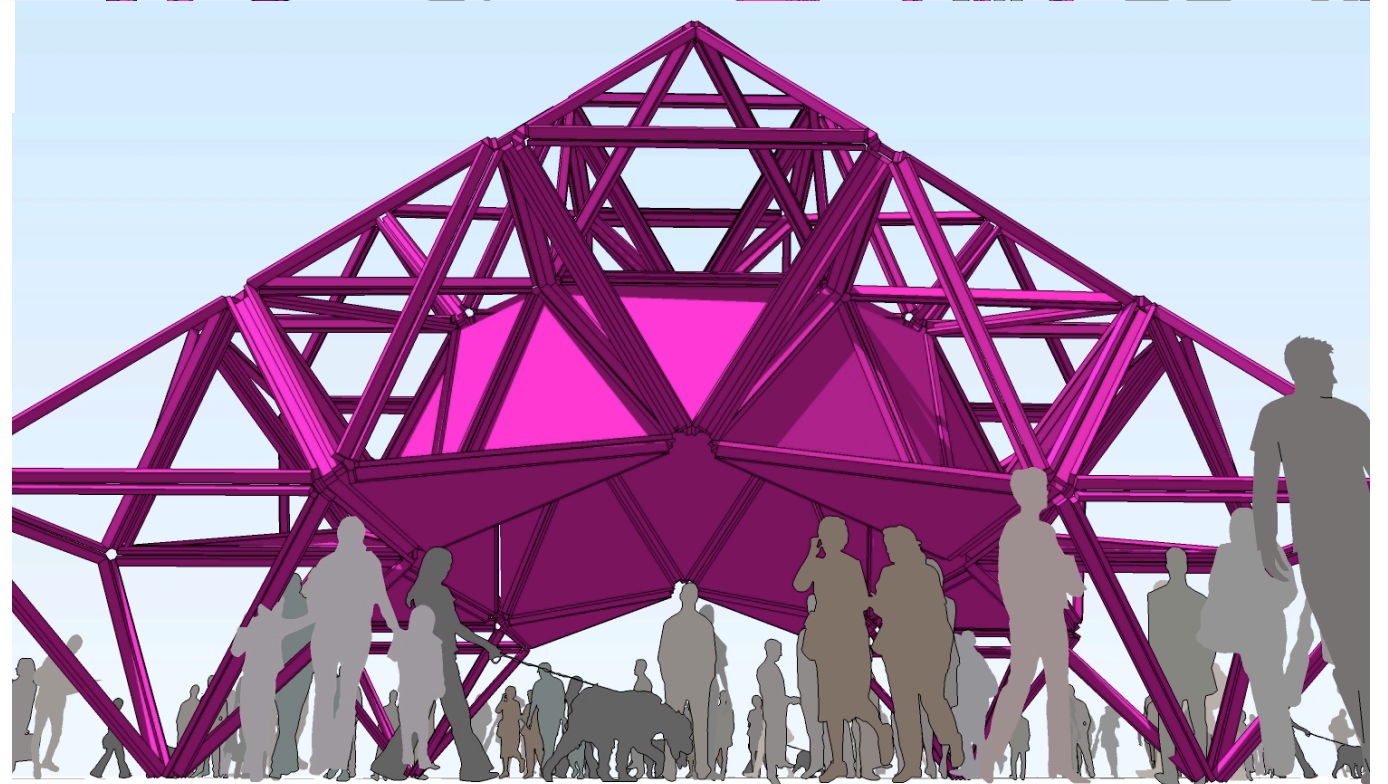
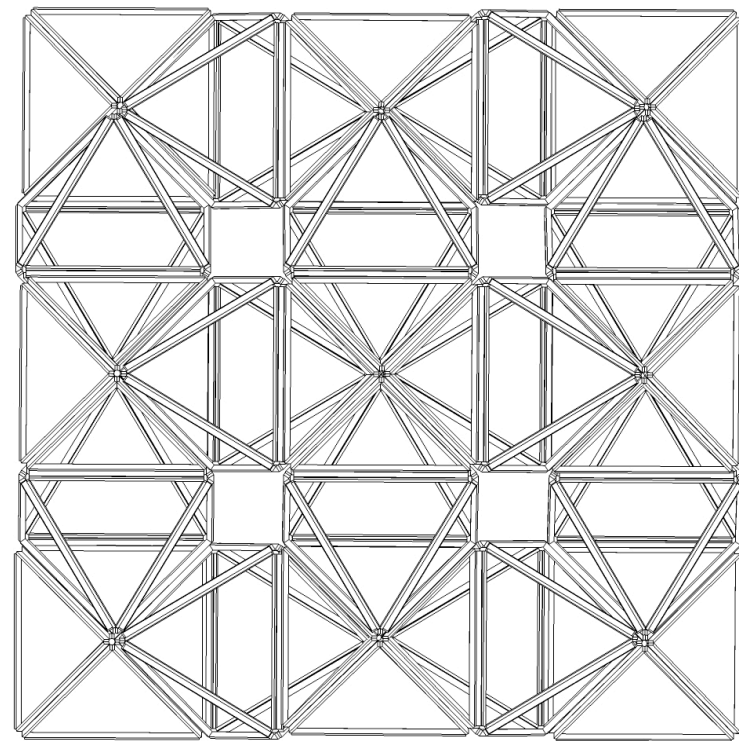
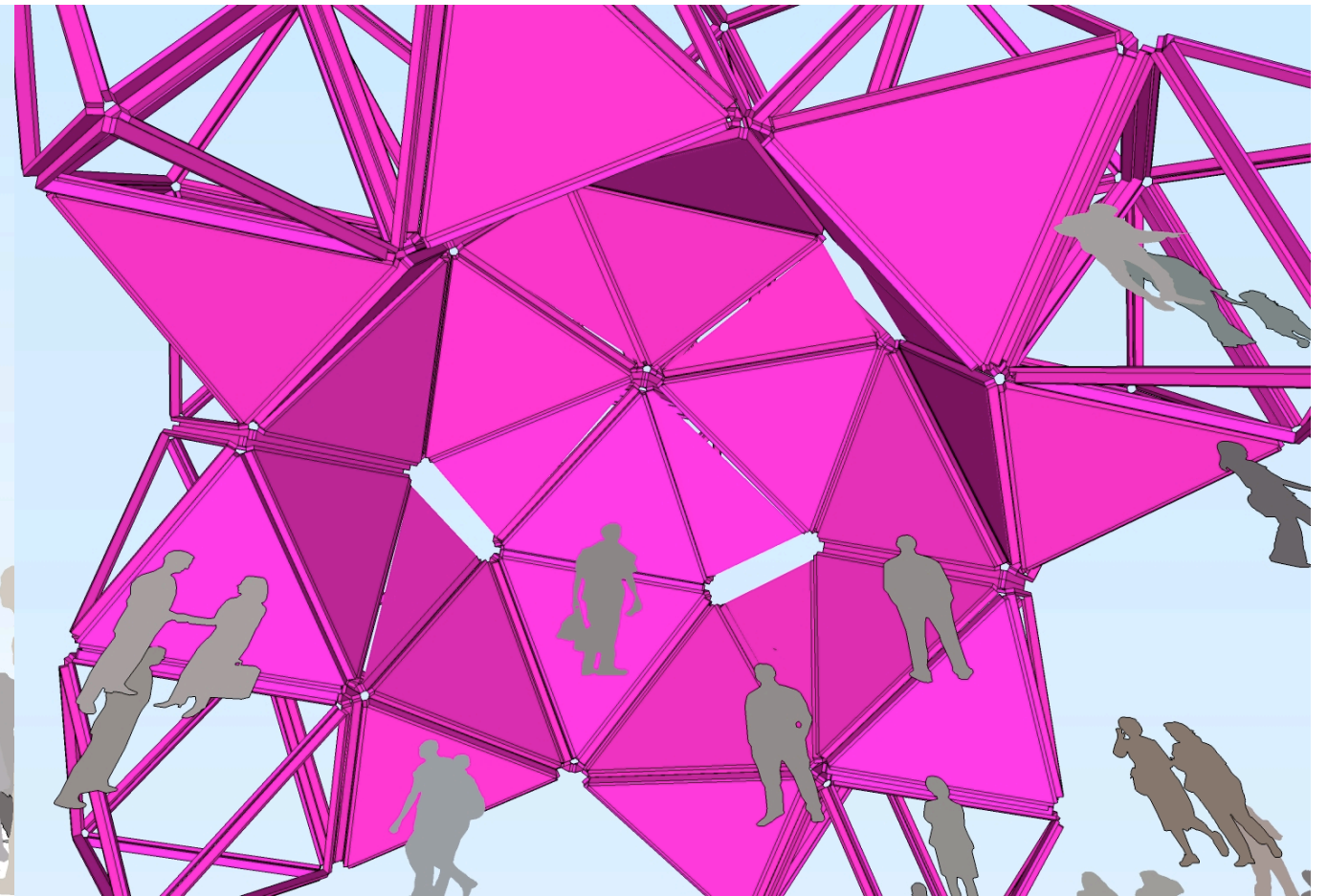
