

氣體用具機動排氣系統的裝置規定

(熱負荷在 70 千瓦以內者)

INSTALLATION OF MECHANICAL EXHAUST SYSTEM FOR GAS APPLIANCES (RATED HEAT INPUT UP TO 70 kW)

工作守則：氣體應用指南之十二

CODE OF PRACTICE GU 12



2004 年 1 月
January 2004

CONTENTS

	Page
1. Foreword	1
2. Scope and Terminology	4
3. Pre-requisites for Flueing of Gas Appliance to Outside Air by Means of a Mechanical Exhaust System	9
4. Selection of Gas Appliance for Physical Connection to a Mechanical Exhaust System	12
5. Installation of Gas Appliance for Physical Connection to a Mechanical Exhaust System	13
6. Labelling and Advice on the Use and Maintenance of Gas Appliance in Physical Connection with a Mechanical Exhaust System	16
Appendix I Table Showing Applicability of Sections of GU12 to Gas Appliances	18

1. Foreword

- 1.1 In consultation with representatives of registered gas contractors, importers and suppliers of domestic gas appliances in Hong Kong, the Gas Authority prepares this Code to provide guidelines for the installation of mechanical exhaust system (MES) for venting flue gas from the use of gas appliance of rated heat input up to 70kW in non-domestic premises, though there may be isolated installations in domestic premises as well.
- 1.2 The guidelines contained in this Code should not be regarded as exhaustive. It is not intended to relieve persons from undertaking the work of their statutory responsibilities in accordance with relevant current safety legislation and statutory requirements.
- 1.3 This Code has a special legal status. Although failure to observe any advice contained in this Code is not in itself an offence, that failure may be taken by a court in criminal proceedings as a relevant factor in determining whether or not a person has breached any of the provisions of the regulations to which the advice relates.
- 1.4 The gas installation work carried out in Hong Kong shall be in accordance with all relevant current statutory provisions under the Laws of the Hong Kong Special Administrative Region, with particular reference to the Gas Safety Ordinance, Cap. 51 and the following subsidiary legislation, and other related statutory provisions depicted in Section 1.5 :-
- (a) Gas Safety (Gas Supply) Regulations, Cap. 51;
 - (b) Gas Safety (Installation and Use) Regulations, Cap. 51;
 - (c) Gas Safety (Miscellaneous) Regulations, Cap. 51;
 - (d) Gas Safety (Registration of Gas Installers and Gas Contractors) Regulations, Cap. 51 ; and
 - (e) Gas Safety (Registration of Gas Supply Companies) Regulations, Cap. 51.
- 1.5 This Code must be read in conjunction with the manufacturer's instructions and shall not supersede such instructions unless the latter conflict with statutory provisions. Attention is also drawn to the current edition of the undernoted ordinances, regulations, codes of practice, etc.: -
- (a) Code of Practice GU03 – Installation Requirements for Domestic Gas Water Heaters (Rated Heat Input up to 70kW);

