



Guidance notes to the CER's recently enacted *Gas Works* Regulations

These Guidance Notes should be read in conjunction with:

ELECTRICITY REGULATION ACT 1999 (GAS WORKS) REGULATIONS 2009

Who should read this document

The aim of these Guidance Notes is to act as an aid to any person or organisation involved in the installation, removal, repair, service or replacement of gas fittings in Ireland in interpreting which categories of gas works are included within the scope of the *gas works* regulations and can, therefore, be only carried out by a Registered Gas Installer.

CER/09/083-B

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Introduction

This document is a Guidance Document with respect to the *Gas Works Regulations* (SI 225 of 2009) recently enacted by the Commission for Energy Regulation (CER).

Why Should I read this?

If you are involved in the installation, removal, repair, service or replacement of gas fittings in Ireland, you will need to know what types of *gas works* are included in the *Gas Works Regulations* (SI 225 of 2009) recently enacted by the CER. Since the 26th June 2009, *gas works* can only be carried out by a Registered Gas Installer (RGI). Therefore, it is a requirement for a person carrying out *gas works* to register with the Gas Safety Supervisory Body (GSSB)¹ and become an RGI. Post 26th June 2009, it is illegal for any person other than an RGI to undertake *gas works* subject to certain limited exceptions². These individuals may be subject to criminal proceedings. It is the CER's responsibility to proceed with such prosecutions under the Electricity Regulation Act 1999³ if it deems it appropriate.

The purpose of this Guidelines Document is to support, provide practical advice and give examples with respect to which categories of *gas works* are included within the scope of the *gas works* regulations to any person or organisation involved in the installation, removal, repair, service or replacement of gas fittings in Ireland.

This document has been presented as a guidelines document to assist persons in interpreting the *Gas Works Regulations*. It does not form part of the *Electricity Regulation Act 1999 (Gas Works) Regulations 2009*. It is intended as a reference document to assist persons in understanding the regulations.

Background to the *Gas Works Regulations*:

The CER was granted the statutory function to regulate the activities of gas installers with respect to safety⁴. As part of this statutory function, the CER appointed the GSSB to operate and manage a registration scheme for RGI's on its behalf. Critical to the full implementation of the registration scheme was the designation of categories of *gas works* which may only be undertaken by individually registered RGI's who are competent, operating to the appropriate standard, using the appropriate materials, who shall certify their work as safe and will be subject to ongoing regulation and inspection by the GSSB. By designating the classes of *gas works*, the Commission set the scope for the system of the regulation of gas installers with respect to safety.

¹ The CER appointed the Register of Gas Installers of Ireland (RGI) as the GSSB on 6th November 2008 for a 7 year period. The Register of Gas Installers of Ireland (RGI) is responsible for regulating gas installers with respect to safety www.rgii.ie

² There are certain limited exemptions for system operators, gas emergency officers and gas safety officers carrying out their functions.

³ See Section 9G (4) of the 1999 Act inserted by Section 13 of the 2006 Energy (Miscellaneous Provisions) Act.

⁴ The Commission's functions were granted further to the enactment of the Energy (Miscellaneous Provisions) Act 2006

What do the Regulations deem as categories of Gas Works?

For the purposes of section 9G(3) of the Electricity Regulation Act 1999, 'works which are *gas works*' means the installation, removal, repair, servicing, maintenance or replacement (or any combination of the foregoing) of a Natural Gas Fitting covered by I.S. 813:2002 which is:

- (a) used or designed to be used by a Domestic Gas Customer; or
- (b) which is designed to be used by a Domestic Gas Customer but which is installed in a Commercial or an Industrial Premises;

What categories of work do the Regulations not deem *Gas Works*?

