



# Godfrey Lappage Green 2020



F-Gas

Energy Saving Solutions

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Godfrey Lappage Simplifying a Healthy and Green Environment

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**GL Green**

## F-Gas Registration

Godfrey Lappage are an F-Gas registered company employing engineers who are also F-Gas registered. F-Gas registration is compulsory for all businesses and engineers who service or maintain refrigeration and air conditioning equipment. The regulations for F-Gas regulations have been updated over the years and we always make sure that our engineers are fully up to date and fully aware of all of the latest information regarding training and new technical bulletins.

## Air Conditioning Energy Assessment

Having an air conditioning system inspected by an accredited air conditioning energy assessor is designed to improve efficiency, reduce energy consumption, operating costs and the carbon emissions of the system. The energy assessor will highlight improvements to the operation of existing systems or opportunities to replace older, less energy efficient systems or oversized systems with new energy efficient systems. Godfrey Lappage would also explain any other options or improvements which can be made to assist in the reduction of energy usage and therefore a reduction in a businesses financial outlay.



## Energy Saving Solutions

With the increasing costs of gas and electric for all businesses, energy saving has never been more visible as it is today. Due to the fact refrigeration equipment usually runs 24 hours a day, 7 days a week and 52 weeks of the year, the energy cost for the usage of refrigeration in any business is constant. Therefore the refrigeration and air conditioning manufacturers have looked into these areas and through a lot of research and development various options are now available to reduce high energy costs. Godfrey Lappage can offer their advise on the many ways that are available in todays market to lessen the financial burden for all businesses through these reduced energy saving solutions. Our team are always on hand to help and enjoy seeing our clients expenditure decrease through good management, monitoring and controlling of their equipment.



## Godfrey Lappage F-Gas Policy Information



### Godfrey Lappage F-Gas

- Company Registered
- Engineers Fully Trained
- Vehicles fully stocked with correct equipment
- Different Refrigerant Available
- Full Leak Testing Equipment
- F-Gas Recording
- Client Database with F-Gas Details
- F-Gas Labels
- Specialists in Leak Detection Systems



GL F-Gas

**Godfrey and Lappage Services Limited** acknowledges that it has a duty of care to ensure that it holds the widest knowledge and understanding of current and future F gas regulations within the Refrigeration, Air Conditioning and Heat Pump industry.

We will ensure that we comply with all of the requirements of the EC F gas Regulation which requires that companies hold a "**Company Certificate**" if they are undertaking installation, maintenance or servicing of stationary refrigeration, air-conditioning and heat pump equipment that contains, or is designed to contain, F gas refrigerants.

We also acknowledge that only individuals of our team holding a fully accredited certificate will be allowed to work on any refrigeration, air conditioning and heat pump systems where F gas refrigerants are to be reclaimed, recovered, recharged, pressure tested or scheduled leak checking and decommissioning are being carried out. We will ensure that records of all training and qualifications are maintained for any individual of our team undertaking such works and will make such records available to the appliance Operator (*client*) on demand.

It is our policy to advise the Operator (*Client*) of their responsibility to keep records (log book) of the refrigeration equipment they operate, and ensure that leak tests are undertaken on time and in accordance with F gas regulations, as there are penalties for the Operator (*Client*) for non compliance.

It is our policy to take full details of all of our client's equipment when on site so all the correct information is loaded onto our own database system. We can therefore produce full reports of F-gas information upon request by the Operator (*Client*) which may from time to time be required to ensure that they maintain their site log book. The said information is to include appliance identification details, F gas type, base and supplementary charge weights, visit dates, engineer details, visit outcomes, refrigerant reclaim and charge weights. We will also have our online database available so our clients can log onto their own site page and have all their F-gas details available to them at a touch of a button.

## Godfrey Lappage F-Gas Policy

It is our policy to maintain records for all equipment, regardless of the F Gas regulations 3kg boundary weight. This ensures all information can be held should the boundary change and will ensure compliance with the Operator (*Client*) who has adopted a zero tolerance environmental policy.

It is our policy to comply with F Gas regulations and ensure that all refrigeration, air conditioning and heat pump systems which we install, service and maintain have a permanent, indelible label showing the type of F-gas and the total quantity by weight installed in the circuit, plus a refrigerant leak test record label when applicable.

