

Object name

Kindergarten Weissensee**Austria**

Object photo



Object description

The municipality of Weissensee has already made itself a name as an environmentally aware community. The kindergarten should be built in a pure timber construction.

The fact that the main view – towards the lake – is located in the North and the South side offers no attractive view (road side) was a difficult situation for designing the longitudinally stretched symmetrical floor plan, since a passive house requires large window areas in the South while the North side, as a rule, is to remain largely closed. Nevertheless, a solution was found for the window and door sizes which grants sufficient insulation and view and, at the same time, meets the energy-efficiency criteria of the passive house.

Architecture / design

The passive house kindergarten at lake Weissensee is evidence of the fact that a symbiosis between regionally typical architecture and passive house standard can be achieved. The building is in line with the traditional land-use plan of the municipality of Techendorf requiring use of the traditional double pitch roof.

Insulation thickness of walls, roof and towards the ground is 45 cm.



Fact sheet

Kindergarten in 9762 / Weissensee	
Treated Floor Area	243 m ²
Number of apartments	--
Completion date	2009

Energy standard [PHPP]

Heat requirement / year	13,76 kWh/m ² a
Heat load	16,00 W/m ²
Primary energy requ.	--- kWh/m ² a
Air-tightness (n ₅₀ -value)	0,30 1/h
Building type	Wood construction

U-value

Exterior wall	0,09 W/m ² K
Roof	0,09 W/m ² K
Basement floor /	0,11 W/m ² K
Floor slab	
Windows / average	0,71 W/m ² K

Specification ventilation system

Modular and central system

Heating installation

Floor heating with heat pump in compact aggregate with sole collector

Construction costs 2.551 Euro/m²

Building owner

Gemeinde Weissensee

Architect/Planner

architekten ronacher / Hermagor
www.architekten-ronacher.at

Photo credits

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