# Arena Boulevard construction scheme

# Construction of new PORR branch in Berlin

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Original Arena Boulevard visualisation Image: gbp Architekten



Arena Boulevard in summer 2015 after completion Image: PORR AG



Advertising slogan at the entrance to PORR's reception area Image: PORR AG

## Project data

Client	Arena Boulevard GmbH & Co. KG
Contractor	PORR Deutschland GmbH, Berlin branch, Building Construction Division
Type of building	Office building
Start of construction work	26 June 2014
End of construction	24 July 2015 (general areas and area rented by PORR) 30 September 2015 (area rented by Zalando)
Gross floor space	8,700m², above ground 1,550m², below ground
Floors	Basement floor, ground floor,1st to 6th floor, attic floor
Parking spaces in the underground car park	36

#### **General information**

After PORR Germany had started the year 2015 with ambitious plans and had already recorded 13 new building construction orders in its books by late July 2015, Berlin branch decided to build a new headquarters for itself in best inner-city location.

On order from Arena Boulevard GmbH & Co. KG, the building construction department of PORR Deutschland GmbH's central Berlin branch, in its function as general contractor, has erected the new office and business building called Arena Boulevard in a central location in Berlin's Friedrichshain neighbourhood opposite the Spree River, the East Side Gallery and the Mercedes-Benz-Arena (called O2-World until August 2015). The client is a project company belonging to Münchner Immobilien Bauträger GmbH (formerly Strauss & Co. Development GmbH). Several companies and departments of the PORR Group were involved in the project's implementation which meant the corporation's entire know-how could be utilised during planning and construction.

The new location is located in Anschutz Entertainment Group's development area on a corner plot located at the crossroads of Valeska-Gert-Straße and Mariane-von-Rantzau-Straße. The scheduled construction of a shopping centre, cinema, theatre, offices and flats makes this area one of the most important development sites in Berlin's inner city. With the railway stations Ostbahnhof (offering long-distance as well as regional connections) and the rapid transit and underground station Warschauer Straße, both of which are located in walking distance, the new location is exceptionally well connected to the public transport system.

PORR Germany, with its divisions for building construction, infrastructure and civil engineering as well as the subsidiary Stump which specialises in foundation

engineering, have moved into floors 1 to 3 as tenants on 24 July 2015. Apart from the future rental area of PORR Design & Engineering GmbH, the ground floor houses a conference area with six meeting rooms. The remaining rentable area (4th to 6th floor) has been let to the online mail-order firm Zalando SE.

#### **Project description**

The almost completely built-up Arena Boulevard plot encompasses a ground area of some 1,700m². From the 1st to the 6th floor, the building tapers to a ground area of some 1,200m². Following regulatory requests, the 6th floor features a façade offset of some 1.5 m on both sides.

The building's ground plan is trapezoidal, with an interior atrium which rises up from the ground floor and is spanned on top of the 6th floor by a glass roof. Together, the atrium and glass roof encompass a ground area of some  $16m \times 5m$  to 8.5m.

The main entrance as well as the staff entrance leading to the area rented by PORR are located at Valeska-Gert-Straße. Located at Mariane-von-Rantzau-Straße are the underground car park access ramp, a back entrance leading to the ground floor's rented area as well as the entrances leading into the auxiliary staircase.

Three lifts as well as two staircases give access to the individual floors. The area leased out to PORR is additionally equipped with an internal staircase with representative steel stairs connecting the reception and conference area on the ground floor with the individual floors.

All office floors are divided into three separate areas measuring 400m² of ground area each. In terms of fire protection, the three areas are divided by means of F90 walls. Should the client decide later on to implement the optionally tendered installation of one or several bridge structures in the atrium area, the effected floors can be let to three individual tenants.

Air conditioning in the offices is taken care of by heating and cooling ceilings in the form of metal sails. Work spaces are supplied with power and connected to the data network through a cavity floor and its integrated floor boxes. The location of the floor boxes, room control units and the control system for the exterior blinds was precisely tailored to tenant planning and the respective ground plans.

Many fit-out standard specifications in the areas leased out to PORR were defined via the "neue arbeitswelt" ("new working world"). Apart from office space, the rental areas feature kitchenettes and so-called coffee corners, storage, cleaning equipment and server rooms as well as sanitary facilities.

The basement floor houses the utility and storage rooms as well as an underground car park with 36 parking spaces of which two have been designed as spaces for electric cars and two as disabled parking spaces.

Hidden behind a screening wall made from aluminium fins, the roof's rear area houses the five central ventilation systems as well as the cooling unit. Also located on the roof and connected to the staircases are two utility rooms in which the sub-distributors for cooling and the buffer storage system have been installed. The front roof area facing Valeska-Gert-Straße features a spacious roof terrace available to all tenants which offers magnificent views of Berlin's inner city and Spree River.

The building's outer area offers 32 bicycle holders for 64 bicycles, installed on two side of the building.

Furthermore, Arena Boulevard has been designed as a sustainable building and has been certified in accordance with DGNB (silver) as well as LEED (gold).