It is our policy when undertaking leak checking to employ the indirect and direct method as described in the F Gas regulations as per the certified engineers decision.

It is our policy that by carrying out the indirect method we use electronic leak detectors or leak fluid/sprays to check for leaks which in the F-gas regulations are only carried out in the direct method. Visual measurement of pressure, temperature, compressor current, liquid levels and recharge volumes will be used as standard.

It is our policy that the direct method could include pressure testing the system. Prior to pressure testing with Oxygen Free Nitrogen (OFN) or another suitable pressure testing gas to check for leakage, fluorinated greenhouse gases shall be recovered or reclaimed from the whole system by personnel certified to recover fluorinated greenhouse gases from the specific type of equipment. We will also require the permission of the Operator (*Client*) first before these types of works can be carried out.

It is our policy that if there are any leak detection systems that have been adapted to the refrigerant in the system that these should be checked and serviced every 12 months so as to keep the system sensitive to concentrations of at least 5 grams per year.

It is our policy that the application of ultraviolet (UV) detection fluid or suitable dye into the circuit shall only be undertaken if the manufacturer of the equipment has approved that such detection methods are technically possible. This shall only be undertaken by personnel certified to undertake activities which entail breaking into the refrigeration circuit containing fluorinated greenhouse gases.

It is our policy that if the leak is not found all other parts of the system shall be inspected until a leak is found.



## F-Gas Certificate

We will ensure that we comply with all of the requirements of the EC F gas Regulation which requires that companies hold a “**Company Certificate**” if they are undertaking installation, maintenance or servicing of stationary refrigeration, air-conditioning and heat pump equipment that contains, or is designed to contain, F gas refrigerants. **Alan Godfrey and Mark Lappage, Managing Directors of Godfrey and Lappage Services Limited** will ensure that an up to date Company Certificate is always held and available as shown .

**Alan Godfrey and Mark Lappage** will also ensure that all individuals undertaking any works that fall under the F Gas regulations are appropriately qualified and hold the correct qualification and certification and that these are recorded and made available for any future request by the Operator (Client).



# FGAS

CERTIFICATION

## STATIONARY EQUIPMENT QUALIFICATION COMPANY CERTIFICATE

Issued in accordance with the Fluorinated Greenhouse Gases Regulations 2015 No 310

**Godfrey and Lappage Services Limited**  
Unit 3  
Abbey Mead Industrial Park  
Brooker Road  
Waltham Abbey  
Essex  
EN9 1HU

The above named company has demonstrated that it employs appropriately qualified personnel in a sufficient number to cover the expected volume of activities in the installation, commissioning, decommissioning, repair, maintenance or servicing of stationary refrigeration, air conditioning and heat pump equipment containing or is designed to contain certain fluorinated greenhouse gases. It has stated that it has the necessary tools and procedures available to the natural persons engaged in activities for which this certificate is issued.

The company is certified to work on all systems under or over 3kg (5 tonnes CO<sub>2</sub> eq) or hermetically sealed systems over 8 Kg (10 tonnes CO<sub>2</sub> eq).

The principle objective of the Regulation EC517/2014 on certain fluorinated greenhouse gases is to contain, prevent and thereby reduce emissions of F-Gases covered by the Kyoto Protocol.

Issue Date: 24 July 2017

Expiry Date: 24 July 2020

For and on behalf of Refcom Certification Ltd,  
appointed by the Secretary of State for the Environment, Food and Rural Affairs.

Company Number: REF1010348



Refcom is a BESA Group Company



GL F-Gas



### Refrigerant Leak Detection

**Refrigerant Leak Detection Systems** are available to suit a varied range of refrigeration and air conditioning equipment and this can range from a small coldroom up to large pack systems serving 16 or more coldrooms. Refrigerant gas leak detection is high on the agenda for many companies, not just the dedicated refrigeration contractors.

Most manufacturing, retail, and storage industries have some form of refrigeration equipment on site and larger offices and public buildings utilise air conditioning. Under the current F-gas regulations it is the responsibility of the site operators (Client) to ensure their equipment is running efficiently and free from leaks. In addition a leak free fully charged refrigeration system operates more efficiently, both making cost savings and being more environmentally friendly.

