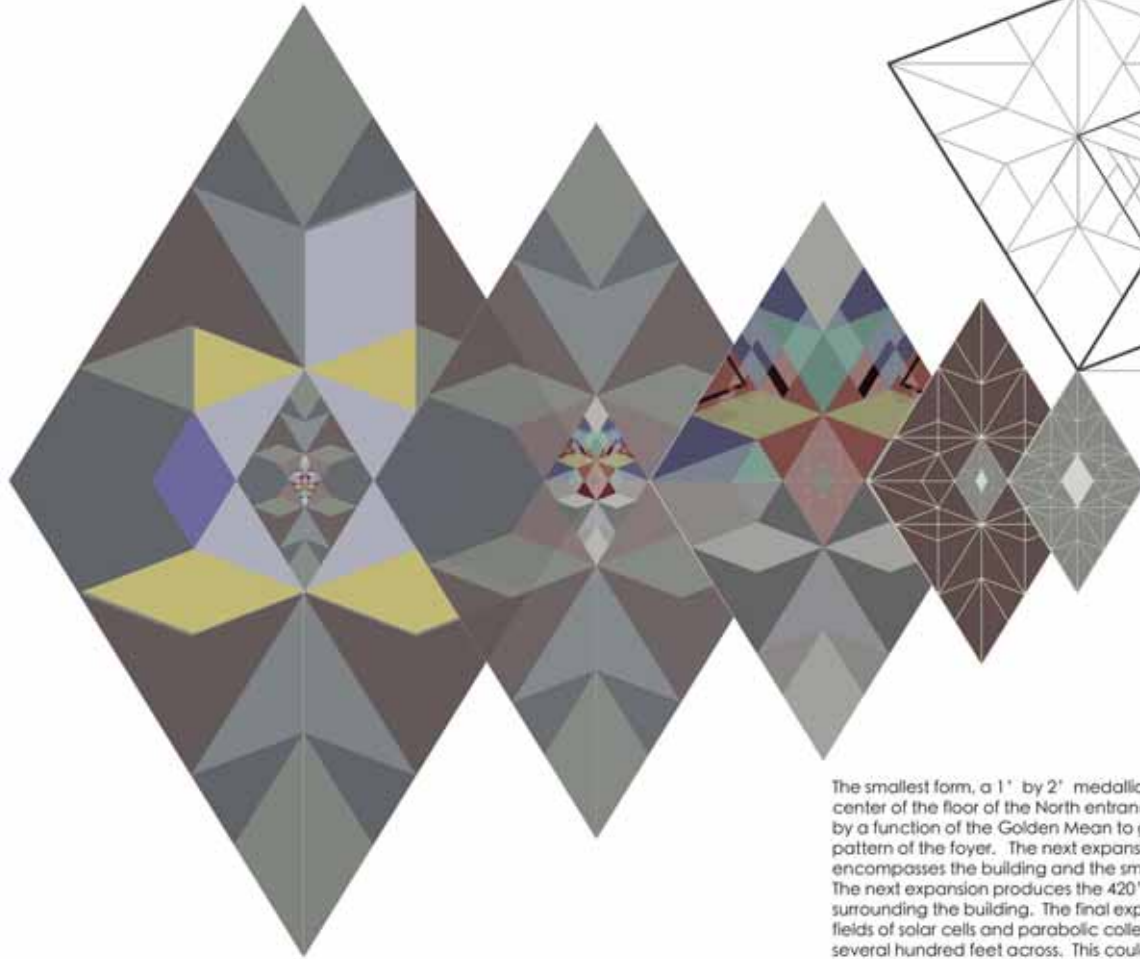


The central structure is the hub of the pattern. This building is an open-air pavilion. The building is 100 feet tall, including the rod shaped tower. It is based on a tiling pattern of mathematical, three-dimensional blocks, which expand and contract in generations of scale.

The main entrance on the north side contains a medallion of the pattern which expands to organize the entire site.

To the left is a dome containing a three dimensional form of translucent, frosted colored glass

To the right is a large open-air structure which contains another dome, also integrated into the overall pattern. Against the North wall, will be a glass elevator which rises 50 feet through the shapes of the dome to the observation deck. There will also be a staircase following the lines of the building up the North wall, disappearing behind, and passing through the dome until it emerges on the outside and continues to the observation deck above.

