

Playing the Game in Korea

Step 1: Calculate FAR (and BCR)

The first step for Korean architects is to know how much floor area they actually have to work with for their design. The Korean word for Floor Area Ratio actually means ‚volume ratio‘. Thus, there is some discrepancy between the definition of FAR in theory and its application in practice. Between the planes of two-dimensional surfaces and three-dimensional volumes is where the FAR Game is really played.

FAR = gross floor area / plot area x 100

So while FAR is calculated this way, the FAR Game involves design strategies to increase not only floor area but also volume. In order to do this, not only is the FAR considered, but another metric as well called the Building Coverage Ratio (BCR). BCR represents the relationship of the built area to plot area, and is calculated as follows:

BCR = built area of a building / plot area x 100

The built area is defined as the footprint of a building projected from 1m above ground level.

The actual BCR and FAR Limits imposed by the government vary based on the zoning of the region.

GRAPH: Relationship between Plot, BCR and FAR

Step 2: Create the Building Envelope

The next step for architects is establishing a hypothetical building envelope‘, which is a three-dimensional figure that encapsulates the shape of the maximal area the building can legally occupy, measured by floor area, storey height and number of stories, bearing the five most critical regulations in mind:

GRAPH: The five most critical building and exemption regulations for the FAR Game

Step 3: Allow for Exemptions

Some building elements are exempt from FAR calculation, like underground floor area, ground floor parking area with pilotis, balconies with a depth of less than 1.5 meters, attics with a height of less than 1.5 meters, exterior areas enclosed by walls whose opening ratios are greater than 50% and handicap elevator areas.

A large part of playing the FAR Game is taking advantage of additional floor space afforded by these exemptions.

Step 4: Organize Space Considering All Requirements

The challenge here for architects is to arrange rooms and hallways to accommodate the specific functions required by clients without losing floor area or volume within the envelope.

Step 5: Extend the Building Envelope with Formal and Configurational Innovations

In order to maximize rentable space and minimize un-rentable space, architects need to be masters in formal and configurational innovation, and sometimes outright invention.