For the purposes of section 9G(3) of the Electricity Regulation Act 1999 'works which are *gas works*' does **not** include—

- (a) the installation, removal, repair, servicing, maintenance or replacement of Natural Gas Fittings designed to be used by Commercial Gas Customers;
- (b) the installation, removal, repair, servicing, maintenance or replacement of Natural Gas Fittings designed to be used by Industrial Gas Customers;
- (c) the installation, removal, repair, servicing, maintenance or replacement of Liquefied Petroleum Gas (LPG) Fittings;
- (d) the design of gas works;
- (e) work on the Point of Delivery;
- (f) work upstream of the Point of Delivery;
- (g) work on Natural Gas Fittings for the supply of gas for automotive use;
- (h) work that is specifically designed to be effected by a person without the use of a tool; or
- (i) the manufacture of Appliances or Natural Gas Fittings.

Guidance for persons requiring assistance in interpreting the above Regulations:

The remainder of this document will provide assistance in describing and providing examples of *gas works* in respect of;

- **Installation work;**
- **Removal work;**
- **Repair or replacement work; and**
- **Servicing and maintenance work.**

People carrying out *gas works* will use the regulations to identify *gas works* which can only be undertaken by an RGI. In instances where work on domestic type appliances is carried out in a commercial or industrial premise, the RGI will need to consider if their competency and skills will enable them to undertake such work without adding any risk within a non domestic environment.

Gas works carried out on and upstream of the Point of Delivery are normally carried out by the Network Operator. Work carried out by operatives for or on behalf of the Network Operator is not included within the scope of the regulations.

All *gas work* must be carried out by an RGI and must be carried out in accordance with IS 813. This work includes installing new gas pipe work, extending existing gas pipe work installation, installing new or second hand appliances and moving the position of existing appliances or pipe work.

The RGI should ensure that gas fittings, e.g. appliances and means of connection are fit for purpose for the environment. A domestic gas appliance is generally considered as one which has been designed for use in a domestic property, its design and manufacture is suitable for normal wear and tear that would be expected “within” a domestic household.

The European Directive on appliance safety called the “Gas Appliance Directive” (GAD⁵) requires that appliances be so designed and built as to operate safely and present no danger to persons, domestic animals or property when normally used. The GAD defines “normally used” as when the appliance is used in accordance with its intended purpose or in a way which can be reasonably foreseen. The GAD requires all gas appliances to be CE marked.

Included within the scope of the *gas works* regulations are:

- All appliances within a domestic premises;
- All boilers within a declared heat input of equal to or below 70kW in a commercial or industrial premises; and
- All other domestic type appliances in a commercial or industrial premises.

Electrical work undertaken by an RGI as part of, or in association with any work on a domestic natural gas appliance must comply with the current edition of the National Rules for Electrical Installations⁶ as referred to in IS 813.

1. Installation work

1.1 Installation of domestic appliances and pipe work in domestic premises

All installation work on domestic appliances and pipe work in domestic premises must be carried out by an RGI and must be in accordance with IS 813. This work includes installing new gas pipe work, extending existing gas pipe work installations, installing new or second hand appliances and moving the position of existing appliances or pipe work. In regard to the installation of used (second-hand) appliances, the RGI shall ensure that the appliance has not been modified in such a way that it no longer complies with the GAD⁷. Safety devices such as flame supervision devices must be checked and found to be working correctly. The RGI shall consult I.S. 813 and the manufacturer’s technical instructions to ensure correct installation.

⁵ Gas Appliance Directive 90/396/EEC

⁶ Electro Technical Council of Ireland (ETCI) National Rules for Electrical Installations, Fourth Edition ET101:2008

⁷ Gas Appliance Directive 90/396/EEC

An RGI must issue an appropriate Declaration of Conformance Certificate⁸ to the person who requested the *gas work* to be carried out.

The Declaration of Conformance Certificate system is essential to the effective operation and integrity of the new regulatory system. The Declaration of Conformance Certificate will act as the thread that links the work carried out by an RGI (for a customer) to the GSSB. The issuance of a Declaration of Conformance Certificate will be mandatory for all *gas works* i.e. the installation, removal, repair, servicing, maintenance or replacement (or any combination of the foregoing) of a Natural Gas Fitting covered by I.S. 813. For further detail on Certification, including the detail of the various forms of Certificates, their format and the process by which they will be sold, completed and verified, please contact the GSSB.

