

Object name

**EPD Cífer****Slovakia**

Object photo



Object description

Single family passive house with timber construction, excellent airtightness less than 0,2 1/h. The building has two stories. It's main characteristic is the use of ecological building materials.

The building has a compact shape, an ideal orientation on south, shading of windows with external jalousie.

The building envelope is insulated with cellulose insulation and the basement is insulated with foamglass. The façade is finished with oiled red pine.

For ventilation is installed a compact unit aerosmart L heating by ventilation air. The unit prepares a domestic hot water with mini heat pump using an exhausted air. As pre-heating and pre-cooling of air a brine heat exchanger was also installed.

Fact sheet

**Single family house in Cífer**

Treated Floor Area	133 m <sup>2</sup>
Number of apartments	1
Completion date	2009

**Energy standard [PHPP]**

Heat requirement / year	12 kWh/m <sup>2</sup> a
Heat load	14 W/m <sup>2</sup>
Primary energy requ.	92 kWh/m <sup>2</sup> a
Air-tightness (n <sub>50</sub> -value)	0,17 1/h
Building type	Timber construction

**U-value**

Exterior wall	0,12 W/m <sup>2</sup> K
Roof	0,08 W/m <sup>2</sup> K
Basement floor /	0,23 W/m <sup>2</sup> K
Floor slab	
Windows / average	0,87 W/m <sup>2</sup> K

**Specification ventilation system**

Central System, Compact unit Drexel und Weiss: Aerosmart L

**Heating installation**

Compact unit Drexel und Weiss: aerosmart L

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

**Building owner**

private

**Architect/Planner**

Kierulfová, Kierulf, Createrra, s.r.o.

**Photo credits**

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