

RECYCLED FACADE

## PAPER

Today, 40% of paper pulp is created from wood.

Paper production represents 1.2% of the world's total economic output.

Recycling one ton of newsprint saves about 1 ton of wood but recycling 1 ton of printing or copier paper saves slightly more than 2 tons of wood.

The question here then becomes how can paper be used in Architecture. One Example is papercrete: a mix between cement and paper. Developed in 1928, the ambition was to use paper as an aggregate to make concrete a more sustainable.

However, the Japanese approach to paper in the traditional housing architecture can be seen as a --- way of approaching the materials properties and its qualities. Two terminologies emerge:

### WASHI:

A style of paper that was first made in Japan. The word «washi» comes from wa 'Japanese' and shi paper, and the term is used to describe paper made by hand in the traditional manner.

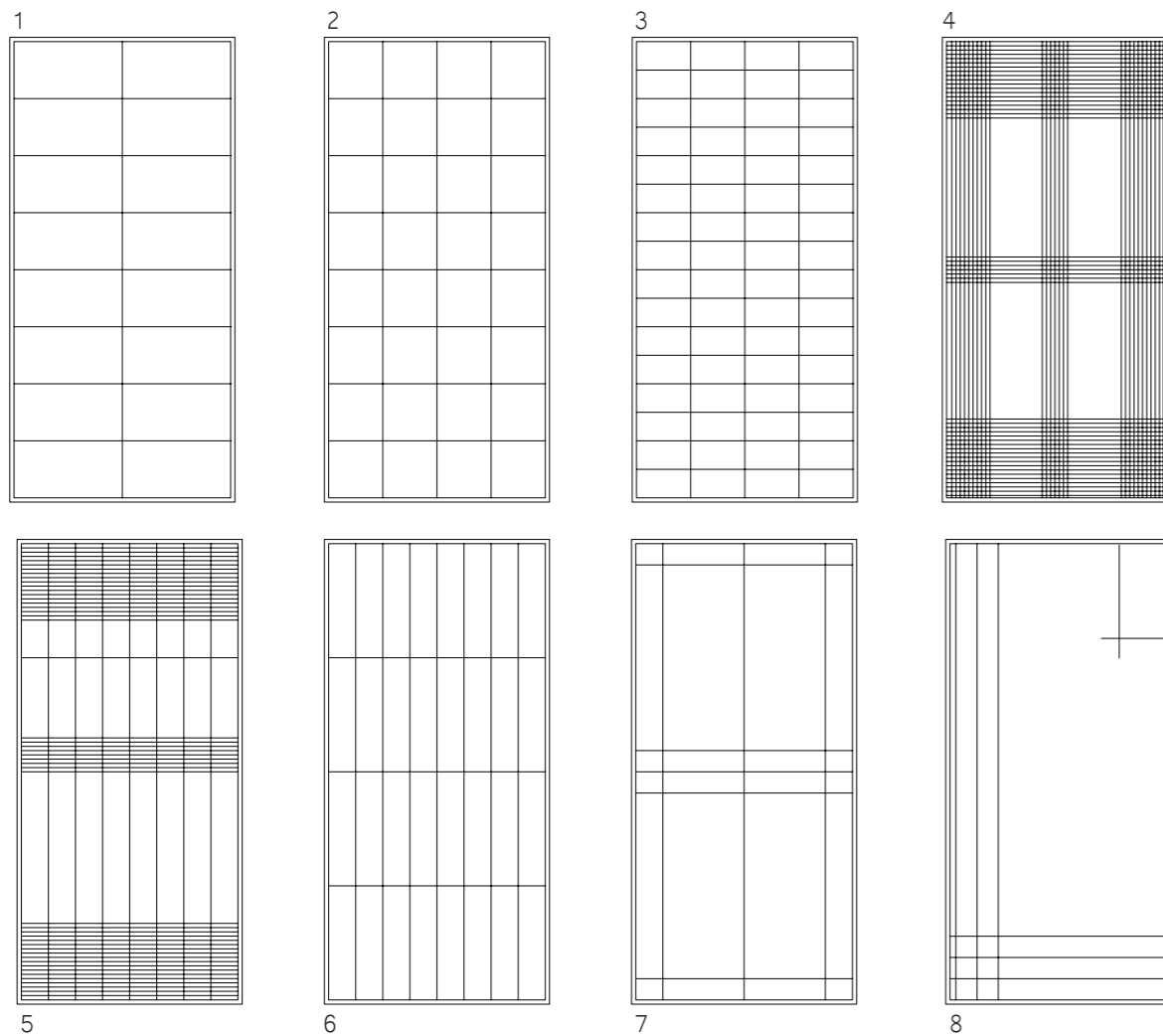
### SHOJI:

