# Housing complex Berliving

# A home between Ku'damm and Grunewald

Michael Fischer

#### **General information**

The housing complex BERLIVING was constructed in the sought-after neighbourhood of Schmargendorf, located in the triangle formed by Hohenzollerndamm, inner-city motorway and Fritz-Wilding-Straße.

Spaciously designed residential units with many conceptual variations are offered to families, couples and singles of all age groups.

The first completed flats were handed over to the tenants in May. The entire complex's completion is scheduled for late July 2016.

#### Order

In March 2014, PORR Deutschland GmbH's Berlin branch was awarded the contract for the turn-key-ready construc-tion of four structures consisting of three city mansions and a multifamily home including underground car park and outside facilities.

The construction scheme is implemented as a project development. Apart from its execution, object design, superstructure design, technical building design as well as verification of noise and heat insulation, and the design of the outdoor areas are part of the general contractor agreement.



Berliving completed Image: PORR AG

#### Project data

Client	Bauträger GmbH Alex-Wedding- Straße 7 10178 Berlin
Contractor	PORR Deutschland GmbH, Berlin branch, Building Construction Division
Start of construction work	September 2014
End of construction	July 2016
Gross floor space	20,000 m <sup>2</sup>
Flats	136
Parking spaces in the underground car park	104
Concrete	6,400 m <sup>3</sup>
Reinforcements	800 t
Façade size	7,000 m <sup>2</sup>

#### **Project description**

The complex consists of four structures (A, B, C, and D) including three city mansions and one multi-family home. The scheme was implemented on a single lot in two staggered construction stages.

Structure A was tackled first, followed by structures B, C, and D. All structures are combined in an ownership community. Together, the construction stages form an independent quarter.

Every building section features a main entrance with a representatively styled foyer.



Image: PORR AG



Image: PORR AG

A total of 136 freehold flats which are sold in the framework of part ownership were built. All buildings share a continuous underground car park with a total of 104 single car parking spaces and an entrance and exit structure. The basement floor furthermore houses the flats' cellar compartments, drying and push-chair rooms, bicycle storage rooms as well as janitor and utility rooms. Additionally, the building efforts include the construction of the outside facilities in accordance with the landscaping plan. Apart from the common underground car park, the buildings are connected to each other via a greened courtyard featuring paths, benches and playgrounds.

Sustainability and optimal resource utilisation were part of the design and permit planning, and further optimised and implemented during the execution planning.

Thus, the buildings are erected as "KfW energy-efficient building 55" in accordance with EnEV 2009. Annually, such buildings use 45% less primary energy than a comparable new building according to EnEV 2009.

#### **Construction progress**

Structure A was to be built first, followed by structures B, C, and D in the second stage. The division into two construction stages was made deliberately to allow for flexible reaction in case of delays in the sale of the flats. This, however, necessitated to plan and implement design and construction progress in such a way that, once structure A was completed, the areas of common use were as well, even though they did not immediately effect structures B, C and D.

Examples are the foundations of all buildings, the completion of the underground car park and the outside facilities including integrated fire brigade parking spaces.

#### Foundations

Down to a remaining excavation depth of 30cm, the construction pit had been excavated by the client. Due to residual foundation elements left over from a former Gasometer facility, parts of the foundation level needed to be re-compacted by means of a pulse method.



Construction pit of structures A and B Image: PORR AG



Construction pit of structure A Image: PORR AG

Overall, the following services were performed in the course of foundation work:

- · Removal of old building substances
- Soil improvement
- Partial excavation pit sheeting for purposes of securing an adjacent building

For this purpose, some 3,200t of soil with different degrees of contamination were excavated and disposed of.

Once the foundations for all four buildings had been completed, work on the carcass of structure A started in September 2014. Work on buildings B, C, and D began in January 2015.



Laying of the foundation stone on 13 November 2014 Image: PORR AG



Ground floor carcass, structure A Image: PORR AG

#### **Special agreements**

Due to the large number of residential units (136) a wide range of special requests had to be fulfilled. These mostly involved tiles, floor coverings and changes to the room division.

The objective was to meet all special requests without impeding the construction progress. Nevertheless, this challenge was mastered perfectly by all involved in the project.



Specially requested equipment Image: PORR AG

#### HVACR systems

The selection of the HVACR systems, too, fully conformed to the requirements of modern living in an energy-efficient building:

- District heating low temperature heating
- Central hot water heating
- Energy-saving floor heating system with independent thermostat control
- Radio-controlled electronic metering
- Demand-based, decentralised controlled residential ventilation
- Bathrooms and toilets with single room ventilation



Service lines with inlet at floor level Image: PORR AG

#### Residential space design

The spacious design of the rooms allows for transparent and individual equipment options.

Spacious window apertures, above-average ceiling heights of some 2.82m, loggias, balconies and terraces provide lots of light in all residential areas as well as a warm and bright atmosphere.





Façade of structure A, courtyard side Image: PORR AG

## **Final remark**

The building ensemble Berliving convinces with its timeless, modern and bright architecture perfectly blending in with the local district of Charlottenburg-Wilmersdorf.



Living room Image: PORR AG

## Façade

The façades were equipped with a thermal insulation system (ETICS) with structured surface in accordance with the requirements of EnEV 2009 - KfW 55.

For purposes of façade division, the ground floor was covered in natural stone plates all around based on the architect's suggestions. Horizontal cornice strips and division elements based on the ETICS system including flashing with preweathered titanium zinc were used inside the façades. From the point block's first to its fourth upper floor as well as on building A's first floor, the window sills were also executed using flashing with preweathered titanium zinc all around.



Structure A, inner courtyard Image: PORR AG



Structure A, design of side entrances Image: PORR AG