

Object name

Single family house in Bernau**Germany**

Object photo



Object description

The low energy house with passive house components in Bernau/Chiemsee (Bavaria) is built with a basement inside the thermal envelope.

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

A central ventilation system with heat recovery provides the air supply. The heat demand is covered by heat from a district heating network. The parents house in the direct neighbourhood was reconstructed and the surplus of heat is now used for this building

Fact sheet

Single family house in 83233 / Bernau
 Treated Floor Area 187 m²
 Number of apartments 1
 Completion date 2005

Energy standard [PHPP]

Heat requirement / year 23 kWh/m²a
 Heat load 14 W/m²
 Primary energy requ. -- kWh/m²a
 Air-tightness (n₅₀-value) 0,50 1/h
 Building type Timber construction

U-value

Exterior wall 0,13 W/m²K
 Roof 0,12 W/m²K
 Basement floor / Floor slab 0,20 W/m²K
 Windows / average 0,8 W/m²K

Specification ventilation system

Central ventilation system with heat recovery

Heating installation

District heat

Construction costs --- Euro/m²

Building owner

private

Architect/Planner

Jürgen Schneider

Photo credits

Lebensraum Holz, Bad Aibling