QUALIFICATION CREDIT FRAMEWORK

Appendix F

SPECIFIC GAS UTILISATION REQUIREMENTS

ADDITIONAL TO THE INFORMATION AND GUIDANCE CONTAINED IN THE FINAL GENERIC ASSESSMENT STRATEGY (v8.3 Jan 2010)

These are the current requirements for accredited vocational qualifications. They will remain in place until the certification end dates. Any requirements for new vocational qualifications will be discussed by EU Skills and the industry and agreed with the awarding body (ies) when the new qualifications are developed.

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INTRODUCTION

This Assessment Strategy has been produced by Energy & Utility Skills (EU Skills), the Sector Skills Council (SSC) for the gas, power, waste management and water industries, who developed the National Occupational Standards underpinning these qualifications and units. The content of the Assessment Strategy has been developed and agreed in consultation with Awarding Organisations, Summit Skills and Gas Safe Register

These qualifications are unique in that they contain assessment units taken from the plumbing and electrical QCF frameworks, developed by Summit Skills for the building services industry. Summit Skills will reciprocate this arrangement and incorporate into their plumbing qualifications, assessment units from the gas QCF frameworks developed by EU Skills for the gas utilisation industry. The rationale for this sharing of qualification units is that this will ensure consistency between the building services and gas sector qualifications. Candidates who commence their qualifications from either a gas or plumbing and heating direction will be assessed against the same gas and water systems criteria.

Achievement of the gas qualifications covered by this document will facilitate Gas Safe Registration in the categories appropriate to the specific qualification achieved **provided that** (1) the Awarding Organisation has a formal documented agreement with Gas Safe Register and (2) that the qualification is delivered fully in line with the requirements set out in this assessment strategy document.

Information about the Gas Safe Registration categories each qualification aligns to may be found in the section on qualification combinations

Information on the QCF etc. can also be accessed on the Qualifications and Curriculum Authority (QCA) web site at <u>www.qca.org.uk</u> and the Office of the Qualifications and Examinations Regulator web site at <u>www.ofqual.gov.uk</u>.

This assessment strategy appendix F is to be used in conjunction with the Energy & Utility Skills Final Generic Assessment Strategy (v 8.3 Jan 2010) consisting of the core requirements, common across all of EU Skills' footprints.

THE DIRECTORY OF QCF QUALIFICATIONS (NVQ) IN GAS UTILISATION

There are a number of Level 3 Diplomas available, these are:

- EUSGU001 Diploma in Gas Utilisation: Core Skills and Knowledge
- EUSGU002 Diploma in Gas Utilisation Metering (2.5-16cu/m)
- EUSGU003 Diploma in Gas Utilisation Metering (2.5-1076cu/m) *
- EUSGU004 Diploma in Gas Utilisation Metering (above 1076cu/m) *
- EUSGU005 Diploma in Gas Utilisation Installation & Maintenance: Cookers, Tumble Dryers and Leisure
- EUSGU006 Diploma in Gas Utilisation Installation & Maintenance: Domestic Space Heating
- EUSGU007 Diploma in Gas Utilisation Installation & Maintenance: Domestic Warm Air
- EUSGU008 Diploma in Gas Utilisation Installation: Water Heating and Wet Central Heating
- EUSGU009 Diploma in Gas Utilisation Maintenance: Water Heating and Wet Central Heating
- EUSGU010 Diploma in Gas Utilisation Installation & Maintenance: Water Heating and Wet Central Heating
- EUSGU011 Diploma in Diploma in Gas Utilisation Installation: Cookers, Tumble Dryers, Leisure and Domestic Space Heating
- EUSGU012 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure and Domestic Space Heating
- EUSGU013 Diploma in Gas Utilisation Installation & Maintenance: Cookers, Tumble Dryers, Leisure and Domestic Space Heating
- EUSGU014 Diploma in Gas Utilisation Installation: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating
- EUSGU015 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating
- EUSGU016 Diploma in Gas Utilisation Installation & Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating
- EUSGU017 Diploma in Gas Utilisation Installation: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Wet Central Heating and Domestic Warm Air
- EUSGU018 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Wet Central Heating and Domestic Warm Air
- EUSGU019 Diploma in Gas Utilisation Installation & Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Wet Central Heating and Domestic Warm Air
- EUSGU020 Diploma for Gas Emergency First Call Operative
- EUSGU023 Natural Gas Smart Metering Low Pressure Only
- EUSGU024 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Limited Wet Central Heating and Domestic Warm Air (in development)

The above suite of qualifications sits within the Gas Industry Framework. In addition to these there are a number of Plumbing and Heating qualifications that incorporate gas requirements and these are:-

- NVQ Level 3 Diploma in Plumbing and Heating (EUSGU021)**
- NVQ Level 3 Diploma in Domestic Heating (EUSGU021)**
- NVQ Level 3 Diploma in Plumbing and Heating (EUSGU022)**
- NVQ Level 3 Diploma in Domestic Heating (EUSGU022)**

EUSGU21 identifies a learner who has completed the gas warm air installation and maintenance option within the plumbing and heating or domestic heating level 3 full qualification

EUSGU22 identifies a learner who has completed the gas wet central heating installation and maintenance option within the plumbing and heating or domestic heating level 3 full qualification

** Level 2 NVQ Diplomas in Plumbing and Heating OR Domestic Heating are pre-requisite qualifications for these routes

These four qualifications sit under the Summit Skills Building Services Framework.

In line with the QCF model other units may be added to these qualifications, subject to the completion of the required core skills and knowledge units pertinent to the additional units selected.

* These Qualifications to be developed subject to demand

THE STRUCTURE OF QCF QUALIFICATIONS (NVQs) IN GAS UTILISATION

(Unit Combinations and Gas Registration Categories)

EUSGU 001 Level 3 Diploma in Gas Utilisation: Core Skills and Knowledge

This is a knowledge only qualification designed to provide underpinning knowledge for the gas industry.

All units below are mandatory and must be completed:

Mandatory Units:

Unit number	QCF unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety

EUSGU 002 Level 3 Diploma in Gas Utilisation Metering 2.5 – 16cu/m

All units below are mandatory and must be completed:

Mandatory Units:

Unit number	QCF unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.1	Specific Core Metering
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.12	Install Gas Meters and Regulators (2.5 – 16.0 m ³ /hr)
Completion of this Qualification Combination will enable Gas Registration in the following categories: CMA 1, MET 1 & 2, REGT 1, Pipework upto 35mm	

EUSGU 005 Level 3 Diploma in Gas Utilisation Installation and Maintenance: Cookers, Tumble Dryers and Leisure

All units below are mandatory and must be completed:

Mandatory Units:

Unit number	QCF unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.1	Install Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.2	Maintain Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, CPA 1, CMDDA 1, Pipework upto 35mm	

EUSGU 006 Level 3 Diploma in Gas Utilisation Installation and Maintenance: Domestic Space Heating

All units below are mandatory and must be completed:

Mandatory Units:

Unit number	QCF unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.7	Install Domestic Gas Space Heating Appliances
DSG 3.8	Maintain Domestic Gas Space Heating Appliances
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, HTR 1, CPA 1, CMDDA 1, Pipework upto 35mm	

EUSGU 007 Level 3 Diploma in Gas Utilisation Installation and Maintenance: Domestic Warm Air

All units below are mandatory and must be completed:

Mandatory Units:

Unit number	QCF unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.10	Install Domestic Gas Warm Air Central Heating Systems
DSG 3.11	Maintain Gas Warm Air Central Heating Systems and Appliances
MES02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating systems
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, DAH 1, CPA 1, CMDDA 1, Pipework upto 35mm	

EUSGU 008 Level 3 Diploma in Gas Utilisation Installation: Water Heating and Wet Central Heating

All units below are mandatory and must be completed:

Unit number	QCF unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.3	Install Domestic Gas Water Heaters and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.21	Water Compulsory Core Unit
DMES 02	Understand and apply domestic cold water system installation and maintenance techniques
DMES 03	Understand and apply domestic hot water system installation and maintenance techniques
DMES 04	Understand and apply domestic central heating system installation and maintenance techniques
DMES 05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques
DMES 06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques
DMES 07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques
DTHG 02	Install and Maintain Domestic Heating Systems
DHTG 04	Install, commission, service and maintain domestic heating systems
MES02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating systems
	of this Qualification Combination will enable Gas Registration in the following categories: NWAT 1, CPA 1, CMDDA 1, Pipework upto 35mm

EUSGU 009 Level 3 Diploma in Gas Utilisation Maintenance: Water Heating and Wet Central Heating

All units below are mandatory and must be completed:

Mandatory Units:

Unit number	QCF unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.4	Maintain Gas Water Heating and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.21	Water Compulsory Core Unit
DMES 02	Understand and apply domestic cold water system installation and maintenance techniques
DMES 03	Understand and apply domestic hot water system installation and maintenance techniques
DMES 04	Understand and apply domestic central heating system installation and maintenance techniques
DMES 05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques
DMES 06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques
DMES 07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques
DHTG 02	Install and Maintain Domestic Heating Systems
DHTG 04	Install, commission, service and maintain domestic heating systems
MES02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating systems
	of this Qualification Combination will enable Gas Registration in the following categories: NWAT 1, CPA 1, CMDDA 1, Pipework upto 35mm