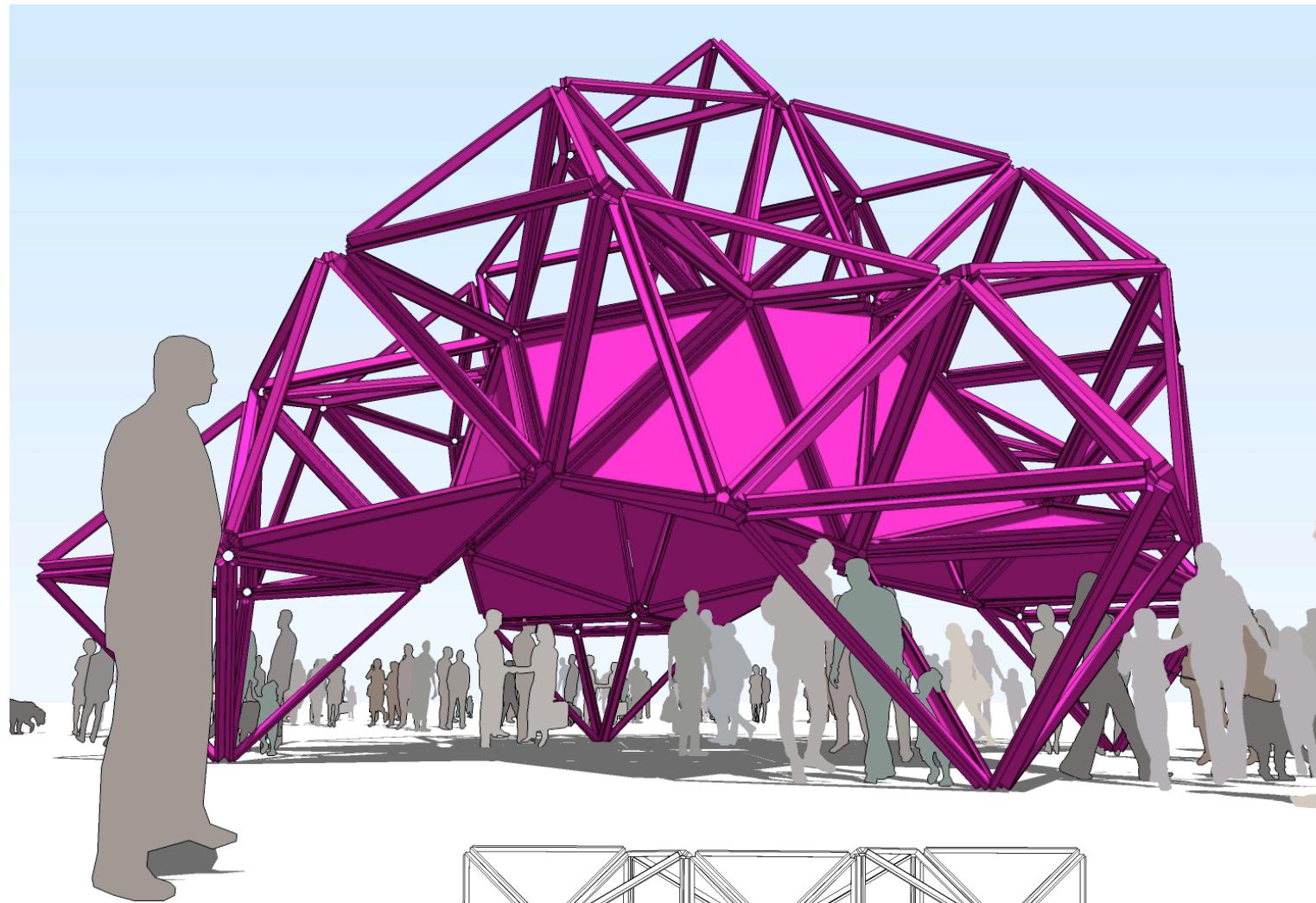
Visitors are attracted by the Temple's playful shapes. As one gets closer, perspectives change and the entire structure visually oscillates between order and chaos.

