23/06/13 General Overview

## **General Overview**



Audio Introduction.wav format, about 3MB



Fly Through (mpg)



First Floor Plan

The Farnsworth House, designed and completed by Mies van der Rohe from 1946 to 1951, is considered a seminal example of International Style architecture as it was introduced to the United States. Located on the bank of the Fox River in Plano, Illinois, the house was commissioned to be a weekend retreat for a single woman, Dr. Edith Farnsworth.

The house's steel skeleton frame structure provides an exterior armature supporting uninterrupted floor and roof planes. Eight W-shape columns in parallel rows 28 feet apart support 15" channel section beams at floor and roof level. These beams frame a steel joist / pre-cast concrete slab system which supports roof, ceiling and floor finishes. All structural steel connections are welded in ways that minimize their visual presence. The steel skeleton frame was sandblasted and primed after installation at the site.

The building's facade is made of 1/4" thick single-pane clear glass panels spanning 9'-6" from floor to ceiling channels, and measuring 10'-6" wide. Steel mullions, built up of angles and bars, support the vertical edges of the glass panes. A continuous curtain track allows for user defined privacy and shading. The facade's only operable lites are the entrance's double doors, and two operable hopper windows in the bottom part of the eastern facade. The effect of this fully transparent facade is to blur the usual boundaries defining domesticity. In the Farnsworth house, distinctions between public and private, outside and inside, often disappear.

In plan, the house consists of two rectangular slabs floating above the ground, bracketed by steel columns. Stairs connect the ground to the 55' x 23' terrace slab, and connect the terrace slab to the 77' x 29' main house slab. This continuous upper level plane, set 5'-3" above the ground to prevent flooding, is used for both exterior deck space and interior floor. Door and facade details were designed so that the deck's 1-1/4" travertine pavers are not penetrated or interrupted, making a smooth transition from outside to inside. These details, combined with the continuous flat ceiling and planar facades, make the house seem like a box that is "slipped" into the steel column structure.

23/06/13 General Overview

The interior space of the house is delineated by an asymmetrically placed core volume, containing the kitchen, bathroom and fireplace. In contrast to the facade's steel and glass, it is constructed primarily of primavera plywood. The core is the only place where elements puncture the severe roof and floor planes. Drain and sewage pipes go through the floor to the ground, and a vertical shaft containing bathroom vents and the fireplace flue punctures the roof. These utilities are suppressed by being recessed into the more inaccessible and discrete center areas of the slabs, making them virtually invisible from view, even from the exterior of the house.

The house is heated by a radiant floor slab system set into the travertine's concrete set bed. The house is not air conditioned; minimal cooling is provided by cross-ventilation between the two operable windows and the entrance doors. The track-mounted shantung drapery just inside the glass facade also helps control solar heat gain.

As Mies's first completed domestic project in America, the Farnsworth House both enlightened and unnerved the architectural community. Its design neglects some traditional domestic conventions and comforts. Still, its reinterpretation of domestic space and its elegant, spare detailing make it a prominent icon of Modern Architecture in America.

Text by Liz Leber and Tony Webster

Farnsworth Main Menu