EUSGU 010 Level 3 Diploma in Gas Utilisation Installation and Maintenance: Water Heating and Wet Central Heating

All units below are mandatory and must be completed:

Unit number	QCF unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.3	Install Domestic Gas Water Heaters and Wet Central Heating Appliances
DSG 3.4	Maintain Gas Water Heating and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.21	Water Compulsory Core Unit
DMES 02	Understand and apply domestic cold water system installation and maintenance techniques
DMES 03	Understand and apply domestic hot water system installation and maintenance techniques
DMES 04	Understand and apply domestic central heating system installation and maintenance techniques
DMES 05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques
DMES 06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques
DMES 07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques
DTHG 02	Install and Maintain Domestic Heating Systems
DHTG 04	Install, commission, service and maintain domestic heating systems
MES02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating systems
	of this Qualification Combination will enable Gas Registration in the following categories: NWAT 1, CPA 1, CMDDA 1, Pipework upto 35mm

EUSGU 011 Level 3 Diploma in Gas Utilisation Installation: Cookers, Tumble Dryers, Leisure and Domestic Space Heating

All units below are mandatory and must be completed:

Mandatory Units:

Unit number	QCF unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.1	Install Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.7	Install Domestic Gas Space Heating Appliances
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CPA 1, CMDDA 1, Pipework upto 35mm	

Total number of units required = 10

Final Version: 8.0

EUSGU 012 Level 3 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure and Domestic Space Heating

All units below are mandatory and must be completed:

Mandatory Units:

Unit number	QCF unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.2	Maintain Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.8	Maintain Domestic Gas Space Heating Appliances
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CPA 1, CMDDA 1, Pipework upto 35mm	

EUSGU 013 Level 3 Diploma in Gas Utilisation Installation and Maintenance: Cookers, Tumble Dryers, Leisure and Domestic Space Heating

All units below are mandatory and must be completed:

Mandatory Units:

Unit number	QCF unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.1	Install Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.2	Maintain Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.7	Install Domestic Gas Space Heating Appliances
DSG 3.8	Maintain Domestic Gas Space Heating Appliances
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CPA 1, CMDDA 1, Pipework upto 35mm	

EUSGU 014 Level 3 Diploma in Gas Utilisation Installation: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating

All units below are mandatory and must be completed:

Unit number	QCF unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.1	Install Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.3	Install Domestic Gas Water Heaters and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.7	Install Domestic Gas Space Heating Appliances
DSG 3.21	Water Compulsory Core Unit
DMES 02	Understand and apply domestic cold water system installation and maintenance techniques
DMES 03	Understand and apply domestic hot water system installation and maintenance techniques
DMES 04	Understand and apply domestic central heating system installation and maintenance techniques
DMES 05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques
DMES 06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques
DMES 07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques
DTHG 02	Install and Maintain Domestic Heating Systems
DHTG 04	Install, commission, service and maintain domestic heating systems
MES 02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating Systems

Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, CKHB 1, LAU 1, LEI 1, HTR 1, CENWAT 1, CPA 1, CMDDA 1, Pipework upto 35mm

EUSGU 015 Level 3 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating

All units below are mandatory and must be completed:

Unit number	QCF unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.2	Maintain Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.4	Maintain Gas Water Heating and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.8	Maintain Domestic Gas Space Heating Appliances
DSG 3.21	Water Compulsory Core Unit
DMES 02	Understand and apply domestic cold water system installation and maintenance techniques
DMES 03	Understand and apply domestic hot water system installation and maintenance techniques
DMES 04	Understand and apply domestic central heating system installation and maintenance techniques
DMES 05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques
DMES 06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques
DMES 07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques
DTHG 02	Install and Maintain Domestic Heating Systems
DHTG 04	Install, commission, service and maintain domestic heating systems

Unit number	QCF unit title
MES02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating systems
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, CKHB 1, LAU 1, LEI 1, HTR 1, CENWAT 1, CPA 1, CMDDA 1, Pipework upto 35mm	

EUSGU 016 Level 3 Diploma in Gas Utilisation Installation and Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating

All units below are mandatory and must be completed:

Unit number	QCF unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.1	Install Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.2	Maintain Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.3	Install Domestic Gas Water Heaters and Wet Central Heating Appliances
DSG 3.4	Maintain Gas Water Heating and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.7	Install Domestic Gas Space Heating Appliances
DSG 3.8	Maintain Domestic Gas Space Heating Appliances
DSG 3.21	Water Compulsory Core Unit
DMES 02	Understand and apply domestic cold water system installation and maintenance techniques
DMES 03	Understand and apply domestic hot water system installation and maintenance techniques
DMES 04	Understand and apply domestic central heating system installation and maintenance techniques
DMES 05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques
DMES 06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques

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Unit number	QCF unit title
DMES 07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques
DTHG 02	Install and Maintain Domestic Heating Systems
DHTG 04	Install, commission, service and maintain domestic heating systems
MES 02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating Systems
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, CKHB 1, LAU 1, LEI 1, HTR 1, CENWAT 1, CPA 1, CMDDA 1, Pipework upto 35mm	

EUSGU 017 Level 3 Diploma in Gas Utilisation Installation: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Wet Central Heating and Domestic Warm Air

All units below are mandatory and must be completed:

Unit number	QCF unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.1	Install Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.3	Install Domestic Gas Water Heaters and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.7	Install Domestic Gas Space Heating Appliances
DSG 3.10	Install Domestic Gas Warm Air Central Heating Systems and Appliances
DSG 3.21	Water Compulsory Core Unit
DMES 02	Understand and apply domestic cold water system installation and maintenance techniques
DMES 03	Understand and apply domestic hot water system installation and maintenance techniques
DMES 04	Understand and apply domestic central heating system installation and maintenance techniques
DMES 05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques
DMES 06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques
DMES 07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques

DTHG 02	Install and Maintain Domestic Heating Systems
DHTG 04	Install, commission, service and maintain domestic heating systems
MES02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating systems
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, CKHB 1, LAU 1, LEI 1, HTR 1, CENWAT 1, DAH 1, CPA 1, CMDDA 1, Pipework upto 35mm	

EUSGU 018 Level 3 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Wet Central Heating and Domestic Warm Air

All units below are mandatory and must be completed:

Unit number	QCF unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.2	Maintain Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.4	Maintain Gas Water Heating and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.8	Maintain Domestic Gas Space Heating Appliances
DSG 3.11	Maintain Gas Warm Air Central Heating Systems and Appliances
DSG 3.21	Water Compulsory Core Unit
DMES 02	Understand and apply domestic cold water system installation and maintenance techniques
DMES 03	Understand and apply domestic hot water system installation and maintenance techniques
DMES 04	Understand and apply domestic central heating system installation and maintenance techniques
DMES 05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques
DMES 06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques
DMES 07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques

Unit number	QCF unit title
DTHG 02	Install and Maintain Domestic Heating Systems
DHTG 04	Install, commission, service and maintain domestic heating systems
MES02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating systems
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, CKHB 1, LAU 1, LEI 1, HTR 1, CENWAT 1, DAH 1, CPA 1, CMDDA 1, Pipework upto 35mm	

EUSGU 019 Level 3 Diploma in Gas Utilisation Installation and Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating and Domestic Warm Air

All units below are mandatory and must be completed:

Unit number	QCF unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.1	Install Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.2	Maintain Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.3	Install Domestic Gas Water Heaters and Wet Central Heating Appliances
DSG 3.4	Maintain Gas Water Heating and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.7	Install Domestic Gas Space Heating Appliances
DSG 3.8	Maintain Domestic Gas Space Heating Appliances
DSG 3.10	Install Domestic Gas Warm Air Central Heating Systems and Appliances
DSG 3.11	Maintain Gas Warm Air Central Heating Systems and Appliances
DSG 3.21	Water Compulsory Core Unit
DMES 02	Understand and apply domestic cold water system installation and maintenance techniques
DMES 03	Understand and apply domestic hot water system installation and maintenance techniques

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Unit number	QCF unit title
DMES 04	Understand and apply domestic central heating system installation and maintenance techniques
DMES 05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques
DMES 06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques
DMES 07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques
DTHG 02	Install and Maintain Domestic Heating Systems
DHTG 04	Install, commission, service and maintain domestic heating systems
MES02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating systems
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, CKHB 1, LAU 1, LEI 1, HTR 1, CENWAT 1, DAH 1, CPA 1, CMDDA 1, Pipework upto 35mm	

EUSGU 020 Level 3 Diploma for Gas Emergency First Call Operative

All units below are mandatory and must be completed:

Mandatory Units:

