

“Next Generation” 2<sup>nd</sup> prize North America

Temporary festival structure using recyclable building components, Providence, RI, United States

Project data

**Project group** Materials, products and construction technologies  
**Client** Sukkah City  
**Project background** Academic research  
**Estimated start of production** September 2011

Main author

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**Study direction** Architecture  
**Supervisor** Jason Wood  
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Further author(s)

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Shim Sukkah.

Comment of the Holcim Awards jury North America

The jury commended the project for the immediate concept of the built structure, but moreover for the fundamental research on the complexity of processes, focusing on the construction and its effects, the relation of material, light and thermal effects. Many principles of sustainable construction are directly or indirectly selected as subject or applied, yet in microcosm and as a theoretical object. The research has been transferred into an object of stunning aesthetic quality and shows great sensibility for its construction material.

Project description by author

**Shim Sukkah**  
 In September of 2010, David Getty, Matthew Jacobs and Stephanie Gunawan were selected as finalists for Sukkah City NYC. The competition sought to reinvigorate the ancient phenomenon of constructing temporary, elemental structures during the Jewish holiday of Sukkot. Our entry, Shim Sukkah aimed to rethink a common material and develop a new method of material practice.

**Description**  
 A wood shim is a rather ordinary thing used in building, a tool of the trade. It is most often used to fill space between things (ie: gaps in construction). The typical shim profile tapers from 0.6cm to nothing over 40cm [¼ inch to nothing (width) over 16 inches (length)].

For *Shim Sukkah*, this becomes the building block. Stacking of these tapered elements allows for structure and the disintegration of structure to exist closely, within the same thing. The floor, walls, and roof all become the space between.

The Sukkah enclosure vanishes with the shim characteristics to reveal the inhabitant(s) inside and the environment in which the sukkah resides, within the park, the city, under the night sky.

Relevance to target issues by author

**Innovation and transferability – Progress**  
 Cedar shims are an integral component of building with timber. They are used primarily to fill voids in construction. The use of an individual shim as a building block for an entire structure is not a new concept. We see a multitude of building products today used from the assembly of many small pieces (plywood, glulam, oriented strand board/OSB to name a few). The simple idea to stack the shims opposite of that which is used in the packaging of bundled shingles (minimize volume) created a void between each alternating shim. This technique maximized the volume (albeit incrementally) and exposed a majority of the shim surface. This in turn had significant effect on the aesthetic and performance of the building with regards to thermal mediation, light quality, adaptability, and scent. Although there were a significant number of shims used (approx. 10,000), the threshold between outside and inside remained elusive and allowed the feeling of exposure from within.

**Ethical standards and social equity – People**  
 Biblical in origin, the sukkah is an ephemeral, elemental shelter, erected for one week each fall, in which it is customary to share meals, entertain, sleep, and rejoice. It is also about universal ideas of transience and permanence as expressed in architecture. The sukkah is a means of ceremonially practicing homelessness. It asks us to acknowledge the changing of the season and to take a moment to dwell on – and dwell in – impermanence.

**Environmental quality and resource efficiency – Planet**  
*Shim Sukkah* had minimal impact on any of the four sites it was placed. Due to the transparency/openness of the structure it took insignificant wind loads. With a relative small footprint (2.5m x 2.5m) it did not require robust foundations. Simple construction was completed without the use of heavy machinery and expedited by the structure's prefabricated elements. Wood came from often discarded broken bundles but could also be harvested from any shingled house needing new siding.

**Economic performance and compatibility – Prosperity**  
 Due to cedar's natural characteristics, the sukkah was maintenance free. The wood could age over time without the need to paint/refinish. The prefabricated panels allow for the structure to evolve over time to accommodate multiple uses. The performance of the building could be directly implemented into a wide variety of contexts/climates with overall costs being relatively the same.

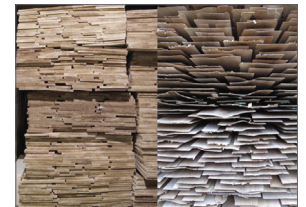
**Contextual and aesthetic impact – Proficiency**  
 As non-Jewish designers entering a sukkah competition, it was paramount the material used for construction was familiar, readily available, and could adopt a new meaning through a change in material practice. The repeated shim was significant in that it receded into the background of the event but provided numerous qualitative aspects to the enjoyment of the space. Seen in the context of New York City, *Shim Sukkah* provided a resting place for thousands of visitors during the week-long holiday of Sukkot. The quality of the space was enhanced by sunlight which illuminated and shaded the singular elements of the building. Due to the fact that the shims were threaded on rods, each element could revolve around the rod which the user could push and pull to make windows/doors/skylights. The sukkah responded to everyone that came up to touch it. The scent of cedar was continually being driven across the interior as the wind sifted through the shim walls.



Entry.



Cedar shingle.



Foundation.



Assembling walls.



Door/roof detail.



Manipulating walls.



Corner detail.



Roof detail.