

Architectural Case Study: Fallingwater by

Architectural Case Study: Fallingwater by Frank Lloyd Wright

1. Introduction

- **Fallingwater:** a private residence designed by Frank Lloyd Wright, completed in 1937 in rural Pennsylvania, USA.
- Built for the Kaufmann family, it is celebrated as a masterpiece of organic architecture.

2. Design Concept

- **Organic architecture:** Wright's philosophy of integrating buildings harmoniously with their natural setting.
- The house is cantilevered directly over a waterfall on Bear Run rather than facing it.
- Indoor and outdoor spaces flow together through terraces and large glazing.

3. Structural Features

- Bold reinforced-concrete cantilevers extend dramatically over the stream.
- Local sandstone anchors the house to its rocky site.
- Horizontal terraces echo the layered rock ledges below.

4. Significance

- Demonstrates integration of architecture, nature and engineering.
- Became an icon of modern American architecture and Wright's career.
- Designated a National Historic Landmark and a UNESCO World Heritage Site.

5. Lessons and Challenges

- Highlights the expressive potential of cantilever construction.
- The cantilevers later required strengthening due to deflection over time.
- Illustrates the value, and difficulty, of building in sensitive natural sites.