

Object name

Single family house in Obing**Germany**

Object photo



Object description

The low energy house with passive house components in Obing (Bavaria) is based on the look of the former farmhouse standing on this position.

The building is a timber construction and all building materials are chosen under the aspect of their environmental compatibility. Wood from the farmers own forest was used to build the house.

A central ventilation system with heat recovery provides the air supply. A wood fired oven produces hot water for the wall heating system and covers the remaining water demand of the building. The oven is supported by a solar heating system installed on the roof.

Fact sheet

Single family house in 83119 / Obing
 Treated Floor Area 158 m²
 Number of apartments 1
 Completion date 2004

Energy standard [PHPP]

Heat requirement / year 23 kWh/m²a
 Heat load 12 W/m²
 Primary energy requ. ---kWh/m²a
 Air-tightness (n₅₀-value) 0,6 1/h
 Building type Timber construction

U-value

Exterior wall 0,12 W/m²K
 Roof 0,13 W/m²K
 Basement floor / Floor slab 0,11 W/m²K
 Windows / average 0,89 W/m²K

Specification ventilation system

Central ventilation system with heat recovery

Heating installation

Central wood oven, solar heating system

Construction costs --- Euro/m²

Building owner

private

Architect/Planner

Lebensraum Holz, Bad Aibling

Photo credits

Lebensraum Holz, Bad Aibling