

Calwer Passage Stuttgart

Location
Stuttgart

Built
Construction period: 2018–2021



A Rooftop Forest for Stuttgart

The Calwer Passage is situated at Stuttgart's geographical heart. For its redesign, the upper portions of the existing 1970s building have been replaced by a newly constructed, up to seven-story structure densely adorned with greenery, featuring office and residential spaces. The heritage listed glass vault of the passage leading to Calwer Platz remains intact in its structure, providing opportunities for small-scale retail with 20 individual shops, supporting owner-operated businesses in a prime downtown location. The partially preserved underground levels are integrated into the Stadtmitte S-Bahn station.

The greening of façades and rooftops creates a premium urban space with a natural and healthy climate. 2,000 plant containers – spanning 1,700 linear meters – are incorporated into the green envelope adjacent to and preceding the post-and-beam façade. Steel cables and nets stretched between the floor levels serve as climbing aids: a rich arrangement of plants, some cascading from the containers, others reaching upwards. A differentiated planting scheme emerges in horizontal and vertical dimensions. It features alternating densities – moderate in front of the office windows to allow for optimal incident light without obstruction, intensifying in front of the stairwells.

A striking aspect and notable feature are 82 large trees strategically planted on and around the building. Additionally, the façades of the residential and commercial partitions are densely adorned with climbing and hanging plants according to a finely balanced system. A small mixed forest on the seventh floor crowns the rooftop, shaping a distinctive contour, visible from afar. On the level below, an expansive hillside landscape with shrubs, terraces, and herb meadows invites for relaxation and contemplation, complemented by a garden with beds and small trees in the courtyard at ground level.

The occupants enjoy a positive, inspiring, and healthy work and living environment, shielded against noise and heat while provided with high-quality greenery. The abundance of vegetative elements contributes to a dynamic and constantly evolving visual allure. Diverse foliage, various fruit arrangements, and a range of flower shapes and colors offer year-round variety in both forms and hues throughout the natural cycle of seasons. The greening and substrate additionally act as reservoirs for water, reducing local particulate matter concentrations and mitigating the summer overheating of densely built areas (the so-called "Urban Heat Island" effect).

The inauguration of the Calwer Passage in 1978 as a new office and commercial building for the Allgemeine Rentenanstalt, introduced the then most advanced shopping center in Germany. As part of the prestigious urban development project by Walter Belz and Hans Kammerer, the passage became an important and integral element of the completed transformation of Calwer Street into a pedestrian zone in 1991.

The green transformation upholds the original vision of urban rejuvenation, advancing the evolution of downtown revitalization. Architecturally distinctive, this pioneering project makes a significant contribution to improving the local microclimate.

Awards, Nominations

2023

Beispielhaftes Bauen Baden-Württemberg 2023 - Recognition
European Union Prize for Contemporary Architecture - Mies van der Rohe Awards 2024 - NomineematerialPREIS 2023 - Award for material in use

Team

Client

Ferdinand Piëch Holding GmbH, Stuttgart

Facade planning - green facades and green roofs
ingenhoven associates, Düsseldorf

Team ingenhoven associates

Christoph Ingenhoven, Martin Reuter, Michael Rathgeb, Nina Schaffernoth, Victor Braun, Julian Blönnigen, Bastian Müller, Jürgen Schreyer, Dariusz Szczygielski, Stefan Boenicke, Thanh Dang

Phytotechnology / Special Building Greening

Prof. Dr. Strauch, Beuth Hochschule für Technik, Berlin, Fachbereich Life Sciences and Technology

Consultancy for Vegetation Ecology

Prof. Dr. Reif, Albert-Ludwigs-University, Freiburg, Professorship for Site Science and Vegetation Science