

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 / m² 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 / m² 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 CO₂ 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 m²
 Number of apartments 354
 Completion date 2009

Energy standard [PHPP]

Heat requirement / year 14,5 kWh/m²a
 Heat load 9,1 W/m²
 Primary energy requ. 112 kWh/m²a
 Air-tightness (n₅₀-value) 0,20 1/h
 Building type massive construction

U-value

Exterior wall 0,13 W/m²K
 Roof 0,11 W/m²K
 Basement floor / Floor slab 0,12 W/m²K
 Windows / average 0,85 W/m²K

Specification ventilation system

Per step one central ventilation system

Heating installation

Pellets heatingsystem + 1.000 m² solar

Construction costs --- Euro/m²

Building owner

Neue Heimat Tirol Gemeinn. Wohnungs-GmbH / Innsbruck www.nht.at

Architect/Planner

Architekturwerkstatt din a4 und team k2 architects

Photo credits

Neue Heimat Tirol / Christof Lackner