

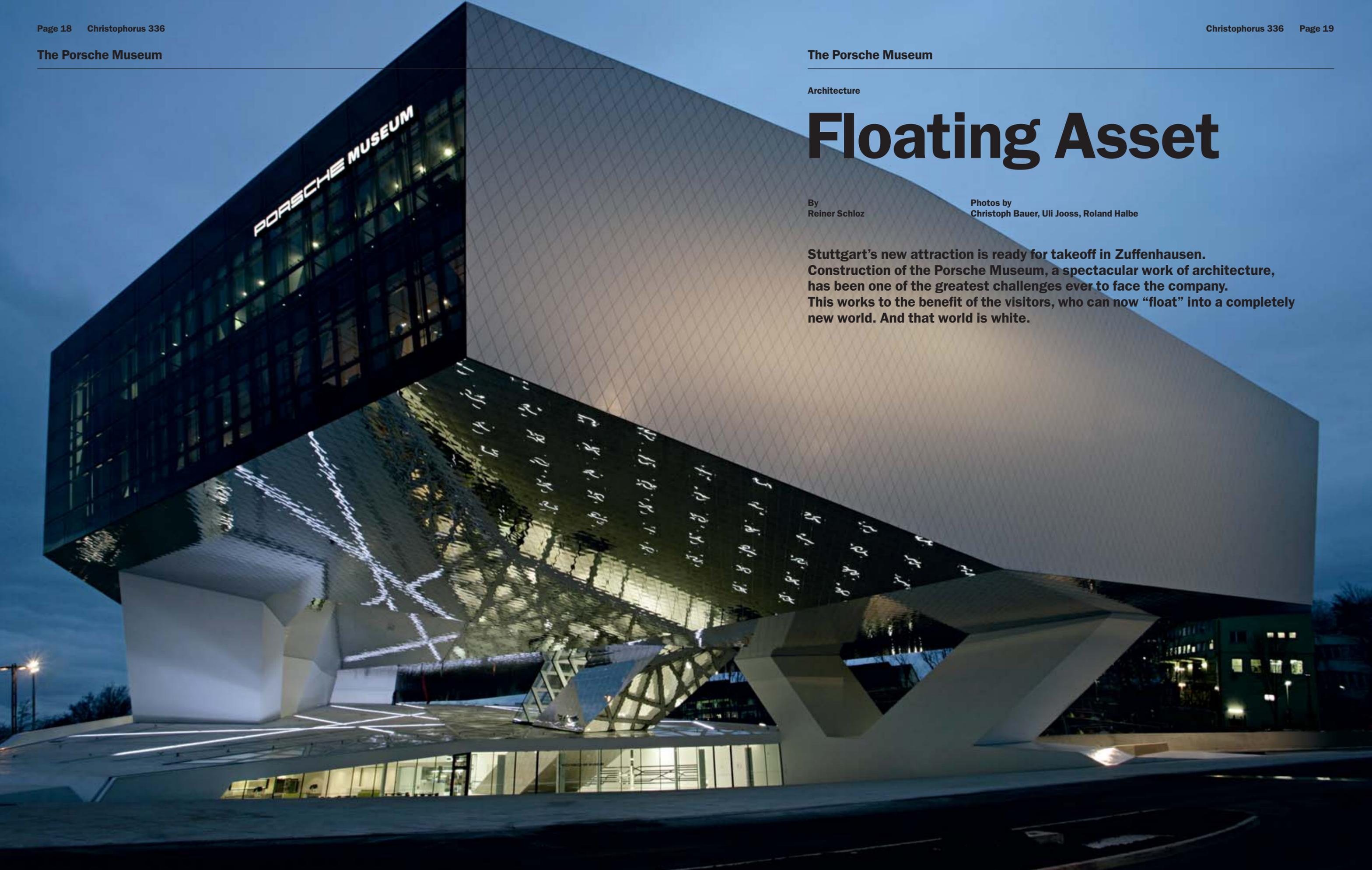
Architecture

Floating Asset

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Stuttgart's new attraction is ready for takeoff in Zuffenhausen. Construction of the Porsche Museum, a spectacular work of architecture, has been one of the greatest challenges ever to face the company. This works to the benefit of the visitors, who can now "float" into a completely new world. And that world is white.



The Porsche Museum

The Porsche Museum



Bold structure: The body of the exhibition area rests gracefully on the base—and weighs 35,000 tons

Expectations are based on three imposing oblique pillars. The exhibition space they support, in which visitors are able to come into direct contact with Porsche history, hovers far above. Almost as if it were about to take off, although it has in fact just arrived. The new Porsche Museum is now open, and the mere sight of it casts a spell on passersby. Completely white and with an enormous glass facade, the museum looks both dynamic and mysterious. A structure that reveals a great deal about the future, even though its interior is dedicated to the past. For Porsche, it is a fitting monument that serves as an intermediary between the eras. The allure of Porsche has once again found a form that takes you by surprise. It radiates out into the world and gives the factory complex at Porscheplatz an entirely new character. Stuttgart's newest attraction sends clear signals. In all directions.