Unit number	QCF unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.1	Specific Core Metering
DSG 2.2	Specific Core Emergency
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.12	Install Gas Meters and Regulators (2.5 to 16.0m ³ /hr)
DSG 3.13	Install Gas Meters and Regulators (2.5 to 1076m ³ /hr)
DSG 3.15	Dealing with Reported Upstream Gas Emergencies
DSG 3.16	Dealing with Reported Downstream Gas Emergencies
DSG 3.17	Strength Testing, Gas Tightness Testing and Direct Purging – IGE/UP/1A
Completion of this Qualification Combination will enable Gas Registration in the following categories: CESP 1, MET 1,2 & 4, TPCP1A, REGT1&2 Pipework upto 35mm +++	

• Level 3 NVQ Diploma in Plumbing and Heating (EUSGU021)**

The gas units listed below are only available if:

- a) the learner already holds the plumbing and heating units listed in the table, at level 3 OR
- b) the learner is undertaking the plumbing and heating units as part of this qualification

** Level 2 NVQ Diploma in Plumbing and Heating is a pre-requisite qualification for this route

All units below are mandatory and must be completed:

Unit number	QCF unit title
BSE05	Understand how to organise resources within BSE
MES02	Understand and carry out electrical work on domestic plumbing and heating systems and components.
DMES05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques
DMES06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques
DMES07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques
PLG06	Understand and apply domestic sanitation system installation, commissioning, service and maintenance techniques
PLG07	Install, commission, service and maintain domestic plumbing and heating systems
DNG01	Understand core gas safety principles for natural gas within domestic building services engineering
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 $\%$) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.10	Install Domestic Gas Warm Air Central Heating Appliances
DSG 3.11	Maintain Gas Warm Air Central Heating Systems and Appliances
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, DAH 1, CPA 1, CMDDA 1, Pipework upto 35mm +++	

• Level 3 NVQ Diploma in Domestic Heating (EUSGU021)**

The gas units listed below are only available if:

- a) the learner already holds the plumbing and heating units listed in the table, at level 3 OR
- b) the learner is undertaking the plumbing and heating units as part of this qualification

** Level 2 NVQ Diploma in Domestic Heating or Plumbing and Heating is a pre-requisite qualification for this route

All units below are mandatory and must be completed:

Unit number	QCF unit title
BSE05	Understand how to organise resources within BSE
MES02	Understand and carry out electrical work on domestic plumbing and heating systems and components.
DMES05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques
DMES06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques
DMES07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques
DHTG04	Install, commission, service and maintain domestic heating systems
DNG01	Understand core gas safety principles for natural gas within domestic building services engineering
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.10	Install Domestic Gas Warm Air Central Heating Appliances
DSG 3.11	Maintain Gas Warm Air Central Heating Systems and Appliances
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, DAH 1, CPA 1, CMDDA 1, Pipework upto 35mm +++	

• Level 3 NVQ Diploma in Plumbing and Heating (EUSGU022)**

The gas units listed below are only available if:

- a) the learner already holds the plumbing and heating units listed in the table, at level 3 OR
- b) the learner is undertaking the plumbing and heating units as part of this qualification

** Level 2 NVQ Diploma in Plumbing and Heating is a pre-requisite qualification for this route

All units below are mandatory and must be completed:

Unit number	QCF unit title
BSE05	Understand how to organise resources within BSE
MES02	Understand and carry out electrical work on domestic plumbing and heating systems and components.
DMES05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques
DMES06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques
DMES07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques
PLG06	Understand and apply domestic sanitation system installation, commissioning, service and maintenance techniques
PLG07	Install, commission, service and maintain domestic plumbing and heating systems
DNG01	Understand core gas safety principles for natural gas within domestic building services engineering
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.3	Install Domestic Gas Water Heaters and Wet Central Heating Appliances
DSG 3.4	Maintain Gas Water Heating and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
-	n of this Qualification Combination will enable Gas Registration in the following categories: ENWAT 1, CPA 1, CMDDA 1, Pipework upto 35mm +++

• Level 3 NVQ Diploma in Domestic Heating (EUSGU022)**

The gas units listed below are only available if:

- a) the learner already holds the plumbing and heating units listed in the table, at level 3 OR
- b) the learner is undertaking the plumbing and heating units as part of this qualification

** Level 2 NVQ Diploma in Domestic Heating or Plumbing and Heating are a pre-requisite qualification for this route

All units below are mandatory and must be completed:

Unit number	QCF unit title
BSE05	Understand how to organise resources within BSE
MES02	Understand and carry out electrical work on domestic plumbing and heating systems and components.
DMES05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques
DMES06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques
DMES07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques
DHTG 04	Install, commission, service and maintain domestic heating systems
DNG01	Understand core gas safety principles for natural gas within domestic building services engineering
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.3	Install Domestic Gas Water Heaters and Wet Central Heating Appliances
DSG 3.4	Maintain Gas Water Heating and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CENWAT 1, CPA 1, CMDDA 1, Pipework upto 35mm +++	

EUSGU 023 Level 2 Diploma in Gas Smart Metering 2.5 – 6 m³/hr

All units below are mandatory and must be completed:

Mandatory Units:

Unit number	QCF unit title
GSM 1.0	Applied Practices and Principles for Installing Low Pressure Natural Gas Smart Meters up to U6 only
GSM 2.0	Prepare, Install and Commission Low Pressure Natural Gas Smart Meters and Regulators up to 6.0m ³ /hr
GSM 3.0	Low Pressure Gas Smart Meter Tightness Testing and Direct Purging
Completion of this Qualification Combination will enable Gas Safe Registration in the following categories only: CMA 1, MET 1 & 2,	

Total number of units required = 3 (see note below)

Important Note regarding the Smart Metering Qualification Options

The EUSGU 023 Diploma also requires the completion other generic units that cover the general safe working practices required, the technical communication devices used in Smart Metering and Customer Service aspects. There are also Power industry units available for Learners who need to be competent for dual fuel working. These additional units are not included in this section of the Assessment Strategy document as it deals only with the gas requirements. For information on the assessment requirements for the other units, please refer to the generic EU Skills Assessment Strategy document.

EUSGU 024 Level 3 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Limited Wet Central Heating and Domestic Warm Air

All units below are mandatory and must be completed:

Mandatory Units:

Unit number	QCF unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.2	Maintain Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.4	Maintain Gas Water Heating and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.8	Maintain Domestic Gas Space Heating Appliances
DSG 3.11	Maintain Gas Warm Air Central Heating Systems and Appliances
DSG 3.21	Water Compulsory Core Unit
DMES 02	Understand and apply domestic cold water system installation and maintenance techniques
DMES 03	Understand and apply domestic hot water system installation and maintenance techniques
DMES 04	Understand and apply domestic central heating system installation and maintenance techniques
DMES 05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques
DMES 06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques
DMES 07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques

Unit number	QCF unit title			
MES02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating systems			
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, CKHB 1, LAU 1, LEI 1, HTR 1, CENWAT 1, DAH 1, CPA 1, CMDDA 1, Pipework upto 35mm				

Total number of units required = 20

ASSESSMENT STRATEGY FOR QCF QUALIFICATIONS (NVQS) IN GAS UTILISATION

THERE ARE A NEW SET OF QCF QUALIFICATIONS FOR ASSESSORS AND VERIFIERS. "Assessors under the Qualification Credit Framework (QCF)"

EXISTING ASSESSOR AND VERIFIER AWARDS ARE STILL SUITABLE WHERE IDENTIFIED.

REQUIREMENTS FOR SCHEME STAFF

Assessors

General

The centre MUST nominate all Assessors to the Awarding Body for approval prior to them conducting any assessments. Assessors may be employed by the Centre (Centre Based Assessors) or be work based (Workplace Assessors) who may or may not be from the same organisation as the Learners.

Assessors MUST be vocationally and occupationally competent in the areas they are assessing and have a thorough knowledge of the National Occupational Standards

In addition to the qualifications listed below, the Assessor must be able to provide appropriate documented evidence that demonstrates they have a minimum of 5 years proven occupational experience in the activities they will be assessing. Particular attention should be paid to providing evidence of occupational experience in the gas safety critical areas being assessed.

Where Assessors undertake assessments in the workplace, and are not supported by a suitable gas operative, then they or their employer must be a member of an appropriate Gas Registration Body in accordance with the Gas Safety (Installation and Use) Regulations. In these circumstances they should also hold suitable insurance for this activity.

Qualifications

Assessors must be technically qualified in domestic gas installation / maintenance and hold one of the following qualifications (see note below for special arrangements for Gas Smart Metering):

- C&G / SQA S/NVQ in Domestic Natural Gas (Level 3); or
- C&G 662 Certificate for Service Engineers (Gas); or
- > C&G 598-2 Certificate in Gas Installation Studies; or
- C&G 660 Certificate in Gas Fitting Final

This list is not considered exhaustive and other 'Mechanical Engineering Services' (MES) or 'Building Engineering Services' (BES) qualifications at Level 3 or equivalent may be considered acceptable. Centres must submit requests to confirm the acceptability of other qualifications to their External Verifier who will then seek approval from the SSC.