The RGI is required to ensure that *gas works* which are in progress but not yet completed by them (unfinished works), are left in such a manner, so as to ensure they do not pose a danger to persons or property.

In regard to materials used in the installation generally, all materials must conform to the materials standards referenced in I.S. 813. Gas fittings shall be of a suitable construction, material, strength and size to convey gas to the appliance to ensure its safe operation. For example, ball valves are available from suppliers for gas or water applications, but not necessarily for both. Material selection will need to recognise the nature of the installed environment e.g. risk of physical damage, temperature, corrosion potential.

1.2 Installation of domestic appliances in commercial premises

A Commercial Premises is any building or part of a building used for the purposes of carrying on a trade or business.

The RGI shall exercise judgement on whether an appliance intended for domestic use, can be operated safely and without danger in a non-domestic environment. For example, a cooker fitted in a kitchen/coffee room of a small shop or office may be subject to general wear and tear similar to a domestic situation and there will be no raised level of risk. However, where this is not the case, for example in a catering type business (chip shop), the RGI would need to consider the usage and the intended environment of the domestic appliance, and ensure that there is no adverse situation and the level of risk is not increased when used in that environment. Another example would be that of a Multipoint water heater designed for use in a domestic premise. In the kitchen/coffee room of a small shop or office, the use of the water heater would be similar to that experienced in a domestic household. On the other hand, its use in a catering area could mean extensive use for which the water heater is not designed. IS

⁸ Declaration of Conformance Certificate is a Completion Certificate for the purposes of the Energy (Miscellaneous Provisions) Act 2006. Full details with respect to the Completion Certification system are available from the RGI

813 requires a Declaration of Conformity⁹ and assurance that all users have been instructed to the safe use of the gas fittings (appliance, apparatus, pipe work and fittings, flues , ventilation and the safe use of the natural gas).

Specific guidance on the use of domestic type cookers in schools and other educational establishments is provided in I.S. 813, Annex J.

An RGI shall also consider the connection of gas fittings to existing commercial pipe work. An RGI may well judge that the connection of a new gas fitting to an existing capped off section isolating valve, which is in close proximity to the intended appliance location, will provide testing and commissioning that is within the bounds of domestic competency.

Gas fittings include the means for providing ventilation and flueing. Where any domestic appliance is installed in a commercial or industrial premise, an RGI shall ensure the safety of the appliance and any existing appliances is not compromised. Examples may include:

- The installation of a domestic appliance in a location where other (commercial) appliances are served by mechanical forced air supply and/or fume extraction.
- A situation where catering appliances are grouped under a canopy with forced fume extraction, as the installation of an additional appliance may affect the ability of the extraction method (fan or natural) of products and fume removal within the canopy. This type of installation often incorporates safety interlocking between airflow and gas flow and requires the RGI to be conversant with the requirements of I.S 820.

Such examples of work may be beyond the competency of the RGI and he/she must exercise his/her own sound judgement in this regard.

1.3 Installation of domestic appliances in industrial properties

The guidelines outlined in section 1.2 will also apply to any work undertaken when installing domestic appliances in industrial premises.

2. Removal work

2.1 Removal of Domestic Gas fittings and Domestic Appliances in a Domestic Premise:

The 2006 Act and subsequent Regulation make it clear that only an RGI is permitted to disconnect and/or remove domestic appliances and gas fittings (gas works). Such work must be carried out in accordance with I.S. 813. An exception to this requirement is in circumstances where the disconnection of the domestic appliance does not require the use of a tool. For example, a cooker or an outside barbeque is usually fitted with a flexible connection and a self-closing valve. These may be disconnected by the user for cleaning and storage respectively.

⁹ I.S. 813 Annex D

During any operation necessitating the connection of pipework to a meter, a temporary electrical continuity bond shall be fixed to span the intended opening. This safety precaution shall be taken regardless of whether or not permanent cross bonding has been established.

