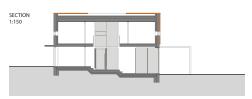
DOBRÝ DUM. s.r.o. (CZ)



















PASSIVE ENERGY HOUSE BRNO - OBŘANY

A simple compact block with a terrace and a pergola on the south side of the house, disposition for a family with two children.

The layout of the house is traditional - the ground floor is the social part - living room and dining room with kitchen, hall and a bathroom with toilet and shower. Upstairs is a gallery and bedrooms with a game room. Important architectural and spatial element is the optical interconnection of the two floors of living space with garden window. All othous are fitted with blinds.

The house has a heat recovery ventilation, heating is split units with heat pump, hot water solar collectors with an electric heater. The project is ready for installation of intelligent home management system.





GROUND FLOOR 1:150







Built-up area: house 246 m², terrace 121 m² Floor area: 226 m² Enclosure: 493 m³

A simple compact block, two-storey villa with large windows on the south side, a terrace and a pergola on the southwest side of the house, disposition for a family with three children. On the first floor there is a main living space elevated, lighted with a glass wall leading to terrace, which connects the house with a living agraden. There is also sauna and a guest room on the first floor. On the second floor, accessible from the gallery, there is a private zone with bedrooms, hygienic facilities and technical room with the central unit integrating ventilation and heating.

The basic heat source for heating, warming hot water and ventilation is integrated air condition unit with heat recovery and inner heat pump connected to the integrated heat storage tanks with preheating of water with by solar panels.







PASSIVE ENERGY HOUSE BORINKA, SLOVAKIA

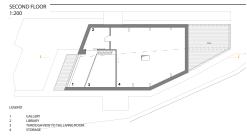
A single-storey house with embedded galleries, dedicated for a family with two children, layout and location of the house within the site were created according to the shape of the site.

The main objectives of the design:

e elimination of environmental impact - minimal energy consumption for the construction,

zero energy costs for home operation. The house is designed so a during the operation it produces more energy than it consumes itself. On the southeast side of the roof of the house there are photovol-take panels placed. The house is designed with a gener roof, reducing the rainwater runoff.

The materials used were chosen in order to meet an energy-saving building concept with superior thermal insulating properties, emphasizing elimination of thermal bridges. Thermal insulation is from renewable sources. Ventilation is compulsory, heating is electric accumulative.







Family house in Popovičky, Czech republic, 2008





















Family house in Rovina, Czech republic, 2012













