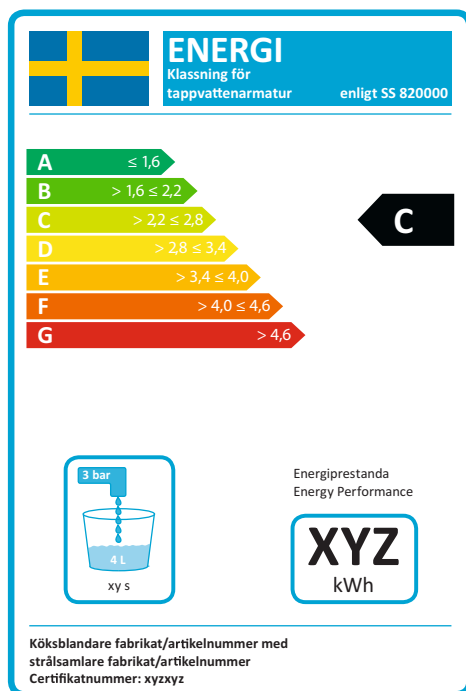


ENERGY LABELLING OF DOMESTIC TAPS

Energy labelling schemes for handbasin and kitchen mixer taps and thermostatic shower mixer taps are now in use.



Domestic users can save up to 40% of their energy use for water heating by installing energy-efficient taps, mixers and shower valves. Field trials and laboratory tests have shown that there are major differences in energy use between products from one maker and another, and also between different types of taps, mixers and shower valves.

Tap and valve manufacturers, construction companies, property-owners, public authorities and other parties involved have developed an open and voluntary classification and labelling system for sanitary tap ware.

The labelling is of the same type as used for white goods, and is intended to provide impartial help for purchasers, installers, energy advisers and consumers when choosing energy-efficient tap ware.

The Swedish Energy Agency has assisted with financing the labelling scheme. The EU is working on plans to require energy labelling of taps and mixers.

The label ratings are based on standardised laboratory tests and certification rules.

For further information on the energy labelling systems and classed products, see:

www.kiwa.se/Swedcert

HOW ENERGY LABELLING TESTING IS PERFORMED

A system for energy labelling of energy-efficient sanitary tap ware has been developed.

Classification and labelling of the energy efficiency of domestic tap sanitary tap ware is a voluntary system to indicate the performance of all taps and similar items that meet the requirements of certification rules and standards.

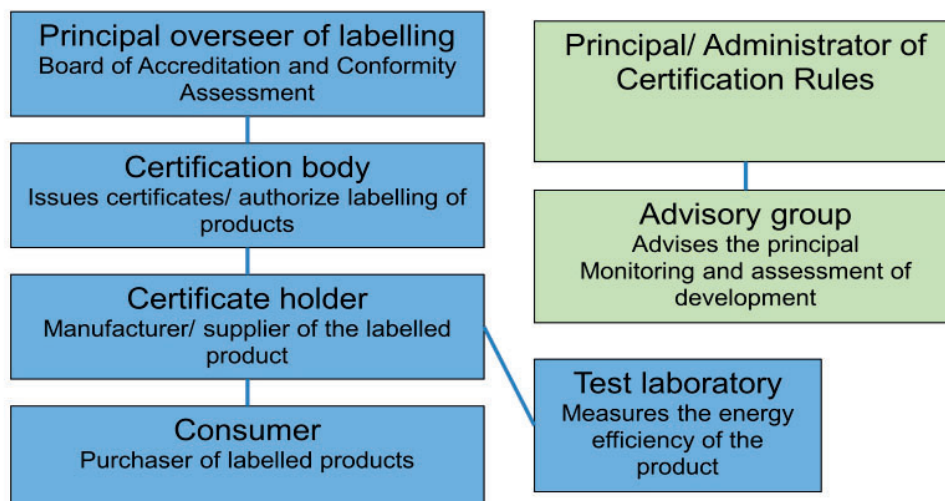
After approval of the energy class of a product by an accredited certification body, manufacturers may label their products to show the approval class. Products carrying such labelling must have successfully passed laboratory testing.

Swedish Standard document "Certification Rules for Energy Classification and Labelling of Domestic Water Taps" describes the requirements for energy classification and labelling of domestic water taps and similar items.

The main requirements of the rules are:

- ▶ Approved testing in accordance with Swedish Standards SS-EN 817 or SS-EN 1111.
- ▶ Approved testing in accordance with Swedish Standards SS 820000 or SS 820001, for determination of the energy efficiency of domestic taps by test laboratories accredited in accordance with EN ISO 17025 or equivalent.
- ▶ The manufacturer must operate a quality management system in accordance with EN ISO 9001 or equivalent.

The aim is that energy labelling of sanitary tap ware should be extended to full European level.



The certification and labelling process.

HOW ENERGY EFFICIENCY IS TESTED

The overall objective of energy classification is to encourage the development of designs that improve energy efficiency, rather than simply limit water flow, i.e. so that the user uses less hot water for the same function.

The following standards describe how laboratory tests for measuring and calculating energy efficiency must be carried out:

- ▶ SS 820000 Sanitary Tapware - Method for Determination of the Energy Efficiency of Mechanical Basin and Sink Mixing Valves.
- ▶ SS 820001 Sanitary Tapware - Method for Determination of Energy Efficiency of Thermostatic Mixing Valves with Shower.

Mixer Valves with showers.

These two standards specify the required procedures for measuring and calculating the energy efficiency of the products.

Energy efficiency is calculated from the measured quantity of energy use for specific defined activities. The requirements for each activity are defined in terms of the setting of the control handle/lever, the flow rate, mixer water temperature, supply pressure, supply temperature and duration of water flow.

Energy use of all the individual tests is summed to give the total energy use of a mixer tap.

This summed energy use value then defines the energy class of handbasin mixer taps, kitchen mixer taps or thermostatic shower mixer taps.



Classification is based on laboratory testing.

FURTHER INFORMATION AND CONTACTS

Certification rules and standards for testing the energy efficiency of domestic hot water taps have been produced by SIS, Swedish Standards Institute Technical Committee TK 519, Energy Labelling of Domestic Water Taps.

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