Housing Type
Residential Palace
1920's

Number of Buildings
8

Building Area
10,404sqft

Garden Area
627,624sqft

Structure
Wooden post & beam

Comments
The creator's intent was to combine a life of refined taste with the requirements of daily livelihood.

Bibliography
http://www.jgc.co.jp/waza/a3_katsura/rikyu02.htm

Katsura is located on the banks of the Katsura River, west of a large artificial pond. Constructed for Prince Toshihito of the Hachijo-no-miya imperial family, this country home became a retreat for both family members and their guests to read and write poetry. The word Katsura was the name of a tree which the Japanese believed grew on the moon. Therefore, the palace was built in Katsura as it is an area known since ancient times to be of a special place for viewing the moon. The three palace buildings are SHOINS, minimal rooms consisting of only shelving (chigaidana/ tokonoma). The first section to be built is the old shoin, Kosho-in, then the middle shoin, Chisho-in, and finally the new shoin (the New Palace and the Music Instruments room), Shinsho-in. The garden consists of three tea ceremonial pavilions, the Shokin-tei, Shoi-ken and the Gepparo. The Outer Rest Pavilion is a place of rest for the tea ceremony participants and garden strollers, as is the Four-Bench Rest Pavilion. The Onrin-Do is a Buddhist memorial chapel and the Shoka-tei is a pavilion for enjoying flowers.
Building

Because of earthquakes and the humid summer heat, the materials used for the buildings were paper, bamboo and plastered earthen walls. Floors were raised to reduce heat transfer from the ground to the interior of the dwellings. Painted wood frame paper partitions separate rooms to maximise cross ventilation. Taking advantage of the garden views, the rooms open to the landscape and their cool breeze. Another measure for a cooling system was the construction of wide verandas and ponds. Finally, to prevent the reflection of ground heat, the roof eaves were extended further to deflect direct rays. The surrounding landscape was designed for the enjoyment of the outdoor life providing a beautiful setting for viewing enjoyment and promenades during all four seasons.
In looking at the Tea Ceremony Pavilions, some have reed thatched roofs and others have a gabled or hipped-gable roof. The actual tea ceremony room has a roof the thatched reeds are complacently combined with wood-shingles, whereas a tile roof creates a ceiling above the domestic service area. For support, the retaining bark of natural trees are used, and for the walls, earth is used to create a sense of modesty to oppose the high social class of the palace. The floor is partly of earth and board, with the hearth and kitchen stove set up in the unfloored corner of the room. The entrance is marked by a hung curtain, NOREN, which allows cross ventilation through the pavilions while providing privacy during the ceremonies.
Unit

The principal module in designing Katsura is the use of pilasters, HASHIRA, and rice-straw mats, TATAMI, on floors for sitting and lying down on. A KEN is the distance between two pilasters, which is approximately two meters. This measuring technique, called KIWARIHO is adopted throughout the buildings to set up a rhythmic structural pattern of posts. The columns, such as the example above, found in the south side of the Middle Shoin, are both structural and aesthetically important as they symbolize and define order in space. Rooms are primarily separated by sliding doors, SHOJI, made of paper applied over wooden lattice frames. For exterior doors, thin translucent white paper is applied only to one side of the frame, allowing the most light into the rooms, whereas in interior doors, the lattice frame is covered with a thick opaque paper on both sides. These paper surfaces become canvases for many beautiful ink paintings. To keep with the simplicity of the Shoins, the rooms consist of exposed shelves and alcoves, TOKONOMA.
Since the eighth century, Japanese Gardens have been best appreciated in the evenings when the high humidity in the atmosphere creates a beautiful moon glow over the gardens. This has led to a tradition of moon-viewing, and hence the necessity for such a deck to watch the moon rise. The building heights and structure were thus determined by the relationship between the sunset, moonrise, topography and the moonlight reflection off the pond surface. Located in the Old Shoin, wooden shutters to the East of Room Two open to a wooden-floored veranda which is approximately six feet wide. A bamboo floored moon-viewing platform projects from this veranda out into the garden, where further down one will find the boat landing by the pond. Although the floor is raised for cooling purposes, the lift in the floor plane detracts a persons attention from the ground view. Even when sitting down, an observers view is directed towards the pond and the garden beyond, creating the visual effect of floating on water.
Diagrams

1: This site plan of the Katsura shows the basic circulation, starting at the everyday Gate at the top of the map, moving through the palace into the gardens and pavilions. There is definitely a hierarchy from public to more private spaces, in this case the transition from the Shoins to the gardens, and finally the pavilions.

2: This diagram represents the Ken, the distance between the two pilasters.

3: The ken becomes the rhythmical structural pattern used throughout the shoins in construction, where each circle represents a pilaster. This method of measuring, called Kiwariho is also adopted in the building of the pavilions.