



Annex P2 Collectors EN 12975

Technical documentation

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1. Abbreviations

The definitions in the Solar Keymark Scheme Rules apply

2. Technical documentation

The application file has to include the technical documentation as defined in this chapter and in paragraph 7 “Collector identification” of EN 12975-1.

If a family of products is certified, the documents have to cover all members of the family. In case of special product designs the delivery of additional documents might be required. All documents are kept strictly confidential by the inspector / test institute.

It is in the responsibility of the inspector / test laboratory that the documents are supplied in a language that is understood by the inspector / testing laboratory.

2.1 Parts list / Bill of materials

For each of the collectors of a certification series parts list (bill of materials) shall be made available to the inspector / test institute. The parts list shall include all parts of the collector, any changes done to the collector initially tested and the date of revision.

2.2 Engineering drawings

Each of the collectors of a certified collector family shall be accompanied by a set of engineering drawings fully dimensioned, including sectional views. Drawings shall have a number, date of issue and possible revision date. These drawings have to include at least the following:

Flat plate collector	Evacuated tube collector
General view	General view
Casing	Tube
Absorber	Absorber
Transparent cover	Reflector
Insulation	Heat transfer sheet
	Heat pipe
	Manifold

For other types of collectors or upon request of the TL/CB additional drawings must be submitted. The drawings shall cover the main components of the product.

2.3 Specifications

The components listed below shall be described and specified using data sheets containing at least the following information.

Absorber (flat plate absorber and evacuated tube absorber)

- Material
- Thickness
- Absorption and emission of the absorber coating
- Connection between absorber plate and piping

Transparent cover (flat plate absorber and evacuated tube absorber)

- Material
- Type (e.g. toughened glass, etc.)
- Thickness
- Surface properties (e.g. structure, coatings, etc.)
- Solar transmission at normal incidence (air mass 1.5)

Insulations (flat plate absorber and evacuated tube absorber)

- Material
- Type (e.g. open porous, closed porous, etc.)
- Thickness
- Density
- Thermal conductivity

Casing (flat plate absorber and evacuated tube absorber)

- Material
- Surface treatment

Heat pipe (evacuated tube absorber)

- Material
- used medium fluid content pressure

Reflector (evacuated tube absorber)

- Material
- Surface treatment (polished, coated, etc.)
- Reflectivity

Heat conductive paste (evacuated tube absorber)

- Information about the use of heat conductive paste
- Technical specifications

2.4 Label and installer instruction manual

The collector label and the installer instruction manual shall fulfil the requirements of the EN 12975.

3. Factory production control

Now empty, will be updated with content from previous Annex E.

All information in EN 12975 prevails.