

FAQ's

1. Explain scale and proportion?

While scale alludes to the size of something compared to a reference standard or to the size of something else, proportion refers to the proper or harmonious relation of one part to another or to the whole. This relationship may not only be one of magnitude, but also of quantity or degree. While the designer usually has a range of choices when determining the proportions of things, some are given to us by the nature of materials, by how building elements respond to forces, and by how things are made.

2. Explain about proportioning systems?

Proportioning systems go beyond the functional and technical determinants of architectural form and space to provide an aesthetic rationale for their dimensions. They can visually unify the multiplicity of elements in an architectural design by having all of its parts belong to the same family of proportions. They can provide a sense of order in, and heighten the continuity of, a sequence of spaces. They can establish relationships between the exterior and interior of a building.

A number of theories of desirable proportions have been developed in the course of history. The notion of devising a system for design and communicating its means is common to all periods.

Some of the proportioning systems in architectural history are: golden section, classical orders, modular etc

3. Explain about Golden Proportion?

The Greeks recognized the dominating role the golden section played in the proportion of the human body.

The golden section can be defined as the ratio between two sections of a line, or the two dimensions of a plane figure, in which the lesser of the two is to the greater as the greater is to the sum of both.

The golden section has some remarkable algebraic and geometric properties that account for its existence in architecture as well as in the structures of many living organisms. Any progression based on the golden section is at once additive and geometrical.

A rectangle whose sides are proportioned according to the golden section is known as a golden rectangle. If a square is constructed on its smaller side, the remaining portion of the original rectangle

would be a smaller but similar golden rectangle. This operation can be repeated indefinitely to create a gradation of squares and golden rectangles. During this transformation, each part remains similar to all of the other parts, as well as to the whole.

4. Explain about the classical orders and proportioning system of the classical antiquity?

The Architectural Orders are distinguished by its proportions and characteristic profiles and details, and most readily recognizable by the type of column employed. Three ancient orders of architecture—the Doric, Ionic, and Corinthian—originated in Greece.

To the Greeks and Romans of classical antiquity, the orders represented in their proportioning of elements represent the perfect expression of beauty and harmony. The basic unit of dimension was the diameter of the column. From this module were derived the dimensions of the shaft, the capital, as well as the pedestal below and the entablature above, down to the smallest detail. Intercolumniation - the system of spacing between columns - was also based on the diameter of the column.

Because the sizes of columns varied according to the extent of a building, the orders were not based on a fixed unit of measurement. Rather, the intention was to ensure that of all the parts of any one building were proportionate and in harmony with one another.

5. Explain about the "Modulor" proportion system?

Le Corbusier developed his proportioning system, the modular, to order "the dimensions of that which contains and that which is contained." He saw the measuring tools of the Greeks, Egyptians, and other high civilization as being "infinitely rich and subtle

He therefore based his measuring tool, the Modulor, on both mathematics (aesthetic dimensions of the golden section and the Fibonacci series), and the proportions of the human body (functional dimensions)

Le Corbusier began his study in 1942, and published "The Modulor: A harmonious measure to the human scale universally applicable to architecture and mathematics" in 1948.

Le Corbusier saw the Modulor not mere as a series of numbers with an inherent harmony, but as a system of measurements that could govern lengths, surfaces, and volume, and "maintain the human scale everywhere." It could "lend itself to an infinity of combinations; it ensures unity with diversity.... the miracle of numbers."