In addition to the above qualifications, all Assessors must hold a current certificate of gas safety competence in the areas of gas work they will be assessing that is not more than 5 years old (either current ACS Certificates of Gas Safety Competence or a 6012 S/NVQ are acceptable).

Note:

Special arrangements for assessments carried out in EUSGU023: L2 Diploma in Gas Smart Metering 2.5 - 6m3/hr only

While holding one of the previously listed qualifications is not a mandatory requirement in this case, Assessors must be technically qualified in domestic gas installation / maintenance and hold a current certificate of gas safety competence that includes Gas Metering and is not more than 5 years old (either current ACS Certificates of Gas Safety Competence or a 6012 S/NVQ are acceptable). 'Centre Based Assessors' MUST hold:

QCF Level Three Award "Assessing Vocational Related Achievement – in Centres/Colleges or Training Providers"

OR

QCF Level Three Certificate "Assessing Vocationally Related Achievement – in Centres/Colleges and The Workplace"

OR

> A1 or D32 /D33 with an Upgrade to A1 as a minimum *

'Workplace Assessors' MUST hold

- > QCF Level Three Award "Assessing Competence in the Workplace Environment"
- QCF Level Three Certificate "Assessing Vocationally Related Achievement in Centres/Colleges and The Workplace"
- > A2 or D32 with an upgrade to A2 as a minimum *
 - The Teaching Qualification for Secondary Education (TQSE) or the Teaching Qualification for Further Education (TQFE) (which is recognised in Scotland) these awards are acceptable providing they are the versions that are recognised as equivalents to the A1 award.
 Assessors holding D units must have evidence of Continuing Professional Development (CPD) to demonstrate compliance with the A units

A qualified Assessor shall supervise 'Candidate Assessors' who are working towards their Assessor qualifications. They should have a clear action plan for achieving the Assessor qualification(s) (this does not apply to Independent Assessors who MUST hold the appropriate Assessor qualification).

Assessor approval will be withdrawn if the qualification / units have not been attained within the approved period (18 months).

Evidence of CPD will be sought by the External Verifier for all Assessors approved to assess for the centre.

INTERNAL QUALITY ASSURANCE (INTERNAL VERIFIERS)

General

The centre MUST nominate all Internal Verifiers to the Awarding Body for approval prior to them conducting any verification activities. Internal Verifiers can be employed by the centre or be work based who may or may not be from the same organisation as the learners.

Internal Verifiers MUST be vocationally and occupationally competent in the areas they are verifying and have a thorough knowledge of the National Occupational Standards.

In addition to the qualifications listed below, the Internal Verifiers must be able to provide appropriate documented evidence that demonstrates they have a minimum of 5 years proven occupational experience in the activities they will be verifying. Particular attention should be paid to providing evidence of occupational experience in the gas safety critical areas being verified.

Qualifications:

Internal Verifiers shall be technically qualified in domestic gas installation / maintenance and hold one of the following qualifications:

- > C&G / SQA S/NVQ in Domestic Natural Gas (Level 3); or
- C&G 662 Certificate for Service Engineers (Gas); or
- > C&G 598-2 Certificate in Gas Installation Studies; or
- > C&G 660 Certificate in Gas Fitting Final

This list is not considered exhaustive and other 'Mechanical Engineering Services' (MES) or 'Building Engineering Services' (BES) qualifications at Level 3 or equivalent may be considered acceptable. Centres must submit requests to confirm the acceptability of other qualifications to their External Verifier who will then seek approval from the SSC.

In addition to the above the Internal Verifier must hold a current certificate of gas safety competence in the areas of gas work they will be internally verifying that is not more than 5 years old (either current ACS Certificates of Gas Safety Competence or a 6012 Domestic Natural Gas S/NVQ are acceptable).

Where the Internal Verifiers themselves do not hold a suitable technical qualifications they must have access to technical expertise from qualified personnel, who hold the relevant qualifications, to support them where the verification requires technical support and interpretation.

Internal Verifiers must hold the following:

- QCF Level Three Certificate "Assessing Vocationally Related Achievement in Centres/Colleges and The Workplace"
- QCF Level Four Award "Internal Quality assurance of assessment processes and practice" or QCF Level Four Certificate "leading the Internal Quality assurance of assessment processes and practice"

OR

- > A1 or D32/D33 with an upgrade to A1 as a minimum*
- V1 or D34 with an upgrade to V1 as a minimum*
 - * The Teaching Qualification for Secondary Education (TQSE) or the Teaching Qualification for Further Education (TQFE) (which is recognised in Scotland) these awards are acceptable providing they are the versions that are recognised as equivalents to the A1 award.

Internal Verifiers holding D units must have evidence of CPD to demonstrate compliance with the A and V units

It is recommended that 'Candidate Internal Verifiers' have a clear action plan for achieving the Internal Verifier qualification(s).

Internal Verifier approval will be withdrawn if the qualification / units have not been attained within the approved period (18 months).

EXTERNAL QUALITY ASSURANCE (EXTERNAL VERIFIERS)

General

External Verifiers MUST be appointed by the Awarding Body, be vocationally and occupationally competent in the areas they are verifying and have a thorough knowledge of the National Occupational Standards.

The External Verifiers must be able to provide appropriate documented evidence that demonstrates they have a minimum of 5 years proven occupational experience in the activities they will be verifying. Particular attention should be paid to providing evidence of occupational experience in the gas safety critical areas being verified.

Qualifications:

External Verifiers should be technically qualified in domestic gas installation / maintenance and hold **one of** the following qualifications:

- > C&G / SQA S/NVQ in Domestic Natural Gas (Level 3); or
- > C&G 662 Certificate for Service Engineers (Gas); or
- C&G 598-2 Certificate in Gas Installation Studies; or
- > C&G 660 Certificate in Gas Fitting Final

This list is not considered exhaustive and other 'Mechanical Engineering Services' (MES) or 'Building Engineering Services' (BES) qualifications at Level 3 or equivalent may be considered acceptable with the prior approval of the Awarding Body.

In addition to the above the External Verifier should hold a current certificate of gas safety competence in the areas of gas work they will be verifying that is not more than 5 years old (either current ACS Certificates of Gas Safety Competence or a 6012 Domestic Natural Gas S/NVQ are acceptable).

Where the External Verifiers themselves do not hold a suitable technical qualifications they must have access to technical expertise from qualified personnel, who hold the relevant qualifications, to support them where the verification requires technical support and interpretation.

External Verifiers MUST hold the following:

- QCF Level Three Certificate "Assessing Vocationally Related Achievement in Centres/Colleges and The Workplace"
- QCF Level Four Award "Internal Quality assurance of assessment processes and practice" or QCF Level Four Certificate "leading the Internal Quality assurance of assessment processes and practice"
- QCF Level Four Award "External Quality assurance of assessment processes and practice" or QCF Level Four Certificate "leading the External Quality assurance of assessment processes and practice"

OR

- > A1 or D32 /D33 with an upgrade to A1 as a minimum*
- > V1 or D34 with an upgrade to V1 as a minimum* (recommended)
- V2 or D35 with an upgrade to V2 as a minimum*

External Verifiers holding D units must have evidence of CPD to demonstrate compliance with the A & V units.

It is recommended that 'Candidate External Verifiers' should have a clear action plan for achieving the External Verifier qualification(s).

External Verifier approval will be withdrawn if the qualification / units have not been attained within the approved period (12 months).

ELECTRICAL AND PLUMBING ASSESSOR/INTERNAL VERIFIER COMPETENCE

The requirements for staff delivering and assessing the plumbing and electrical activities contained in this qualification are set out in the Summit Skills Consolidated Assessment Strategy for Units and Qualifications of "Occupational Competence" in the Credit Framework (England, Northern Ireland and Wales) for the Building Services Engineering Sector.

In general terms Gas Assessors and Internal Verifiers who meet the criteria to assess and internally verify the gas components of these QCF awards will be eligible to assess and internally verify plumbing and/or electrical activities, **provided** that they can demonstrate the additional competence and experience required to competently assess electrical and/or plumbing work.

Additional evidence for this competence and experience may be in the form of relevant plumbing/electrical qualifications, minimum technical competence type awards, building regulations competent persons schemes, CPD records and suitable work experience. This is not an exhaustive list and centres must submit requests to confirm the acceptability of other qualifications and experience to their External Verifier who will then seek approval from Summit Skills.

ELECTRICAL AND PLUMBING UNITS OF COMPETENCE

The units in scope of these additional Assessor/IV requirements are:

- DMES 02 Understand and apply domestic cold water system installation and maintenance techniques
- DMES 03 Understand and apply domestic hot water system installation and maintenance techniques
- DMES 04 Understand and apply domestic central heating system installation and maintenance techniques
- DMES 05 Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques
- DMES 06 Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques
- DMES 07 Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques

- DHTG 02 Install and maintain domestic heating systems
- DHTG 04 Install, commission, service and maintain domestic heating systems
- MES 02 Understand and carry out electrical work on domestic plumbing and heating systems and components

REQUIREMENTS FOR ASSESSMENT

The Domestic Natural Gas QCF qualifications (NVQs) are assessed through a combination of workplace assessment, simulation assessment and knowledge assessment.