Godfrey Lappage can supply and install **“Refrigerant Leak Detection Systems”** covering all of the common refrigerants and can be connected to all alarm, BMS or other site management structures due to the output options on the main control panel. These systems are bespoke made and are built to satisfy our client’s requirements and needs.

### Refrigerant Leakage

The F-Gas regulations are an environmental regulation brought into effect on the 4th July 2007, as part of the European unions obligations under the Kyoto protocol. Due to the fact that refrigerant gasses can be harmful to the environment and cause climate change, the F-Gas regulations was brought in to police the reclaim, recovery, disposal as well as recharging of all refrigerants in the refrigeration and air conditioning industry.

The F-Gas regulations were updated in January 2015 and there is an even larger emphasis on refrigerant leak detection to reduce refrigerant loss.

With the rising cost of refrigerant and the high cost to pressure leak test larger systems, **“Refrigerant Leak Detection Systems”** can save thousands of pounds for a diverse rang of businesses.



## Equipment Size

The importance of accurately sized equipment has never been greater. With the increased pressure of saving energy for us all, systems being calculated correctly can reduce excessive running time and therefore decrease all costs. Too many times we are called out to equipment which is consistently breaking down and unreliable, and a fair percentage of these calls are due to the fact that the equipment is incorrectly sized and is either undersized or oversized. We have seen the cheaper option being used on tenders and quotations which generally means that the equipment is smaller, but in the long run the high energy usage, lack of reliability and the downtime becomes more expensive. At Godfrey Lappage we use all of the latest hardware plus our experience and knowledge to ensure all equipment which is provided and installed is perfectly correct.

## System Set Points

By setting the running temperature specifically to suit the type of food stored in your fridge, you can make significant savings. Don't run your refrigerator colder than you need it. Use a fridge thermometer regularly to monitor temperature. All chilled food must be kept below 8°C in accordance with food safety legislation, with all commercial refrigerators set to a maximum of +5°C to ensure this is met. If you are storing dairy items, these will need chilling to the usual manufacturers setting of +1/+4°C. Meat should ideally be chilled to -2/+2°C, whereas Wet Fish should be stored at -1/+1°C. However if you are storing only salad or vegetable items, a temperature of around 6°C will be best, whilst pastry items are ideally stored at +4/+6°C. By setting the refrigerator to the correct temperature your energy usage should drop significantly.



## Godfrey Lappage Energy Saving Solutions

The move over recent years towards energy efficiency, resulting in the ECA Scheme, the Climate Change Levy and the Kyoto Agreement, has made energy efficient kitchen equipment even more important to a diverse range of clientele. This is particularly so in the case of refrigeration, as commercial refrigeration systems are one of the only groups of equipment in the industrial and commercial catering, brewery and food production sector that uses energy 24 hours a day and for most days of the year. Due to the importance of refrigeration storage and with the increasing costs for gas and electricity, the search for energy-saving equipment has stepped up a gear. Therefore a large number of manufacturers are investing in research and development to create various ways to minimize the running times and in turn reducing the energy cost. Godfrey Lappage can advise our clients on the latest technology and new models of refrigeration and air conditioning systems on the market today.



## GL Energy Solutions





## Energy Saving Solutions

Godfrey Lappage can supply and install a variety of Energy managing, monitoring and controlling systems to ensure the energy financial costs are kept to a minimum and savings are maximised. We can supply full electrical and electronic systems to provide full reports and data so our client's can understand and see what are the areas of their business which are cost effective and which areas are costing excessive amounts of money. This would not only be the usual gas and electric supplies but also water savings .

Air conditioning systems and heat pumps are becoming more and more cost effective to run. These are now moving heavily into the residential market where domestic heating and hot water can be supplied by new innovative heat pump systems.

Please contact us and one of our sales team would be more than happy to carry out a site survey to provide you with all the information you would require.

**Email: [sales@godfreylappage.co.uk](mailto:sales@godfreylappage.co.uk) Head Office: 01992 760024**



**GL Energy Solutions**

Godfrey Lappage Simplifying a Healthy and Green Environment

## Air Conditioning Energy Assessment Reports

The purpose of the inspection report is to ensure that the building owner or manager is provided with information regarding the efficiency of the air conditioning systems that they control, together with advice on how to improve the energy efficiency of the system, to identify opportunities to save energy and to reduce operating costs.

