

Object name

Single family house in Schönau

Germany

Object photo



Object description

The single family house in Schönau/Tuntenhausen (Bavaria) is built without a basement.

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. The drinking hot water distribution is carried out by single pipes.

Fact sheet

Single family house in 83104 / Schönau

Treated Floor Area	182 m ²
Number of apartments	1
Completion date	2007

Energy standard [PHPP]

Heat requirement / year	15 kWh/m ² a
Heat load	11 W/m ²
Primary energy requ.	--- kWh/m ² a
Air-tightness (n ₅₀ -value)	0,6 1/h
Building type	Timber construction

U-value

Exterior wall	0,11 W/m ² K
Roof	0,11 W/m ² K
Basement floor /	0,11 W/m ² K
Floor slab	
Windows / average	0,86 W/m ² K

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

plan_z architekten, Michael Lehner

Photo credits

Lebensraum Holz, Bad Aibling