

Object name

**EPD Klimek****Slovakia**

Object photo



Object description

Passive house with massive construction of aerated concrete blocks with airtightness less than 0,2 1/h. It is a two stories single family house with cellar and heatless attic. The house has a south orientation.

There is installed a ventilation unit with subsoil heat exchanger for preheating and precooling of air.

For heating is used an oven with hot-water exchanger and floor heating with possible cooling.

Insulation of window frames with wrapped wall embrasure. On the west side is shading with controlled jalousie.

Fact sheet

**Single family house in Piešťany**

Treated Floor Area	177 m <sup>2</sup>
Number of apartments	1
Completion date	2009

**Energy standard [PHPP]**

Heat requirement / year	13 kWh/m <sup>2</sup> a
Heat load	13 W/m <sup>2</sup>
Primary energy requ.	-- kWh/m <sup>2</sup> a
Air-tightness (n <sub>50</sub> -value)	0,18 1/h
Building type	massive construction

**U-value**

Exterior wall	0,1 W/m <sup>2</sup> K
Roof	0,08 W/m <sup>2</sup> K
Basement floor / Floor slab	0,2 W/m <sup>2</sup> K
Windows / average	0,79 W/m <sup>2</sup> K

**Specification ventilation system**

Autonomous ventilation unit with earth exchanger

**Heating installation**

Solar system and chimney

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

**Building owner**

private

**Architect/Planner**

ADV Klimek, Ing. Ján Klimek

**Photo credits**

Ing. Ján Klimek