Porsche didn't take the easy route when it came to creating a space for its own history. The company finally chose the design by Delugan Meissl Associated Architects. It depicted the exhibition space of the Porsche Museum as a dynamically shaped monolithic body detached from the earth that appears to float above the creased topography at the ground floor level. The Viennese architects, never at a loss for extraordinary solutions, viewed this outcome as the logical interpretation of the Porsche philosophy. They combined it with the demands ensuing from the potential uses of the museum and the exhibition concept envisaged by the Stuttgart museum designer Professor HG Merz. For Porsche, it was above all a huge challenge. For the planners, it meant developing the sculptural draft into a buildable concept while avoiding significant alterations to the proportions or the visual impact of the original design.

In short, nothing like it has ever been built. In Europe, there are only a few specialists capable of calculating the structural requirements for the structure. The big question was how to construct the steel girders of the exhibition space to distribute its tremendous weight securely among the three pillars—and at the same time use the pillars to house the elevator shafts, stairwells, cable ducts, and utility conduits.

In the beginning, there was a stable base of 4,000 tons of reinforcing steel combined with over 27,000 cubic yards of concrete that was developed especially for this building. The slender concrete-steel pillars thus formed stand at a slant nearly 200 feet (60 meters) apart under the belly of the "fuselage" that houses the exhibition space. That space would soon earn the nickname "the Plane." Its mass is enough to weigh you down, however: 35,000 tons. The supporting structure consists of 6,500 tons of steel and around 13,000 individual rods. The steel construction was assembled on 34 temporary supports with cambers of up to 8 inches ▶

The Porsche Museum

March 31, 2006: Over two million cubic feet of earth are excavated



August 29, 2006: The reinforced concrete cores are encased



March 23, 2007: The reinforced concrete cores are completed



July 4, 2007: The shell of 6,500 tons of steel



(20 centimeters) and then, following the completion of the entire system, lowered by hydraulic presses in order to feed the weight of the exhibition area into the reinforced concrete cores. That process officially came to a successful conclusion on November 13, 2007. That day, the planners, architects, and others involved in the project determined with satisfaction that the structure was even more stable than had originally been projected. November 13th may not be the actual birthday of the Porsche Museum, but it is certainly an important date in the history of its creation.

Each pillar supports over 10,000 tons. The cores transfer this burden onto the earth below—by means of a massive ground plate that rests on 135 bored piles of more than 82 feet (25 meters) in length apiece. The magnificent edifice now rests on this foundation, around 280,000 square feet (26,000 square meters) in size with the spectacular “plane” on top, its “wingspan” of nearly 230 feet (70 meters) and distances of up to 165 feet (50 meters) from the foundation. The museum features a plethora of edges and corners wrapped in a fine net of white metallic diamonds. The underside of the “plane” is encased in diamond-shaped plates of polished stainless steel, creating a sense of lightness. There is no trace of the colossal amount of effort concealed behind the facade. Christina Becker, responsible for the Porsche Museum project under the overall direction of Anton Hunger, is still overcome by a “funny feeling” whenever she beholds what has been created. In

The project team for the new Porsche Museum with Christina Becker (2nd row, 2nd from right) and Armin Wagner (2nd row, left)



her mind, the work is far from finished. She and her team have shed “blood, sweat, and tears” over the past few years. Armin Wagner, a specialist from Porsche’s Central Construction Management unit and the project director for construction, remembers “wild dreams” and “sleepless nights.” “We always operated in the context of the competing interests of planners, architects, and museum designers,” Wagner reports. And the huge construction site itself: more than 100 companies took part in the adventure of the Porsche Museum, and around 2,500 construction site identification cards have been issued since work began. “And now we’re excited to see the reaction of the visitors,” says Becker.

The visitors are sure to have a splendid time on their journey of discovery through Porsche history. It begins, logically enough, in the foyer. A futuristic counter, the museum shop, and the restaurant ensure a promising reception. One’s glance is almost automatically directed upward to the striking ceiling with its crossed beams traced by beams of light.

An appetite for Porsche history is best stoked in the Coffee Bar, with its tastefully backlit counter and rear wall. A large glass wall provides a superb view of all the vehicles being worked on in the museum workshop: the exhibition cars and those chosen to continue performing at historic races on behalf of the Museum on Wheels. After all, the joy of motion is something this museum is trying to convey. And the visitor’s encounter with the 80 cars on display and the other exhibits begins with motion: the escalator moves steeply upward until the exhibition space is revealed. And here once again, everything—walls, floors, beams, and display cases—is white. No dabs of color are allowed to disturb the illustrious sports cars and racing legends. The space is broken up only by ramps, stairs, and galleries; virtually every point in the room offers a view of the entire exhibition or at least the opportunity to view the vehicles from many different perspectives. A regular tour of the exhibition is provided, but by no means obligatory. The encounter with Porsche is intended to be an entirely personal affair. Nevertheless, the sloping floors and narrow aisles combined with spacious open areas lead the visitor almost automatically along the intended path. Additionally, there are a few technological highlights. The “sound showers” hanging from the ceiling, for instance. Or the 1,937-square-foot LED podium (180 square meters) with 380,000 illuminating diodes.

The Porsche Museum thus stands ready to fulfill any and all expectations raised by the sight of the building’s exterior, no matter how high. Just like the Porsche sports cars. ◀

The Porsche Museum

November 13, 2007: Lowering of the steel construction



July 31, 2008: 107,000 square feet of facade are faced



November 5, 2008: The logo is installed



December 2008: The new showpiece on Porscheplatz