- (b) Code of Practice GU05 – Approval of Domestic Gas Appliances;
- (c) Code of Practice GU06 – LPG Installations for Catering Purposes in Commercial Premises;
- (d) Code of Practice GU09 – Low Pressure Regulators for Supplying Gas from LPG Cylinders having less than 40 litres Water Capacity;
- (e) The Hong Kong & China Gas Co. Ltd.’s Operating Procedures - Service;
- (f) Code of Practice for Hong Kong LPG Industry;
- (g) Fire Services Ordinance, Cap. 95;
- (h) Fire Safety (Commercial Premises) Ordinance, Cap. 502;
- (i) Fire Safety (Buildings) Ordinance, Cap. 572;
- (j) Buildings Ordinance, Cap. 123;
- (k) Buildings (Ventilating Systems) Regulations, Cap. 123J;
- (l) Buildings Department - Practice Note for Authorized Persons and Registered Structural Engineers 82;
- (m) Electricity Ordinance, Cap. 406;
- (n) Code of Practice for the Electricity (Wiring) Regulations;
- (o) Factories and Industrial Undertakings Ordinance, Cap. 59;
- (p) Occupational Safety and Health Ordinance, Cap. 509;
- (q) Labour Department - Code of Practice on Control of Air Impurities (Chemical Substances) in the Workplace;
- (r) Ventilation of Scheduled Premises Regulation, Cap. 132CE;
- (s) Air Pollution Control Ordinance, Cap. 311;
- (t) Air Pollution Control (Furnaces, Ovens and Chimneys)(Installation and Alteration) Regulations, Cap. 311A;
- (u) Environmental Protection Department Guideline – Control of Oily Fume and Cooking Odour from Restaurants and Food Business;
- (v) Environmental Protection Department - Guidance Notes for the Management of Indoor Air Quality in Offices and Public Places;
- (w) Hong Kong electricity supply companies’ policy requirements, supply rules, installation guides and codes of practice; and
- (x) International/national standards and codes referred to in Section 1.6.

1.6 The following international / national standards and codes are useful for reference:-

BS 6173 : 2001 “Installation of gas-fired catering appliances for use in all types of catering establishment. (2nd and 3rd family gases)” – published by the British Standards Institution, Great Britain.

BS 6644 : 1991 “Installation of gas-fired hot water boilers of rated inputs between 60kW and 2MW (2nd and 3rd family

gases)" – published by the British Standards Institution, Great Britain.

VDI 2052 : 1995 "Ventilation Equipment for Kitchens" – published by the Verein Deutscher Ingenieure (Association of German Engineers), Germany.

International Fuel Gas Code : 2000 - published by the International Code Council, Inc., USA

JIS S2080 : 2000 Exhaust pipes for burning appliances – published by the Japanese Standards Association, Japan.

JIS S3025 : 1996 Supply and exhaust pipe for burning appliances– published by the Japanese Standards Association, Japan.

BS 715 : 1993 Metal flue pipes, fittings, terminals and accessions for gas fired appliances with a rated input not exceeding 60kW– published by the British Standards Institution, Great Britain.

1.7 The applicability of this Code in relation to domestic and non-domestic gas appliances is illustrated in Appendix 1 for easy reference.

2. Scope and Terminology

2.1 Scope

2.1.1 This Code covers new or replacement installation of gas appliances (domestic or non-domestic types), which burn gases of types defined in Section 2 of the Gas Safety Ordinance, Cap. 51, of rated heat input up to 70kW with flue gas vented to outside air by means of a mechanical exhaust system (MES) generally installed in non-domestic premises, though there may be isolated cases in domestic premises. Save Section 3 on ventilation requirements, which covers all gas appliances with or without flue terminal unless otherwise stated, the requirements stipulated in other sections of this Code only apply to gas appliances that have a flue terminal physically connected to the MES by a flue pipe or duct for flueing to outside air.

2.1.2 The requirements of this Code do not apply to conventional types of range hood venting to outside air that are mass-produced for typical use in domestic premises such as kitchens.

2.1.3 In this Code, those requirements for gas appliances that are covered under the gas appliance approval scheme administered by the Gas Authority and in connection with Recognised Certification Authority (RCA) apply to domestic gas appliances only.

2.1.4 Non-domestic gas appliances fall outside the jurisdiction of the gas appliance approval scheme depicted in Section 2.1.3. However, they shall comply with recognized international or national safety standards, codes and / or accepted practices operated under approved safety and quality standards regimes, and be suitable for safe use in Hong Kong in accordance with the Gas Safety Ordinance, Cap. 51.

