

Mercator One at Duisburg's central railway station

Data and facts

Company	PORR Hochbau West GmbH
Туре	Office buildings
Runtime	09.2018 - 09.2020
Principal	Devario Mercator One GmbH & Co. KG

Project report online



A flagship for the modern, cosmopolitan city of Duisburg

The geometrically challenging construction includes two levels of underground parking, and required intensive planning of formwork and scaffolding as well as significant efforts in measurement throughout the construction process. A critical point in the façade construction was the determination of the static load-bearing capacity of the concrete roof, which was required to overhang on each side by up to 13.5m. The team chose the practical and intelligent option of simulating future additional loads on site. Team members applied strain to the projecting construction elements using filled water tanks and bundles of stones. Simultaneous measurements verified the deflection amounts previously calculated from the statics.

Recycled aluminium alloy for a sustainable façade

The Mercator One project also set a new benchmark for sustainability. The heavily screened, anthracite-coloured façade was made from 90% recycled aluminium alloy with an end-of-life recycling rate of 75%. Triple glazing provides for optimum protection from sun, heat and sound, while a hybrid ceiling system provides tenants with lighting, heating, cooling and fresh air. The heat recovery rate is around 80%. The climate of the city was also taken into consideration. Extensive greenery was planted on the technical roof and roof terrace on the sixth floor to counteract the heat island effect.

Impressions







Image notes

1

Mercator One am Hauptbahnhof, Duisburg

The six-storey building is characterised by storeylong projections on the front sides. 2

Mercator One am Hauptbahnhof, Duisburg

The unusual silhouette makes the building, which is around 114 metres long, 18 metres wide and 26 metres high, an eye-catcher in Duisburg's city centre.

3

Mercator One am Hauptbahnhof, Duisburg

The striking, clearly structured façade is made of 90 percent recycled aluminium.

Do you have questions about the project or would you like to learn more? Feel free to contact us for further information.

PORR AG Group Communications

Absberggasse 47 1100 Wien T +43 50 626-0

E-Mail: comms@porr-group.com