Open ends of pipework and valve outlets shall be sealed with an appropriate fitting requiring tools to re-open.

2.2 Removal of domestic appliances in commercial premises.

Generally, this work should only entail removal of the appliance with the connected supply sealed at the isolating valve. This work may be beyond the competency of the RGI and he/she must exercise his/her own sound judgement in this regard.

2.3 Removal of domestic appliances in industrial premises.

Generally, this work should only entail removal of the appliance with the connected supply sealed at the isolating valve. This work may be beyond the competency of the RGI and he/she must exercise his/her own sound judgement in this regard.

3. Repair or replacement work

3.1 Repair and replacement of domestic appliances and pipe work in domestic premises

The RGI shall ensure that any repair/service or inspection of an appliance shall not degrade its safety and present danger. Where an RGI is involved in the repair of a gas appliance, the RGI should make the appliance safe by turning off the gas at the appliance isolation valve during the period before a replacement part is fitted. Where a section of a gas installation is repaired or replaced, an RGI shall consider the effects of any release of gas and the safe sealing of the installation until the repair is completed.

3.2 Repair and replacement of domestic appliances in commercial premises

The guidelines outlined in section 3.1 will also apply to domestic appliance installations in commercial properties.

3.3 Repair and replacement of domestic appliances in industrial properties

The guidelines outlined in section 3.1 will also apply to domestic appliance installations in industrial properties.

4 Service and maintenance

4.1 Service and maintenance of domestic appliances and pipe work in domestic premises

Service and maintenance work includes all activities carried out on an appliance and the associated ventilation flue system, including connecting pipe work. Works involving plumbing and heating controls external to an appliance (such as a room thermostat or a circulating pump or the adjustment of user controls such as a programmer) are not considered *gas works*. The RGI should recognise that some types of central heating boilers have integral circulating pumps (as well as safety controls that require re-setting

following a fault condition) that are accessed only after removal of casing panels. Often these casings are *functional* i.e. they provide a seal, the integrity of which is crucial for the safe operation of the appliance, consequently any work requiring removal of such panels will be regarded as gas works.

4.2 Service and maintenance of domestic appliances in commercial premises

The guidelines outlined in section 4.1 will also apply to domestic appliance installations in commercial properties.

For requirements relating to the installation in schools and other educational establishments of domestic type appliances not intended for educational purposes, for example a domestic type gas cooker in a staff room, reference shall be made to I.S. 813. For requirements relating to the pipework up to and including the valve supplying such an appliance, reference shall be made to the appropriate clauses of I.S. 820. The domestic RGI shall recognise that domestic competency does not extend to the application of I.S. 820 and this work may only be carried out by a gas installer fully conversant with I.S. 820.

Where any domestic appliance is installed in a commercial premise, an RGI shall ensure the safety of the appliance and any existing appliances is not compromised. Examples may include:

- The installation of a domestic appliance in a location where other (commercial) appliances are served by mechanical forced air supply and/or fume extraction.
- A situation where catering appliances are grouped under a canopy with forced fume extraction, as the installation of an additional appliance may affect the ability of the extraction method (fan or natural) of products and fume removal within the canopy. This type of installation often incorporates safety interlocking between airflow and gas flow and requires the RGI to be conversant with the requirements of I.S 820.

Such examples of work may be beyond the competency of the RGI and he/she must exercise his/her own sound judgement in this regard.

The RGI should recognise that some types of central heating boilers have integral circulating pumps (as well as safety controls that require re-setting following a fault condition) that are accessed only after removal of casing panels. Often these casings are *functional* i.e. they provide a seal, the integrity of which is crucial for the safe operation of the appliance, consequently any work requiring removal of such panels will be regarded as *gas works*.

4.3 Service and maintenance of domestic appliances in industrial premises

The guidelines outlined in section 4.2 will also apply to domestic appliance installations in industrial premises.