Once inside, protected from the elements (640 sq. ft. of covered area), a sense of comfort inspires anonymous strangers to become sympathetic players. The temporary community that hatches inspires members to interact and share. Ideas are articulated, meanings emerge and a newly found sense of belonging leads to a state of flow and well-being.

Welcome to Geodesic Temple.

Geodesic Temple is made of 21 octahedrons. The octahedron is a shape found at the heart of nature--in our DNA for instance--and has been used in sacred geometry in the design of churches, mosques and temples. This platonic solid connects with the element of air and symbolizes inspiration, intellect, integration and new beginnings.





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Budget

Item Description	Price	Quantity	Total
Installation			
2x4x8’ wood strut	\$ 10.00	500	\$ 5,000.00
3/4” CDX Plywood 4’x8’	\$ 40.00	50	\$ 2,000.00
Wood delivery			\$ 300.00
Compound mitre saw	\$ 560.00	1	\$ 560.00
Nail gun + compressor	\$ 600.00	1	\$ 600.00
Screws, nails, saw blades			\$ 350.00
Simpson Strong Tie LSTA24	\$ 1.50	300	\$ 450.00
Paint, protective coat			\$ 600.00
Paint expendables: rollers, protective sheeting, brushes, saw horses			\$ 180.00
Paint sprayer rental	\$ 60.00	3 days	\$ 180.00
Cable, rigging, scaffold			\$ 400.00
Truck rental	\$ 200.00	4 days	\$ 800.00
Wood shop rental	\$ 80.00	15 days	\$ 1,200.00
Daily water and food for volunteer crew	\$ 50.00	10 days	\$ 500.00
LED light fixture + power supply	\$ 1,100.00	4	\$ 4,400.00
Deinstallation			
Truck rental	\$ 200.00	2 days	\$ 400.00
Sub total			\$ 17,920.00
tax		8.75%	\$ 1,568.00
Total			\$ 19,888.00

Physical description

Geodesic Temple is a meta-modular, self-supporting structure made of [octahedrons](#), a regular polyhedron with 8 identical equilateral triangular faces which is also a [platonic solid](#). The octahedron is used as building block to create a self-supporting structure. All octahedrons used in Geodesic Temple have similar sizes and are made of 2x4 wood struts. The choice of using the octahedron as basic module was dictated by the form’s physical qualities and its history in sacred architecture.

Height: 30 ft. Width: 32 ft. Length: 32 ft. Ground surface covered by roof: 640 sq. ft. which is plenty of space for more than 50 people to gather and listen to music as we plan to prove during Figment when we bring our sound system. The structure will penetrate less than 6” into the ground.

Modular

Modularity has been one of the core principles of the group presenting this project for more than ten years. The radically modular Geodesic Temple is no exception. Geodesic Temple is a meta-modular (modules made of modules) structure based on a single module, an octahedron. It is composed of 21 octahedrons, all similar. Each octahedron is made of 24 identical 2x4 wood struts.

Reuse

As an art collective, we have created artworks recycling material from previous installations for the past 11 years and developed a decentralized approach to art making supported by a vast vocabulary of "modules.” The octahedrons fabricated for Geodesic Temple will become part of our visual vocabulary for years to come and will be reused and reconfigured for future installations either as a version of Geodesic Temple or as other structures. Examples of other configurations

based on the same octahedron are available on request. In addition to the octahedrons, any remaining tool, materials, and supplies after disassembly will be stored and reused by the art collective for future projects. We plan to obtain, to the fullest extent possible, supplies from Build It Green! NYC (BIG!NYC), Materials for the Arts and other sources of salvaged and surplus building materials. We have dedicated a team to locate recycled materials.

Durability

The way the design of the structure organizes octahedrons in interlocked closed loops reinforces the structural integrity of the entire piece. We use a compound angle connection. Both ends of each 2x4 strut are cut at an angle so they fit tightly together when the octahedron is assembled. 24’ galvanized ties reinforce each corner. Geodesic Temple is painted--pink--to be protected against the elements.

Assembly

Five parts made of octahedrons are first assembled on the ground. A crane capable of lifting 1,200 lbs. at 35 ft. above the ground (not included in budget) is needed to complete the assembly.

Economy

Triangles are stronger than squares as that they are naturally triangulated. Geodesic Temple is economical because of the inherent strength of triangles. It takes less material to build a modular structure using octahedrons than it would using classic orthogonal building blocks. Octahedrons will be assembled on site to avoid multiple deliveries and reduce the carbon footprint of the project.