# Residential and office building Prager Carrée in Dresden

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On 5 July 2014, Revitalis AG awarded Porr Deutschland GmbH, Berlin branch, the contract for the erection of the residential and office building Prager Carrée as a general contractor including planning and house technology.

#### The development site

Revitalis AG, with its project company Revitalis Dritte Grundstücksgesellschaft mbH & Co. KG, has purchased the development site MK5 in Dresden's Old Town in June 2013. Already there was a construction pit which had been excavated in 1999 in the course of development measures in the area of Dresden's main station and the tunnels making the southern Prager Straße accessible. The property is surrounded on all sides by tunnel structures whose outer walls – except for the western side – also represent the respective construction pit walls. The east-west tunnel whose northern double carriageway is located on the project plot runs in parallel to the southern property line.



Construction pit Image: PORR AG

Building on the MK5 site will occupy the last unused site in the southern section of Prager Straße, thus closing the last gap on the heavily frequented axis between the main railway station / the central bus station (ZOB) and Dresden Altmarkt. With some 8,500 pedestrians daily, Prager Straße is the most frequented shopping street in Eastern Germany.

## **Project description**

The ground floor, parts of the first floor and the first underground storey along Prager Straße and Wiener Platz will be used as retail spaces. Some 241 rental flats will be built in the other areas and upper storeys.

The two-storey underground car park will feature a total of 327 parking spaces. Apart from the underground car park and retail spaces, the two basement storeys measuring a gross floor area of approx. 7,300 m<sup>2</sup> each will harbour the house technology rooms and tenants' cellars.



Image: PORR AG



Floor slab 2 basement storey Image: PORR AG

A total of eleven house entrances along Prager Straße and Wiener Platz with one staircase and lift each are located on the ground floor with its gross floor area of 4,900 m<sup>2</sup>. The mezzanines at Breslauer Straße and Planstraße D, are planned to house flats with tenants' gardens positioned towards the interior. 42 residential units each will be located on storeys 1 to 5 with a gross floor area of 17,000 m<sup>2</sup>. The 6th storey measuring some 2,600 m<sup>2</sup> in gross floor area is executed as a stacked storey. The 21 residential units located on this storey will feature generous roof terraces positioned towards the interior and towards Wiener Platz in the south. All the other flats in the building feature at least a balcony or terrace with garden plot.

## Laying of the corner stone

Following the motto "bye, bye Viennese Hole" (the name comes from the adjacent Wiener Platz), the corner stone for the residential project was laid on Monday, 8 September 2014.

In perfect "Anglo-Saxon", the client, Revitalis AG, invited more than 100 guests to the cornerstone laying ceremony. Among the invited guests were the city's Construction Mayor Jörn Marx, the comedian Uwe Steimke, representatives from the city's administration and the city council.



Laying of the corner stone; from left to right: Comedian Uwe Steimke; Mayor Jörn Marx; architect Jan-Oliver Meding and Thomas Cromm from Revitalis AG Image: PORR AG



Building shell Image: PORR AG



Visualisation areal image Image: MPP Meding Plan + Projekt GmbH; Gärtner+Christ

#### **Execution of construction work**

Porr Deutschland GmbH has been commissioned with the execution planning, statics, house technology and turn-key ready construction. The 19-year-old construction pit was overgrown with varied vegetation which had to be removed before construction could begin. The northern and southern tunnel bypasses surround the construction pit. These were partly founded on piles which protruded into our development site.

Using a mat foundation system, we provided a uniform transfer of the loads into the grown soil. Additionally, two existing subterranean culvert pipelines serving flood protection purposes needed to be protected in such a way that their function would not be impeded by the floor slab above. For this purpose, a load-transferring cap was concreted that transfers the loads around the pipelines and into the building ground.

The 2nd basement storey was entirely constructed in monolithic design. The high ground water level made it necessary to construct both basement storeys as water-tight constructions. The exterior walls on the 1st basement storey were executed using double filigree walls.

In order to meet the demands of the commercial areas on the ground floor and the 1st storey, all walls in this area are to be executed with reinforced concrete beams transferring the loads safely into the building ground.

Only once the residential areas were reached, the exterior and separation walls could be made from lime and sandstone masonry. The system used was a Quadro system with a brick compressive strength of 2.0. In the flats, the ceilings were constructed using filigree slabs and top concrete.

At the moment, form work, reinforcement, concreting and masonry work are advancing at full swing.

Thus, nothing stands in the way of the building's scheduled completion in June 2016.



Visualisation: View from the balcony Image: MPP Meding Plan + Projekt GmbH; Gärtner+Christ



Visualisation: View Prager Straße Image: MPP Meding Plan + Projekt GmbH; Gärtner+Christ



Visualisation: View Prager Carree Image: MPP Meding Plan + Projekt GmbH; Gärtner+Christ

### Project data

Client	Revitalis Dritte Grundstücksgesellschaft mbH & Co. KG
Contractor	Porr Deutschland GmbH, Berlin branch
Start of construction work	Juli 2014
End of construction	Juni 2016
Gross floor area	44,005 m <sup>2</sup>
Storeys	2nd basement storey, 1st basement storey, ground floor, 1st to 6th upper storey
Staircases	12
Lifts	12
Residential units	241
Car parking spaces	327