

A Buyers' Guide to Solar Water Heaters

Installing a solar water heater is not very complicated, however it is not a do-it-yourself job for most people. There are important decisions to make, including system size and design, and it is important to know what works best for a particular home and location.



Quality is of paramount importance when choosing a solar water heater and an installer. REIO recommends that you opt for solar components (panels and storage tank) that have been certified to ensure the maximum level of efficiency and reliability. The following quality labels ensure compliance with the relevant European standards (*) as a minimum. Ask for a copy of the certificate of compliance from your supplier.

Quality Certificate	Description
	<p>Solar Keymark Country of Origin: Europe Web: www.estif.org/solarkeymark</p>
	<p>Solar Energy Centre Denmark Country of Origin: Denmark Web: www.solarenergycentre.com/testing_advice.asp</p>
	<p>DIN Geprüft Country of Origin: Germany Web: www.en.dincertco.de/sixcms/detail.php3?id=1809</p>
	<p>CE Mark Country of Origin: Europe Web: http://www.nsai.ie/Standards/EU_Directives/CE_Marking.html</p>

(*) Relevant European standards include EN 12975 (for solar thermal collectors) and EN 12976 (for factory made solar thermal systems).

Questions to ask to your supplier and installer

REIO has put together this list of questions you should ask when engaging suppliers and installers as a prospective buyer. It is in your best interest to make sure you are satisfied that all your questions are answered.

Sizing and design

- How are your hot water requirements calculated and how is the solar water heater sized?
- Is the solar system configured according to the manufacturer's specifications?
- What percentage of your hot water requirement will be covered by the solar water heater?
- Is the location of the solar panels (orientation, tilt, visual aspect) appropriate?
- Is there any disruption of the building structure required to install the system?
- How is back-up heating going to be provided?
- Is the system regulated to bring the hot water to 60 °C at least once daily?

Equipment

- Are the solar panels and storage tank certified by a quality label and a CE compliance label (**see front page**)?
- Are all the flashing and fixing components for the panels provided?
- Do all the materials used conform to the solar system manufacturer's specifications?
- Is the system protected against overheating, freezing and excessive pressure?
- What is the performance rating of the solar collectors under expected operating conditions?

Costs and payment

- What elements (equipment and labour) are covered by the quotation? Is there additional cost?
- What is the range of annual savings under average conditions?
- What are the financing options or payment terms?

Installation

- Does the dealer offer delivery, installation, commissioning and after sales service?
- What is the training or accreditation of the installers involved in the installation?
- Which trade associations do the installers belong to?
- Has the contractor installed a solar water heater in his house?
- How many systems has the dealer installed; are local references available?
- How much of the installation will be sub-contracted?
- Who is ultimately responsible for what segments of work?
- How long will the installation take?

Commissioning

- Who cleans up inside / outside?
- Who is responsible for commissioning the system?
- What are the procedure and tests carried out when commissioning the system?

After-sales services

- What is the manufacturer's or supplier's warranty for each component of the system?
- What guarantees / warranties are provided for the installation?
- Is an annual service contract available from the supplier?
- Is full documentation, including the user's manual, provided?
- How does the dealer provide emergency service work if required?

Visit www.sei.ie/reio.htm for further information, including our range of publications and contact lists on solar water heaters and other renewable energy technologies.