In traditional Japanese architecture, a shoji is a door, window or room divider consisting of translucent paper over a frame of wood which holds together a lattice of wood or bamboo. While washi is the traditional paper, shoji may be made of paper made by modern manufacturing processes.

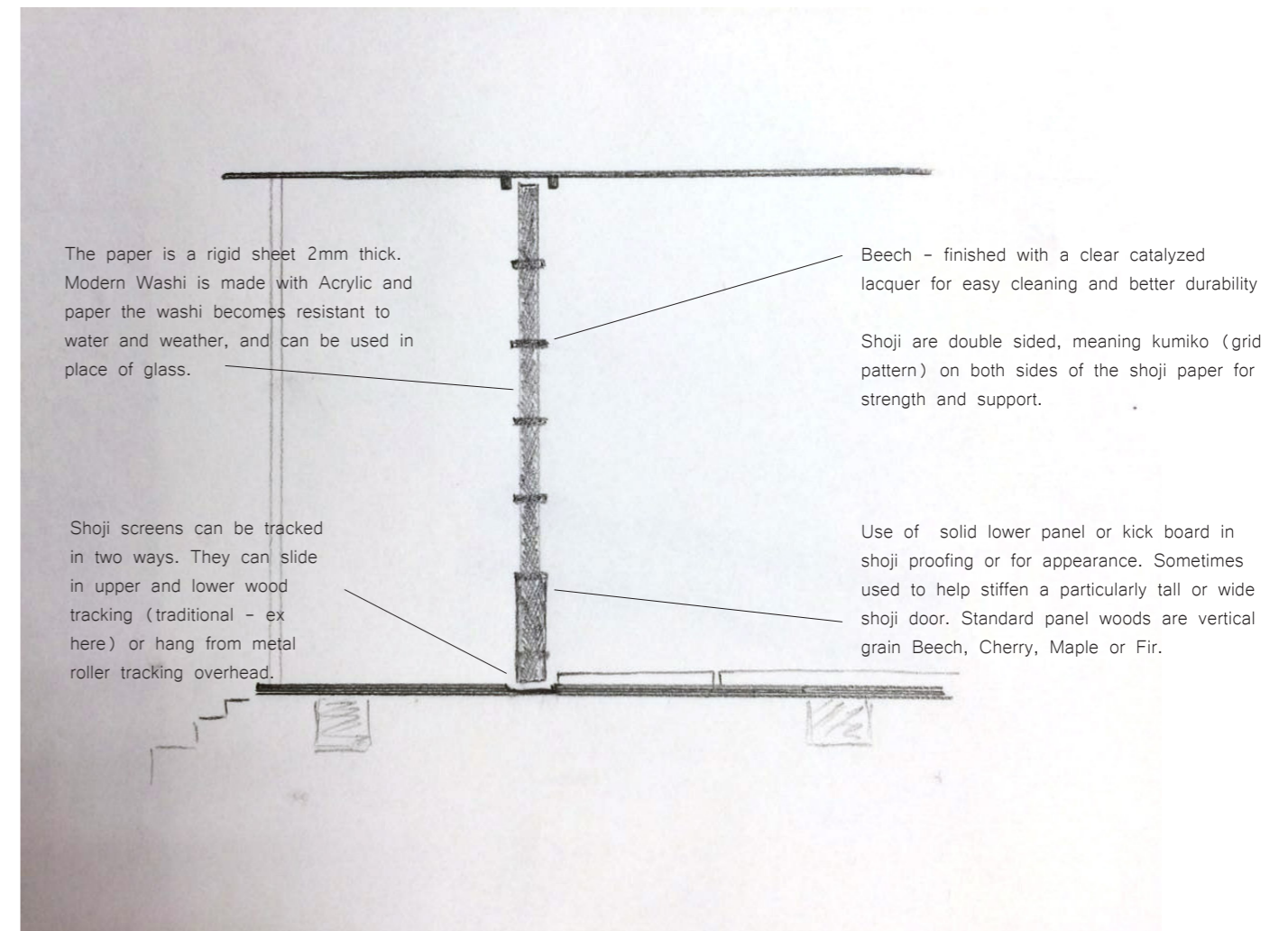
# The Traditional Japanese house



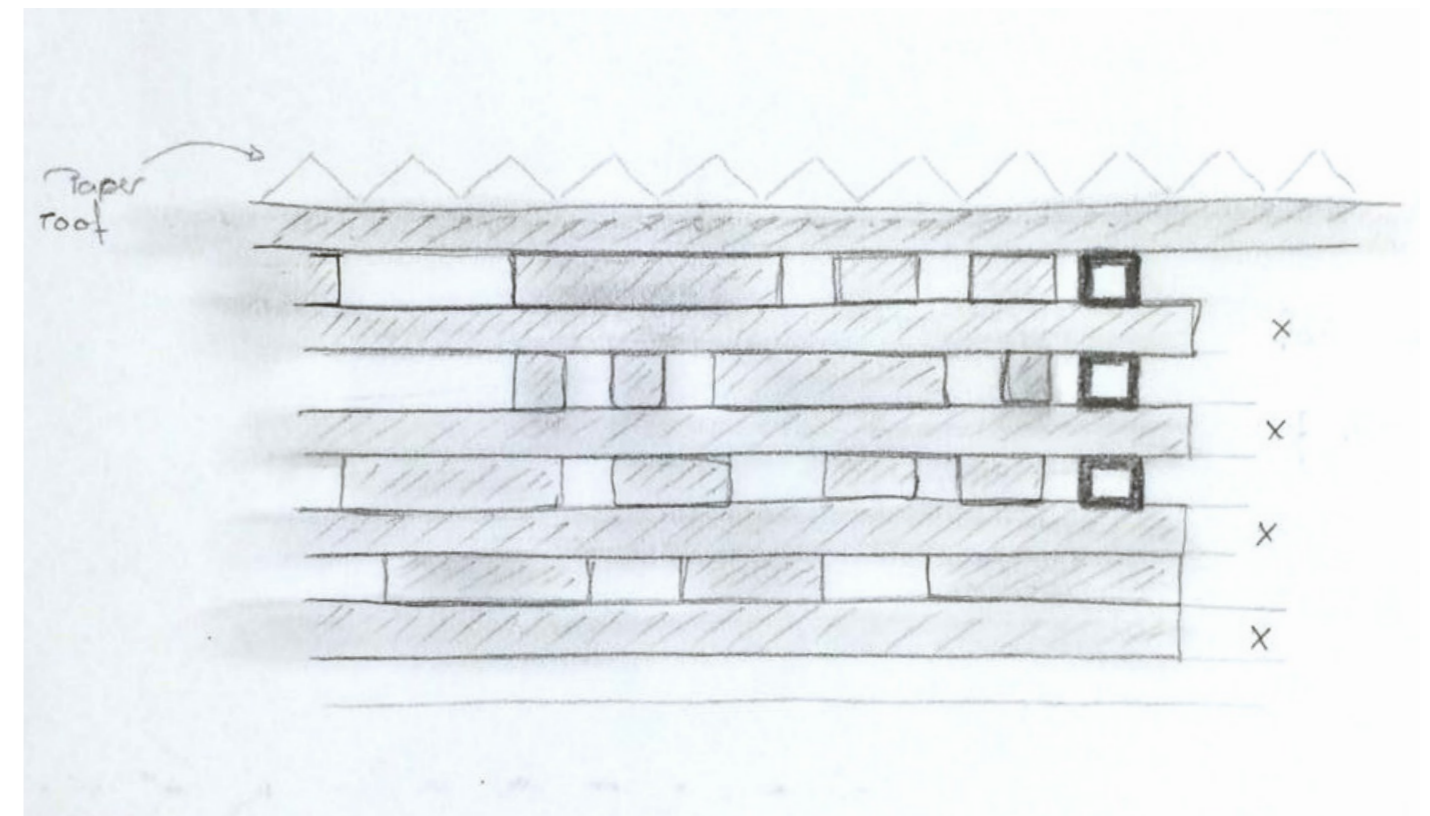
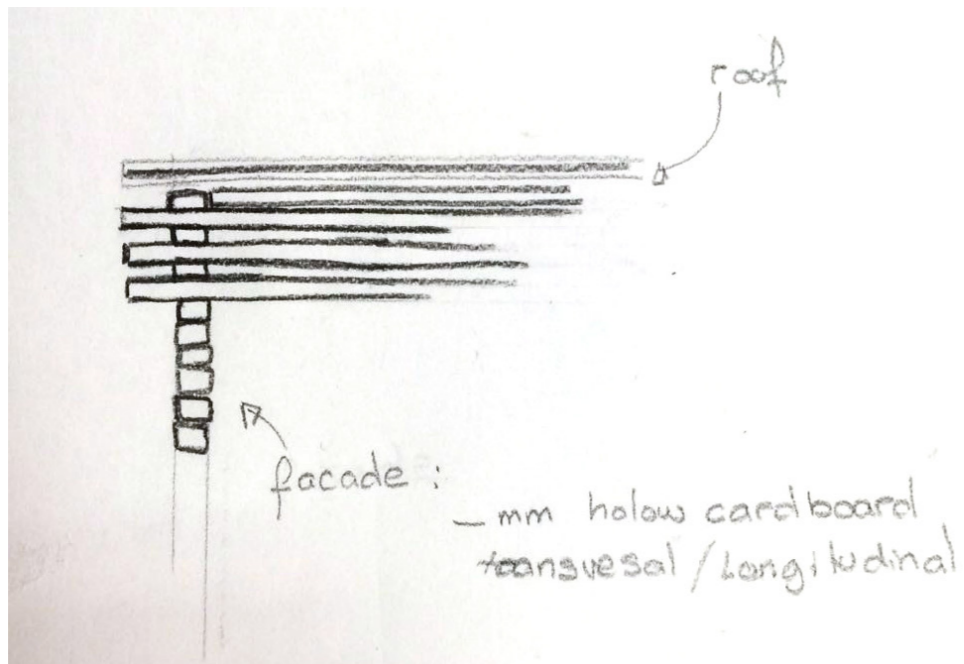