2.2 Terminology

2.2.1 Definition of terms :-

“ by means of”	in relation to venting flue gas, means making use of, with or without physical connection of a designated flue passage, duct or pipe.
“ competent assessor”	in relation to the carrying out of any assessment or calculation required by this

Code, means a person who is –

- (a) appointed by the owner / user to ensure that the assessment or calculation is carried out;
- (b) a registered professional engineer registered under the Engineers Registration Ordinance (Cap. 409) within the disciplines of building services, gas, mechanical or another relevant discipline specified by the Gas Authority; and
- (c) by reason of his / her qualifications, training and experience, competent to carry out the assessment or calculation.

“ connected to MES”	flue passage physically connected to MES by a means such as rigid or flexible extension pipe or duct.
“ contractor”	a person or company, being a Registered Gas Contractor, engaged to conduct the gas installation and / or maintenance work, unless otherwise stated as doing other work.
“ domestic gas appliance”	as defined under the Gas Safety Ordinance, Cap. 51, means a gas appliance which is designed or intended to be used primarily in domestic premises, irrespective of whether it is so used.
“ domestic premises”	as defined under the Gas Safety Ordinance, Cap. 51, means any premises which are constructed or intended to be used for habitation.
“ fail-shut”	a characteristic of a protection device such that if no signal is generated from or no signal passes through it or if abnormality is sensed, the result will be non-operation of the gas appliance to which the device is linked.
“ fire compartment”	in relation to a building, means a part of the building that is physically separated from adjoining parts by walls, and by a floor and ceiling, that meets the standard of fire resistance prescribed by the Code of Practice for Fire Resistance Construction

1996, as published by the Director of Buildings and printed by the Government Printer (Schedule 3 of the Fire Safety (Buildings) Ordinance, Cap. 572, refers).

" flue"	a passage for conveying the products of combustion from a gas appliance to the outside air, and includes any part of the passage in a gas appliance ventilation duct which serves the purpose of a flue.
" flueing"	the conveyance of combustion products from the gas appliance to outside air by means of a flue pipe or duct.
" gas appliance"	an appliance which uses gas to provide lighting, heating, or cooling, but does not include a boiler within the meaning of the Boilers and Pressure Vessels Ordinance, Cap. 56.
" Gas Authority"	the authority appointed under Section 5 of the Gas Safety Ordinance, Cap. 51.
" gas water heater"	a gas appliance for the supply of water at a temperature not exceeding 99 ⁰ C.
" importer"	a company in Hong Kong (as defined in Section 2 of the Gas Safety Ordinance, Cap. 51) engaged in the business of importation of domestic gas appliances for use in Hong Kong.
" interlock"	a device or function that ensures that the operation of item(s) of equipment is dependent upon the fulfillment of predetermined condition(s) by other item(s) of equipment.
" lockout"	a safety shutdown condition of the control system that requires a manual reset in order to restart the normal operation of the installation being controlled.
" manufacturer"	the original designer and producer of a gas appliance.
" mechanical exhaust system (MES)"	a system to remove flue, vent gases or fumes produced from gas appliance

		mechanically. The system shall consist of an induced draft (suction) fan being operated under negative static pressure within purpose-built ducting, or mechanical ventilation system, if any.
" non-domestic gas appliance"		gas appliance which falls outside the meaning of domestic gas appliance as defined in the Gas Safety Ordinance, Cap. 51.
" outside air"		open and unobstructed atmospheric air, having open space on at least any one side, unless requirements specified in paragraphs 6 and 7 of the Building Department's Practice Notes for Authorized Persons and Registered Structural Engineers 82 are satisfied.
" physical connection"		connection of flue passage from gas appliance to mechanical exhaust system (MES) by pipe or duct extension.
" Recognised Certification Authority (RCA)"		an independent organization recognized by the Gas Authority which is empowered under law or decree (e.g. notified body appointed by the Commission of European Communities), to certify that a gas appliance is designed and produced in compliance with international or national safety standards. In this Code, the requirements for gas appliances with reference to RCA apply to domestic gas appliances only.
" Registered Contractor"	Gas	means a person or a company who as a business carries out gas installation work and is registered under the Gas Safety Ordinance, Cap. 51.
" Registered Installer"	Gas	means an individual, employed by a Registered Gas Contractor, who personally carries out gas installation work within specified class(es) and is registered under the Gas Safety Ordinance, Cap. 51.
" supplier"		a company in Hong Kong (as defined in Section 2 of the Gas Safety Ordinance, Cap. 51) engaged in the local sale or supply of gas appliances for use in Hong

Kong excluding the importer or local manufacturer.