The Level 3 Diploma in Gas Utilisation: Core Skills and Knowledge (EUSGU001) is now an integral part, and a prerequisite of, all the Gas Utilisation qualifications. As such the following options are available to Learners:

- EUSGU001 may be completed as a stand alone qualification*
- EUSGU001 may be completed as an introductory part of a larger qualification

* Important Notes

The assessment requirements set out in this document must be met in full. Any proposed variation(s) may not be introduced without prior written permission from the Sector Skills Council(s) and relevant Awarding Organisation.

The EUSGU001 Diploma, taken as a stand alone qualification is not sufficient for eligibility for entry to the Gas Safe Register, via any assessment only route (eg. ACS). Candidates must complete a minimum of one of the range of Level 2 and Level 3 Diplomas (EUSGU002-EUSGU024) to meet the requirements for Gas Safe Registration.

"Matters of Gas Safety" criteria are incorporated in all assessments. It is essential that the Awarding Organisations update their Assessors and Assessment Materials to ensure that any changes to these criteria are reflected in the performance of the candidate from the date they become effective. (for example: if the IGE/UP/1B Testing procedure changed six months prior to the candidate completing the qualification, all assessments including testing from the change date, must be completed against the changed procedure standard).

PRACTICAL EVIDENCE

Learners must be able to practice on all specified unit components within the tables below.

RWE assessments must be included in the portfolio of evidence leading to completion of a QCF unit in line with the requirements set out for each unit. This must be supplemented by evidence gathered directly from the workplace as required for each unit and a work experience portfolio, signed off as accurate and authentic by a suitably qualified and Gas Safe Registered engineer.

Learners MUST demonstrate competence in the workplace during the performance of genuine work activities, by carrying out the tasks and duties that would be reasonably expected of them as a competent operative. Learners will be expected to have demonstrated competence in the assessed tasks over a period of time under normal working conditions to generate a sufficiency of evidence.

The gas industry is highly regulated regarding safety requirements and this is reflected in these qualifications. Certain Gas Safety related assessments must only be carried out under simulated conditions. Gas Safety critical activities within the Units will normally be assessed in a simulated RWE and where necessary these requirements are incorporated in the tables.

Learners must demonstrate competence in each Unit through assessments in line with the evidence and assessment requirement tables below:

Unit 3.1 Install domestic gas cookers, tumble dryers and leisure appliances Unit Assessment Requirements:

- Learners must be allowed to practice on all of the identified unit components and the evidence from these activities must be recorded in the RWE and Work Experience Portfolio
- Assessments must be carried out as detailed in this table

Unit Components	Assessments to be conducted in either a RWE or the Workplace	Assessments to be conducted in the Workplace only	RWE and Work Experience Portfolio
Install Cookers:FreestandingBuilt in OvenSlide Under CookersHotplatesGrillsRange CookersDual Fuel CookersDual Fuel CookersFreestandingBuilt in OvenInstall Tumble DryersExchange Tumble DryersRemove Tumble DryersGreenhouse HeatersBarbecuesPatio HeatersGas FlambeauxOutdoor Lighting	Two assessments are required from this group and must include a gas hotplate	Two assessments are required from this group The assessments must include at least two different types of cooker	Learners must complete a RWE and Work Experience Portfolio To provide additional information about the experience gained by the learner in both RWE and the workplace Evidence must be specific regarding actual work activities undertaken by the learner It should Include all relevant evidence as available and be authorised by a competent responsible person
Remove Leisure Appliances; Greenhouse Heaters Barbecues Patio Heaters Gas Flambeaux Outdoor Lighting			Practice is required where these appliances are available

Unit 3.2 Maintain domestic gas cookers, tumble dryers and leisure appliances

Unit Assessment Requirements:

- Learners must be allowed to practice on all of the identified unit components and the evidence from these activities must be recorded in the RWE and Work Experience Portfolio
- Assessments must be carried out as detailed in this table
- Maintain must include maintenance of all appropriate components and controls. Fault Diagnostics. Servicing to manufacturers specifications. Checking the correct operation via the appropriate methods including gas pressures, gas rates, combustion performance, chimney system performance.

Unit Components	Assessments to be conducted in either a RWE or the Workplace	Assessments to be conducted in the Workplace only	RWE and Work Experience Portfolio
Servicing Cookers: Freestanding Built in Cookers Slide Under Cookers Hotplates Grills Range Cookers Dual Fuel Cookers Identify and Repair Faults: Freestanding Built in Cookers Slide Under Cookers Hotplates Grills Range Cookers Dual Fuel Cookers Dual Fuel Cookers Dual Fuel Cookers Dual Fuel Cookers Dual Fuel Cookers	Two assessments are required from this group	Two assessments required from this group The assessments must include at least two different types of cooker	Learners must complete a RWE and Work Experience Portfolio To provide additional information about the experience gained by the learner in both RWE and the workplace Evidence must be specific regarding actual work activities undertaken by the learner It should Include all relevant evidence as available and be authorised by a competent responsible person
Service Leisure Appliances: Greenhouse Heaters Barbecues Patio Heaters Gas Flambeaux Outdoor Lighting			Practice is required where these appliances are available

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Identify and Repair Faults on Leisure Appliances
Greenhouse Heaters
Barbecues
Patio Heaters
Gas Flambeaux
Outdoor Lighting

Unit 3.3 Install gas water heating and wet central heating appliances Unit Assessment Requirements:

- Learners must be allowed to practice on all of the identified unit components and the evidence from these activities must be recorded in the RWE and Work Experience Portfolio
- Assessments must be carried out as detailed in this table
- Assessments must cover the range of fanned flue systems including vertical, horizontal, twin pipe.
- In an RWE Learners must install one typical chimney lined flue system

Unit Components	Assessments to be conducted in either a RWE or the Workplace	Assessments to be conducted in the Workplace only	RWE and Work Experience Portfolio
Install Water Heaters:			
Multipoint			Learners must complete
Balance Chimney Instantaneous multipoint	One assessment required from		a RWE and Work Experience Portfolio
Fanned Chimney Instantaneous multipoint	this group		To provide additional information about the experience gained by the learner in both RWE and
Storage WH/Circulators	One		the workplace
Storage water heater Circulators	assessment required from this group		Evidence must be specific regarding actual work activities
Install Wet Central Heating Appliances:			undertaken by the learner
Fanned Chimney Condensing Combination Boiler	One assessment required from this group	Two assessment required from this group	It should Include all relevant evidence as available and be
Fanned Chimney Combined Primary Storage Condensing Combination Boiler		One of the installations should be a replacement boiler located in a	authorised by a competent responsible person
Fanned Chimney Regular System Condensing Boiler		different position	
Back Boiler Condensing			

Unit 3.4 Maintain gas water heating and wet central heating appliances Unit Assessment Requirements:

- Learners must be allowed to practice on all of the identified unit components and the evidence from these activities must be recorded in the RWE and Work Experience Portfolio
- Assessments must be carried out as detailed in this table
- Maintain must include maintenance of all appropriate components and controls. Fault Diagnostics. Servicing to manufacturers specifications. Checking the correct operation via the appropriate methods including gas pressures, gas rates, combustion performance, chimney system performance, heating/hot water system performance.

Unit Components	Assessments to be conducted in either a RWE or the Workplace	Assessments to be conducted in the Workplace only	RWE and Work Experience Portfolio
Service Water Heaters: Multipoint Balance Chimney Instantaneous multipoint Fanned Chimney Instantaneous multipoint Storage WH/Circulators Storage water heater Circulators	One assessment required from this group		Learners must complete a RWE and Work Experience Portfolio To provide additional information about the experience gained by the learner in both RWE and the workplace Evidence must be specific regarding actual work activities undertaken by the learner
Service Wet Central Heating Appliances: Fanned Chimney Condensing Combination Boiler Fanned Chimney Combined Primary Storage Condensing Combination Boiler Fanned Chimney Regular System Condensing Boiler Back Boiler Condensing	One assessment required from this group	Two assessments required from this group	It should Include all relevant evidence as available and be authorised by a competent responsible person

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Identify and Repair Faults on Water Heaters: Multipoint Balance Chimney Instantaneous multipoint Fanned Chimney Instantaneous multipoint	One assessment required from this group	
Storage WH/Circulators		
Storage water heater		
Circulators		
Identify and Repair Faults on Wet Central Heating Appliances: Fanned Chimney Condensing Combination Boiler Fanned Chimney Combined Primary Storage Condensing Combination Boiler Fanned Chimney Regular System Condensing Boiler Back Boiler Condensing	One assessment required from this group	Two assessments required from this group

Unit 3.5 Install Gas Pipework Upto 35mm Unit Assessment Requirements:

