

Object name

**Twin house in Allershausen**

**Germany**

Object photo



Object description

The twin house in Allershausen (Bavaria) is built with a basement outside 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 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

**Twin house in 835391 / Allershausen**  
Treated Floor Area 149 m<sup>2</sup>  
Number of apartments 1  
Completion date 2009

**Energy standard [PHPP]**

Heat requirement / year 15 kWh/m<sup>2</sup>a  
Heat load 11 W/m<sup>2</sup>  
Primary energy requ. 66 kWh/m<sup>2</sup>a  
Air-tightness (n<sub>50</sub>-value) 0,4 1/h  
Building type Timber construction

**U-value**

Exterior wall 0,11 W/m<sup>2</sup>K  
Roof 0,09 W/m<sup>2</sup>K  
Basement floor / Floor slab 0,18 W/m<sup>2</sup>K  
Windows / average 0,80 W/m<sup>2</sup>K

**Specification ventilation system**

Compact Unit with subsoil heat exchanger for frost protection

**Heating installation**

Compact Unit, wood oven

Construction costs --- Euro/m<sup>2</sup>

**Building owner**

private

**Architect/Planner**

Lebensraum Holz, Bad Aibling

**Photo credits**

Lebensraum Holz, Bad Aibling