Competition Turkish Embassy, Berlin (GER)

project **Open competition in two processing phases for the construction of the administrative building of the Turkish Embassy in Berlin** contracting authority **Turkish Republic** conception **WW+ (LUX), EC Arch (Istanbul, Turkey), Terra Nova (Munich, Germany)** floor area **14.813 m²** cubage **55.618 m³** planning **2007** result **4th place** construction costs **41.000.000 € (incl. 18% ancillary construction costs and 19% taxes)**

Architectural concept

The main idea of the concept of the Turkish Embassy in Berlin is beared by the aims of a long term presence of the Turkish Embassy in the capital of a state bonded in partnership, the intellectual exchange, the transparency, the tolerance, the cosmopolitanism and the expression of the personal identity.

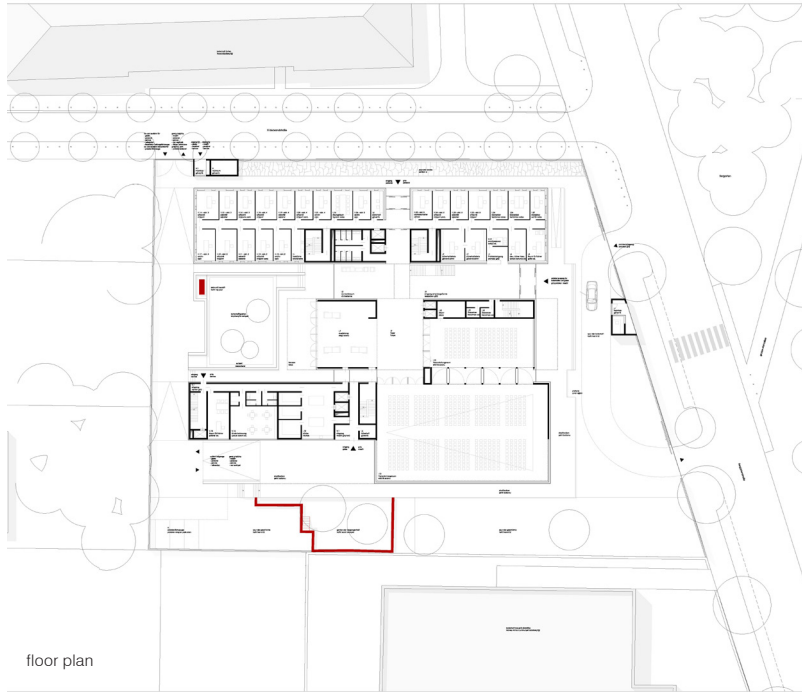
This reflects in the outline of the building ensemble. In the inside by the open alignment of the visitors areas, the communication promoting organisation and, in the outside, by deliberately choosing transparent areas in the facade and by the interlocking form of the building with the surrounding urban space.

Functionally this tooth system enables the transfer, the exchange and the dialogue between the Turkish and the German culture, architecturally the building is interfingering with its surroundings and the urban space, interferes between the inside and the outside and makes the Turkish Embassy open the dialogue with its environment.

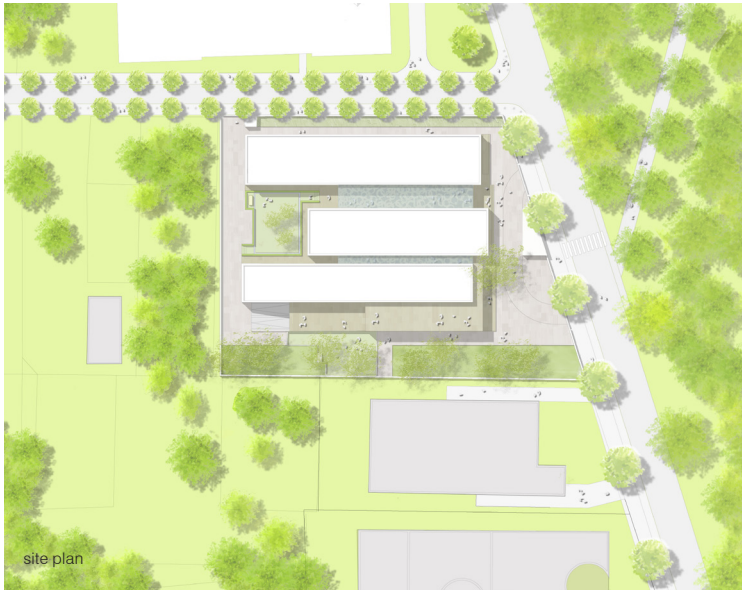
The coexistence and the cooperation, the mergence and the interlocking of the different cultures shall be seen through the building. The new embassy shall show the importance of the presence, the modern ideas of the country regarding art, culture, politics and economy, but also trough the course of history. The new building shows by its formal distinctiveness and its modernity, its tranquillity, its seriousness and its self-assurance.