- Learners must be allowed to practice on all of the identified unit components and the evidence from these activities must be recorded in the RWE and Work Experience Portfolio
- Assessments must be carried out as detailed in this table
- The range of pipework and sizes up to 35mm must be covered by the assessments and they must include capillary, mechanical, compression and screwed joints. Union joints and pressed joints
- Pipework installations used for assessment must be a minimum of 3 metres in length and include changes in direction via the use of fittings and bends.
- Pipework installations used for assessment must include at least one occasion where:
 - Pipework passes through a cavity wall
 - Pipework is installed under a wooden floor
 - Pipework is installed on the surface and clipped
 - Pipework is protected from corrosion

Unit Components	Assessments to be conducted in either a RWE or the	Assessments to be conducted in the Workplace only	RWE and Work Experience Portfolio
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	Workplace		
Install Copper Pipework Install Steel Pipework Install Corrugated Stainless Steel Tube (CSST) Install Polyethylene	Yes x 1 Yes x 1 Yes x 1	Three assessments required from this group The assessments must include at least two different types of pipework material	Learners must complete a RWE and Work Experience Portfolio To provide additional information about the experience gained by the learner in both RWE and the workplace Evidence must be specific regarding actual work activities undertaken by the learner It should Include all relevant evidence as available and be authorised by a competent responsible person

Unit 3.6 Gas Tightness Testing and Direct Purging IGE/UP/1B Unit Assessment Requirements:

- Learners must be allowed to practice on all of the identified unit components and the evidence from these activities must be recorded in the RWE and Work Experience Portfolio
- Assessments must be carried out as detailed in this table
- The range of Low and Medium Pressure supply must be covered by the assessments
- The range of pipework sizes up to 35mm must be covered by the assessments
- The range of volumes upto 0.035cu mtrs must be covered by the assessments

Unit Components	Assessments to be conducted in either a RWE or the Workplace	Assessments to be conducted in the Workplace only	RWE and Work Experience Portfolio
			Learners must complete a RWE and Work Experience Portfolio
Testing and Purging Low Pressure fed	One		To provide additional information about the experience gained by the learner in both RWE and the workplace
U6/G4, E6 Type Installations U16/G10 Type Installations Medium Pressure fed	assessment required from this group One	Two assessments required from this group	Evidence must be specific regarding actual work activities undertaken by the learner
U6/G4, E6 Type Installations U16/G10 Type Installations	assessment required from this group		It should Include all relevant evidence as available and be authorised by a competent responsible person

Unit 3.7 Install domestic gas space heating appliances Unit Assessment Requirements:

- Learners must be allowed to practice on all of the identified unit components and the evidence from these activities must be recorded in the RWE and Work Experience Portfolio
- Assessments must be carried out as detailed in this table
- In an RWE Learners must install one typical open flue system
- In an RWE Learners must install one typical chimney lined flue system
- Chimney types must include open, room sealed and fanned draught

Unit Components	Assessments to be conducted in either a RWE or the Workplace	Assessments to be conducted in the Workplace only	RWE and Work Experience Portfolio
Install Gas Fires Outset Gas Fires ILFE's DFE's Flueless Direct Flue Connection Fires Heating Stoves Cassette Fires Condensing Gas Fires Fanned Flues Install Gas Wall Heaters Room-Sealed Remove Gas Space Heaters Gas Fire Gas Wall Heater	Two assessments are required from this group The assessments must include two different types of fire Yes x 1	Two assessments are required from this group and one should be an exchange The assessments must include at least two different types of fire	Learners must complete a RWE and Work Experience Portfolio To provide additional information about the experience gained by the learner in both RWE and the workplace Evidence must be specific regarding actual work activities undertaken by the learner It should Include all relevant evidence as available and be authorised by a competent responsible person

Unit 3.8 Maintain domestic gas space heating appliances Unit Assessment Requirements:

- Learners must be allowed to practice on all of the identified unit components and the evidence from these activities must be recorded in the RWE and Work Experience Portfolio
- Assessments must be carried out as detailed in this table
- Chimney types must include open, room sealed and fanned draught
- Maintain must include maintenance of all appropriate components and controls. Fault Diagnostics. Servicing to manufacturers specifications. Checking the correct operation via the appropriate methods including gas pressures, gas rates, combustion performance, chimney system performance,

Unit Components	Assessments	Assessments to be	RWE and Work
	to be conducted in either a RWE or the Workplace	conducted in the Workplace only	Experience Portfolio
Service Gas Fires			
Outset Gas Fires			Learners must complete a RWE and Work
ILFE's	Two		Experience Portfolio
DFE's	assessments are required	Two assessments are required from this group	To provide additional information about the
Flueless	from this group		experience gained by the
Direct Flue Connection Fires	The	The assessments must	learner in both RWE and the workplace
Heating Stoves	assessments must include	include at least two	Evidence must be
Cassette Fires	two different	different types of fire	specific regarding actual
Condensing Gas Fires	types of fire		work activities undertaken by the
Fanned Flues			learner
Service Gas Wall Heaters			It should include all relevant evidence as
Room-Sealed	Yes x 1		available and be authorised by a competent responsible
Identify and Repair Faults on Gas Fires			person
Outset Gas Fires			
ILFE's	Two		
DFE's	assessments		
Flueless	are required from this group		
Direct Flue Connection Fires	The		
Heating Stoves	assessments must include		
Cassette Fires	two different		
Condensing Gas Fires	types of fire		
Fanned Flues			
Identify and Repair Faults on Gas Wall Heaters			

Unit 3.10 Install gas warm air central heating systems and appliances Unit Assessment Requirements:

- This unit must not be used to assess combined warm air and water heating system installation. Other units are available in the QCF framework to assess the associated water skills and competences
- Learners must be allowed to practice on all of the identified unit components and the evidence from these activities must be recorded in the RWE and Work Experience Portfolio
- Assessments must be carried out as detailed in this table
- Chimney types must include open, room sealed and fanned draught
- In an RWE Learners must also install one typical open flue system

Unit Components	Assessments to be conducted in either a RWE or the Workplace	Assessments to be conducted in the Workplace only	RWE and Work Experience Portfolio
Install Warm Air Central Heating Appliances: Basic Warm Air Units: Down-flow Up-flow Horizontal-flow Slot-fit Ducting Systems:	Two assessments are required from this group	Two assessments are required from this group	Learners must complete a RWE and Work Experience Portfolio To provide additional information about the experience gained by the learner in both RWE and the workplace Evidence must be specific regarding actual work activities undertaken by the
Stub Duct Radial Duct Perimeter Loop Extended Plenum Stepped Duct	Two assessments are required from this group		learner It should Include all relevant evidence as available and be authorised by a competent responsible person

Unit 3.11 Maintain gas warm air central heating systems and appliances Unit Assessment Requirements:

- This unit must not be used to assess combined warm air and water heating system maintenance. Other units are available in the QCF framework to assess the associated water skills and competences
- Learners must be allowed to practice on all of the identified unit components and the evidence from these activities must be recorded in the RWE and Work Experience Portfolio
- Assessments must be carried out as detailed in this table
- Chimney types must include open, room sealed and fanned draught
- In an RWE Learners must also install one typical open flue system
- Maintain must include maintenance of all appropriate components and controls. Fault Diagnostics. Servicing to manufacturers specifications. Checking the correct operation via the appropriate methods including gas pressures, gas rates, combustion performance, chimney system performance, warm air system performance.

Unit Components	Assessments to be conducted in either a RWE or the Workplace	Assessments to be conducted in the Workplace only	RWE and Work Experience Portfolio
Service Basic Warm Air Central Heating Appliances and Ducting Systems			Learners must complete a RWE and Work Experience Portfolio
Down-flow	Two	Two assessments are	To provide additional
Up-flow	assessments are required	required from this group	information about the experience gained by the
Horizontal-flow	from this group		learner in both RWE and
Slot-fit			the workplace
Stub Duct Radial Duct			Evidence must be specific regarding actual work activities undertaken by the learner
Perimeter Loop			It should Include all
Extended Plenum			relevant evidence as available and be
Stepped Duct			authorised by a
Identify and Repair Faults on Basic Warm Air Central Heating Appliances and Ducting Systems:			competent responsible person
Down-flow	Three		
Up-flow	assessments		
Horizontal-flow	are required from this group		
Slot-fit	<u>-</u>		
Stub Duct			

Radial Duct			
Perimeter Loop			
Extended Plenum			
Stepped Duct			

Unit 3.12 Install gas meters and regulators 2.5 – 16cu mtrs/hr Unit Assessment Requirements:

- Learners must be allowed to practice on all of the identified unit components and the evidence from these activities must be recorded in the RWE and Work Experience Portfolio
- Assessments must be carried out as detailed in this table

Unit Components	Assessments to be conducted in either a RWE or the Workplace	Assessments to be conducted in the Workplace only	RWE and Work Experience Portfolio
Install Gas Meters and Regulators:			Learners must complete
Low Pressure Fed U6/G4, E6, U16/G10, Prepayment and			a RWE and Work Experience Portfolio
Credit Internal Installation on a Meter bar Installation in a Surface Mounted Meter box	One assessment required from	Two assessments are required from this group	To provide additional information about the experience gained by the learner in both RWE and the workplace
Installation in a Built in Meter box Installation in a Semi Concealed Meter box	required from this group	required from this group	Evidence must be specific regarding actual work activities undertaken by the learner
Medium Pressure Fed U6/G4, E6, Internal Installation on a Meter bar Installation in a Surface Mounted Meter box Installation in a Semi Concealed Meter box	One assessment required from this group	One assessment required from this group	It should Include all relevant evidence as available and be authorised by a competent responsible person
Exchange U6G4,E6 or U16/G10 Meter	Yes x 1	Yes x 1	
Remove U6,E6 or U16 Meter	Yes x 1		

