

## House 61



### Location

Built  
2003-2005  
GFA 747 m<sup>2</sup>

This detached private house was designed to high standards in terms of ecology, the environment and building biology. Shaped like a ring-segment in plan, the villa opens up towards the park-like garden, which borders a protected landscape conservation area. The transparent villa with about 400 sq m of net floor area gives a light and almost weightless impression. Mainly natural, unprocessed and non-toxic materials have been used. The façade and the window frames are made of Oregon pine. The coated glass has a good thermal insulation performance and keeps mobile phone radiation and electric smog away. The design avoids electromagnetic pollution and radon emissions. The bedrooms have a mains cut-off mechanism. Two stairs connect to the lower floor with playrooms and secondary functions.

Power is generated from renewable sources. The energy use of the house is well below the already strict German energy-saving regulations. Heating is provided from three sources: 85% of the annual requirement is provided by a thermal solar system and a ground-source heat pump. During high demand periods, hot water is also produced from a wood-pellet-fuelled heating system. In summer, the underfloor heating in the rooms is linked to the geothermal cooling system. Electric power comes from renewable sources through the public grid. A custom-made computer system manages and optimises the functions in each room, and regulates the natural ventilation and sun shading by means of a motor controlled façade system. It has several preselected "functional scenarios". Cisterns collect the rain water from the roof so that it can be

used for irrigation. A total of 18 slender steel columns carry the cantilevering roof. It is made from stainless steel, so that the rain water cannot get polluted with particles. House 61 is a building that offers the optimum standard of healthy living.

## Awards, Nominations

2009

Deutscher Landschaftsarchitekturpreis 2009

## Team

Architect

ingenhoven architects, Düsseldorf

Christoph Ingenhoven, Ben Dieckmann, Martin Reuter, Peter Jan van Ouwkerk, Maud Barg, Claudia de Bruyn, Lutz Büsing, Jens Busche, Yves Corneille, Darko Cvetuljski, Ralf Dorsch-Rüter, Karolina Dyla, Marco Glashagen, Stefan Henfler, Jutta Mengede, Axel Möller, Dirk Monson, Kirstin Opitz, Frank Reineke, Peter Georg Vahlhaus, Thomas Wendlinger, Regina Wuff, Alexandra Zupanc, Lutz Büsing

Structural Engineering

Werner Sobek Ingenieure GmbH, Stuttgart

Facade Planning

DS-Plan, Stuttgart

Lightning

Tropp Lightning Design, Weilheim

landscape planning

ingenhoven architects, Düsseldorf

Weber, Klein und Maas, Meerbusch