### "neue arbeitswelt" ("new workingworld")

Arena Boulevard, Berlin branch's new location, is the first PORR project in Germany in which the company's new workingworld was implemented. In the course of the new workingworld, the PORR Corporation relies on open structures and transparency to facilitate communication and teamwork when it comes to the design of offices and branches.

In cooperation with PORR Design & Engineering and in tune with the corporate architecture, all locations are equipped with premium architecture.

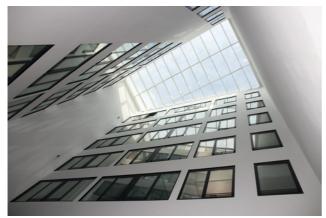
The scheme's key elements include glass walls, white furniture, green carpet floor, so-called coffee corners serving as central meeting zones, the installation of a cooling system, quiet rooms and one-to-one rooms for smaller meetings and serving as retreats as well as modern meeting room equipment, allowing all locations to hold video conferences.



Arena Boulevard exterior view from Valeska-Gert-Straße Image: PORR AG



View of the main entrance to the building and PORR's reception area Image: PORR AG



Atrium Image: PORR AG



Internal stairwell in PORR's rental area Image: PORR AG

### **Planning**

Arena Boulevard was designed by the architectural office gdp Generalplanung GmbH & Co. KG. PORR Design & Engineering GmbH in Vienna was in charge of the HVACR system in performance phase 3 while Weiske & Partner were responsible for the structural planning draft and structural engineering.

Based on this, PORR Design & Engineering has subsequently assumed general planning of performance phase 5. While the colleagues in Vienna remained in charge of architectural and structural planning, the HVACR system was planned by the colleagues in Berlin and Dresden.

Specialist planning, consulting services regarding the façade, building physics and fire protection were outsourced to external contractors.

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

PORR Deutschland GmbH's central Berlin branch was commissioned with the turn-key-ready construction of Arena Boulevard on 12 June 2014.

## **Construction pit**

Construction work began on 26 June 2014 with the excavation of the construction pit. This work was carried out by the consdidated company Stump. Due to the fact that the area had been used as a car park that had been built below street level, excavation work could be completed in as little as approx. two weeks. The low ground water table and ample space allowed for the construction pit to be created with slopes on three sides. The one remaining side facing Marine-von-Rantzau-Straße was secured by means of a soldier pile wall. A temporary dewatering system had to be installed for a short time to complete concreting work on the three deep segments (lift core box, transformer station and crane foundations). The water was diverted into the adjoining combined waste water sewer.



Development site in June 2014 prior to start of construction Image: PORR AG



Development site in July 2014 shortly after start of structural work Image: PORR AG



View from Mariane-von-Rantzau-Straße Image: PORR AG

#### Shell

Main work on the building shell was carried out from mid-July to late November 2014. Two building construction cranes were used for the purpose. The building shell, a reinforced steel skeleton structure, was mainly built using in-situ concrete, supplemented by semi-finished parts for the ceilings.

### Façade

Once the structural work had been completed, the shell was handed over to the group company ALUSOMMER for the installation of the stacked façade and the atrium windows on the floors 1 to 6. Fully according to schedule, the façade's tightness was established by the end of January 2015. The post-and-beam construction on the ground floor was installed at the same time as the stacked façade. The exterior sun protection system was integrated into the façade elements in the factory. The baseboards featuring the façade's decorating elements were subsequently suspended in spring and adorned with facing clinker on location. The glass roof had already been installed earlier, in February 2015.



Structural work Image: PORR AG



Bird's eye view of Arena Boulevard from the crane Image: PORR AG



Façade view Image: PORR AG

# Interior fit-out

Starting on the basement floor, the interior fit-out process started at the same time as façade work, in January 2015. Initially, only the public areas and the area rented by PORR were finished. These areas were handed over earlier than scheduled, on 24 July 2015. The contract had stipulated a completion in mid-September 2015.

The fit-out of the area leased out to Zalando on the floors 4 to 6 was requested by the client in early June 2015 and was completed in accordance with the contract on 30 September 2015. In certain points, the fit-out of this area differs from the standards used on the PORR floors. The ceilings, for instance, were left unfinished while the system partition walls mostly feature opaque elements and the ceiling sails were suspended lower. Additional forced-air cooling equipment

was installed in the heating and cooling sails' area to divert peak loads.



PORR's rental area, office area prior to furnishing Image: PORR AG



PORR's rental area, office area prior to furnishing Image: PORR AG



PORR's rental area, office area prior to furnishing Image: PORR AG



Zalando's rental area, office area lmage: PORR AG



Zalando's rental area, office area lmage: PORR AG



Zalando's rental area, meeting room lmage: PORR AG



Zalando's rental area, large kitchen lmage: PORR AG

Interior work on the remaining ground floor area is currently being planned for PORR Design & Engineering. These rooms' completion is scheduled for February 2016.



PORR's reception area on the ground floor Image: PORR AG



PORR conference area, Vienna section Image: PORR AG



PORR conference area, Berlin section Image: PORR AG



PORR's rental area, Coffee Corner and project room Image: PORR AG



PORR's rental area, office area lmage: PORR AG