

## Solomenka Business Park Kiev, Ukraine



View into the plaza

The Solomenka project consists of the following buildings:

- Office tower: ca. 125 m high, gross floor area ca. 43,000 m<sup>2</sup>
- Office building: ca. 40 m high, gross floor area ca. 28,100 m<sup>2</sup>
- Bank building: ca. 28 m high, gross floor area ca. 11,100 m<sup>2</sup>
- Restaurant building: ca. 16 m high, gross floor area ca. 4,900 m<sup>2</sup>
- Multi-storey car park: ca. 25 m high, gross floor area ca. 13,400 m<sup>2</sup>
- Underground car park: 3 levels, gross floor area ca. 48,000 m<sup>2</sup>

The above-ground buildings are all constructed on top of the underground car park. An additional building for retail purposes is being built outside the basement box.

Under Ukrainian construction law, this project is being treated as an “experi-



View of the restaurant building

mental construction” which is not bound by the currently valid Ukrainian norms. The design was therefore oriented towards German norms, whereby a number of special Ukrainian regulations had to be observed.

The below-ground floors are being constructed using the top-down method, since it was not possible to absorb the high earth and water pressures using temporary anchors. The design had to take into consideration the construction methods that are technically possible in the Ukraine and/or have already been tested there.

As an exception to the Ukrainian norms, the basement box was constructed without joints and special calculations were necessary for this.

A number of alternative load-bearing structures for the tower were examined and evaluated at local unit prices. The result was an optimally cost-effective solution that diverged from conventional construction methods used in the Ukraine.

All solutions were developed in close cooperation with local planners in order to ensure that they were both suitable for approval and technically feasible in Kiev.

Owner / Client  
Solomenka LLC, Kiev

Architect  
RKW Architekten,  
Düsseldorf

Construction period  
2007

Construction costs  
Ca. 185 million EUR

Project data

- Gross volume: 543,000 m<sup>3</sup>
- Gross floor area: 154,000 m<sup>2</sup>
- 3 below-ground floors constructed using the top-down method
- Tower: 125 m

Krebs und Kiefer services

- Planning of load-bearing structure up to design phase taking Ukrainian norms into consideration



View of office tower



Entrance to office tower