

Object name

Heightening in Munich**Germany**

Object photo



Object description

This project was a heightening of a single family house with passive house components.

The heightening was undertaken in 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

Fact sheet

Single family house in 80992 / Munich
 Treated Floor Area 138 m²
 Number of apartments 1
 Completion date 2009

Energy standard [PHPP]

Heat requirement / year 19 kWh/m²a
 Heat load 14 W/m²
 Primary energy requ. 117 kWh/m²a
 Air-tightness (n₅₀-value) 0,50 1/h
 Building type Timber construction

U-value

Exterior wall 0,11 W/m²K
 Roof 0,10 W/m²K
 Basement floor / Floor slab --- W/m²K
 Windows / average 0,96 W/m²K

Specification ventilation system

Compact Unit with subsoil heat exchanger for frost protection

Heating installation

Wood oven, Compact Unit

Construction costs --- Euro/m²

Building owner

private

Architect/Planner

Bläsig Architekten

Photo credits

Lebensraum Holz, Bad Aibling