Phase 2 Unit Unit 3.13 Install gas meters and regulators 16 – 1076cu mtrs/hr

Unit Assessment Requirements:

- Learners must be allowed to practice on all of the identified unit components and the evidence from these activities must be recorded in the RWE and Work Experience Portfolio
- Assessments must be carried out as detailed in this table

Unit Components	Assessments to be conducted in either a RWE or the Workplace	Assessments to be conducted in the Workplace only	RWE and Work Experience Portfolio
Install Gas Meters and Regulators: Low Pressure Fed U6, E6, Prepayment, U16 Assessment Content To be Confirmed in Phase 2 Medium Pressure Fed U6, E6, Exchange U6,E6 or U16 Meter Remove U6,E6 or U16 Meter			Learners must complete a RWE and Work Experience Portfolio To provide additional information about the experience gained by the learner in both RWE and the workplace Evidence must be specific regarding actual work activities undertaken by the learner It should Include all relevant evidence as available and be authorised by a competent responsible person

Phase 2 unit

Unit 3.14 Install gas meters and regulators above 1076cu mtrs/hr Unit Assessment Requirements:

- Learners must be allowed to practice on all of the identified unit components and the evidence from these activities must be recorded in the RWE and Work Experience Portfolio
- Assessments must be carried out as detailed in this table

		Learners must complete a RWE and Work Experience Portfolio
		To provide additional information about the experience gained by the learner in both RWE and the workplace
Install Gas Meters and Regulators Assessment Content To be		Evidence must be specific regarding actual work activities undertaken by the learner
Confirmed in Phase 2		It should Include all relevant evidence as available and be authorised by a competent responsible person

Unit 3.15 Dealing with reported gas upstream emergencies Unit Assessment Requirements:

- Learners must be allowed to practice on all of the identified unit components and the evidence from these activities must be recorded in the RWE and Work Experience Portfolio
- Assessments must be carried out as detailed in this table
- Evidence should cover dealing with outside gas escapes, low and medium pressure, gas in ducts, gas tracking into properties, property safety checks, safe isolation, evacuations, summoning assistance from the emergency services, teamworking, gas in confined spaces, LPG escapes.

Unit Components	Assessments to be conducted in a RWE	Assessments conducted in the Workplace only	RWE and Work Experience Portfolio
Receive, Use and Communicate Information and Data	Yes x 2		This is an essential part of this unit as
Use approved Gas Detection and Safety Equipment Assess Risks to Life, Property	Yes x 2		assessment in the real workplace is not allowed due the to the safety critical nature of the work
Assess Risks to Life, Property and the Environment during Gas Emergencies Eliminate, Remove, Minimise	Yes x 2		Accurate post job records must be completed and signed off by a competent engineer/person.
Risks to Life, Property and the Environment during Gas Emergencies Undertake Site Surveys to	Yes x 2		The additional information gathered will evidence the experience gained by the learner in the workplace
Determine the extent and levels of Gas Escape Concentrations	Yes x 2		It must be specific regarding the actual work activities and
Final Investigation, Leaving the Immediate Work Site Safe	Yes x 2		responsibilities undertaken by the learner
Resolve problems which could affect the emergency situation	Yes x 2		

Unit 3.16 Dealing with reported gas downstream emergencies Unit Assessment Requirements:

- Learners must be allowed to practice on all of the identified unit components and the evidence from these activities must be recorded in the RWE and Work Experience Portfolio
- Assessments must be carried out as detailed in this table
- Evidence should cover Controlled and Un-Controlled gas escapes, reports of gassing, fumes, fluctuating supplies, no gas and flue blockage due to birds/animals behind appliances. LPG escapes, RIDDOR reportable escapes. Gas tracking into properties, property safety checks, safe isolation, evacuations, summoning assistance from the emergency services, teamworking, gas in confined spaces.

Unit Components	Assessments conducted in a RWE	Assessments conducted in the Workplace only	RWE and Work Experience Portfolio
Receive, Use and Communicate Information and Data Use approved Gas Detection	Yes x 2		This is an essential part of this unit as assessment in the real workplace is not allowed
and Safety Equipment	Yes x 2		due the to the safety critical nature of the work
Assess Risks to Life, Property and the Environment during Gas Emergencies Eliminate, Remove, Minimise	Yes x 2		Accurate post job records must be completed and signed off by a competent engineer/person.
Risks to Life, Property and the Environment during Gas Emergencies	Yes x 2		The additional information gathered will evidence the experience
Undertake Site Surveys to Determine the extent and levels of Gas Escape Concentrations	Yes x 2		gained by the learner in the workplace It must be specific regarding the actual work
Final Investigation, Leaving the Immediate Work Site Safe	Yes x 2		activities and responsibilities undertaken by the
Resolve problems which could affect the emergency situation	Yes x 2		learner

Unit 3.17 Strength testing, gas tightness testing and direct purging IGE/UP/1A Unit Assessment Requirements:

- Learners must be allowed to practice on all of the identified unit components and the evidence from these activities must be recorded in the RWE and Work Experience Portfolio
- Assessments must be carried out as detailed in this table
- Low Pressure fed supplies upto 75mbar
- Maximum outlet pressures 40mbar
- The range of pipework sizes up to 150mm must be covered by the assessments
- The range of volumes upto 1.0 cu mtrs must be covered by the assessments

Unit Components	Assessments to be conducted in either a RWE or the Workplace	Assessments to be conducted in the Workplace only	RWE and Work Experience Portfolio
Strength Testing	Yes x 1	Yes x 1	Learners must complete a RWE and Work Experience Portfolio
TightnessTesting: New Installation Existing Installation Purging: Decommission Purge Commission Purge	Yes x 1 Yes x 1 Yes x 1 Yes x 1	One assessment required from this group One assessment required from this group	To provide additional information about the experience gained by the learner in both RWE and the workplace Evidence must be specific regarding actual work activities undertaken by the learner It should Include all relevant evidence as available and be authorised by a competent responsible person

Unit GSM 2.0 Prepare, Install and Commission Low Pressure Natural Gas Smart Meter and Regulator up to 6.0m³/hr

Unit Assessment Requirements:

- Learners must be allowed to practice on all of the identified unit components
 - Assessments must be carried out as detailed in this table

Unit Components	Assessments conducted in either a RWE or the Workplace	Assessments conducted in the Workplace only	Work Experience Log
Exchange Low Pressure (U6/G4, E6), Smart Gas Meter Internal Installation with pre- installed Meter bar Internal installation without pre- installed Meter bar Surface Mounted Meter box Built in Meter box	Yes x 1 Yes x 1 Yes x 1 Yes x 1 Yes x 1	Two assessments are required from this group	To provide additional information about the experience gained by the learner in the workplace Must be specific regarding actual work activities undertaken by the learner Should Include all relevant evidence as available
Remove U6,E6 METER	Yes x 1	Optional	

Unit GSM 3.0 Low Pressure Gas Smart Meter Tightness Testing and Direct Purging

Unit Assessment Requirements:

- Learners must be allowed to practice on all of the identified unit components
- Assessments must be carried out as detailed in this table
- The range of pipework sizes up to 35mm must be covered by the assessments

Unit Components	Assessments conducted in either a RWE or the Workplace	Assessments conducted in the Workplace only	Work Experience Log
Testing and Purging			
Low Pressure fed Smart Meter Installation U6/G4, E6 Type Installations	One assessment required from this group	ONE assessment required from this group	To provide additional information about the experience gained by the learner in the workplace Must be specific regarding actual work activities undertaken by the learner Should Include all
			relevant evidence where available

Generic Core Knowledge Units

All knowledge criteria must be evidenced by learners. Awarding Organisations can use a variety of assessment methods which will demonstrate that learners have successfully met the unit criteria. These can include Closed Book Written Questions, Open Book Written Questions, Recorded Oral Questions, Projects and Assignments.

Specific Core Knowledge and Performance Units

All knowledge and performance criteria must be evidenced by learners. Awarding Organisations can use a variety of assessment methods which will demonstrate that learners have successfully met the unit criteria. These can include Closed Book Written Questions, Open Book Written Questions, Recorded Oral Questions, Projects, Assignments, Evidence from Practical Assessments conducted in a RWE and evidence from Practical Assessments conducted in the workplace.

Optional Knowledge and Performance Units

All knowledge and performance criteria must be evidenced by learners. Awarding Organisations must ensure that the "Assessment Strategy Evidence and Assessment Requirement Tables" produced for each unit are followed. A variety of assessment methods can be used to demonstrate that learners have successfully met the unit criteria. These can include Closed Book Written Questions, Open Book Written Questions, Recorded Oral Questions Projects, Assignments, Evidence from Practical Assessments conducted in a RWE and evidence from Practical Assessments conducted in the workplace.

