

1. Toolbox: Solterm

1.1. Description of the tool / methodology of the tool

Solterm is a planning and design tool for ST and PV systems. It's the calculation procedure recognized by the national STO. Licences must be bought. It is published in portuguese language

1.2. Outcomes of the tool

It's a software that aggregates 308 years of climate data and simulates the performance of ST and PV systems for the Portuguese climate in several locations.

The annual energy production of the solar system must be calculated with a programme developed by SOLTERM in order for the ST project to comply with the national STO.

It allows calculating the thermal contribution of the system to the house energy performance, which is afterwards integrated in the energy certification calculations.

The tool allows optimising the solar production of ST according to the optimal orientation and slope, as well as optimizing the whole system performance according to the hot water needs and type of installation selected.

It calculates also the performance of PV systems. It has updated information on types of systems, panels, brands and average investment allowing for the assessment of the system economic revenue.

1.3. Assessment of the tool

1.3.1. Advantages / Disadvantages

Advantages

- Recognized by the national STO;
- Easy to use;
- Simulates ST and PV.Improvements

Disadvantages

- Lack of possibilities for simulating a multi-family apartment building.

1.4. Examples

Link:

http://dl.dropbox.com/u/3977268/SolTerm/Manual_SolTerm_5.1.3.pdf

1.5. Literature

Link:

<http://www.lneg.pt/iedt/projectos/370/>