Experimental means

CSTB has various assessment equipment in Sophia-Antipolis and Marne-la-Vallée on which thermal solar systems can be tested.



"Aging" test bench To expose solar collectors to natural climatic constraints and to evaluate their durabilitu performances.



resistance bench To verify the mechanical shock on the collector glazing.



Collector" thermal performance test bench o determine the thermal performances of solar collectors according to European standard NF EN 12975-2 and to measure the maximum temperatures reached in a collector.

Mechanical load bench To determine the intrinsic resistance of the solar collector to damage caused by wind and snow loads according to European standard NF EN 12975-2.

Air – water – wind bench To verify the wind resistance according to standard NF EN 12179 and water tightness according to standard NF EN 12155 of a set of collectors with their fasteners..



'Water heater" thermal performance test bench o determine the thermal performances of solar domestic hot water systems,thermosyphon solar water heaters or integrated collector storage according to European standard NF EN 12976-2.



Contact :

CSTB-SOLAIRE-THERMIQUE > cstb-solaire-thermique@cstb.fr To view the list of thermal solar products with Technical Assessment www.cstb.fr /évaluation/Avis techniques/ keywords « CESI » or « capteur solaire » (solar collector).

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Thermal solar products are increasingly used in detached houses and apartment buildings. CSTB offers a procedure adapted to these innovative products, namely the Technical Assessment, in order to evaluate and verify their performances.

> EVALUATION

Technical assessment of thermal solar products



The Technical Assessment, a solution for innovative systems

Who can ask for it ?

Any French or foreign person or legal entity who makes, distributes or installs a "non-traditional" construction product in France, for example thermal solar systems.

A 5-step approach :

You are a manufacturer / distributor in the thermal solar sector and you would like to highlight the performances of these innovative products, their durability, conformity with French regulations and their suitability for use according to the installation method used ? The Technical Assessment procedure is an ambitious approach adapted to your need.



What is a Technical Assessment ?

For thermal solar products, the Technical Assessment applies particularly to use on the structure (independent on support, on roof or buit-in in roof). Projects are investigated and then presented to a group of neutral and impartial experts in different fields (HVAC engineering, roof, waterproofing, etc.).

The Technical Assessment is designed to provide everyone involved in building with an opinion about new products for a defined use.

In particular, it provides information about the extent to which the product ...

- Satisfies regulations in force,
- Is suitable for use once installed,
- Has in-service durability.

A double guarantee

For you, as a manufacturer/distributor, the Technical Assessment...

- Highlights the performances of your product in comparison
 with the competition,
- Makes everyone involved in construction familiar with your product (publication on the CSTB site and on the TRANSOL software database),
- Is the result of an impartial and objective evaluation by a group of experts in the field,
- Forms the first step towards certification for solar collectors, integrated collector storage and thermosyphon solar water heaters.

For your user customers, the Technical Assessment...

Can confirm that your product is suitable for the intended use

Helps them to confidently choose a product satisfying the need
Forms the first step towards benefiting from tax aid*

* Refer to texts in force at the time of the purchase.

What assessment for what product?



Cost and time

An estimate is produced when the request is submitted. The investigation time is 6 to 15 months, depending on the reactivity of the requester to build up a complete technical file and to answer to the questions from experts in Specialised Groups.