



# Eco-Design “LOT 20” Legislation 2018 – Requirements and Intelli Heat Compliance

Current UK fuel poverty levels demonstrate that heating our homes can be prohibitively expensive. As ultra-efficient technology has continuously squeezed every watt of saving possible from our lighting, our kitchen appliances, our entertainment and IT systems and even our vacuum cleaners! Many of us have somehow missed out on the reel key to energy saving in our homes and offices! The electric heating system...

All the latest Intelli Heat smart radiator systems are fully compliant with “Lot 20” of the New E.N. ECO DESIGN Legislation for Energy Related Products compliance.

“All local space electric heaters manufactured for sale in the EU after 1st January 2018 which use electricity, or liquid fuels, must comply with a minimum efficiency standard. This includes electric radiators, electric under floor heating and electric and gas fires.”

## What does this mean?

Very basically... From 1st January 2018 all electric space heaters sold in the UK must meet a set of minimum efficiency standards, this means that at the very least all heaters will have to incorporate intelligent room temperature controls to minimise wasted energy and comply with Energy Related Products Regulations (ERP). Essentially, Lot 20 demands that all electric space heaters sold after the 1st of January 2018 must incorporate intelligent room temperature controls to minimise wasted energy.

Since 1st January 2018 all electric space heaters sold in the UK must meet a set of minimum efficiency standards, this means that at the very least all heaters will have to incorporate intelligent room temperature controls to minimise wasted energy. The Cali Sense compliant to the Eco Design legislation, and indeed exceed, all the requirements of Lot 20.

To be LOT 20 compliant, heaters must include amongst other things, three key features:

24/7 time and temperature control, either built in or through wireless/WIFI APP.

Electronic thermostatic control for accurate room temperature measurement.

Open window/door recognition so the heater can reduce usage should the user leave a door or window open reducing the room temperature rapidly. IntelliHeat products have further incorporated a Triac energy regulator within the smart thermostat system to which allows the heater to choose the time it engages to bring the room up to the required temperature set by the user therefore further reducing energy wastage

This includes such features as the presence detection system which can override set programmes on the radiators where long periods of absence are detected in the area. This mitigates energy wastage from users forgetting to turn off their heating, or reset their programming in specific areas of their dwellings. Effectively the integration of “Lot 20” technological features provides Intelli Heat customers with an average up to 30% saving on energy consumption as compared to storage heater, panel heater or none intelligent control electric heating systems.

## Self learning Thermostat:

latest generation IntelliHeat systems are further equipped with motion sensors which can override the heating programmes where the room remain unoccupied for a preset duration. This is especially useful in guest bedrooms for instance, where a pre-set programs can be applied, the program will be overridden when no movement is sensed in the area for a determined period of time, and the radiators will automatically revert to background mode. (background mode is a variable temperature setting usually at around 14°).

These are all the percentages of energy savings achieved by adding all the eco-design features which on its own is 16.2 % in comparison to storage heaters:

- +7% for an electronic room temperature control plus week timer.
- +5% for an electronic room temperature control plus day timer.
- +3% for electronic room temperature control.



- +1% mechanical thermostat room temperature control.
- +3% for room temperature control with open window detection.
- +1% with distance control option.
- +1% with adaptive start control (eg. Wi-Fi compatibility).
- +13% with PRI presence detection.

Intelli Heat will be organising a National Lunch-and-Learn Roadshow to showcase the recent release of the market leading I-Sense Smart Heater Range.

We would be delighted to demonstrate this truly revolutionary smart heating system, so please get in touch regarding your Lunch-and-Learn in your offices.

office@intelligentheat.co.uk | www.intelligentheat.co.uk | www.livingstoneheating.co.uk