



Fallingwater, Frank Lloyd Wright

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Fallingwater is one of Frank Lloyd Wright's best known structures. Located in rural southwestern Pennsylvania's mountainous Laurel Highlands, on a 30-foot waterfall on the Bear Run tributary, it was designed in 1935 for Edgar J. Kaufmann. The iconic integration of the Fallingwater design with its pre-existing natural surroundings is a perfect example of what Wright strove for throughout many of his plans, blending nature and architecture. The organic architectural principles are reflected in cantilevered terraces, horizontal lines and local materials.



Initially, Kaufmann had intended to construct the dwelling on the opposite side of the waterfall. However, Frank Lloyd Wright proposed to situate it directly above the falls to fully capitalise on the site's dramatic potential, additionally facilitating a distinctive fusion of architecture and landscape. The 9,300-square-foot main house (4,400 square feet of which are the outdoor terraces), cost the Kaufmanns \$148,000 to construct, and they paid Wright \$11,800 for his architectural design services. Adjusting for inflation, the construction cost today would be around \$3.3 million and Wright's fee would have been approximately \$264,445 as the architect of the project, (Fazzare, 2023).

Figure 1: Wide Angle

View from Southwest of House as Seen
from Crest of Lower Falls [The Classic View of Fallingwater].
(Boucher, 1985a)

Throughout Fallingwater, there is a key theme of seamlessness between the interior and exterior spaces. This promotes the obvious integration with its original site and surroundings, Frank Lloyd Wright coined the term 'organic architecture' which is the category that many of his buildings fall into. This type of architecture seeks to blend human occupancy with the natural environment, blurring the dissimilarity between the built structure and its site, rather than dominating it.

Fallingwater's interior design facilitates a seamless flow between indoor and outdoor spaces, thanks in part to expansive windows and their transepts, which appear to meld with the rocky surroundings. The open layout and glass doors further invite a sense of unity with the natural world. Additionally, the stunning cantilevered terraces and balconies extend over the waterfall and impart a breathtaking illusion of the building hovering weightlessly above its environment.



Figure 2: Interior Image of Fallingwater's Windows (Jack Balderrama Morley, 2020)

The construction of Fallingwater was an extraordinary engineering feat that posed numerous challenges due to its distinctive design and location. The rocky terrain and proximity to the waterfall demanded careful attention to the foundations and their placement. The cantilevered design of the main living area, which extends over the waterfall, proved to be one of the most challenging aspects of the construction. To provide structural support for the design, large concrete pads and footings with steel reinforcement were incorporated into the horizontal plane. Wright adhered to the fundamental principles of organic architecture by using sandstone quarried

from the site itself, using it for both the walls and floors. The construction took approximately two years to complete.

The home's vertical elements were inspired by its isolated Pennsylvania site. Wright used local sandstone to clad the vertical elements, which were laid in horizontal striations, emulating the forms found in the natural surroundings, adding to the strong connection between the house and its environment. To further emphasize the house's connection to nature, Wright used flagstone flooring both inside and outside the house.

In each of the six bathrooms, Wright used cork to cover the floors and walls, which added a warm and natural feel to the space. The house's material palette is simple and largely unadorned, aside from two paint colours. Ochre was used on the concrete elements, while Cherokee red, which was the architect's signature earthy hue, was used on the steel sash windows and doors. These colours assisted in the addition of depth and interest to the design, without detracting from the raw essence of the surroundings.



Figure 3: East Corner of Living Room with Trellis Skylights, East Terrace in the Background. (Boucher, 1985b)

Frank Lloyd Wright was renowned for his all-encompassing approach to residential design. He not only created the architecture but also incorporated built-in furnishings, lighting fixtures and millwork. He went so far as to source and arrange furniture for his clients, ensuring that his vision for aesthetics, function and family living was always fully realised. His custom wood furnishings, of which he designed nearly 170, had locally sourced materials and corresponded to the natural colouration. This attention to detail resulted in a cohesive and harmonious blend of furniture, architecture and the site itself.



Figure 4: Interior View of Living Room with Furniture. (Jack Balderrama Morley, 2020b)

Fallingwater's interior design follows Wright's concept of compression and openness. The first floor has a small entryway, leading to a continuous dining and living room. The hatch in the floor opens up to an external staircase, emphasizing the house's connection with nature. The main living area features cantilevered terraces that extend over the waterfall. Fallingwater has several cosy bedrooms, elegantly designed bathrooms with natural light, a compact kitchen with modern appliances, and a study/library for occupants. Fallingwater has it all, making it suitable for permanent or semi-permanent stays.

