

Object name

Single family house Bělkovice-Lašťany Czech Republic

Object photo



Object description

It is 2-storeys single-family house with shed roof, the wall construction consist of prefabricated wooden-panels with extra polystyrene insulation. The structural insulated panels are composed of two OSB boards with polystyrene insulation in between.

The house is using central ventilation system with heat recovery. Heating is via preheated supply air with the possibility of circulation of heating air for higher heat load. The earth air to air heat exchanger is used as well.

Along the house there is a car parking and tool storage extension from east side. The roof is insulated with blown cellulose in between gang-nail trusses.

Fact sheet

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|-----------------------|----------------------|
| SFH Bělkovice-Lašťany | |
| Treated Floor Area | 141,6 m ² |
| Number of apartments | 1 |
| Completion date | 2007 |

Energy standard [PHPP]

| | |
|--|---------------------------|
| Heat requirement / year | 14,7 kWh/m ² a |
| Heat load | 9 W/m ² |
| Primary energy requ. | 102 kWh/m ² a |
| Air-tightness (n ₅₀ -value) | 0,48 1/h |
| Building type | Timber construction |

U-value

| | |
|-------------------|--------------------------|
| Exterior wall | 0,096 W/m ² K |
| Roof | 0,098 W/m ² K |
| Basement floor / | 0,123 W/m ² K |
| Floor slab | |
| Windows / average | 0,8 W/m ² K |

Specification ventilation system

Central system Atea Duplex RB

Heating installation

Warm-air heating ventilation unit with heat recovery, fireplace, solar collector

Construction costs 1100 Euro/m²

Building owner

Mgr. Richard Hamřík

Architect/Planner

Stanislav Karásek - KARON s.r.o.

Photo credits

Stanislav Karásek