2.2.2 Definitions of gas water heater types :-

“balanced flue”	a room-sealed gas water heater incorporating an air-inlet-cum-product-outlet terminal designed to be exposed on an external wall.
“fanned draught”	a gas water heater with a flue system in which the draught is produced by a fan.
“open-flued”	a gas water heater designed to be connected to a flue system, its combustion air being drawn from the room or internal space in which it is installed.
“room-sealed”	a gas water heater which, when in operation, has the combustion air inlet and the combustion products outlet isolated from the room in which the heater is installed.

3. Pre-requisites for Flueing of Gas Appliance to Outside Air by Means of a Mechanical Exhaust System

- 3.1 The installation of gas appliance with flue gas vented to outside air by means of a mechanical exhaust system (MES), regardless whether the gas appliance is physically connected to the system or not, shall comply with the Gas Safety (Installation and Use) Regulations, Cap. 51, particularly Part V - Gas Appliances.
- 3.2 The MES shall always discharge to outside air as defined in Section 2.2.1. Air discharged to the outside air shall not adversely affect any sensitive receptor and shall comply with the Air Pollution Control (Furnaces, Ovens and Chimneys)(Installation and Alteration) Regulations, Cap. 311.
- 3.3 Where internal thermal insulation is used in the MES, the insulation material shall be of non-combustible type and shall comply with the Buildings (Ventilating Systems) Regulations, Cap. 123.
- 3.4 The MES shall be designed and operated under negative static pressure at all times, i.e. the fan of the MES shall be installed as near as possible to the terminal (exit) section of the MES.
- 3.5 The MES for a gas appliance shall satisfy the draught requirements of the gas appliance in accordance with the prescribed or otherwise approved manufacturer's instructions and fire protection requirements in accordance with the Fire Services Department. In this connection, the contractor shall provide documentary information on the draught requirements and fire protection requirements specified in Section 5.7 of this Code such as specification sheet, calculation sheet, etc. to the ventilation contractor or competent assessor to design or construct the MES. Record of such information shall be kept by the contractor for a minimum of two years after the owner / user commences operation of the MES.
- 3.6 If a gas appliance is to be installed with flue gas vented to outside air by means of a MES irrespective whether or not there is a physical pipe / duct connection between the appliance and the MES, the following requirements on the owner / user shall be met :
 - 3.6.1 Adequate supply of combustion air shall be provided at all times for simultaneous operation of all full-loaded gas appliances (domestic and non-domestic). If combustion air is provided by an individual forced-air supply system, adequate fresh air shall be supplied for

combustion and ventilation to maintain the indoor air quality for the maximum number of accommodated occupants inside the room or space. Recommendations of the Environmental Protection Department Guidance Notes for the Management of Indoor Air Quality in Offices and Public Places shall be observed.

