

## Changes to UK Building Regulations Approved Documents J, L and F

(extracted from the HETAS newsletter dated July 2010, with kind permission of HETAS Ltd)

Although Approved Document J is the main document in the collection of Building Regulations associated with the installation of combustion appliances, it cannot be stressed enough that you must also comply with the requirements of all the other Building Regulations Approved Documents. There is now a strong inter-relationship between the AD's with changes in one document affecting the regulations in another. It's for this reason that documents J, F and L have been revised at the same time.

### Approved Document J

There are quite a number of changes in approved document J; many are updated references to the new BS EN standards that have replaced withdrawn British Standards. Further guidance and explanations have been added. There are also important changes that you must take account of when you install appliances after 1st October. The current "Use of Guidance" section giving 1½ pages of guidance has been split into two sections "What is an Approved Document" and "The requirements" giving 5 pages of guidance and information. This expansion has allowed new topics such as Notification of Work, Independent schemes of certification and accreditation, the clean air act and Maintenance to be added. I urge you to become familiar with them, they are important to your role as an installer.

The main changes to the installation requirements for solid fuel are: requirement J2A will make it compulsory to install a Carbon Monoxide alarm with every solid fuel or biomass installation. Paragraphs 2.34, 2.35 and 2.36 on page 41 give guidance on the type of alarm to be fitted and the position of the alarm within the room the appliance is installed into.

Air supply to solid fuel appliances, detailed in Table 1 on page 29, has changed. The changes have been made to account for the lack of adventitious air supply in modern airtight houses. This will mainly apply to houses built after 2006 when Building Regulations required builders to account for the unintentional air leakage of houses in the SAP CO<sub>2</sub> calculation. As an installer you will be required to find out the design air permeability of the house, it should be in the information pack left with the initial purchaser. If the design air permeability isn't known, the house builder must be contacted for the information. Once you know the design air permeability, if it is equal to, or less than, 5m<sup>3</sup>/m<sup>2</sup>h (this means the house will leak 5 cubic metres of air per hour, for every square metre of external surface, when the house is pressurised to 50 pascals), you will need to: on an appliance with a flue draught stabiliser, add permanently open air vents of 850 mm<sup>2</sup>/kW of appliance rated output (a 4 kW appliance will require ventilation openings of 3400 mm<sup>2</sup>). On an appliance without a flue draught stabiliser, add permanently open air vents of 550 mm<sup>2</sup>/kW of appliance rated output. There is no change to the current requirements if the design air permeability is more than 5m<sup>3</sup>/(.m<sup>2</sup>).

Some clarification has also been added to the size of flues in Table 2 on page 30. A smoke control exempt wood burning stove can now be installed with a 125 mm flue.

Pellet stoves or boilers must be fitted with a 150 mm flue unless they have an exemption for use in smoke control areas. If the pellet appliance is exempt it can be used with a 125 mm flue and if the flue requirements of the exempt appliance are proven by calculating to BSEN 13384-1: 2002 you can reduce the flue to a minimum size of 100 mm.

### Approved Document L

There are a number of requirements in this document that an installer must be aware of. It is a legal requirement to only fit an appliance that meets the minimum gross efficiency detailed in the Domestic Building Services Compliance Guide. You can satisfy this requirement by using HETAS approved appliances as we have checked that they comply with UK environmental and safety requirements and publish the verified gross efficiency. If you use an appliance that is not HETAS approved, you must carry out a check to see that it has been correctly tested by a notified test laboratory to the relevant BSEN standard. The test reports record the efficiency as a net value; you therefore need to carry out a calculation to convert the net efficiency from the test report to the UK required gross efficiency. It is illegal to install an appliance that does not meet these minimum requirements and if you install an appliance that is not HETAS approved the onus is on you to make sure these requirements are met. If you install an appliance without knowing its efficiency value, you will most likely be breaking the law.

The same requirement for minimum gross efficiency also applies in the refurbishment sector. In the updates to these regulations there have been some changes to the CO<sub>2</sub> ratings of fuels. This affects you if you fit a biomass/solid fuel appliance in a house where that appliance takes all or some of the primary heating role. The appliance should be no worse than 2% lower than the efficiency of the appliance you are replacing. If a fuel switch takes place (e.g. changing from oil to dual fuel) the CO<sub>2</sub> emission factor of the fuels must also be taken into account. In this situation you must carry out a calculation to ensure the energy efficiency requirements are met. Details of the efficiency and fuel switching calculation are provided in the Domestic Building Services Compliance Guide which can be downloaded from the CLG website [www.planningportal.gov.uk/uploads/br/domestic\\_building\\_compliance\\_guide\\_2010.pdf](http://www.planningportal.gov.uk/uploads/br/domestic_building_compliance_guide_2010.pdf)

### Approved Document F

As with previous versions of ADF, permanently open combustion ventilators can count towards the dwellings ventilation requirements, but closable trickle ventilators cannot count towards combustion ventilation.

Note: *This is only intended as a brief introduction to some of the changes to the Approved Documents. As a HETAS installer, you are required to read and understand them all in their entirety.*