Matters of Gas Safety

Awarding Organisations must ensure that all QCF units and the associated "matters of gas safety criteria" are referenced to those issued by Energy & Utility Skills. The "matters of gas safety criteria" are updated on a six monthly cycle and any changes must be implemented in line with the industry requirements agreed with Gas Safe Register

Approved Awarding Organisations

Must ensure the security of qualification information and assessment materials at their delivery centres. These will include matters of gas safety criteria, questions, assessments and assessment materials, etc. It is essential that these types of materials are kept safe and secure in accordance with the Approved Awarding Organisations policy and procedures.

Realistic Working Environment (RWE) Assessment (Simulation)

RWE simulated assessment may only be used as specified and, if necessary, with the prior approval of the External Verifier (see previous section). Any approval given by the External Verifier MUST be in writing and filed in the centre's Quality Manual and in the 'Learners Portfolio' for audit purposes.

These assessments will normally be installation and maintenance bays in a workshop area. These areas are considered to be a 'managed' environment because there is a degree of control over the conditions under which the activity is undertaken. The simulation activities and bays will normally contain:

- real time pressures;
- a range of appliances, applicable to the assessment types;
- a variety of flue types, e.g. Type 'B', Type 'C', natural & fanned draught with a range of construction methods;
- a range of potential hazards that could realistically be found in a domestic dwelling, e.g. combustible surfaces, openable windows, doors, fans, curtains etc. (*Note: these hazards may be simulated*);
- a range of installation conditions, e.g. surface installation, under floor installation, through wall installation etc;
- a range of building material types, e.g. brick walls, block walls, plaster board and timber walls.

The RWE must take account of health and safety requirements for risk assessments, gas safety related issues and against other activities where generating evidence is limited.

RECOGNITION OF PRIOR LEARNING (RPL)

Recognition of Prior Learning (RPL) evidence is an acceptable source of evidence for these qualifications.

For evidence of gas safety competence the following constraints shall apply:

• Current (issued within last 3 years) ACoPS / ACS Certificates of competence in matters of gas safety are acceptable as RPL evidence. However, as these do not attest to competence in the other essential aspects of gas installation and maintenance, all unit requirements must be satisfied in full to achieve the qualification. All evidence of current gas safety competence MUST be demonstrated throughout the qualification being undertaken.

All RPL evidence must be approved by the centre's RPL Advisor. The RPL Advisor shall hold D36 or equivalent. All evidence shall be sufficient, valid, reliable, authentic and current

GATHERING EVIDENCE

In order to achieve a qualification, Learners MUST produce sufficient evidence of competence.

Documentation must be provided to ensure that evidence of competence is gathered, organised and recorded in a uniform manner across all centres.

Where appropriate, learners may provide evidence of prior learning (see RPL Section of this Guide)

Witness testimony may be used as supporting evidence to cover the range of activities not covered naturally by workplace assessment. This evidence will normally be via a completed document signed by a 'Technically and Occupationally Competent Witness' (the centres External Verifier will be able to give further advice on the use of witness testimony). **Note:** Witness testimony is not acceptable as evidence to meet the "Matters of Gas Safety" criteria, incorporated into each qualification

THE LEARNER'S PORTFOLIO

The learner portfolio documents the evidence which will demonstrate learner progress. It records their assessment achievement, development and work experience leading to the attainment of their chosen QCF qualification.

The 'Learner's Portfolio' could be made up of a combination of the following:

- Summary of the results from Knowledge & Understanding Question Papers
- Summary of the results from Assessments (RWE/Workplace)
- Assessment sheets
- Copies of all Learner specific questions together with a record of the answers given (oral or written)
- Feedback sheets
- Workplace Experience Evidence
- Witness Statements
- Work Method Statements
- Evidence of Prior Learning (RPL Evidence)
- Assessor Assessment Plans feedback to Learners
- Company or employer job sheets and specifications
- Curriculum Vitae
- Photographic Evidence

WITNESS TESTIMONY

'Witness Testimony' can NOT be accepted as a primary source of evidence for all work activities. 'Witness Testimony' may be used as supporting evidence to cover the range of activities not covered by 'Workplace Assessment' or RWE Assessment.

'Witness Testimony' evidence can only be accepted if the testimony is completed by a 'Technically and Occupationally Competent Witness' and will normally be in the form of a completed and signed SoE with other supporting evidence (e.g. company or employer job sheets, photographic evidence). The centres External Verifier will be able to give further advice on the use of witness testimony.

The evidence provided by 'Witness Testimony' and other non-observed sources must be substantiated by an Assessor (e.g. by confirming the suitability of the witness and by professional discussion). Once the evidence has been substantiated and suitably documented, then it can be referenced to the appropriate RoA by the Assessor.

WRITTEN & ORAL QUESTIONING

Assessors should use questioning where they consider it is appropriate to fully cover the subject area being assessed and to allow the Learner to evidence their full understanding.

When using oral questions, Assessors should be mindful of the effect their behaviour can have on the Learners performance. Questions should be asked in the spirit of gaining information rather than pressurising a Learner by creating the atmosphere of a test.

ALL oral questions must be relevant to the assessment criteria and the Assessor MUST NOT coach or lead the Learner towards providing correct answers. The Assessor MUST NOT ask the Learner any 'leading' or 'closed' questions. Assessors should take care to ask clear questions.

Questions and the Learners responses should be recorded on the appropriate assessment documentation, for example on the 'Feedback Sheet' provided.

FEEDBACK

Learners shall be given feedback at appropriate times during the completion of their qualification, as determined suitable by the Assessor, employer, mentor, etc. This would normally be associated with an assessment activity with Assessor involvement and should be given as soon a practical after the completion of the activity.

It is important that a copy of all feedback and oral questioning sessions with Learners are kept for inclusion in the Learner Portfolio.

Notes from feedback and oral questioning sessions might not include a precise record of the feedback, questions and answers to every question, but a summary of the feedback, questions and answers must be recorded with reference to specific criteria as necessary.

EXTERNAL QUALITY CONTROL REQUIREMENTS

All Awarding Organisations offering these qualifications must operate and maintain a robust quality assurance process to ensure that the assessment requirements set out in this document are delivered to the specification provided.

APPENDIX 1 - GLOSSARY OF TERMS

Approved Centre: an organisation inspected by the Awarding Body and deemed to have the trained staff and resources to make assessment arrangements for particular QCF qualifications

Assessor: person accountable to the external verifier (through the internal verifier) who is both experienced and qualified/or working towards qualifications in assessing Learners. Assessor skills include observation, evaluation, making judgements about individual performance.

Assessors may be based in the workplace, in an approved centre such as a college, or be peripatetic, visiting Learners in a variety of situations.

Assessment Plan: Between Assessor and Learner a structured approach is used to specify how, where and when evidence will be generated and what method of assessment will be used. This information is recorded, dated and signed by assessor and Learner and is used as the basis for review meetings between Learner and assessor.

Awarding Organisation: an organisation recognised by Ofqual for the purpose of awarding QCF qualifications

Learner: employee or student / trainee who wishes to be assessed in order to gain a qualification (formerly referred to as a candidate).

Competence: an assessment based on the Learner's ability to perform a task to a defined standard specified in the national occupational standards.

Evidence: the means by which an external verifier can be satisfied that an individual has been properly assessed, usually a combination of completed/endorsed witness statements, and assessments by a qualified assessor with additional documentation collected in a portfolio of evidence.

External Verifier: person accountable to the Awarding Body who by monitoring and advising internal verifiers and assessors effects quality assurance

Internal Verifier: person accountable to the external verifier and the Awarding Body who is based in the approved centre and who co-ordinates assessment arrangements and monitors assessor standards.

National Standard of Work (Performance Criteria): required from learners to demonstrate their capability.

National Vocational Qualification: a qualification recognised by UKCES as being relevant to the need of industry.

Portfolio: a structured collection of evidence from several sources, gathered together and referenced to the national occupational standards, in which a learner's achievements are recorded.

Qualification Credit Framework (QCF) Qualification Credit Framework, the suite of units that may be used to build qualifications and enable career progression.

Real Work: where the provision of the product or service by the Learner, if not carried out, would require an organisation to employ someone else to do it.

Realistic Working Environment (RWE): an environment within which Learners are producing performance evidence subject to the following conditions:

- real work pressures (e.g. working hours, timescales, accountability, establishing priorities)
- real work problems
- real tools to do the job (e.g. real information, industry standard equipment)
- a real client or customer (not the trainer or assessor)

RPL: the Recognition of Prior Learning- the facility for an individual to receive credit for previously acquired (and still current) competence.

Technically & Occupationally Competent Witness: a gas operative who holds a current certificate of competence in the area of work for which they are providing witness testimony (these operatives must be a 'member of a class of persons' as outlined in Regulation 3(3) of the Gas Safety (Installation and Use) Regulations).