- 3.6.2 For extraction of flue gas, the MES shall be capable of adequately removing all products of combustion arising from the simultaneous operation of all full-powered gas appliances coupled with design margin and planned reserve for future installation, if any, in the room or space at any time. Occupational exposure limits specified in the Labour Department Code of Practice on Control of Air Impurities (Chemical Substances) in the Workplace shall not be exceeded.
- 3.6.3 Current requirements of the Fire Services Department, the Environmental Protection Department, the Labour Department and other statutory provisions shall also be met.
- 3.7 Gas appliances shall not be physically connected to a MES for use in domestic premises, unless prior project approval on a case-by-case basis has been obtained from the Gas Authority, or otherwise approved under the Code of Practice GU05 "Approval of Domestic Gas Appliances", as deemed appropriate.
- 3.8 A gas appliance to be physically connected to a MES shall be confirmed by the manufacturer with documentary evidence showing that the appliance is suitably designed and operated for connection to a MES. A specification of the connection method and permissible draught requirements shall be kept by the contractor who has carried out the installation work for record purposes. The record shall be kept for a minimum of two years after the owner / user commences operation of the MES.
- 3.9 The method of installation of gas appliance with flue gas vented to outside air via a physical connection to a MES, i.e. the flue passage connection between the appliance and the flue terminal where it is connected to the MES, shall comply strictly
 - (a) with the manufacturer's instructions, statutory provisions stated in Section 1.4 of this Code; or
 - (b) in the event of design modification of gas appliance, with recommendations of the manufacturer, the national or

international standard(s) adopted by the manufacturer and the RCA; and

(c) be submitted for prior notification to the Gas Authority.

3.10 Any alternative design modification of the ventilation / flueing of the gas appliance put forward by the importer / supplier shall be

(a) endorsed in writing in advance by the manufacturer in consultation with the RCA; and

(b) be incorporated as an addendum into the manufacturer's instructions prior to manufacture.

The importer / supplier shall produce a description complete with illustrations on installation requirements pertaining to the alternative design modification that has been endorsed, and incorporate the same into the Installation Manual of the gas appliance under amendment for illustration purposes. Application for re-approval or endorsement for domestic gas appliance under COP GU05 "Approval of Domestic Gas Appliances" shall be submitted to the Gas Authority prior to importing or manufacturing the model of domestic gas appliance for use in Hong Kong.

3.11 Where a gas appliance is installed with flue gas vented to outside air via a pipe / duct for physical connection to a MES, an interlock shall be provided to ensure the gas appliance is not operated unless the MES is in normal safe working order. The requirements on the interlock are specified in Section 5.2 of this Code.

4. Selection of Gas Appliance for Physical Connection to a Mechanical Exhaust System

- 4.1. Balanced flue (room-sealed) gas water heaters shall comply with Regulation 27 of the Gas Safety (Installation and Use) Regulations, Cap. 51, and shall not be physically connected to a MES.
- 4.2. If the environment dictates that it is not possible to install a balanced flue gas water heater, then a heater of other suitable type as recommended by the manufacturer may be used. The gas water heater shall be installed in accordance with the manufacturer's instructions. The gas water heater shall preferably be of a type designed by the manufacturer and, in the case of domestic type or model, be approved by the Recognised Certification Authority to be suitable for physical connection to a MES. Only if such type of heater is not available for the installation, then a gas water heater not originally designed for physical connection to MES may be used subject to compliance with Sections 3.8, 3.9 and 3.10 of this Code basing on an alternative installation method.
- 4.3. If the gas appliance is to be operated under environment laden with, for example, foul air, chemical fume, oil, mist, etc. that may affect the performance of the appliance, the applicability of the gas appliance for connection to a MES shall be critically assessed and endorsed on a case-by-case basis by the manufacturer who shall provide special documentary instructions on appliance-cum-flue design and operation prior to selection of appliance by the contractor. Records of such instructions shall be kept by the contractor.

5. Installation of Gas Appliance for Physical Connection to a Mechanical Exhaust System

5.1 Before installation of gas appliance physically connected to MES, the contractor shall notify the owner / user to appoint a competent assessor or ventilation contractor to conduct an assessment to ensure that the draught requirements shall comply with the manufacturer's instructions on flueing operation pertaining to the MES and in accordance with appropriate international / national standard(s), including:-

- range of specified extraction capacities of the MES;
- control of egress flue temperature into the MES extraction duct to avoid excessive temperature rise in the duct; and
- health, safety and fire risk concerns, etc.

