

BEHIND THE CONSTRUCTION FENCE

CONSTRUCTION DETAILS

TECHNOLOGY

# "Neue Spreespeicher" project in Berlin

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## Building construction



## Factbox

**Client:** Cuvrystrasse 50-51 Berlin GmbH

**Contractor:** PORR Deutschland GmbH

**Architect:** PORR Design & Engineering GmbH

**Contract Type:**  
Generalunternehmer

**Project Type:** Building construction . Residential building . Design & Engineering

**Scope:** Design and construction of an office complex in Kreuzberg, Berlin

**Contract Volume:** 46 million euros

**Construction Start:**  
01/2018

**Construction End:**  
01/2020

**Location:** Berlin

## Offices with vision

An office complex on the Spree, comprising six building elements and a multi-story glass hall, is currently under construction

PORR is completing the premium building shell construction and finishes on four of the buildings. Although the design is reminiscent of the old warehouse building, the very latest technology is being used throughout the planning, construction and operation of the buildings - 3D modelling, model presentations and the use of 3D data to control the technical building services works.



Thanks to BIM working methods and Lean methodology, the exchange of information between planning and execution was very efficient

**Susan Glöckner**

Project Manager PDE Germany

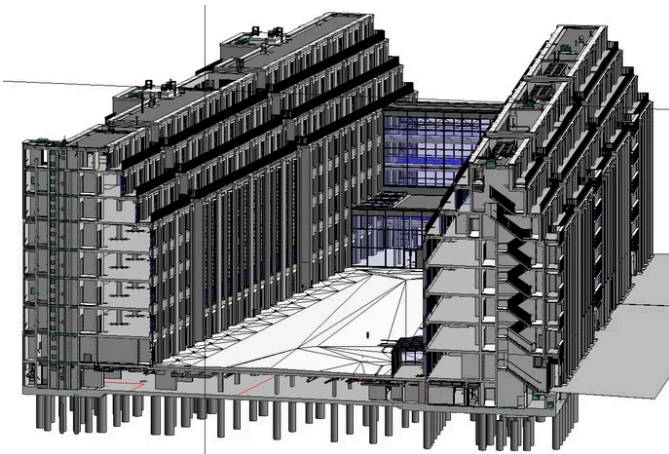


View over the Spree to the new buildings. Source: PORR

## Background

The Neue Spreespeicher project on the former German-German border is not only being built on a site steeped in history - the project itself can also look back on a long history. Planning permission was obtained back in 2002, which envisaged both offices and a hotel use in the Schlesische Strasse area. In typical Kreuzberg tradition, the vacant property was quickly occupied and turned into a tent city for several years, so the project was postponed for the first time. After lengthy negotiations, the residents were persuaded to give up their home in 2017. However, the client's focus had shifted in the meantime and the hotel's planning permission was converted to office use.

However, the community concept was still taken into account by including an approx. 200 m<sup>2</sup> neighbourhood shop in the plans as a social contact point for the neighbourhood. On the other hand, the public outdoor areas will be accessible to all Berliners. The inner courtyard with its spacious green areas and tree planting is connected to the street space by public passageways, while the planned Spree walkway also offers all Kreuzberg residents the opportunity to enjoy the view of the Spree from park benches and seating steps.



The 3D modelling of all trades in the course of execution planning facilitated cooperation and made processes transparent. Source: PORR

## Successful with BIM and Lean

Once the site was available again as building land, the project quickly gained momentum. In July 2017, PORR secured the EUR 46m contract as general contractor for the construction of four Edelrohaus buildings, including the outdoor facilities. In collaboration with PORR Design & Engineering GmbH (PDE) as general planner, the project was set up in a short space of time. Thanks to the use of Building Information Modelling (BIM), now standard at PDE, the interfaces and open points were quickly identified and clarified. Thanks to the planning process using Lean Design - which also involved the site manager - it was possible to exchange information between planning and execution quickly.

## Cooperation at all levels

Collaboration and dialogue were not only a priority within the PORR teams, but PORR was also able to contribute its many years of experience in discussions with the future tenants. The mix of service and catering space on the ground floor and high-quality office space on the upper floors places very different demands on the building services. These must be taken into account during the

planning and execution stages in order to optimise the supply of the future tenant spaces. As a result, both the adequate provision in the building services shafts and the request for meeting rooms on the ground floor with a resulting larger sprinkler centre were successfully resolved in the implementation planning.



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All of PDE's general planning projects are now implemented using Lean Design and BIM.

**Markus Strobl**

Managing Director PDE Germany



Around 400,000 m<sup>3</sup> of water was pumped out during the course of the construction site. Source: PORR

## Working on and under water

Work on the construction site began with the handover of the construction site at the start of 2018. The location directly on the Spree made extensive dewatering necessary for the construction pits. A total of around 400,000 cubic metres of water was pumped out and then returned to the Spree. The construction pit then had to be filled with the basement as quickly as possible to shorten the dewatering time. In addition, a professional diver in a dry suit was on the way to burn off the sheet pile walls, set barrier grids for the discharge structure and make the facade connections under water.

400.000 m<sup>3</sup> (approx.)

Water pumped out

Technical data

Gross surface area	39.192 m <sup>2</sup>
Plot area	9.805 m <sup>2</sup>
Floors	8 upper floors, 1 underground floor

# Growing shell



In the meantime, the shell has been extended above water. Currently, two buildings have already been constructed and the installation of the building services in the shafts has begun. Apart from the interior construction, the external appearance of the project is also being emphasised: The sample façade is being presented to the critical eyes of all those involved in the project and gives a first impression of the imposing appearance of the buildings, which will later be visible from afar as the Neue Spreespeicher.

With elaborate bay windows and a brick façade, the Neue Spreespeicher also boasts visual highlights.  
Source: PORR Further projects Exciting projects from the World of PORR.