

Object name

**WHA Lodenareal - Innsbruck****Austria**

Object photo



Object description

NEUE HEIMAT TIROL has built 354 rental flats in form of a passive house project, which is certified by the Passivhaus Institut in Darmstadt, Germany. The main aim of the developer is to minimize long term energy costs and rents for his customers, by applying modern architecture and a challenging technical management, as well as enhancing the public awareness of current energy issues and achieving a leading role in the sector of sustainable housing. With an energy consumption of 14,5 kWh / m<sup>2</sup> usable area and year (calculated by the PHPP), the utilization of groundwater heat, a wood pellet based heating system and solar collectors the building is actively contributing to climate protection. The heating demand according to the Austrian Energy Pass amounts to 7 kWh / m<sup>2</sup> usable area and year, which classifies the project "Lodenareal" in the category A++. In comparison to a low energy housing project the passive house project "Lodenareal" achieves to reduce the yearly production of CO<sub>2</sub> by 680 tons. Further objectives of this passive house project were to increase the living comfort for the tenants through the installation of a controlled comfort ventilation system, to fulfill the specifications of the Kyoto Protocol and to implement the Tyrolean Energy Strategy 2020.



Fact sheet

Apartment building in 6020 / Innsbruck  
 Treated Floor Area 26.000 m<sup>2</sup>  
 Number of apartments 354  
 Completion date 2009

**Energy standard [PHPP]**

Heat requirement / year 14,5 kWh/m<sup>2</sup>a  
 Heat load 9,1 W/m<sup>2</sup>  
 Primary energy requ. 112 kWh/m<sup>2</sup>a  
 Air-tightness (n<sub>50</sub>-value) 0,20 1/h  
 Building type massive construction

**U-value**

Exterior wall 0,13 W/m<sup>2</sup>K  
 Roof 0,11 W/m<sup>2</sup>K  
 Basement floor / Floor slab 0,12 W/m<sup>2</sup>K  
 Windows / average 0,85 W/m<sup>2</sup>K

**Specification ventilation system**

Per step one central ventilation system

**Heating installation**

Pellets heatingsystem + 1.000 m<sup>2</sup> solar

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

**Building owner**

Neue Heimat Tirol Gemeinn. Wohnungs-GmbH / Innsbruck [www.nht.at](http://www.nht.at)

**Architect/Planner**

Architekturwerkstatt din a4 und team k2 architects

**Photo credits**

Neue Heimat Tirol / Christof Lackner