

Guidance for gas engineers to the application of relevant sections of IGEM/UP/19 in catering establishments

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SECTION 1 : INTRODUCTION

IGEM/UP/19 “Design and application of interlock devices and associated systems used with gas appliance installations in commercial catering establishments” was published in October 2014 and supports the requirements for interlocking mechanical ventilation systems required by BS 6173.

Note: BS 6173, as currently written, is not intended to apply to dwellings or primarily domestic premises, such as those in Bed & Breakfast installations. For these latter installations reference has in the past been made to standards such as BS 5440-2 and BS 6172.

The aim of this Guide is to clarify some of the options and requirements for new and existing installations, both large and small.

Catering establishments are generally defined as those preparing meals for the public other than in domestic situations. However, the Standard IGEM/UP/19 and this guide covers all catering establishments that fall within The Food Safety (General Food Hygiene) Regulations.

Note: This guidance does not apply to mobile catering installations or transportable temporary event catering installations (see Nationwide Caterers Association (NACSS) guidance).

This guide has been prepared in consultation with the commercial catering industry bodies CEDA and CESA.

SECTION 2 : SCOPE

This Guide may be used to clarify some of the options and requirements for ventilation systems for new and existing gas installations in catering establishments that are required by IGEM/UP/19.

This Guide is not intended for use in isolation, it is to provide support to the competent gas engineer working in catering establishments, and includes extracts from the IGEM publication IGEM/UP/19.

This Guide includes the risk assessment protocols for new and existing catering installations along with the air quality testing procedure, acceptance criteria and sign posting to the Gas Industry Unsafe Situations Procedure (GIUSP) for commercial catering establishments.

This Guide is applicable to those installing, servicing or maintaining catering equipment.

This Guide includes supporting questions and advice for sample testing and it also covers maintenance, inspection, records and user instructions.

Note: Notes have been added either directly from IGEM/UP/19 or by the Catering Equipment Industry Technical Representatives in each section and sub-section where applicable.

SECTION 3 : VENTILATION AND INTERLOCKS

NEW SYSTEMS

Gas appliances may be fitted in a room/space that is naturally or mechanically ventilated. If it is mechanically ventilated then in order to satisfy GS(I&U)R requirements under Regulation 27(4) an interlock is required to prevent the appliance operating if the draught fails.

Type A flueless appliances are not required to be connected to a flue, but if the environment that they are installed in requires mechanical supply/extract ventilation then this requires to be interlocked with the appliances. The interlocks for proving safe working conditions need to monitor at least one of the following:

- air flow
- air pressure
- power absorption
- air quality, for instance carbon dioxide (CO₂) (this may be in association with variable speed drive (VSD) systems).

The interlock may operate on any of the following:

- a single automatic gas supply valve
- individual automatic gas supply valves to each appliance or
- power isolation to all fully automatic appliances.

Type B flued catering appliances are required to be connected to a flue system such as an extract canopy.

For Type B flued appliances, the interlocks for proving safe working conditions need to monitor at least one of the following:

- air flow
- air pressure
- power absorption.

The interlock may operate on any of the following:

- a single automatic gas supply valve
- individual automatic gas supply valves to each appliance or
- power isolation to all fully automatic appliances.

EXISTING SYSTEMS

In accordance with BS 6173 over-rides to interlocks and interlock systems are not permitted and, as appropriate the responsible person is to be advised accordingly including within any written report (see Risk assessment protocol given in Figure 2).

Note 1 by the Catering Industry: Unless the engineer is competent to carry out work on interlock systems they are not to attempt it and are to refer the customer to the original supplier (see IGEN/UP/19).

For domestic type installations (see BS 5440-2) that are used infrequently and only for short periods it is permitted to have opening windows or a domestic type wall extract fan. In such instances interlocks are not always essential with domestic Type A appliances, but safe systems of work need to be in place and suitable signage used to specify the ventilation procedures.

In all cases, correct air quality conditions are to be achievable with windows open or extract fans operating. If safety cannot be demonstrated with open windows and extract fans operating, supply air fans need to be fitted.

Note 1: Notices typically would be expected to say 'When cooking, ensure adequate ventilation by opening windows or operating extractor fans' (see IGEN/UP/19).

Note 2 by the Catering Industry: If an installation including Type A appliances predates 2001 and does not have an interlock fitted, the engineer is to recommend the fitting of an interlock as a safety upgrade. If the upgrade is not to be carried out but the installation is well managed with trained staff operating in safe conditions they are to classify the installation under the current GIUSP.

The ventilation system and interlocks need to be reviewed when there are changes to the cooking equipment or catering environment to ensure that it continues to deliver the required air quality.

Where an atmosphere sampling test identifies that continued use of the catering establishment would be considered unsafe, the current Gas Industry Unsafe Situations Procedure (GIUSP) needs to be implemented.