For one week each fall, in celebration of the Jewish holiday of Sukkot, elemental and temporary festival structures are built in alleys, yards, rooftops and balconies all across the globe. For the duration of the holiday the pious use these structures as a sacred space in which to share meals, entertain, sleep, meditate and rejoice. In 2010, an open architectural competition was announced challenging participants to rethink and re-imagine what is not only a long standing religious phenomenon but one of the oldest ongoing building traditions. Our winning scheme was 1 of 650 entries submitted representing over 40 different countries. In September of 2010 we, along with 11 other teams, constructed and displayed our sukkah in Union Square Park in New York City.

When the custom was in its infancy, sometime around 800 BCE, the concept was simple; to erect and live in a temporary “booth” or sukkah, with at least two and a half walls that enclosed enough space for at least one person (preferably many), and have a roof constructed of organic materials that can shield the inhabitant(s) from the sun by day and focus their gaze on the heavens by night.

What started as a simple dictate has evolved into complex and at times logistical “building codes” that range from the practical, the structure should be built to withstand the wind, to others as seemingly unattainable as those in Hammurabi’s Code. While the rules have nothing to do with lumb-forma-kb or a fire-escape, they do dictate which animals, both living and dead, the structure can be built with or upon. The structure can be built on a camel’s back or wall or in live elephants or even recently deceased whales. Nearly every aspect of the structures siting, size, program, materials and structural properties have been delineated. Constraints that at first may seem ridiculous take on new meaning when considered in the context from which they came. For travelers of yore, accustomed to traversing the desert on quasi-architectural camel saddles or in mounted palanquins, the consideration of whether it was permissible to build a sukkah on camel’s back seems less absurd. (As for the dead whale, we have not been able to rationalize that.) But, what the fantastical rules clearly demonstrate and encourage is resourcefulness; a critically relevant theme for Architects and building practitioners today. Whether it is a camel, a stand of reeds, or a nearby lumberyard, building with what is readily available is often most efficient and a self reflective gesture of thanksgiving for what material possessions one does have.

Ostensibly built to stand for only seven days the structures truly exist as part of a 3000 year continuum; no other act of architecture is so temporary and so permanent, as new and as ancient. The traditions strength is built on these and similarly paradoxical concepts. The original intent was to commemorate and reset the structures the Israelites built while wandering in the wilderness during the Exodus from Egypt. Today the focus is less on the recollection of an event, but dwelling on and in the underlying and often contradictory ideas of transcendence and permanence, past and future, mobility and rootedness, vulnerability and security. The holiday is a time to consciously practice homelessness. For us and the rest of the architects and designers in the competition, regardless of religious conviction, the design of a sukkah offered a rich environment to explore and experiment with concepts critical to the discipline; albeit ones never directly or indirectly addressed and incorporated in the design and construction of sukkah. While the system was developed specifically for the sukkah the ideas are applicable to a range of architectural themes. Inspired by the resourcefulness of the camel-back sukkah builders, we sought to redefine a common material. Inexpensive, durable and made from waste products, the cedar shims system we developed can create micro climatic conditions inside the structure that can mitigate dramatic temperature fluctuations. Within 64 square feet of wall the stacks of shims exposed 650 square ft of surface area (a 900% increase over traditional wall) which hypothermically produced cooler temperatures during the middle sun and warmer temperatures when the stars were above. We found this to mark a specific trajectory of material practice that could be developed further to reduce heating and cooling demands within the built environment.

The concept of using shims as a complete structure began in jest while working on another project that required excessive quantities of the scrap wood wedges leading us to jokingly consider the possibility of building a whole structure out of them. Shims are one of the most ubiquitous materials on any job site or workshop and unsurprisingly we had some lying around while experimenting with possible sukkah construction materials. This most plebeian material when considered a primary building block rather than a means of correcting construction mistakes took on new meaning and relevance in the context of the sukkah requirements. Over the length of the shim (approximately four handbreadths) it taps from a “U” to nothing thus fulfilling the dimensional and many conceptual requirements. After multiple experiments we found that by alternating and overlapping the thick portion of the shim we could create a straight column with the narrow ends fingering outward, tapering to nothing. When combined, the units could create the floor, walls and roof of a practical and poetic space. While the individual shims remained recognizable, in aggregate the 10,000 scrap-wood wedges created a structure with unique spatial qualities and embodied many of concepts that before seemed too contradictory to manifest in physical form. The afford the material and the building system had on the space created an atmosphere that supported and delivered the program. Hours before we were to remove the structure from Union Square Park, the Novelty State Police, who supposedly had no jurisdiction for a “booth” on the esplanade, issued a citation and an ultimatum to share a meal. Despite the frantic hustle outside, the rich scent of cedar and the rhythmic play of light across the undulating surfaces created a sense of intimacy in our booth just steps from Park Avenue.

Sukkah building is first and foremost a communal activity; an architectural endeavor meant to unite families, friends and strangers through a common act of construction. Over the course of one weekend a quartet of a million people passed through the Union Square and what we heard and saw was inspiring. We met people, much like ourselves, who prior to the competition knew little or nothing at all about sukkahs and we met those who have never known a time without them and both found inspiration and common ground among the structures. The sukkah’s become many things to many different people. We saw zealots proselytizing, rabble teaching, detractors protesting, opportunists pedaling watches, black spectacled onlookers discussing Messiah principles, but most importantly we saw people of all ages, races and creeds reaching out, seeking a better understanding of the architectural, religious and social significance behind the sukkah. Just as the individual sukkah is a framework for religious practice the competition became a stage for public dialogue on religious, social and environmental issues.

As Architects, builders and citizens we understand homelessness and vulnerability are more than just themes; they are reality for millions of people across the globe. Union Square Park is by day one of the busiest squares in Manhattan and by night a haven for transient and homeless populations. Before the two day public exhibition came to a close our sukkah had been sold with proceeds donated to a New York City organization that provides support and advocacy for the city’s homeless as well as those in disaster stricken Haiti. At B&H (16) our sukkah is ninety-four percent smaller than the average American home while in most