The air conditioning inspection report will include at least the following details:

- the likely efficiency of the system and any suggestions made for improvement
- any faults identified during the inspection and suggested actions
- the adequacy of equipment maintenance and any suggestions for improvement
- the adequacy of the installed controls and control settings and any suggestions made for improvement.
- the current size of the installed system in relation to the cooling load any suggestions for improvement.
- summary of the findings and the key recommendations

There is no legal requirement to act on the recommendations. Acting on the advice and key recommendations in the inspection report and rectifying faults or making appropriate improvements, where this is attractive and cost effective, will contribute to the efficient running of air conditioning system, which will contribute to a reduction in carbon emissions and reduce the operating costs for the building occupants. In some cases the costs of providing both heating and cooling may be reduced, in cases where these two systems are unnecessarily in use at the same time due to inappropriate controls or settings.

In many cases it will be clear that the building and systems are already well understood, documented and commissioned, with records available showing that the equipment has been regularly maintained to a good standard. In such cases, the scope of an energy inspection could be reduced in extent and the inspection report brief, with the main content advising on opportunities for load reduction or on alternative solutions not previously considered. In other cases the energy assessor may find it necessary to suggest relatively basic maintenance, such as cleaning or repairs, to equipment whose efficiency has evidently suffered through neglect.

Cleaning operations or adjustments to controls do not form part of the inspection procedure, even where they might be carried out simply and with significant immediate effect to improve efficiency. The inspection is not intended, or expected, to involve any physical work of this nature as this could change the level of professional risk to the energy assessor. Authority to carry out such work would need to be given as part of a separate arrangement by the building owner or manager provided the energy assessor has the necessary competence to do this work. However, the building owner, manager or their representative may well be able to carry out some alterations themselves as the energy inspection is carried out, provided they agree with the assessor's observations.

Most reports are likely to contain advice with a combination of simple low or no cost measures and measures where some investment may be required either to apply the measures, or to investigate the potential to apply measures in more detail. The building owner or manager should also be provided with, or informed of how to obtain, access to advice on the ongoing management of the systems.



## GL AC Energy Assessments



## Air Conditioning Energy Assessment

Having an air conditioning system inspected by an accredited air conditioning energy assessor is designed to improve efficiency, reduce energy consumption, operating costs and the carbon emissions of the system. The energy assessor will highlight improvements to the operation of existing systems or opportunities to replace older, less energy efficient systems or oversized systems with new energy efficient systems. Godfrey Lappage would also explain any other options or improvements which can be made to assist in the reduction of energy usage and therefore a reduction in a businesses financial outlay.

Only air conditioning systems with an effective rated output of more than 12 kw are affected by these regulations. This will include systems consisting of individual units which are less than 12 kw but whose combined effective rated output is more than 12 kw. The effective rated output is the maximum calorific output in kw stated by the manufacturer of the system as deliverable during continuous operation while complying with the useful efficiency indicated by the manufacturer.

## When Air Conditioning Inspections are Required

All air conditioning systems with an effective rated output of more than 12 kw must be regularly inspected by an energy assessor. The inspections must be no more than five years apart. The regulations require the first inspection of the affected air conditioning systems to be carried out as follows:

- For all systems first put into service on or after 1 January 2008, the first inspection must have taken place within five years of the date when the system was first put into service
- For other air conditioning systems, where the effective rated output is more than 250 kw the first inspection must have taken place by 4 January 2009
- For other air conditioning systems, where the effective rated output is more than 12 kw the first inspection must have taken place by 4 January 2011

If you require the full detailed information brochure regarding Air Conditioning Energy Assessments, then please contact one of our team and we would be more than happy to provide you with all the information required.

**Email: [sales@godfreylappage.co.uk](mailto:sales@godfreylappage.co.uk) Head Office: 01992 760024**



## GL AC Energy Assessments

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**Registration No:** 3858926

**VAT Registration:** 714 2976 28

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**GL SERVICE**



**GL SALES**



**GL GREEN**



**GL HSQE**