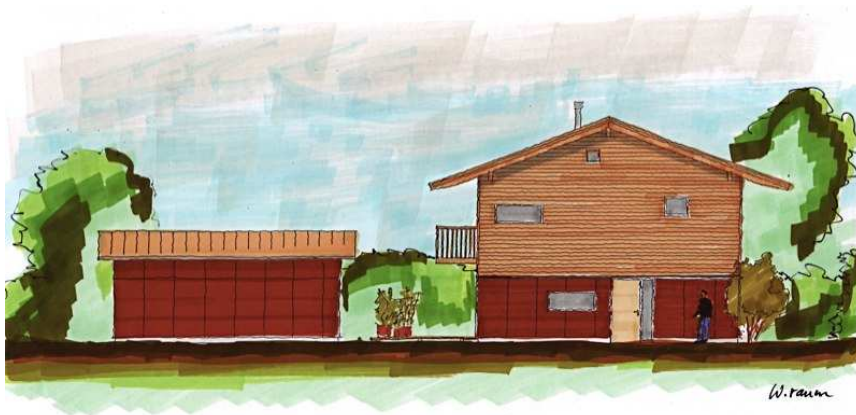


Object name

Single family house in Bergen

Germany

Object photo



Object description

The single family house in Bergen (Bavaria) is built with a basement outside the thermal envelope.

The building is a timber construction and all building materials are chosen under the aspect of their environmental compatibility.

A Compact Unit provides the heating with supply-air and also generates the hot water. The frost protection of the Compact Unit is realised with a brine-bearing subsoil heat exchanger.

For supporting the Compact Unit a wood fired oven is additionally built-in. A special feature is a rainwater tank, for using rainwater in the lavatory.

Fact sheet

Single family house in 83346 / Bergen
Treated Floor Area 161 m²
Number of apartments 1
Completion date 2008

Energy standard [PHPP]

Heat requirement / year 15 kWh/m²a
Heat load 13 W/m²
Primary energy requ. 106 kWh/m²a
Air-tightness (n₅₀-value) 0,4 1/h
Building type Timber construction

U-value

Exterior wall 0,10 W/m²K
Roof 0,10 W/m²K
Basement floor / Floor slab 0,11 W/m²K
Windows / average 0,75 W/m²K

Specification ventilation system

Compact Unit with subsoil heat exchanger for frost protection

Heating installation

Compact Unit, wood oven

Construction costs --- Euro/m²

Building owner

private

Architect/Planner

Sebastian Wagnerberger

Photo credits

Lebensraum Holz, Bad Aibling