

Frequently Asked Questions (FAQs)

Request for Variance from Mandatory Solar Water Heater

Effective of January 1, 2010, ALL NEW single-family dwellings built in the State of Hawaii are required to have a solar water heater (Act 204, June 26, 2008, now HRS 196-6.5).

If your building plans do not include a solar water heater, then you must request a "variance" (exemption) from this state law. Submit a "Request for Variance from Mandatory Solar Water Heater" to DBEDT. This form must be signed and stamped by a professional architect or mechanical engineer licensed to do business in the State of Hawaii (Hawaii Revised Statutes Chapter 464).

Please go to the following web site for the forms needed for a variance.

<http://energy.hawaii.gov/resources/planning-policy/solar-water-heater-variance>

There are links to the Request for Variance form and, if needed, the accompanying life cycle cost comparison worksheet. Completed, stamped and signed Requests and LCC comparison worksheets should be e-mailed to dfenn@dbedt.hawaii.gov (please put "SWH Variance" in subject box), or faxed to 808-586-2536 (Attn: Denise Fenn, Subject: SWH Variance).

Frequently Asked Questions (FAQs)

I do not want to install a solar water heater on my new Hawaii home. Where do I get a Request for Variance from Mandatory Solar Water Heater?

Go to the following website:

1. <http://energy.hawaii.gov/resources/planning-policy/solar-water-heater-variance>
2. **To whom do I submit the Request for Variance from Mandatory Solar Water Heater?**

Completed, stamped, and signed Requests should be e-mailed to dfenn@dbedt.hawaii.gov (please put "SWH Variance" in subject box), or fax to 808-586-2536 (Attn: Denise Fenn, Subject: SWH Variance).

3. **If I do not want to install a solar water heater on my new Hawaii home, what are my options?**

There are two options:

- a. Power your home with a renewable energy technology (as defined in Hawaii Revised Statutes 235-12.5):
 - 1) Photovoltaics
 - 2) Solar Thermal
 - 3) Wind
- b. Install a gas-powered, tankless, instantaneous (on-demand) water heater that is certified by the Underwriters Laboratories (UL-certified). If you choose this option, you must also install at least one other gas-powered appliance.

4. **If I choose to have a gas, tankless, instantaneous (on demand) water in my new home instead of a solar water heater, am I required to also install another gas-powered appliance?**

Yes, at least one other gas appliance must be installed in your home if you choose the gas, tankless, instantaneous water heater option.

5. **Must the Request be completed by a licensed architect or licensed mechanical engineer?**

Yes. The Request must be signed by a licensed architect or licensed mechanical engineer authorized to do business in the State of Hawaii according to Hawaii Revised Statutes Chapter 464. He/she must also stamp the Request with his/her architect/engineer stamp.

6. **Can a licensed structural engineer substitute for a mechanical engineer?**

No. The engineer who signs and stamps the Request must be a MECHANICAL engineer licensed under Hawaii Revised Statutes Chapter 464.

7. **How do I know if the gas, tankless water heater I want to install is “UL-certified?”**

The Underwriters Laboratories, Inc., label is usually printed on the outside of the box, on the water heater, on the instructions manual, or on a brochure or specification sheet for that water heater. It is always good to check with the manufacturer and have printed evidence that the model you are using is UL-certified.

A UL website lists eight companies that have UL-certified, gas, tankless water heaters at this website:

<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.html>

- a. Type LUVK into the “UL Category Code” box
- b. Click on “Search” button.
- c. The next UL “Online Certifications Directory” page lists companies that make UL-certified instantaneous gas water heaters (8 companies are listed). The names are linked to lists of the UL-certified gas tankless water heaters. Some of the water heaters are for commercial buildings, so be careful

8. **How can I find a “UL-certified” gas-powered, tankless water heater?**

Go to the UL website listed above in Question #7.

9. **When do I use the “Water Heating Life Cycle Cost Comparison” spreadsheet?**

Your licensed professional will need to use this spreadsheet if you do not choose from the options listed in Question #3 and want to install a regular electric or gas water heater.

The licensed professional must show that installing a solar water heater is impractical due to poor solar resource, and/or installation is not cost effective based upon a life cycle cost-benefit analysis that incorporates the average residential utility bill and the cost of the new solar water heater system with a life cycle that does not exceed 15 years.

The Life Cycle Cost Comparison spreadsheet will automatically calculate when using a computer with the Microsoft "Excel" program.

Send the Life Cycle Cost Comparison along with the Request for Variance to the name and address listed in Question #2 above.

10. Where do I find the "Water Heater Life Cycle Cost Comparison" spreadsheet?

<http://energy.hawaii.gov/resources/planning-policy/solar-water-heater-variance>.

11. How long does it take for a Request to be processed?

Usually about two weeks, depending upon holidays or other workload involved, but the law gives DBEDT **30 working days** to respond.

12. Where can I get a copy of the Hawaii State Law that mandates solar water heaters on all new Hawaii homes beginning January 1, 2010?

http://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0196/HRS_0196-0006_0005.htm

13. How do I find out the specifications to qualify for a solar water heater system rebate?

The specifications to qualify for a solar water heater system rebate in Hawaii were developed by the State of Hawaii Public Utilities Commission (PUC). Please see the following PUC web sites:

- a. PUC page listing all the links regarding SWH standards:
<http://puc.hawaii.gov/industries/Energy/swhs/>
- b. **The specific standards.** In the link entitled, "[Decision and Order, filed October 29, 2009](#) ...," the actual requirements begin on page 36 of the PDF (page 35 of the printed document), Exhibit 1.

The "Solar Collector BTU/Day Output by Hawaii Sunshine Zone, Attachment A," which begins on page 56 of the PDF, was updated in the link entitled, "[Agreed-Upon Revised Output Tables, Updated November 30, 2009](#)"

14. If I have more questions, who do I ask?

Send your questions to the e-mail address or fax number listed in Question #2.