

Object photo



Object description

The Passive house is located on a parcel at a rather steep north slope over the former agricultural area.

Entrance to the house is on the first floor from the northern side with internal staircase connecting to ground floor.

Designed house is developed in parallel with a linear line of sinkholes. Sequence juxtaposing accommodation and narrow and long floor scheme stems from the desire of the traditional design Karts' house and consequently exploit all the advantages that such a concept entails. Best orientation and small installation depth, in combination with roofed balcony, allows the capture of passive solar energy.

House is made out of natural and autochthones materials, which are following the concept of traditional construction in the area.

The construction is made of prefabricated timber elements, insulated with cellulose insulation in the walls and roof and wood fibre insulation boards on the facade.

Fact sheet

Single family house in Karst

Treated Floor Area	163,77 m ²
Number of apartments	1
Completion date	2008

Energy standard [PHPP]

Heat requirement / year	9 kWh/m ² a
Heat load	12,5 W/m ²
Primary energy requ.	--- kWh/m ² a
Air-tightness (n ₅₀ -value)	0,37 1/h
Building type	Prefabricated timber construction

U-value

Exterior wall	0,108 W/m ² K
Roof	0,092 W/m ² K
Basement floor / Floor slab	--- W/m ² K
Windows / average	0,8 and 0,71 W/m ² K

Specification ventilation system

Central System

Heating installation

Heat pump

Construction costs --- Euro/m²

Building owner

Private investment

Architect/Planner

Architect Robert Mašera

Photo credits

Lumar IG d.o.o.