

Hotel Jezerka, Czech Republic



Photo: Thermosolar

Architectural integration of solar thermal energy systems

Hotel Jezerka, Czech Republic

Hotel located in the marvellous ambience of the Iron Mountains Natural Preserve with solar collectors on the balconies

PROJECT

Hotel Jezerka is a modern accommodation facility with the capacity of 150 beds, 3 swimming pools and a large sports centre. 236 m² solar collectors are integrated in the south facing balconies, heating tap water and swimming pools.

The hotel was built in 1988, but has been regularly upgraded. The solar system was installed in 2007.



Photo: Thermosolar

Heating system

The solar system, installed on the balconies, provides domestic hot water and heating of the swimming pools. The collector area of 236 m² is divided into two fields on two different blocs (A and B). Auxiliary heating is electricity.

Collector area;

Block A :156m²

Block B 80m²

Heat store description:

Block A - 2000l water storage, outdoor and indoor swimming pools

Block B- 2000l water storage



SOLAR COLLECTOR

Type:
Flat plate metal collector
TS 330 (producer THERMO/SOLAR Ziar)

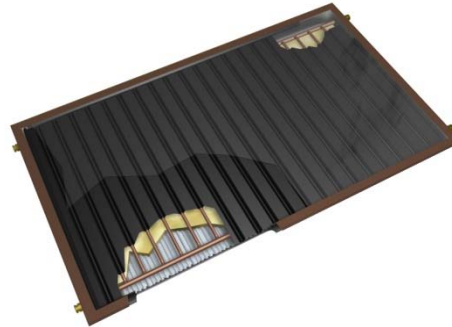
The solar collector is designed especially for horizontal installation. It is the first choice when architectural design of buildings is required. These collectors are often used as handrails of balconies, or established on flat roofs of high buildings where vertical collectors would be overloaded by wind.

Dimensions (mm): 2009 x 1009 x 75
Weight (kg): 36
Efficiency (η_0 ($\Delta T=0$ K) %): 77,6 (aperture)

Read more:
http://www.thermosolar.sk/stara_stranka/aa-eng.htm

ECONOMY

Collector prize; 364,8 € /2009
Solar gain; 120 000 kWh/year
System price; block "A" 2 172 704,- CZK = 83 565 €
block "B" 1 513 266,- CZK= 58 202 €



GALLERY



PHOTOS; THERMO/SOLAR Ziar

- Built:
1988 / 2007
- Project designers:
JH SOLAR, s.r.o.
- Consultants:
JH SOLAR, s.r.o.
- Address:
Ústupky 278
- Location:
538 07 Seč, Czech Republic
- Project period:
2007
- Type of project:
Hotel

