

## **THE ROOFED LETTERS: SUKKAH, TEXT AS ARCHITECTURE<sup>1</sup>**

For seven days each year, Jews are commanded to dwell in sukkahs, or temporary huts, during the festival of Sukkot. Also known as the Festival of Booths, Feast of the Ingathering, and Feast of Tabernacles, Sukkot begins annually five days after the end of the intensely inward-focused observances of Yom Kippur and brings the congregation out of doors, to eat, sleep, and pray together for a period of seven days and nights. The holiday occurs each fall sometime in September or October; the Jewish calendar is a lunar calendar, and the festival coincides with the full harvest moon. The commandment to dwell in booths appears in Leviticus 23:33: “Ye shall dwell in booths seven days; all that are home-borne in Israel shall dwell in booths; that your generations may know that I made the children of Israel dwell in booths, when I brought them out of the land of Egypt: I am the Lord your G-d.”

The Hebrew name for the holiday, “Sukkot,” is the plural of the word “sukkah” or booth and refers to the booths which are constructed during this festival time. The most common understanding of the sukkah structure is a temporary, primitive hut, a place for domestic activities, such as eating and sleeping, and for ritual activities such as hand washings, blessings, and readings. It appears as a minimal structure, generally with a table, a place for eating and for study, and it may be decorated with fruit from the recent harvest. There may be a special place for the Lulav and the Etrog, the four species that are used for worship during the holiday. It is large enough for a small group to gather, a family or some friends. To dwell in the sukkah is both to turn atten-

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tion to the beauty and bounty of nature and to reenact the forty years of wandering in the wilderness.

Sukkot resonates with stories. The booths themselves are the nomadic dwellings which created a sense of place and orientation in the boundless desert. Within the cycle of Jewish holidays, this is the fall pilgrimage festival. It is a celebration of the harvest, a memory of harvest booths for the collection of fruit and vegetables and of answered prayers for rain. Besides these widely known histories, a richer understanding of the festival may be found by examining the deep connection between the name of the festival and the architectural space of the sukkah, that is, the connection between text and architecture.

There are three Hebrew letters that form the word sukkah: the *Samech*, the *Kaf*, and the *Hei*. Like all letters in the Hebrew language, these have literal, numerical, and symbolic meanings. The name of the holiday and hence the name of the letters themselves are derived from the Hebrew word for roof or cover, the "Shekinah," the clouds that protected the Israelites as they wandered in the desert. *Samech*, formed like a square or rounded square, means literally support or prop; *Kaf*, formed like a sideways "U," means the crown, the palm of the hand, the cover, the cloud; and *Hei*, a right angle with a short leg, means window, lattice window, or air hole. The letters spell out not only the word but also the physical elements of the sukkah: Support, Cover, Window. The significance of the structure is "spelled out" by the architectonic elements. Sukkah is a Support for the Crown, Support for the Cover, Support for the Cloud.



**Figure 1**

## Building Codes and Specifications

Though the actual form of the sukkah appears to be quite simple, precise guidelines must be followed in order that the completed structures are considered “valid.” The dimensioning tool for the sukkah, a human scaled space, is the hand, and the measure for its construction is the handbreadth. Just as a scribe is instructed to draw each Hebrew letter of sacred text in a specific manner, with attention to measure, material, and order, so too is the builder of the sukkah instructed in the method, material, and timing of the construction of the sukkah.

The halachic building code specifies in detail the rules for the construction of the valid sukkah, and instructions on the proper way to dwell within its walls. The location, the covering, the walls, the dimensions, and even the intentions required for a valid booth are pre-scribed. For the modern sukkah builder, there are many available handbooks which outline the requirements for valid sukkah construction. As sukkahs were constructed over time and throughout the world, many questions arose, and the rabbis of the time clarified the guidelines:

*Some of the older regulations are preserved in the Mishnaic tractate called Sukkah, and these were discussed in the Talmud. It was first of all necessary to establish architectural rules for the booths—for these huts had to be impermanent and shady as befitting harvest booths. But questions of height, length, and size naturally came under discussion, as well as many seemingly odd details from our modern perspective. ( Fishbane qtd. in Hartry and Weiss 8)*

The following compilation comprises the most consistently cited specifications. The roof structure and covering are considered to be the most important elements of the sukkah, and therefore have the most detailed specifications.

