



F Gas Regulations Update: Do your business use air conditioning, heat pumps, or refrigeration?

If so, you should read this....

The European Union's F-gas Regulation No 842/2006 became law on 4 July 2006. This imposes obligations on "operators" of this equipment from 4 July 2007 that you should know about. F-gases include HFCs, which are the commonest refrigerants in use today. The Regulation aims to minimise emissions of these gases, which affect global warming if they escape into the air.

User responsibilities

"Operators" are defined as the people or organisations that have actual power over the technical functioning of the equipment. The legal responsibility for compliance with the Regulation lies with the operator. For further details of the definition of the operator see the DEFRA Guidance for Users. Any equipment small enough to plug in rather than have to be permanently wired is likely to be excluded from the requirements, other than an overall requirement to prevent leakage and to repair any leaks as soon as possible.

For stationary refrigeration, air conditioning and heat pump units over 3kg charge (6 kg if hermetic), operators must

- Prevent leakage, and repair any leaks as soon as possible
- Arrange proper refrigerant recovery by certified personnel during servicing and disposal
- Carry out leak checks to the schedule shown below
- Ensure that only certified competent personnel carry out leakage checks
- Maintain records of refrigerants and of servicing

For non-stationary equipment (e.g. mobile units on trucks) and any other products containing F-gases, operators must ensure that appropriately qualified personnel are used to recover gases, as long as this is feasible and not excessively expensive.

Leak checking schedule

The leak checks must be carried out according to the procedure laid down by the Commission in October 2007 (Industry guidance is available from the Institute of Refrigeration at http://www.ior.org.uk/ior/_images/pdf/se/bulletin%2028%20f%20gas%20leak%20checking.pdf or you can download the full text of the leak check regulation at <http://www.dti.gov.uk/innovation/sustainability/fgases/page28889.html>

The schedule for leak checks varies depending on the amount of refrigerant in the system, as follows:

- At least annually for applications with 3kg or more of F-gases (unless the equipment is hermetically sealed and labelled as such, in which case the threshold is up to 6kg). For a definition of hermetically sealed see the DEFRA Guidance for Users at <http://www.defra.gov.uk/environment/climatechange/uk/fgas/pdf/suppguidance-refrigeration.pdf>
- At least once every six months for applications with 30kg or more of F-gases
- At least once every three months for applications with 300kg or more of F-gases
- Leakage detection systems must be installed on applications with 300 kg or more of F-gases, and when these are in place, checking requirements are halved

- If a leak is detected and repaired, a further check must be carried out within one month to ensure that the repair has been effective

Maintenance and servicing records

Operators of all stationary systems containing 3kg or more of F-gases must maintain records including

- Quantity and type of F-gases installed, added or recovered
- Identification of the company or technician carrying out servicing and details of the Operator
- Dates and results of leakage checks, specifically identifying separate pieces of equipment containing 30kgs or more of refrigerant

It is the operator's responsibility to ensure that the relevant servicing personnel have obtained the necessary certification, which shows that they understand the regulations and are competent.

A sample equipment register is available from ACRIB at

http://www.acrib.org.uk/web_images/documents/system%20record%20keeping.pdf

How to know how much F-gas is in the system

The system should be labelled with this information, but if not, you can estimate this using a Calculator provided by UK Government at <http://www.defra.gov.uk/environment/climatechange/uk/fgas/pdf/refrigerantcalculator-v1-4.xls>

Need to find out more?

- The Government Department BERR has set up a website with Frequently Asked Questions, up to date Guidance and a copy of the Regulation at www.dti.gov.uk/innovation/sustainability/fgases/page28889.html.
- The Air Conditioning and Refrigeration Industry Board is an umbrella body for trade bodies and professional associations in the refrigeration and air conditioning industry. It has been helping UK government with technical aspects of the regulation and promoting requirements within the industry. The ACRIB website contains links to the Government Department sites (DEFRA and BERR) where you can see the full text of the regulation and download detailed guidance.

See www.acrib.org.uk