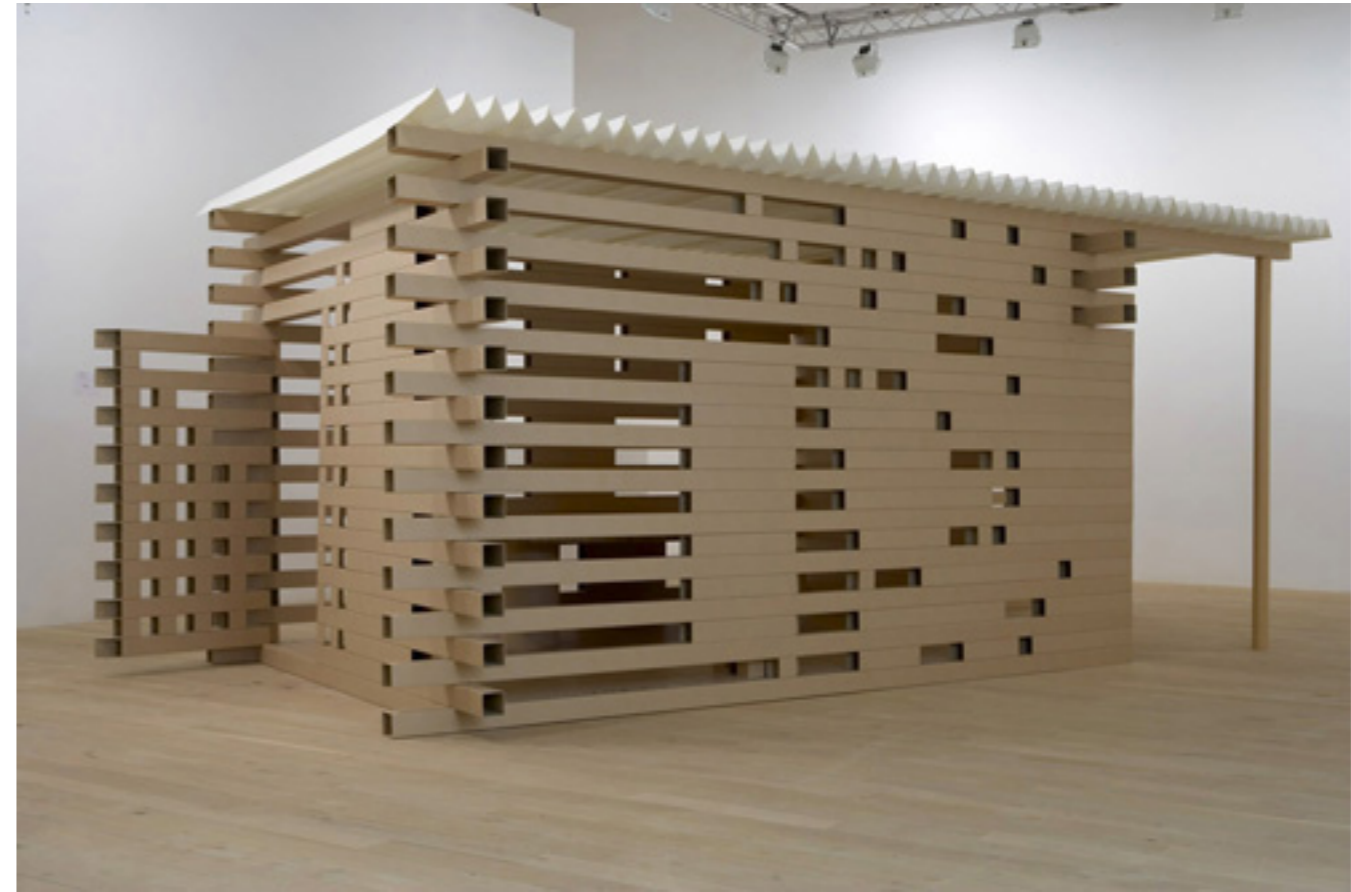
SHOJI can be defined as an cladding facade of the japanese traditon house. It is a non load barring cladding , and its structure bassed on a grid. Its great popularity and delvelopment was due to both its capacity to let light come into the building but also for economical and structural solution at the time as one of the major considerations of Japanese construction was the additional weight of the doors and windows.