Sukkah Dimension overall: note, one handbreadth measures approximately 3.66 inches.

- Total inside square footage required is the equivalent of 40 handbreadths x 40 handbreadths (configuration does not need to be a square).

- Inside areas must be at least 7 handbreadths x 7 handbreadths (length and width).
- Interior height must be more than ten handbreadths and less than eight cubits (one cubit equals six handbreadths).

These dimensions must be measured from top of sukkah floor to underside of roof covering.

### **Roof:**

- Consists of two distinct components, roof structure and roof covering.
- Roof must be made of natural material (any material that grows from the ground).
- Natural materials that have undergone a complete change in form (such as pounding) are not permitted. Mats used for sleeping on floors may not be used as roof covering.
- The roof covering must provide more than 50% shade inside the sukkah during the daytime.
- The stars and sky must be seen through the roof covering at night.
- Heavy rain must be able to penetrate the roof covering.
- The covered area of the roof must exceed the open space of the roof.
- The roof covering must be at least 7 handbreadths x 7 handbreadths in width and length.
- Openings in the roof covering must be less than three handbreadths square.
- If boards are being used as beams, they cannot be wider or deeper than four handbreadths.

- If roof extends beyond the wall the extension may not be more than three handbreadths.
- Changes in roof height must be less than three handbreadths distance between the two levels, measured from top of the lower level to the underside of the upper level.
- Roof covering can only be added after the walls are in place.
- Roof should be parallel to the sky.
- Occupation of the roof is not permitted.

### **Walls:**

- Walls may be made of any material, natural or synthetic.
- Walls may provide more sunshine than shade as long as roof covering is valid.
- Wall covering should not move in a breeze; if walls are made of cloth, they must be tight, but it is preferable to weave wood slats that are fastened to the structure to insure that no movement occurs.
- Walls may allow an average wind to move through the sukkah, but walls should prevent a wind which would extinguish the flame of a candle to move through the sukkah.
- Walls should be at ninety degrees to each other.
- Minimum height of walls is ten handbreadths.
- Top of walls must be within three handbreadths of roof covering.
- Bottom of walls must be within three handbreadths of ground.
- Sukkah must have at least two and a half walls; two complete walls and one incomplete (half) wall.

- A complete wall spans from edge to edge of the sukkah.
- A wall is considered complete as long as each element it is made is within three handbreadths of the next.
- The length of two complete walls must be at least seven handbreadths wide and the incomplete wall must be at least four handbreadths wide.
- The incomplete wall must have the appearance of a wall. Therefore an entrance frame is required and can be accomplished by placing a vertical element (column) at the edge of the sukkah, opposite the incomplete wall in order to form an entrance frame, and then placing a horizontal element (lintel, beam) that extends from the top of the incomplete wall to the top of the vertical element (it is not necessary for the horizontal element to touch the vertical elements). The distance between the incomplete wall and the vertical element must be at least three handbreadths.
- Openings at corners of sukkah walls are not permitted. A sukkah corner is defined as the area within seven handbreadths of intersecting walls and/or entrance frames.
- Openings less than three handbreadths are considered closed and not open. Therefore, as long as a void in this corner is made of continuous material four handbreadths wide, the opening would be permitted.
- No opening can be larger than ten cubits wide. Any opening greater than ten cubits in width requires an entrance frame.
- The two complete walls must each have more closed than open area.
- Sukkahs must have more walled than open space.

**Floors:**

- Sukkah may have a constructed floor.
- No second levels within sukkahs are allowed.
- Constructed floors must be located less than five handbreadths in height from the ground to the underside of the floor.
- Raised or depressed areas in constructed floor can occur within the ten-handbreadth space between ground and floor.
- Space below floor may not be occupied.

**Foundation:**

- Foundations are not allowed, and digging into the ground is prohibited.