5.2 An electrical interlock or air pressure switch specified in Section 5.10 (d) of this Code shall be the first choice and be provided with fail-shut and lockout functions for controlled operation of the MES. The electrical interlock shall link the power supply to the gas appliance to the power supply of the suction fan of the MES incorporating a means to ensure that the suction fan is in normal safe working order. However, reliance on an alternative design other than electrical interlock or air pressure switch may be considered for approval only when a competent assessor has proved with valid justifications in writing that the fail-shut and lock-out functions for controlled operation of the MES has been demonstrably fulfilled. The interlock shall be considered an integral part of the gas installation in connection with the operation with the MES

5.3 For gas safety and interlock control purposes, gas appliances installed for use in one fire compartment shall not, under all circumstances, be connected to a MES which serves more than one fire compartment.

5.4 Materials for air intake and exhaust connections on the section from the gas appliance to the MES shall be of adequate mechanical strength and resistance to fire and corrosion and be suitable for the environment where the gas appliance is installed. Where the appliance is to be operated under environment laden with, for example, foul air, chemical fume, oil, mist, etc. that may affect the performance of the appliance, the manufacturer shall be fully consulted in advance on the suitability of materials under application, e.g. corrosion protection, etc.

5.5 The material of the exhaust pipe connecting a gas appliance to the MES

shall be in accordance with the prescribed manufacturer's instructions and, in the case of domestic gas appliances, endorsed by the RCA. In the absence of such instructions provided by the manufacturer or the RCA, the material shall, unless otherwise approved, be of suitable grade of stainless steel as follows:

- 5.5.1 Rigid pipe of stainless steel grade 316 having a minimum thickness of 0.3 mm before application of protective coating, if any, shall be primarily used.
- 5.5.2 Where location constraints the use of rigid pipe, flexible extension pipe of stainless steel grade 316 having a minimum thickness of 0.1 mm before application of protective coating, if any, shall be used.
- 5.6 Installation method of gas appliance shall be in accordance with the manufacturer's instructions, including suction and exhaust pipe length, maximum number of bends, pressure drop, joint sealing method, support and gradient requirements, etc. Discharge of flue at the terminal shall at all times be unobstructed in full passage and distant from any adjacent openings, other appliances etc.
- 5.7 The ventilation duct of the MES shall be routed in the shortest path to outside air as far as reasonably practicable, and shall not in any case pass through or connect with circulating air plenum. In case the exhaust duct has to pass through building compartments, the portion of ductwork going beyond the compartment / room where the gas installation is provided and leading to the outside air shall be properly enclosed by building material having the same Fire Resistance Period (FRP) with the building structure in order to maintain compartmentation of the building / premises. The contractor shall inform the ventilation contractor or the competent assessor of the connection of gas appliance to MES in accordance with Section 3.5 of this Code.
- 5.8 For open type gas appliances (i.e. gas appliance not connected to a flue) operated with exposed flame, e.g. a cooking range, the exhaust flue gas may be extracted by means of a general-purpose ventilation exhaust hood connected to a MES positioned directly above the gas appliance.
- 5.9 Save Section 5.10, the flue exhaust system for an enclosed type gas appliance such as gas water heater shall be separate from and independent of the ventilation exhaust system as described in Section 5.8 above. That

means enclosed type gas appliance shall have its flue gas discharged to the external air through a separate ductwork which is independent of the ventilation system designated for open type gas appliance.

- 5.10 The gas appliance may have its flue exhaust system connected to the MES as described in Section 5.8 above only if means of protection serving the following functions have been provided:
- (a) in case there is a fire damper provision at the MES, the maximum temperature of exhaust flue gas in the exhaust duct shall not prevent the correct operation of the fire damper ;
 - (b) in connection with (a), a device shall be provided to stop the operation of gas appliance if the temperature of exhaust flue gas in the exhaust duct exceeds the temperature set point of the fire damper;
 - (c) prevent spatter or other fire hazardous particle / matter contained in the exhaust gas from being carried over from the gas appliance to the MES; and
 - (d) in case there is a fire damper provision at the MES, air pressure switch in lieu of or in addition to electrical interlock as specified in Section 5.2 has to be provided at downstream of connection point to ensure the effectiveness of air extraction.
- 5.11 All electrical installations shall comply with the Electricity Ordinance, Cap. 406 and subsidiary legislation.

