



# Level 3 NVQ Diploma in DOMESTIC PLUMBING AND HEATING

## Qualification Specification

### Overview

This qualification is a National Vocational qualification (NVQ). It involves the skills and knowledge needed to do the job, ability to organise work and identify and prevent problems. NVQs are based on national occupational standards, which the learner must meet to be competent in a particular task. The achievement of NVQs will encourage an employee to value their contribution to the workplace, and it will develop their skills and potential. This qualification requires occupational evidence.

### Typical Job

Plumber, Plumbing and Domestic Heating Installer, Plumbing and Domestic Heating Engineer

Qualification code:	600/1252/3
Level:	3
Total qualification time:	680
Guided learning hours:	549
Minimum learning age:	16



## Purpose of qualification

The qualification provides learners with practical experience of plumbing and an expectation of some of the situations that they could face as a plumber in the building services sector. More specifically, it provides learners with the required underpinning knowledge and related practical skills they will need to prove competence and to subsequently pursue a career in this occupational area.

Key topics include commissioning, service and maintenance techniques for cold water, hot water, central heating and above ground drainage systems.

### What does this qualification cover?

This qualification has SEVEN core mandatory units and three optional pathways which learners must complete one pathway and this will provide learners with the competence to work in the plumbing industry at the level achieved, the structure is listed on page 3.

The optional pathways are relevant to either solar thermal, heat pumps and rain water harvesting

### Who is this qualification for?

This qualification is predominantly for learners who want to be plumbers working in the BSE industry. The qualification may also be suitable for learners who are interested in plumbing and/or are considering a career change. The qualification has been specifically designed as a competence component in the Apprenticeship framework.

It is suitable for learners aged:

- 16-18
- 19+

### Who supports this qualification?

This qualification is:

- Accredited by Ofqual at level 3
- Endorsed by employers as facilitating progression to an apprenticeship and/or one or more of the industry recognised qualifications at level 3\*

\*Letters of endorsement from employers and other organisations can be viewed on the EAL website.

## What could this qualification lead to?

### Typical job roles include:

Plumber, Plumbing and Domestic Heating Installer, Plumbing and Domestic Heating Engineer

This qualification relates to:

- EAL Level 1 Diploma in Plumbing
- EAL Level 3 Diploma in Plumbing and Heating
- EAL Level 2 NVQ Diploma in Plumbing and Heating
- EAL Level 3 NVQ Diploma in Heating

## Entry requirements

Learners must be at least 16 years old. There are no formal entry requirements for this qualification. However, learners must have the potential to achieve all aspects of the qualification. In particular, learners should be able to demonstrate that they have the minimum levels of literacy and numeracy required to comply with the health and safety aspects of the scheme, the completion of the learning outcomes, and the assessments.

## How is the qualification achieved?

This qualification will be achieved when the learner has successfully completed:

- The SEVEN mandatory units, including any related Centre marked assignments/practical tests and externally marked exams.
- ONE of the three pathways, including any related Centre marked assignments/practical tests, portfolio development and on-site practical assessments

## What will be assessed?

This qualification is made up of units to which appropriate assessment methods have been applied. The units contain the learning outcomes and the assessment criteria that the learner is to be assessed against.

All learning outcomes within the qualification will be assessed. In order to meet this requirement, it is advised that centres should maintain an assessment and feedback record for each learner. This will detail the evidence evaluated against the learning outcome and the feedback given to the learner. All learner evidence must be available to the EAL External Quality Assurer.

## How will it be assessed?

Where appropriate, learners will be assessed in naturally occurring planned activities carrying out their work tasks. Assessment against the learning outcomes of the qualification may be through practical observation and oral questioning. Performance evidence may be provided by the employer in partnership with the approved centre staff where established performance management processes are used by the employer to monitor staff performance.

The internal assessments will be a combination of on-screen exams, written and short answers and simulated practical assessments

The internal assessments are set by EAL and the on-screen exam is marked by EAL and all other internal assessments are marked by members of the delivery team at the Centre.

Where the assessment takes the form of written/short answer or multiple choice question papers, these must be treated as controlled assessments.

## Structure

The qualification will be obtained by the learner once they have completed the mandatory units and at least one pathway.

Achievement of the qualification will require at least 549 Guided Learning Hours (GLH) and has 680 hours Total Qualification Time.

### Mandatory units: this unit must be completed:

Unit	Unit title	Credit value	GLH	Ofqual Code
QBSE3/05	Understand how to organise resources within BSE	3	26	R/602/2498
QMES3/02	Understand and carry out electrical work on domestic plumbing and heating systems and components	12	102	T/502/9157
QDMES3/05	Understand and apply domestic cold water system installation, commissioning, service and maintenance techniques	9	76	K/502/8930
QDMES3/06	Understand and apply domestic hot water system installation, commissioning, service and maintenance techniques	9	76	K/502/9155
QDMES3/07	Understand and apply domestic central heating system installation, commissioning, service and maintenance techniques	12	98	M/502/9156
QPLG3/06	Understand and apply domestic sanitation system installation, commissioning, service and maintenance techniques	8	72	D/502/9296
QPLG3/07	Install, commission, service and maintain domestic plumbing and heating systems	3	4	K/502/9298

## Structure

### Pathway: Environmental:

The learner must achieve 12 credits by completing either Option A, Option B, or Option C.

#### Option A: Solar Thermal: All units must be completed:

Unit	Unit title	Credit value	GLH	Ofqual Code
QET3/001	Understand the fundamental principles and requirements of environmental technology systems	2	15	K/602/3138
QET3/002ST	Know the requirements to install, commission and handover solar thermal hot water systems	4	35	F/602/3100
QET3/003ST	Install, commission and handover 'active' solar thermal hot water systems	2	15	L/602/3102
QET3/004ST	Know the requirements to inspect, service and maintain 'active' solar thermal hot water systems	2	15	Y/602/3104
QET3/005ST	Inspect, service and maintain 'active' solar thermal hot water systems	2	15	K/602/3107

#### Option B: Heat Pumps: All units must be completed:

Unit	Unit title	Credit value	GLH	Ofqual Code
QET3/001	Understand the fundamental principles and requirements of environmental technology systems	2	15	K/602/3138
QET3/002HP	Know the requirements to install, commission and handover heat pump systems non-refrigerant circuits	4	35	Y/602/3054
QET3/003HP	Install, commission and handover heat pumps non-refrigerant circuits	2	15	D/602/3072
QET3/004HP	Know the requirements to inspect, service and maintain heat pump system installations non-refrigerant circuits	2	15	F/602/3078
QET3/005HP	Inspect, service and maintain heat pump installations non-refrigerant circuits	2	15	L/602/3083

**Option C: Water Recycling: All units must be completed:**

Unit	Unit title	Credit value	GLH	Ofqual Code
QET3/001	Understand the fundamental principles and requirements of environmental technology systems	2	15	K/602/3138
QET3/002 WHR	Know the requirements to install, commission and handover rainwater harvesting and greywater reuse systems	4	35	T/602/3109
QET3/003 WHR	Install, commission and handover rainwater harvesting and greywater reuse systems	2	15	K/602/3110
QET3/004 WHR	Know the requirements to inspect, service and maintain rainwater harvesting and greywater reuse systems	2	15	M/602/3111
QET3/005 WHR	Inspect, service and maintain rainwater harvesting and greywater reuse systems	2	15	A/602/3130