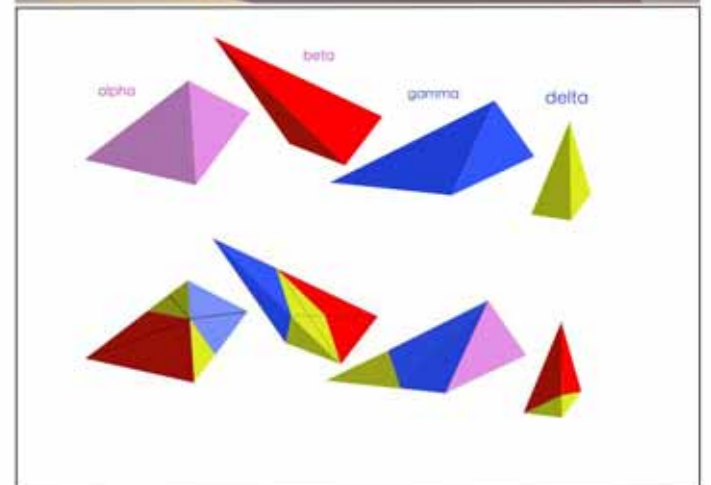
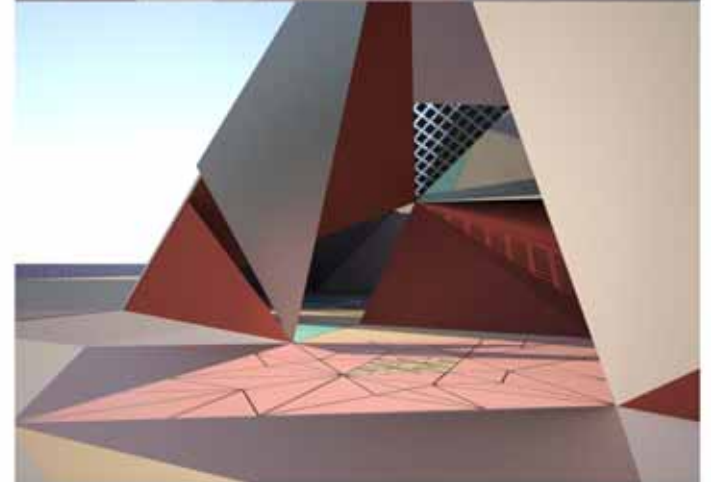


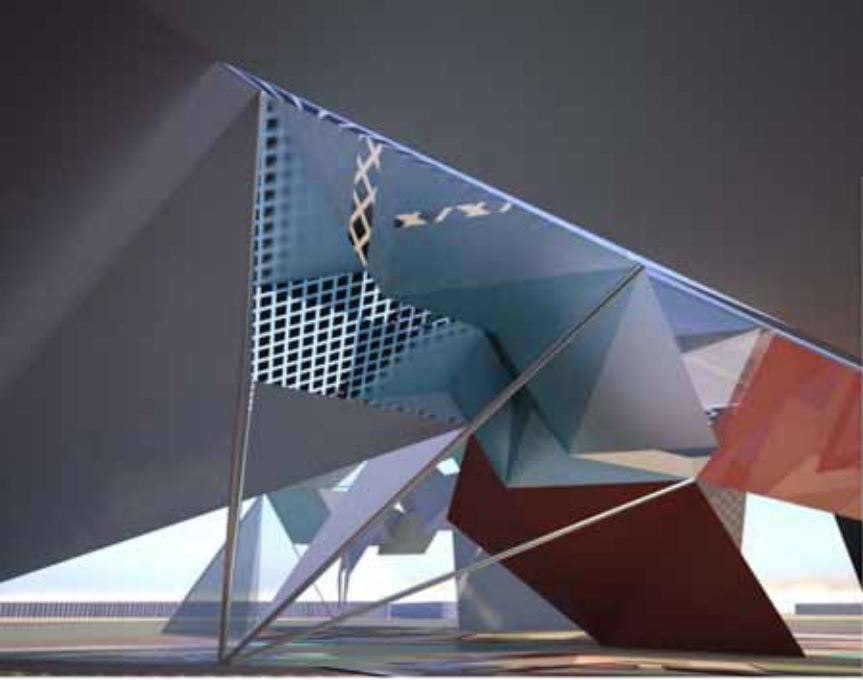
The smallest form, a 1' by 2' medallion, is located in the center of the floor of the North entrance. This form is multiplied by a function of the Golden Mean to generate the 6 foot wide pattern of the foyer. The next expansion of the pattern encompasses the building and the smaller shaped plaza. The next expansion produces the 420' wide plaza surrounding the building. The final expansion generates fields of solar cells and parabolic collectors which are several hundred feet across. This could go on indefinitely.

