

Zeroenergy House

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Jens Hirschberg has managed his architecture office titled *hirschberg architekten* since 1998. The firm is located in Schwäbisch Hall, a city in the south of Germany. From the beginning Jens Hirschberg has been focused on energy efficient buildings. It is very important for him to build with two types of energy in mind: energy conservation, which reduces resources and cost, and atmosphere - the energy to bond people.

In the last ten years, *hirschberg architekten* has designed and realised about 50 passive houses. Including business partners the firm has worked on 164 zero-energy buildings.

Partner:

Regina Rachinger, garden designer and landscape architect
She designs public green spaces for urban, city and house planning utilising energy efficiency. She uses local vegetation and preserves resources through the natural use of sun, water and air.

Business association: Architos®

ARCHITOS® is the leading association for architecture and special suppliers in Switzerland and Germany. *hirschberg architekten* is a member of ARCHITOS® and offers a pool of experienced and knowledgeable professionals.

The aim of the company is to support individual and modern architecture utilising custom tailored designs made of wood. ARCHITOS® architecture builds houses with little energy consumption and a comfortable interior. The building materials are renewable, environmentally friendly and of high quality.

ARCHITOS® is also involved in research and development involving new building materials such as vacuum insulation

Competencies:

Passive homes constructed by wood, custom designed and ready to use

- Renovation by energy recovery standards, therefore less than a tenth of the energy consumed as before
- Analysis and valuation of structural damage and elements
- Urban planning simulation
- Zero-energy-city
- Green building concept
- education for passivehouse-architects

Cliffhanger - Zero energy house

Zero energy concept means the Balance between energy we need for and energy we can take for free by the sun directly or indirectly.

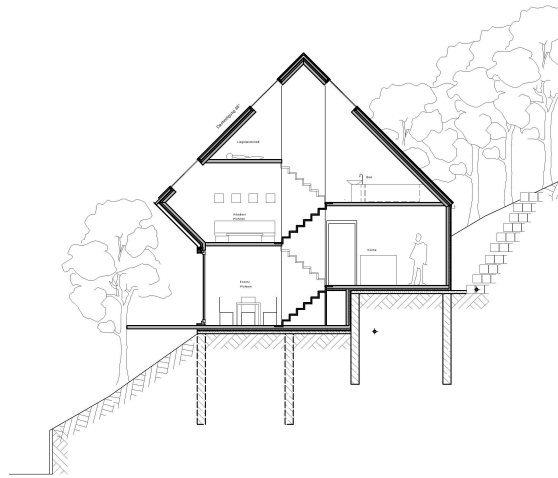


The Garden -

Possibility for this particular project

- 1 To protect the vegetation as much as possible in order to erosion
- 2 to built a hen-coop
- 3 to use the natural shadow in the old-growth forest as seat for summerdays
- 4 a natural place to use it for meditation and contemplation
- 5 to use wood from the plot for the fireplace





the elements you need for a good zero energy house.

- 1 the relation between the outside shape and the inside volume.
- 2 Thermal insulation for roof, wall, ground
- 3 the windows
- 4 Ventilation with heat recovery
- 5 A airtight construction
- 6 Free from thermal bridges
- 7 zero emission
- 8 zero pollution
- 9 vehicle to grid zero mobility
- 10 natural water system