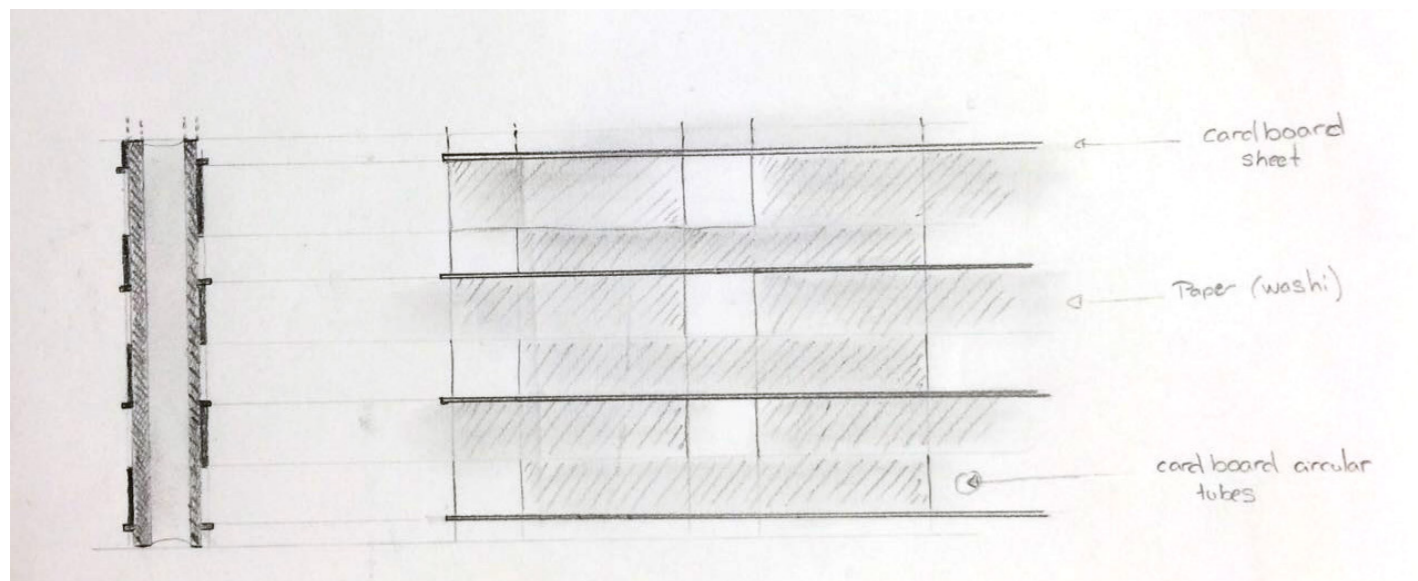


Design Options for a Shoji

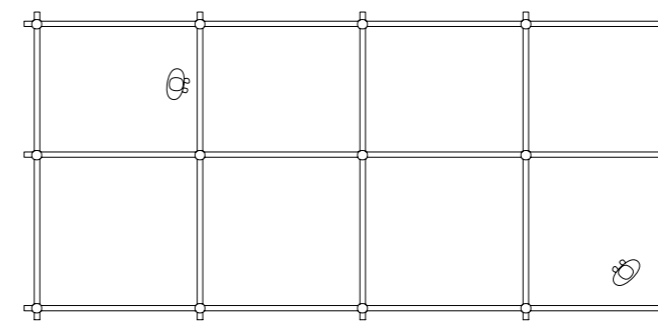


Contemporary interpretation/ adaptation

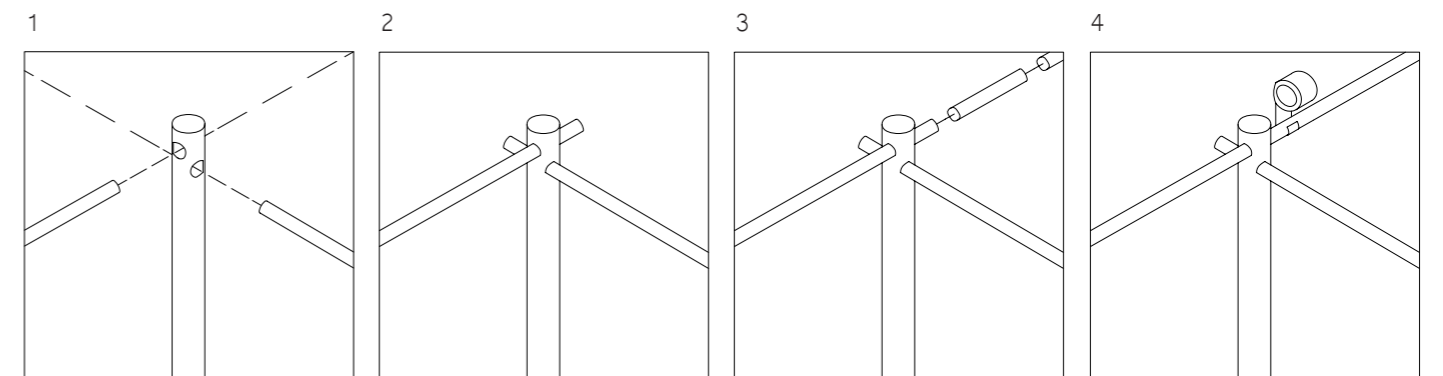
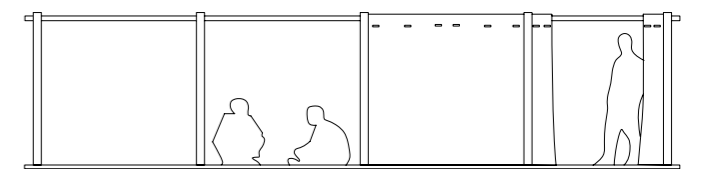




Structure Plan



Elevation



HERMES PAVILION, Shigeru Ban Architects / 2011

