

We tell you everything you need to know about the F-Gas regulations

This is your essential guide to EU F-Gas Regulations: why they exist, what your legal obligations are and how Adcock can ensure that you meet them – completely, conveniently and cost-effectively.

For any enquiries and requests for advice that you have regarding F-gas, please go straight to the final section of this guide, email f-gas@adcock.co.uk or call the service department of your local branch (contact details at end of guide).

What is F-Gas?

F stands for fluorinated, and F-Gas is the term used to describe a particular family of fluorinated gases which are widely used as refrigerants in air conditioning and commercial refrigeration systems (as well as in many essential appliances such as fire extinguishers and medical inhalers). This family of fluorinated gases is subject to stringent EU and national regulations drawn up in response to the Kyoto Protocol.

The F-gases most commonly used as refrigerants in commercial refrigeration and air conditioning [RAC] equipment are hydrofluorocarbons [HFCs], but the F-Gas family also comprises:

- Perfluorocarbons [PFCs]
- Sulphur hexafluoride [SF₆]

F-gas refrigerants are sometimes referred to by their 'R-numbers' (such as R134a, R407c, R404A and R401A, etc) and also by a variety of trade names (such as Suva, Isceon, Forane and Harp, for example).

Why the legislation?

The purpose of the F-Gas legislation and regulations (which are being regularly updated since their initial introduction in 2006) is to reduce and, as far as possible, prevent F-gas emissions. This is because F-gases are classified as having 'global warming potential' [GWP] because of the significant greenhouse effects which they exert if leaked into the atmosphere.





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Is F-Gas unsafe?

It is important to note that, when responsibly used and properly contained, F-gases are safe.

Containment is the key issue as concerns about their environmental impact relate solely to their GWP if leaked. F-gases in general are both energy-efficient and readily recyclable, and HFCs in particular are widely accepted as having made a positive contribution to reducing environmental damage, through their widespread replacement of CFCs.

F-gases can also be re-claimed (subtly different from recycling) and, when no longer useable, they can be destroyed by means of a specialist incineration process which breaks them down into chemicals which do not have a greenhouse effect.

What are the F-Gas regulations?

- EU Regulation 842/2006
- The Fluorinated Greenhouse Gases (FGG) Regulations 2009 (Statutory Instrument No 261)
- ... are the EU and national regulations respectively by which organisations in the UK must abide.

These regulations make the 'operators' of equipment containing F-gas legally responsible for key obligations (see below), with 'operators' defined as follows: "Operator means the natural or legal person exercising actual power over the technical functioning of the equipment and systems ..."

Statutory Instrument No 261 details penalties applicable in Britain to operators who infringe the regulations.

What the regulations oblige you to do

Essentially, the regulations make all operators of equipment containing F-gas legally responsible for:

- 1. taking all technically feasible steps to prevent F-gas leakage from all systems; having any detected leakage repaired as soon as possible and having repairs checked after one month to ensure that they're successful;
- having leakage checks conducted on all systems at regular intervals (ranging from quarterly to annually according to the quantity of refrigerant in the system);
- 3. having approved automatic leak detectors fitted on systems using 300kg or more of refrigerant and subjecting the detectors to annual functionality checks;
- 4. maintaining precise records and, where required, making these available to the regulator (the Environment Agency or your local authority) or the European Commission; these include, for example, the quantity and type of refrigerant installed in each system, the quantities added and recovered during maintenance and servicing, details of leaks and repairs, plus key identification details relating to the service engineer;
- 5. recovering F-gases during servicing and routine maintenance of your plant at the end of its life for re-use, reclamation or destruction;
- 6. having new equipment labelled adjacent to service points with details of the type and quantity of F-gas contained within it;
- 7. never using or selling non-refillable containers for transporting or storing F-gas refrigerant.

The regulations also stipulate the qualifications and certification which operators must ensure are held by personnel involved in carrying out all tasks in relation to their F-gas equipment. (See What the regulations oblige us to do for details.

The above is an outline of what you are legally obliged to do. For more detailed information go to http://www.defra.gov.uk/environment/quality/air/fgas.

For details of how we can relieve you of all pressure associated with the above regulations and ensure that you are totally compliant, please see How we can ensure that you fulfill all your legal obligations with regard to F-Gas on the next page.





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F-Gas Regulation exemptions

There are exemptions to some of the above regulations for non-stationary systems (such as refrigerated lorries and containers) and systems using less than 3kg of refrigerant (such as very small chiller units). If you are unsure whether or not your equipment qualifies for some exemptions please email us at f-gas@adcock.co.uk and we will contact you to confirm.

What the regulations oblige us to do

As of July 2009, all companies offering installation, commissioning, servicing, maintenance and leak testing services for stationary refrigeration, air conditioning and heat pump equipment containing refrigerants covered by the F Gas Regulations must be registered with REFCOM. Our registration number is REF 1005647. For more information please go to www.refcom. org.uk

As of July 2011, all personnel carrying out installation, commissioning, servicing, maintenance and leak testing services for stationary refrigeration, air conditioning and heat pump equipment containing refrigerants covered by the F Gas Regulations must hold either the latest City & Guilds 2079 qualification or CITB J01. All Adcock engineers hold City & Guilds 2079.

How we can ensure that you fulfill all your legal obligations with regard to F-Gas

When we maintain your equipment for you we ensure that you meet all your F-gas legal requirements as a matter of course.

Entering into a maintenance agreement with us, for us to service your equipment regularly twice or more each year (according to equipment and refrigerant), automatically takes all the pressure off you.

So, the obligations might sound onerous, but they needn't be! And the good news is that:

- Our maintenance services offer great value for money.
- A well-maintained system does more than keep you on the right side of the law: it costs you less to run because it is more energy efficient and because gas leaks are potentially very expensive (when you consider that a single kilo of HFC costs roughly the same as a decent bottle of whisky!)
- The latest government (DEFRA) report on the impact of the F-Gas Regulations in the period 2008-2012 showed their positive contribution to the successful achievement of emission reduction targets under the Kyoto Protocol.

In short, many of the F-gas legal requirements promote good practice and can benefit you financially as well as benefitting the environment.

Full F-Gas survey

If you have any equipment on your premises that you are concerned about we can conduct a full F-gas survey. We can then advise you on everything that you need to do in order to comply with legislation and also on the various issues (including cost and energy efficiency) that you might wish to take into account if you want to replace the equipment.

Please email us at f-gas@adcock.co.uk and we'll contact you to arrange a convenient time for us to conduct the survey. Alternatively, please contact the service department of your local Adcock branch (contact details on next page).



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What to do next

Contact the service department of your local Adcock branch and they will be pleased to discuss your concerns, offer advice and provide whatever service is required to ensure that your equipment is fully compliant.

For more information

For more information about any aspect of the F-Gas Regulations, please email us at f-gas@adcock.co.uk or go to http://www.defra.gov.uk/environment/quality/air/fgas

We've helped dozens of organisations up and down the country to fulfil their legal obligations with regard to F-Gas – completely, conveniently and cost-effectively. Call us now and we'll do the same for you.



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