

Register of Gas Installers of Ireland

Unit 9, KCR Industrial Estate, Ravensdale Park, Kimmage, Dublin 1

Tel: 01-4997998 Fax: 01-4929983

Email: installationstandards@rgii.ie



Technical Bulletin

Concealed extended flues

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BACKGROUND:

Introduction

Incidents have occurred in Ireland and in the UK where joints between flue sections have become disconnected either through not being installed correctly or through interference. A disconnected flue will permit products of combustion to terminate within the property with a risk of carbon monoxide poisoning to those occupants within the property and in neighbouring properties. In accordance with the relevant manufacturersq instructions, I.S. 813 and Building Regulations Part J 1997, all products of combustion must terminate outside of building. Before commencing the service and inspection of a gas appliance, it is therefore critical that the RGI is equipped with the appliance manufacturersqinstructions and correct tools including, where appropriate a calibrated flue gas analyser (specification EN 50379).

As a Registered Gas Installers (RGI) you are responsible for ensuring you carry out gas works safely and in line with the relevant technical standards. The Irish Standard for Domestic Gas Installations (I.S. 813) and the relevant manufacturersqinstructions must be adhered to when installing and servicing gas appliances. All requirements including those relating to Flueing, Ventilation and Permitted Location must be adhered to.

While servicing appliances and/ or carrying out gas safety inspections it is imperative that all RGIs are aware of the specific requirements of I.S. 813 and the manufacturersqinstructions that relate to the flueing of the appliance. It is essential that "The effectiveness of any flue or chimney" be checked.

Scope

This technical bulletin provides guidance and clarity to RGlos on the additional steps to take at gas installations where the flue is <u>concealed and extended</u> within a duct or a void (i.e. roof spaces, studs, walls, ceilings etc.) It is stressed that equal care must be taken when inspecting and testing standard flues, non-concealed flues or chimneys however this bulletin deals specifically with concealed extended flues. An extended flue is any flue with more than two joints, those being the joint at the boiler flue inlet/outlet and the joint at the terminal.

SAFETY ACTIONS:

When requested by a customer to carry out a service/repair or safety inspection on a gas installation which includes a concealed extended flue the following additional steps must be carried out, as well as those required by Annex C of I.S. 813.

Servicing a domestic gas appliance

Appliances shall be serviced according to I.S. 813 and manufacturersqinstructions. In servicing the appliance(s), the Registered Gas Installer shall address the following safety indicators:

- Visually inspect the exposed flue where possible.
- Ensure the flue is installed as per manufacturersqinstructions.

Where access to flue is not available

- Visually inspect the pathway of the concealed extended flue for evidence of staining.
- If access to the void is available carry out a CO test in the void.
- Ask customer if there has been any ongoing problems/issues with boiler performance.

When these steps have been achieved, continue with the following:

 Perform combustion flue gas analysis and air intake contamination analysis at the flue sample points (where fitted) at the boiler. If no sample points are fitted at the boiler then the flue gas sample should be taken at the flue terminal where reasonably possible.

Gas rating and burner pressure

- Rate the gas appliance at the gas meter. It must fall within the range specified on the data badge on the appliance and/or in the manufacturersqinstructions.
- If this is not possible then the appliance working pressure (all appliances) and burner pressure (where applicable) shall be checked and must be within the range as displayed on the data badge on the appliance and/or in the manufacturersqinstructions.

Customer Awareness/ Notification

Wherever there is a concealed flue which cannot be inspected and on completion of the above steps:

 Issue the owner/occupier responsible for the premises in which concealed extended flues are fitted with the *Concealed Flue Advisory Note* from RGII.

- The issuing of the Concealed Flue Advisory Note must be recorded in the comments section of the Certificate of Conformance (Certificate 3) and witnessed by way of the owner/occupier signature.
- The Concealed Flue Advisory Note does not replace a Notice of Hazard.

NOTE When the steps in this Technical Bulletin have been carried out in addition to those in Annex C of I.S. 813 and it is considered that there may be a safety risk a Notification of Hazard must be issued.

Appendix A- Concealed Flue Advisory Note





Concealed Flue Advisory Note

Dear Owner/Occupier,

Your Registered Gas Installer (RGI) has identified that your gas installation includes a **concealed** (hidden) extended flue from your boiler to the flue terminal outside. This flue is designed to safely remove flue gases produced by your boiler to outside of your building. If it is not installed correctly Carbon Monoxide may be produced and could be a risk to your health.

Your RGI has attempted to inspect the flue. However because it is hidden it has not been possible to carry out a full inspection. Without access to the flue your RGI cannot fully confirm the safety of its installation.

It is strongly recommended that you take further steps to ensure your own safety, that of other people in the property and your neighbours by making the hidden sections of the flue accessible for inspection by a RGI. Your RGI will be able to advise you on the options available to you.

Additional safety measures

In addition to making the hidden sections of the flue accessible for inspection it is also strongly recommended that you have a Carbon Monoxide alarm(s) installed by a competent person, such as a RGI.

When installing a Carbon Monoxide alarm:

- Make sure it meets the standard EN 50291 (this will be marked on the packaging);
- Make sure it has an end-of-life indicator and carries a third party certification mark, for example the BSI Kitemark;
- Make sure that the installation instructions are followed to ensure that your Carbon Monoxide alarm is installed in the correct location and operates effectively.

You should also regularly check the path of your flue for staining or discolouration and have your boiler serviced annually by a RGI.

- If you see any evidence of staining or discolouration along the path of, or near the flue, switch off your gas appliance and contact your RGI immediately to inspect the entire length of the flue.
- Staining may be a sign that your flue has corroded and may require immediate replacement.
- Visit www.carbonmonoxide.ie or phone 1850 797979 to learn more about the signs and dangers of Carbon Monoxide.

For further information on getting your flue inspected or to find a RGI, please contact the Register of Gas Installers of Ireland on 1850 454 454 or 01 4997998. You can also visit our website www.rgii.ie

Yours sincerely,

The Register of Gas Installers of Ireland