The extraordinary two-dimensional, mathematical/architectural tiling patterns of the Middle-East are based on a small set of shapes and subdivisions which can fill the void with repetitions and permutations. Three-dimensional tilings behave similarly. This work is based on a system of 4, four-sided triangular blocks, or tetrahedra.

These tetrahedra have interesting and complex properties, which can be combined in patterns that fill three-dimensional space without voids, just as flat tilings fill a plane. These patterns are aperiodic. Unlike bricks, they cannot be assembled in a single, regular pattern that repeats. Instead, they radiate out in varying angles and combinations.

All of the structure and forms in the building and solar gardens are composed of different scale generations of these four forms.





View up into the Pavilion ceiling.

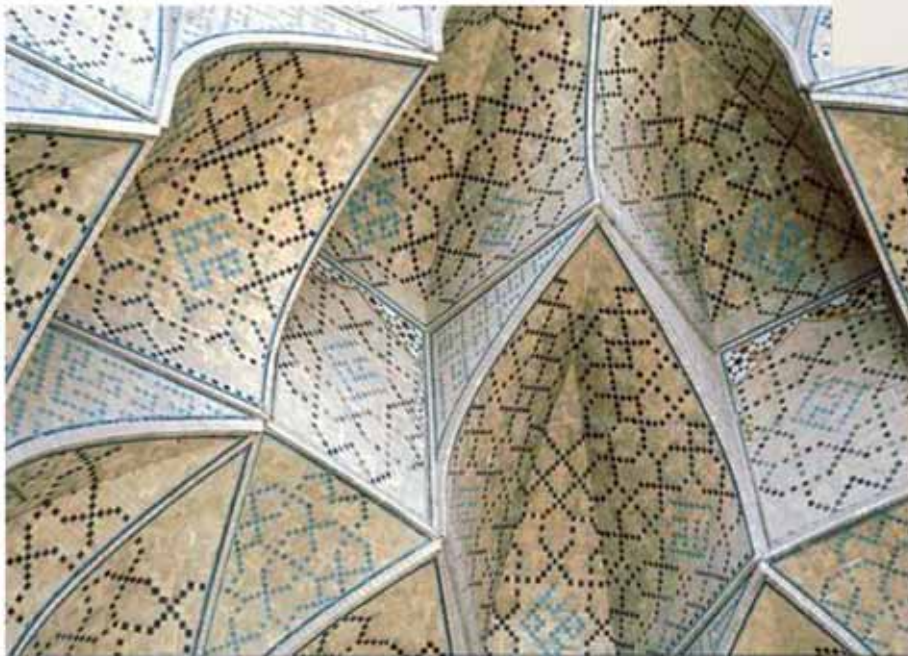
There is mathematical substructure in music, which promotes a sense of rigor and beauty, but need not be understood consciously. The role of structure in this work is similar. There is an affinity between this work and Middle Eastern tilings.



Three story concert hall lobby installation.



Colors are suggested by the volumetric watercolor studies.





SOLAR FIELDS

Over 500,00 sq. ft. (approximately 55,000 square meters) yields 6.0 MW of electrical power from two types of photovoltaic arrays and parabolic collectors for day and night electrical production.

