

A Step by Step Guide to Labelling of Gaseous Fuel Local Space Heaters (Part 2)

Hopefully you will have read Kiwa Gastec's informative Step by Step Guide to Energy Labelling of Gaseous Fuel Local Space Heaters (Part 1) and are aware of the actions you need to take to affix Ecolabel to your gas appliances by 1st January 2018. The linked Regulation -2015/1186 - Ecodesign requirements for local space heaters - will come into force on the 1st January 2022.

In addition to establishing minimum efficiency requirements, the regulations also stipulate specific eco-design requirements for a maximum limit of 130 mg/kWh_{input} (Gross Calorific Value (GCV)) for the emission of nitrogen oxides (NO_x).

Which appliance types are included?

All gaseous fuel local space heaters (gas fires) with a nominal heat output of 50kW or less, including Inset Live Fuel Effect (ILFE) appliances, Live Fuel Effect (LFE), Decorative Fuel Effect (DFE) appliances and Independent Gas Fired Convection Heaters (freestanding stoves). The regulations include appliances installed in workshops, and decorative appliances. Some exceptions exist – for example: external appliances, sauna heaters, air heaters and products where the direct heat output is low – but the majority of gaseous fuel local space heaters, will be required to comply with the Regulation:

Commission Delegated Regulation (EU) 2015/1186 – energy labelling of local space heaters

What are the requirements?

Efficiency

From the 1st January 2018 seasonal space heating energy efficiency shall not be less than:

- 42% for open fronted local space heaters using gaseous and liquid fuel.
- 72% for closed fronted local space heaters using gaseous and liquid fuel.

All efficiencies are calculated using net calorific values. Please note that these efficiencies are not the traditionally reported efficiency, but are calculated as an Energy Efficiency Index (EEI) as described in the Part 1 article.

Is my appliance likely to meet the future NO_x emission requirement?

The measurement of NO_x has not been mandatory to demonstrate compliance with the emissions requirements of Gas Appliance Directive 2009/142/EC (soon to be replaced by Gas Appliance Regulation (EU) 2016/426), so depending on your appliance type, and the standard to which it was approved; manufacturers may not have had this routinely measured as part of the CE approval process. If requested, NO_x emissions can be measured as part of the CE approval process, and we recommend that they are included in your future test programs. By including the NO_x measurement in your product test program, you will be able to establish NO_x emissions from your appliances and whether they will comply with the 2022 limit. By measuring your appliance emissions now, there is time to take corrective action, where necessary, to ensure that you meet the NO_x emission limit in 2022.

Requirements for product information

From the 1st January 2022, manufacturers, their authorised representatives and importers will be required to include on websites, installation and user manuals for each product the seasonal efficiency and emissions described above at nominal and possibly minimum output. Various other technical detail may be required relating to electricity consumption, heat output/temperature controls etc. Full details can be seen in Table 1 of the regulation.

How will the ErP be policed?

Enforcement of the new regulations will be carried out by national Market Surveillance Authorities (MSA's), which in the UK is the National Measurement and Regulation Office (NMRO), through product testing and market surveillance. Installers or manufacturers identified as non-compliant could face legal action and criminal prosecution.

Fines for misreporting the energy efficiency rating can be unlimited, but will be closely related to the diligence that can be demonstrated in producing the efficiency measurements. Experience in other product sectors has shown the severity of enforcement sanctions.

Where to get advice on ErP compliance and emission tests?

There are many sources of information on the topic – The European Union (EU) Energy Efficient Products website, Department of Energy and Climate Change (DECC) website, HETAS and the Stove Industry Alliance (SIA), but Kiwa Gastec has vast experience testing a variety of gas appliances. We are a United Kingdom Accreditation Service (UKAS) accredited test laboratory (No. 0692) for product testing under the Gas Appliance Directive 2009/142/EC (soon to be replaced by Gas Appliance Regulation (EU) 2016/426) and we would be happy to offer any assistance that you might require to help you to calculate Energy Efficiency Index (EEI), populate product fiches and generate energy labels.

What to do next?

To get advice on meeting emissions limits for solid fuel appliances, or to book your appliances into our test labs, please call us on 01242 677877 or email enquiries@kiwa.co.uk