**The Letters as Spiritual /Material Structures**

It is not difficult to imagine how each of the preceding regulations has been discussed and evaluated by rabbis, scholars, and sukkah builders over the centuries. These specifications have been questioned and reinterpreted, not only to clarify practical problems that arise during construction but also in an effort to reveal a deeper spiritual dimension underlying the text. With so many specifications to comply with, a short hand way of remembering the rules was recognized:

*Scrupulous people build a succah enclosed by walls on all sides, like the completely enclosed samech.*

*Some construct only three walls, like the letter kaf, which is also permissible.*

*It is also permissible to construct one of the two walls and a third partial, unattached wall, like the letter hei. (Scherman and Zlotowitz 49)*

Remarkably, the three letters which spell out the name of the holiday and the name of the structure are also plan drawings of the only three valid architectural diagrams for the sukkah. Each letter of the word Sukkot or sukkah can be read both as two-dimensional symbol for a sound and as a precise plan for the festival structure. Seen another way, the sukkah is the three-dimensional, physical embodiment of the word of G-d. The form of the valid sukkah emerges from the shapes of the letters traced on the ground. It is almost as if the letters sprang to life, stood tall, and then at last allowed the roof covering to be placed on them.

Not only are the shapes of the letters building plans, but the root meaning of each letter also relates to the functions of the sukkah. Particularly in the mystical Kabalist tradition of Judaism, the etymological significance of letters is studied in an effort to uncover meaning from sacred texts. The search for meanings within the letters related to the sukkah is quite fruitful and provides the poetic inspiration for the set of sukkahs illustrated below.

The relationship of Hebrew text to architecture is an intriguing subject for the twentieth-century architect John Hejduk. In his book, *Pewter Wings Golden Horns Stone Veils*, he investigates the mystical power of the Hebrew letter and its potential for architectural space. Hejduk has developed an architecture of masques and scenarios, specific memories and places. His drawings are rich with spaces for certain well-defined characters, and his buildings themselves become characters in remote landscapes and cities. The image of the letter as “spiritual / material structure” is especially compelling to Hejduk, an architect and poet who searched for architectural space in paintings and texts as well as the constructed environment. Referring to the Hebrew letters, he describes what he has found:

*The form of the letters is not accidental; they are spiritual essences whose external shape corresponds to their internal essence.*

*When a person pronounces or uses the letters of the alphabet, it awakens the spiritual essence contained in them and “sacred forms” come into being which rise and unite with their origins, the heavenly*

*letters, “which are the source of emanation”; there they become subtle and incorporeal, similar to what they were before they took on a definite material shape in man’s mouth. (222)*

If the Hebrew letters can be understood as spiritual / material structures, they are architecture, because a work of architecture strives to be just that: a place where spirit and material are united. The primitive hut, the sukkah, based on the architecture of the text, is architecture, which does not need an architect to design it. To dwell in the Sukkah is to dwell within, and be protected by, the space of the word of G-d. The sukkah is at once an intentionally fragile hut which sways in the wind and an immeasurably strong spatial embodiment of text.

### Three sukkahs



**Figure 2: Samech: Support or Prop**

This sukkah is comprised of separate elements which come together to form a single structure. The four walls, the floor platform, and the roof structure were de-

signed by separate teams and connected together as the sukkah was constructed. The deep beam which holds the roof covering is read as an exaggerated Support element.

**Figure 3: *Kaf*: the Crown, the Palm of the Hand, the Cover, the Cloud.**



The u-shaped plan of the sukkah takes the form of the letter *Kaf*, the Cloud.

All elements of the structure are white or translucent fabric and are lightweight. The tent-like sukkah is designed as a nomadic structure. It is first assembled in Florida and then reassembled in the desert in New Mexico. Much as a cloud floats through the air and casts a shadow on the ground, this sukkah moves and provides cloud shelter in different environments.

**Figure 4: *Hei*: the Window, Lattice Window, Air Hol 1**



This sukkah is constructed of a set of square “Windows.” Interchangeable square frames of copper screen, bamboo lattice, and canvas fabric are assembled in a cubic frame. The windows and lattice openings are multiplied as one looks into and through the sukkah structure. The sukkah is essentially a set of windows which come together to hold up the roof covering. When inside the window-sukkah, one can look out through the walls and through the leafy roof.

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