

Object name

**Herrgårdsängen****Sweden**

Object photo



Object description

At Herrgårdsängen in Gäddeholm, outside Västerås, Aroseken will build 27 dwellings with the low-energy classification technology. The dwellings will contain 5 rooms with a living area at 151 m<sup>2</sup>. The first 7 dwellings will be ready for occupancy in June 2010.

The external walls are built with double timber frame construction and the insulation thickness of the walls is 370mm. The basement will be insulated with 280mm cell plastic. An exterior air heat pump to supply of hot water in the houses. Air recycling equipment with heat recovery takes care of the heat from the dwellings. Beyond that, the dwellings are equipped with fire place.

Isolation thickness:

walls:	435 mm
roof:	500 mm
floor over crawl space:	300 mm

Fact sheet

**Single family houses** in Västerås

Treated Floor Area	27*151=4077 m <sup>2</sup>
Number of apartments	27
Completion date	2010

**Energy standard**

[Swedish criteria incl. an indoor temp of 22°C]	
Heat requirement / year	24,6 kWh/m <sup>2</sup> a
Heat load	17,3 W/m <sup>2</sup>
Primary energy requ.	- kWh/m <sup>2</sup> a
Air-tightness (n <sub>50</sub> -value)	0,50 1/h
Building type	Timber construction

**U-value**

Exterior wall	0,01 W/m <sup>2</sup> K
Roof	0,08 W/m <sup>2</sup> K
Basement floor / Floor slab	0,117 W/m <sup>2</sup> K
Windows / average	0,9 W/m <sup>2</sup> K

**Specification ventilation system**

Mechanical ventilation with heat recovery

**Heating installation**

Exhaust air heat pump and a wood stove and electrical supply air heating battery

Construction costs ~2550 Euro/m<sup>2</sup>

**Building owner**

Aroseken Egna Hem

**Architect/Planner**

Sundquist & Westerberg Arkitekter AB

**Photo credits**

Lars Ahlberg

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