

DAVINCI HOUSE – Transparent Architecture for Low-Energy Building

Just to see the futuristic design of this specific DAVINCI HOUSE is enough to understand: future-oriented building and innovative house concepts rate highly here.

It concerns the new demonstration center for the low-energy building and living, that DAVINCI HOUSE - as a producer of the exclusive half-timbered houses - has created on the showhouse exhibition site "Own House & Garden" in Fellbach.

The demo center is a satellite of the Solar Building Innovation Center (SOBIC) and has been initiated by Fraunhofer Institute of Solar Energy Systems (ISE), Freiburg, and Institute of Building Physics (IBP), Stuttgart. The Aim of the Center is to open up the latest research results and up-to-date findings of the energy-saving building for all interested builder-owners, architects and planners. It is open for visitors since October 21, 2002.

Aesthetics and Resources Saving

The construction alone is intended to be a paragon of an attractive yet environment-friendly building.

Combination of two buildings provides passive solar energy saving. Your generous glass plains have a multilayered structure. In interspaces, there are different shadings that serve not only as light and sun protection but also have a thermal insulation function.

Transparent acryl rainfall pipes vouch for the sensible utilization of the rainwater. They supply a 5.000 l - tank with water that will be used for the irrigation of the garden.

There is the modern thermal value equipment on the ground floor that furnishes the underfloor heating with water as the heating medium.

Exhibition in the Exclusive Framework

In connection with such topics as architecture, energy balance and house equipment the modern glass house with visible gray half-timbering built on 250 square meters presents information and interactive showpieces of celebrated providers from industry and construction sphere.

The visitors can for instance create the house of their own on the basis of computer simulations and "get acquainted" with different building physical effects or test the energy profits at the rotatable house model according to the solar radiation.

You will learn at a special touch window that the feeling of a temperature not necessarily corresponds with the real temperature effect: here the visitor is shown that the cool windowpanes of modern construction elements are a sign of good heat insulation.

Posters and information boards reproduce diverse options of heating, ventilation and warming of drinking water in comparison with each other – as well as different details of thermal insulation systems and window connections. Advantages and disadvantages of definite measures are clearly and comprehensible arranged and are explained elaborately to every visitor.

The offer is concluded by regular seminars of members of the Fraunhofer Institute dealing with such subjects as healthy living, energy-saving building or daylight concepts as well as by the free of charge consultation for energy consumption of municipal utilities of Fellbach city.

Successful Cooperation

„If a new home is at stake, our clients put a very high value on their personal impression, good information and own experience. That's why we are especially proud that our central building – a modern construction with the visual gray half-timbering – is a model of solar architecture”, this is how the director of the exhibition company ‘Own House & Garden” Andreas Speer explained the background of the cooperation with the DAVINCI HOUSE.

„An aesthetically demanding architecture of timber and glass does not conflict with the idea of low-energy building. Quite the opposite, it offers the challenge for attractive yet environment-friendly building projects. We have proved this with our new demonstration center”, according to Anton Hammes, one of the two directors of the DAVINCI HOUSE Inc. in Elben.