Technical building equipment

An integrated concept had been developed for the building equipment by optimizing the building and the technique in a way that the whole building meets the current technical standards regarding ecology and economy.



floor plan



site plan

Energy concept

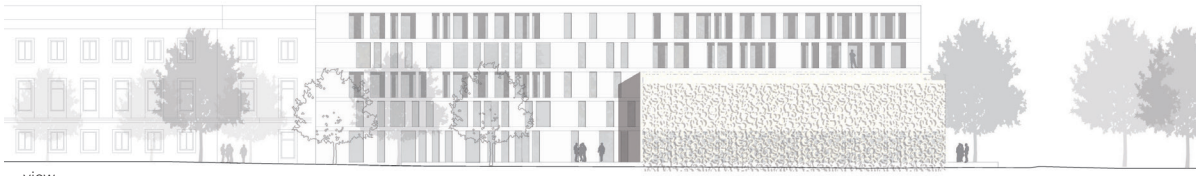
Because of energy saving reasons and for natural ventilation the façade is being equipped with windows whose opening angle can be dosed. Furthermore a supporting ventilation system with energy recovery facilities makes sure that in winter as well as in summer there's only a little loss of energy. The heat insulation value of the façade is less than 0,7 w/m²k and the planned sunblind has a b-factor of 0,12. The energy supply of the floor-spaces is taken over by a gas-powered heat pump system with usage of the ground water energy. A piping system, which draws heat from the ground water, is integrated into the white tank. In winter the heat pump brings this heat up to a higher temperature level. By switching the water flows in summer the floor-spaces are cooled and the existing heat is released back to the ground water. The electrical energy is taken from the evu network. Depending on the need of self electricity supply a diesel aggregate is integrated into the energy cycle. As for safety reasons this aggregate will be installed anyway, we recommend – without anticipating an economic efficiency calculation – using this aggregate also as block heating system, which is equipped according to regulations for a blackout and delivers heat for the ventilation system and operating power for an absorption cooling device and also delivers part of the electric energy. Normally the aggregate runs with gas, in case of a blackout with bio-diesel. With these measures a low energy standard with primary energy consumption values of less than 100w/m²a is achieved.

Building element heating and cooling

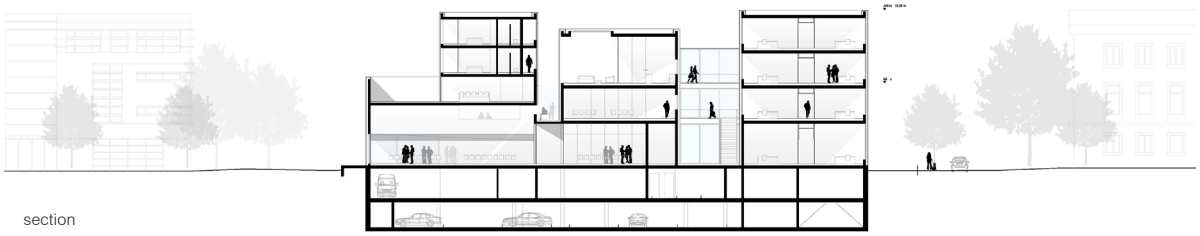
The advantage of the building heating and cooling rests on its economy and comfort improvement. Due to the low charging temperatures (summer 18 degrees, winter 25 degrees) energy-saving systems for energy generation can be used and line loss can be kept low. The energy supply via the ceiling generates agreeable moderate surface temperatures, hence increasing comfort.

Ventilation and air-conditioning system

The interior rooms like reception hall, ballroom etc. will be equipped with separate, specifically adapted air-conditioning systems; the exterior rooms will get a supporting ventilation system. The air duct goes from the floor to the ceiling in the direction of the archimedean uplift. This reduces the cruise of the compartment air and avoids the occurrence of an air draught.



view



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