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Introduction

This manual is designed to provide information for operatives preparing for the National ACS assessments in subject areas relating to non-domestic activities.

The information relates to individual subject areas covered by the ACS scheme including guidance for the safe installation of pipework, strength/tightness testing and purging of non-domestic gas installations, control devices and covers the general combustion, flueing and ventilation requirements for non-domestic gas appliances. Information is also provided for the commissioning and maintenance of non-domestic gas installations and appliances.

Whilst this manual does include the general requirements of relevant legislation and industry standards e.g. British Standards, IGEN Utilisation Procedures and other industry codes of practice needed when preparing for ACS assessments, it does not purport to cover all the requirements of these industry standards and legislation, reference should therefore be made to the particular normative documents themselves.

Normative Documents

Statutory Regulations

Health and Safety at Work etc Act 1974

Building Regulations (England & Wales) 2010

Building Standards (Scotland) Regulations 2004

Building Regulations (Northern Ireland) 2012

Building Regulations (Isle of Man) 2014

The Gas Safety (Installation and Use) Regulations 1998

Gas Safety (Installation and Use) Regulations (Northern Ireland) 2004

Gas Safety (Installation and Use) Regulations 1994 (as amended for the Isle of Man)

The Gas Safety (Management) Regulations 1996

Available from HMSO

Health and Safety Executive

Standards of Training in Safe Gas Installation – Approved Code of Practice

Table 1: Summary of the GSIUR

Regulation	Description	Interpretation	Covered in Module
2(1) – 2(8)	General Interpretation and Application	Gives an explanation of various terms used within the context of these regulations, for example 'gas fitting'. It also describes dwellings and buildings that are or are not covered by these regulations. We have used such terminology throughout this publication. It also gives exemption for Gas Training and Assessment Centres to install appliances and pipework in contravention of these regulations, this enables centres to carry out assessments realistically, for example, flue blocked.	
3(1), (2), (3) & (6)	Qualification and Supervision	Requires all Gas Fitters to be Gas Safe Registered, if self employed, or be registered as working for a Gas Safe Registered company. This section also requires individuals to prove competence by holding the relevant 'ACS' certificates. Prohibits anybody from falsely claiming to be Gas Safe Registered. This part of the regulations also allows for the changing of Butane/Propane gas cylinders without the need to be Gas Safe Registered.	
4	Duty of Employer	Places a duty on employers to ensure all gas work carried out in a business premises under their control, is carried out by a Gas Safe Registered installer.	
5(1) – 5(3)	Material and Workmanship	Requires materials and appliances to conform to current standards. In the case of new appliances this can be proved by the appliance carrying the CE mark, pipework and fittings should be manufactured to the appropriate standards etc. Also covers the use of flexible gas connections for movable gas appliances, the use of polyethylene pipe and the use of lead pipework for gas.	5
6(1) – 6(8)	General Safety Precautions	Is concerned with the release of gas from pipework which is being worked on and the sealing of pipework which is being worked on if left unattended.	2 & 5
7(1) – 7(3)	Protection Against Damage	Requires all pipework to be properly supported and protected against damage, requires the installer to ensure no foreign matter can block the gas supply or where this may happen to ensure the supply is fitted with a filter. Requires all supplies to be protected against corrosion or installed with materials that are resistant to corrosion.	5
8(1) – 8(3)	Existing Gas Fittings	All work carried out on an existing installation should ensure that the performance or safety of an installation is not impaired by any alterations that are made. This covers the whole installation for example, pipework, flues, or ventilation. It places a responsibility on the installer and or the person in charge of the operatives to ensure compliance with these regulations.	
10	Maintaining Electrical Continuity	Requires the use of a Temporary Continuity Bond, where pipework or a meter is being removed. This is to ensure that electrical continuity is maintained.	5 & 7

Meter/Emergency Control Valve Locations

Note: These simplified illustration diagrams are only intended for use as an aid to identify and indicate the relative positions of components.






-  Regulators
-  Meter
-  Gas emergency control - situated as near as is reasonably practical to the point where the pipe supplying gas enters the premises or building
-  Vapour valve on the storage vessel
-  Automatic change-over device

Figure (a) Outside meter installation

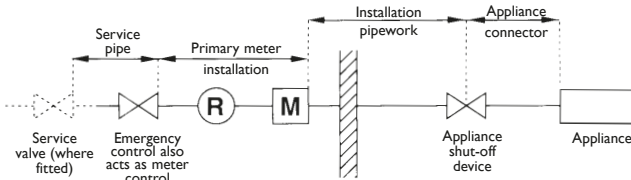


Figure (b) Inside meter installation

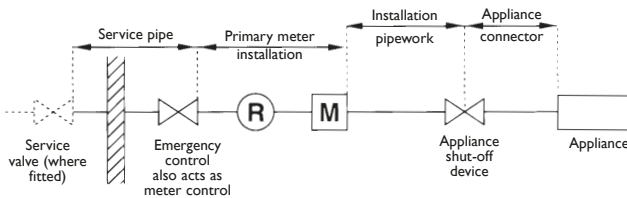
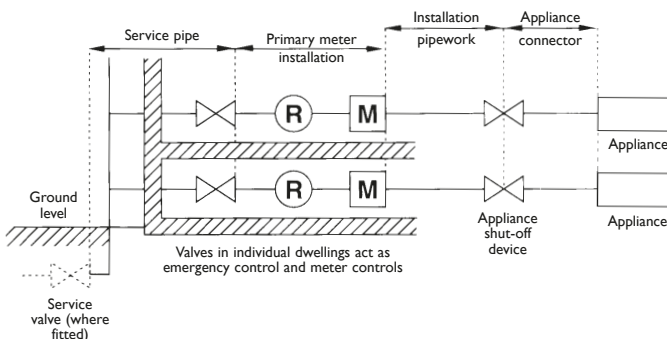


Figure (c)(i) Multi-occupancy installation – external riser



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The heated surface may be either a machined-polished cooking surface, stainless steel, aluminium branding surface or a lava bed heating grill bars above.

Doner Kebab grills - are similar in operation to salamander grills with multiple ceramic plaques in the vertical plane.

In general, the ceramic plaques are lit by depressing the control tap, with manual or automatic ignition to each plaque in turn and holding until the thermocouple is heated and the FSD holds the gas valve open.

This type of appliance is normally supplied fitted with a 240v AC electrical motor to drive the vertical spit. The motor is supplied with a foot control to stop the rotation of the spit when required so that meat can be cut off the spit.

Hot cupboards, Bains marie

Figure L19 - Combined hot cupboard and bains marie



Hot cupboards - are used to keep cooked food and plates hot. They are heated either:

- Directly – where the burner is situated at the base of the cupboard, or
- Indirectly – where the burner at the base of the unit heats a trough of water and the moist heat generated is circulated around the cabinet interior. These are more suited to keeping food warm and moist due to the humidity within the cabinet.

Bains-marie - are appliances that are designed to keep food warm by using food containers in a shallow bath of hot water. The bain-marie can have either:

- An open bath - where pots/containers 'free stand' on a mesh submerged below the surface of the hot water, or
- A covered bath where a plate has various size shapes cut out of it and into which purpose designed containers are inserted.