6. Labelling and Advice on the Use and Maintenance of Gas Appliance in Physical Connection with a Mechanical Exhaust System

- 6.1 A durable and conspicuous label in English and Chinese of suitable size shall be attached onto the front side of the gas appliance instructing the user to confirm actual operation of the MES before turning on any gas appliance.
- 6.2 An indication lamp (e.g. green-coloured) shall be provided in a conspicuous position noticeable to the working personnel in the room or space where the gas appliance is installed to indicate "normal" operating condition of the suction fan of the MES. Similarly, an indication lamp (e.g. red-coloured) shall be provided to indicate "abnormal" operating condition of the fan of the MES. Indication lamps shall be located on, or in the close vicinity of, the control panel of the gas appliances to draw the attention of the owner / user. Warning notice in English and Chinese of suitable size shall be displayed to alert that in case the lamp is found unlit while the gas appliance is being used, the gas appliance must be discontinued for use immediately whatsoever, and the MES must receive urgent servicing attention.
- 6.3 The user manual, which shall include prescribed or RCA-approved manufacturer's instructions, any additional safety measures, maintenance obligations, etc., shall be delivered by the Registered Gas Contractor to the owner / user or representative with acknowledgement receipt for record purposes after satisfactory commissioning and handing over of the appliance-cum-interlock installation.
- 6.4 It is emphasised that the owner / user shall arrange to employ a Registered Gas Contractor to conduct regular maintenance, including servicing, cleaning and testing of the installation, including the gas appliance(s), the associated control, the interlock with the operation of the MES, and the temperature sensing device at the exhaust duct, at least once annually. The Registered Gas Contractor shall keep the following documentary records for a period of at least two years after the owner / user commences operation of the MES:
- manufacturer's instructions and associated contractor's manuals and maintenance agreement;
 - testing and commissioning reports on new installation;
 - testing / servicing reports and any follow-up work completed or in progress; and

- maintenance log including date of previous inspections, fault reports, if any, and the next schedule of inspection.

The interlock, being an integral part of the gas installation in connection with the operation of the MES, shall be subjected to function check and technical inspection at the following intervals by relevant parties to ensure that it is in proper, reliable and safe working order for controlled operation of the MES:

- function check (by user) – at least once weekly;
- technical inspection (by Registered Gas Contractor responsible for maintenance) – at least once quarterly / half-yearly as recommended by Registered Gas Contractor responsible for project installation.

6.5 It should be noted that the integrity of the exhaust ducting of the MES shall also be subject to annual inspection by a ventilation contractor as part of the regular maintenance required to be arranged by the owner / user. Records of such inspection shall be kept by the owner / user and the maintenance party.

Appendix I - Table Showing Applicability of Sections of GU12 to Gas Appliances

	Domestic Appliances		Non-Domestic Appliances	
	not connected to MES	connected to MES	not connected to MES	connected to MES
Section 3 - Pre-requisites				
3.1	✓	✓	✓	✓
3.2	✓	✓	✓	✓
3.3	✓	✓	✓	✓
3.4	✓	✓	✓	✓
3.5	x	✓	x	✓
3.6	✓	✓	✓	✓
3.7	x	✓	x	✓ (partly*)
3.8	x	✓	x	✓
3.9	x	✓	x	✓
3.10	✓	✓	✓	✓
3.11	x	✓	x	✓
Section 4 - Selection	x	✓	x	✓
Section 5 - Installation	x	✓	x	✓
Section 6 - Labelling and Advice	x	✓	x	✓

Legend

✓ applicable

x not applicable

* requirements concerning RCA do not apply