

Solaris shopping centre

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Building construction



Factbox

Client: IGI EXCLUSIVE Sp. z o.o.

Contractor: PORR S.A.

Architect: JSK ARCHITEKCI Sp. z o.o.

Contract Type: Generalunternehmer

Project Type: Building construction .
Shopping centre

Scope: Expansion and conversion of the Solaris shopping and leisure centre with preparation of execution designs

Contract Volume: 88.5 million PLN (20.8 million EUR)

Construction Start: 09/2017

Construction End: 05/2019

In Opole, PORR realised one of the few public-private partnership projects in Poland with the conversion and expansion of the Solaris shopping centre.

The order included not only the turnkey extension of the shopping centre but also the construction of an underground car park, the redesign of the foodcourt, and the adaptation of the adjacent transport infrastructure. All construction and installations works were preceded by implementation of execution designs by PORR.

The Solaris shopping and leisure centre, which opened in 2009, is located at the site of the Pringsheim brewery (which was demolished in the 1970s) on Nikolaus-Kopernikus-Platz in the centre of Opole. In 2017 – not quite 10 years after the opening – a large-scale conversion and extension of the centre began. This also included a complete redesign of the square. Trees were planted, a fountain was built, and part of the parking space was moved to a two-story underground car park.

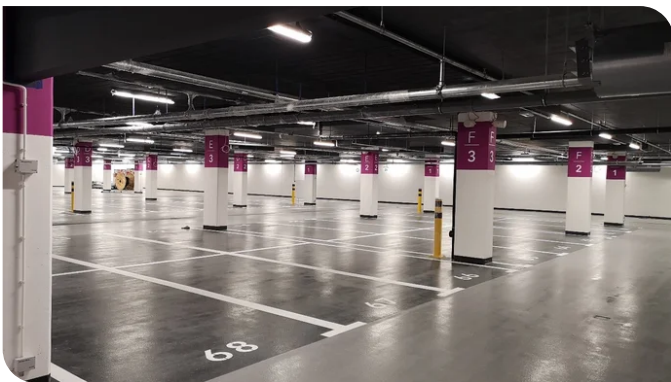
As general contractor, PORR was commissioned with the modernization and expansion of the shopping centre, the construction of the underground car park, and the expansion of the transport infrastructure at Nikolaus-Kopernikus-Platz. The project was implemented as one of the few public-private partnership models in Poland.

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The heavy traffic around the construction site and the rocky subsoil made the excavation work a real challenge.

Tomasz Rzewuski
Operations director, PORR S.A.

Elaborate preparatory work



305 new parking spaces were created in the new underground car park. Source: PORR

The project was a real challenge. Not only did the shopping centre remain partially open during the conversion work but there were also several tasks to be completed before the actual construction work began. For example, an inventory of the entire underground infrastructure in the city centre had to be drawn up. This led to the installation of a transformer station for medium and low voltage in the construction site area.

The excavation work was also quite demanding. In addition to the heavy traffic around the construction site, the PORR experts also had to work their way down to a depth of 9 m through a rocky subsoil. Because of the inner-city location, it was crucial to remove the excavated material and protect the construction pit. Taking into account the respective soil and water conditions, the temporary construction pit system was designed as berliner walls and as a palisade of bored piles. The PORR special civil engineering was brought on board to carry out the demanding foundation work.

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In order to ensure the high quality of the interior fittings required by the investor, all materials used were subjected to rigorous testing in advance.

Tomasz Rzewuski
Operations director, PORR S.A.

New construction and connection to the existing building

The new part of the project was a monolithic reinforced concrete construction. Additional reinforcements in the form of steel girders or integrated carbon reinforcements were installed at the connection points to the existing building. An important aspect in the construction of the new building was the gradual dismantling of the existing façade at the border between the old and new buildings.

Before each dismantling of the façade, a series of measures had to be taken in order to ensure smooth operation in the open part of the shopping and leisure centre.

The east and west façades directly adjoining the existing building were designed as brick façades, the south façade as an impressive glass-aluminium façade.

The interior and installation work started in parallel to the work on the building shell. In order to ensure the high quality of the interior fittings required by the investor, all materials used were subjected to rigorous testing in advance.

The technical installations of the energy supply as well as the heating and cooling systems required a sophisticated coordination of the individual crews. These systems and the fire protection system are controlled via an integrated building management system, which also includes the existing part of the shopping centre.

For the turnkey handover, the building was equipped with furniture and all movable elements up to the signage.



After a construction period of 20 months, the turnkey extension was handed over in May 2019. Source: PORR

New transport infrastructure



In the immediate vicinity of the Solaris Center, streets were adapted and two new roundabouts were built. Source: PORR

While the interior work was completed, the existing transport infrastructure was rebuilt, and the area above the underground car park was extended. Nearly all the streets around the shopping and leisure centre had to be adapted for this purpose. The road surfaces were replaced and two new roundabouts were created.

As part of the development of the square above the multi-story underground car park, large granite slabs were laid, a fountain erected, and spacious green areas created.

Conclusion

Despite difficult conditions and an ambitious schedule, all work was completed within 20 months thanks to the full commitment of all participants. The official

opening of the annex and the completely redesigned square took place on 21 June 2019.

Technical data

Total floor space	26,215 m ²
Parking spaces	305
Gross floor area	30,815 m ²
Rentable area	10,924 m ²
Building cubature	123,613 m ³
Parking space	9,247 m ²