

Object name

**EPD Biely Kostol****Slovakia**

Object photo



Object description

Two-storied single-family house with gabled roof has wooden construction with thick cellulose insulation (additional cork insulation is under the plaster). Interior walls are filled with unburned bricks to get better thermal inertia.

Triple-glazed wooden windows are shaded by external jalousies the greatest ones are exactly south-oriented and shaded also by a pergola and balcony. Wooden garage and storage with flat green roof are outside the thermal envelope at the northern side of the house.

The only HVAC system in the house is ventilation with heat-recovery combined with heat-storage tank, solar collectors and heat-exchanger using well-water.

Fact sheet

Single family house in Trnava- Biely Kostol

Treated Floor Area	159,6 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	12 W/m <sup>2</sup>
Primary energy requ.	-- 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 /	0,21 W/m <sup>2</sup> K
Floor slab	
Windows / average	0,91 W/m <sup>2</sup> K

**Specification ventilation system**

Ventilation unit Atrea RK2

**Heating installation**

Ventilation unit Atrea RK2

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

**Building owner**

private

**Architect/Planner**

Henrich Pifko, EEB, s.r.o.

**Photo credits**

EEB, s.r.o.