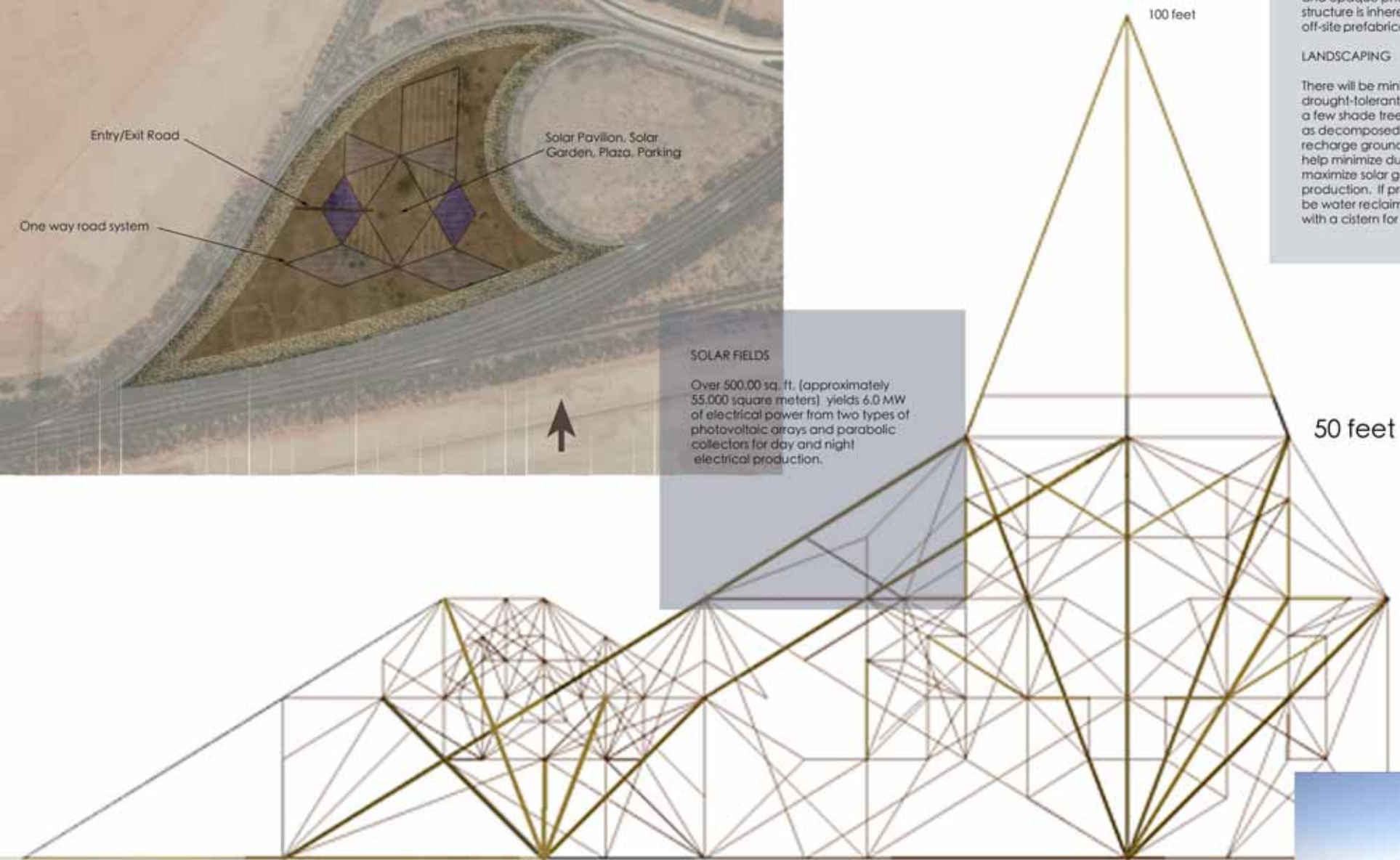


BUILDING

The building is surfaced in transparent, translucent, and opaque photovoltaic glass. The geodesic structure is inherently strong and will permit off-site prefabrication.

LANDSCAPING

There will be minimal landscaping with drought-tolerant (xeric) native plants, and a few shade trees. Porous hard surfaces, such as decomposed granite, to be used to help recharge groundwater. Appropriate hardscapes help minimize dust to keep solar arrays clean to maximize solar gain and, hence, electrical production. If practical, in this climate, there will be water reclamation from the solar "curtain-wall" with a cistern for watering.



Three-dimensional, stainless steel supports with a transparent scrim "hedge" or fence to prevent public entry.