The Kaufmann family used Fallingwater as a weekend and summer getaway, providing them with an opportunity to disconnect from the hustle and bustle of their daily lives and immerse themselves in the tranquility of the countryside. They often entertained guests at the house, hosting gatherings and social events. The house's unique design and stunning natural surroundings made it an ideal location for hosting visitors and enjoying leisure time with friends and family. Over the years, Fallingwater has also served as a cultural and educational venue; hosting exhibitions, lectures and educational programs focused on architecture, design and the work of Frank Lloyd Wright. Visitors from around the world come to Fallingwater to learn about its history, architecture and significance in the context of modern design. Today, the house has become an iconic tourist attraction, drawing visitors from all over the world who come to admire its architecture and experience the building's beauty. Guided tours allow visitors to explore the

interior spaces and learn about the design principles behind Wright's masterpiece, contributing to its enduring legacy as one of the most significant architectural achievements of the 20th century.

Overall, Frank Lloyd Wright's, Fallingwater is a quintessential example of organic architecture, showcasing the vision of harmonious living with nature through thoughtful design and careful consideration of the building's context and interior.

References:

Fazzare, E. (2023). *Frank Lloyd Wright's Fallingwater: Everything to Know About the Masterpiece*. [online] Architectural Digest. Available at: <https://www.architecturaldigest.com/story/fallingwater-everything-to-know-about-frank-lloyd-wrights-masterpiece> [Accessed 14 Mar. 2024].

Figures:

Figure 1: Boucher, J.E. (1985a). 4. *Wide Angle View from Southwest of House as Seen from Crest of Lower Falls [the Classic View of Fallingwater]. - Fallingwater, State Route 381 (Stewart Township), Ohiopyle, Fayette County, PA.* [5 X 7 in] Library of Congress. Available at: <https://www.loc.gov/pictures/item/pa1690.photos.134143p/> [Accessed 14 Mar. 2024].

Reproduction Number: HABS PA,26-OHPY.V,1--4.

Figure 2: Boucher, J.E. (1985b). 93. *East Corner of Living Room with Trellis skylights, East Terrace in the Background - Fallingwater, State Route 381 (Stewart Township), Ohiopyle, Fayette County, PA.* [5 X 7 in.] Library of Congress. Available at: <https://www.loc.gov/pictures/item/pa1690.color.570323c/> [Accessed 14 Mar. 2024].

Reproduction Number: HABS PA,26-OHPY.V,1--93 (CT).

Figure 3: Jack Balderrama Morley (2020a). *Frank Lloyd Wright's Fallingwater lets in the light with low-iron glass.* [online] The Architect's Newspaper. Available at: <https://www.archpaper.com/2020/09/facades-frank-lloyd-wright-fallingwater-lets-in-light-with-low-iron-glass/> [Accessed 21 Mar. 2024].

Figure 4: Jack Balderrama Morley (2020b). *Frank Lloyd Wright's Fallingwater lets in the light with low-iron glass.* [online] The Architect's Newspaper. Available at: <https://www.archpaper.com/2020/09/facades-frank-lloyd-wright-fallingwater-lets-in-light-with-low-iron-glass/> [Accessed 21 Mar. 2024].

Bibliography:

Gunn, E. (2018). *Ezra Gunn - Precedent Analysis: Fallingwater*. [online] Ezragunn.com. Available at: <https://ezragunn.com/precedent-analysis-fallingwater> [Accessed 14 Mar. 2024].

How To Have Fun Outdoors (2022). *Fallingwater Full Walkthrough Tour in 4K // Frank Lloyd Wright Masterpiece*. YouTube. Available at: https://www.youtube.com/watch?v=TJpE3z5DaXk&ab_channel=HowToHaveFunOutdoors [Accessed 21 Mar. 2024].

Library of Congress (2020). *Search Results: 'fallingwater' - Prints & Photographs Online Catalog (Library of Congress)*. [online] Loc.gov. Available at: <https://www.loc.gov/pictures/search/?q=fallingwater&co=hh> [Accessed 14 Mar. 2024].

Run The Atlas (2018). *FALLINGWATER - TOUR of FRANK LLOYD WRIGHT'S ARCHITECTURE - vlog*. YouTube. Available at: https://www.youtube.com/watch?v=E7cO_cvg95Y&ab_channel=RunTheAtlas [Accessed 14 Mar. 2024].