

Quick Access Airport

Architects in Dresden have created a bright and open airport terminal out of a closed down airplane hangar. "Pyran S" fire-resistant glass was used for the greatest degree of transparency and fire safety.

► The new terminal building at Dresden Airport, opened at the beginning of 2001, is a unique architectural structure characterized by a sense of light and openness. As Dresden evolves more and more to a thriving metropolis, its airport was designed to meet the needs of business travelers: to be a quick-access airport, easily reached from the highway and a suburban railroad. The construction site was roughly 500 meters east of the old terminal building, where a gigantic airplane hangar built in the 1950s was already on the site. The architects decided against tearing it down to make room for their plans. They were so impressed with the imposing high-quality steel structure that they set about transforming the former hangar into the new terminal, thereby giving the old building a new identity.

An old building in a new skin

The architects wanted to preserve the hangar atmosphere in the new terminal. Bles & Kampmann, the planning company, came up with the concept of building a new construction inside the old one, or a "house within a house." This resulted in some rather specific difficulties, not only because the old structure had to be taken into account, but also today's safety standards. The old building was stripped down to the bare supporting structure and given a new facade made of glass, brick and sheet metal.

A second construction made of reinforced concrete was built inside the original structure. Due to the suburban train connection, the foundations had to be laid at a depth of eight meters, which entailed underpinning the existing foundation. A further four levels were built above the rails. Passenger transportation is located only in the central nave. The east aisle houses the administration and waiting areas. The west aisle was merely covered with a facade, which allows for a possible expansion of the terminal in a second construction phase.

The spectacular route to the departure level starts from a tubular glass skywalk that connects the adjacent parking garage with the terminal and ends in the enormous check-in hall. As in the past, the large glass surfaces provide daylight. Like glass boxes, stores, travel agencies and airline counters are fitted in between the double columns that make up the sidewalls. A glass cylinder roughly 18 meters in diameter cuts through both gallery levels and conveys an impression of the building's dimensions even in the waiting areas below.

Security in case of fire

Planners were especially concerned to keep the characteristic openness and generous use of space in the terminal from being disrupted by security fixtures. A sprinkler

system installed across the entire roof structure, but barely visible to observers, permitted extra large fire lobbies. This was essential to preserve the visibility in the structure and maintain the sense of space. For this reason it was also decided to use glass for the dividing walls between the check-in hall and the waiting area, as well as those between the baggage terminal and the arrival hall. The construction used six millimeters thick "Pyran S" glass from Schott in an oak colored steel post and bolt frame system made by Schueco. "Pyran S" was the only product that conformed not only to the 30-minute integrity standard, but also to the high quality requirements of the architects. The areas between the main hall and the side aisles are dominated by a view of the imposing reinforced concrete pillars. So as not to obstruct that view with massive firewalls, a combination of "Pyran S" and the Schueco system was used. An ultra-modern fire alarm system provides further security in case of fire. It controls the ventilation system, elevators, the electrical door locking system and the alarm system with such a degree of accuracy that, in case of emergency, the affected area can be secured, while allowing flight service to continue for as long as possible. ◀





The view from the street is dominated by the prominent skywalk that connects the new terminal with the newly constructed parking garage. It breaks the austere horizontal structure of the fixed sunblinds on the main hall. The facade behind is completely glazed.



The dividing wall in front of the security gate in the departure area was made with six-millimeter thick "Pyran S" special glass supported in steel fire protection profile frame system from Schueco. The system meets the 30-minute integrity standard.



The whole roof construction rests on imposing reinforced concrete pillars. In order to provide a view of the successive pillars in the various fire lobbies, the dividing walls were also constructed in accordance to the 30-minute integrity standard with six-millimeter thick "Pyran S" in a Schueco profile system.