

Object name

Single family house in Erding

Germany

Object photo



Object description

The single family house in Erding (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 Compact Unit provides air supply and also generates the hot water for the wall floor heating system. The frost protection of the Compact Unit is realised with a brine-bearing subsoil heat exchanger.

Fact sheet

Single family house in 85435 / Erding
Treated Floor Area 268 m²
Number of apartments 1
Completion date 2008

Energy standard [PHPP]

Heat requirement / year 15 kWh/m²a
Heat load 10 W/m²
Primary energy requ. 88 kWh/m²a
Air-tightness (n₅₀-value) 0,3 1/h
Building type Timber construction

U-value

Exterior wall 0,105 W/m²K
Roof 0,128 W/m²K
Basement floor / Floor slab 0,167 W/m²K
Windows / average 0,71 W/m²K

Specification ventilation system

Compact Unit with subsoil heat exchanger for frost protection

Heating installation

Compact Unit

Construction costs --- Euro/m²

Building owner

private

Architect/Planner

Grotz Architekturbüro

Photo credits

Lebensraum Holz, Bad Aibling