

# Level 2 Award for Installing Water Meters and Proprietary Boundary Boxes (6028-28)

April 2014 Version 1.0



## Qualification at a glance

<b>Subject area</b>	<b>Utilities</b>
<b>City &amp; Guilds number</b>	6028
<b>Age group approved</b>	18+
<b>Entry requirements</b>	None
<b>Assessment</b>	Practical Observation/Assignment
<b>Support materials</b>	Centre handbook
<b>Registration and certification</b>	Consult the Walled Garden/Online Catalogue for last dates

<b>Title and level</b>	<b>City &amp; Guilds number</b>	<b>Accreditation number</b>
Level 2 Award for Installing Water Meters and Proprietary Boundary Boxes	6028-28	601/3000/3



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# 1 Introduction

This document tells you what you need to do to deliver the qualification:

Area	Description
Who is the qualification for?	Those with experience of Water Service installation who wish to install meters and proprietary meter boxes.
What does the qualification cover?	Understanding the requirements for and installing meters and proprietary meter boxes.
Who did we develop the qualification with?	It was developed in association with Develop Training Ltd.
What opportunities for progression are there?	It allows learners to progress into employment or to the following City & Guilds qualification: <ul style="list-style-type: none"> <li>6028 Level 2 Certificate in Network Construction Operations (Water) - Service Layer</li> </ul>

## Structure

To achieve the **Level 2 Award for Installing Water Meters and Proprietary Boundary Boxes** learners must achieve **4** credits from the mandatory unit 230.

Unit accreditation number	City & Guilds unit number	Unit title	Credit value	Unit Level	GLH
<b>Mandatory</b>					
K/506/1510	230	Installing water meters and proprietary boundary boxes	4	2	21



## 2 Centre requirements

### Approval

There is no fast track approval for this qualification; existing centres who wish to offer this qualification must use the **standard** Qualification Approval Process.

To offer this qualification, new centres will need to gain both centre and qualification approval. Please refer to the *Centre Manual - Supporting Customer Excellence* for further information.

Centre staff should familiarise themselves with the structure, content and assessment requirements of the qualification before designing a course programme.

### Resource requirements

#### Centre staffing

Staff delivering this qualification must be able to demonstrate that they meet the following occupational expertise requirements. They should:

- be occupationally competent or technically knowledgeable in the areas for which they are delivering training and/or have experience of providing training. This knowledge must be to the same level as the training being delivered
- have recent relevant experience in the specific area they will be assessing
- have credible experience of providing training.

Centre staff may undertake more than one role, eg tutor and assessor or internal quality assurer, but cannot internally verify their own assessments.

#### Assessors and Internal Quality Assurer

Assessor/Internal Quality Assurer TAQA qualifications are valued as qualifications for centre staff, but they are not currently a requirement for the qualification.

#### Continuing professional development (CPD)

Centres must support their staff to ensure that they have current knowledge of the occupational area, that delivery, mentoring, training, assessment and verification is in line with best practice, and that it takes account of any national or legislative developments.

## **Learner entry requirements**

City & Guilds does not set entry requirements for this qualification. However, centres must ensure that learners have the potential and opportunity to gain the qualification successfully.

## **Age restrictions**

City & Guilds cannot accept any registrations for learners under 18 as this qualification is not approved for under 18s.



### 3 Delivering the qualification

#### **Initial assessment and induction**

An initial assessment of each learner should be made before the start of their programme to identify:

- if the learner has any specific training needs,
- support and guidance they may need when working towards their qualification
- the appropriate type and level of qualification.

We recommend that centres provide an induction programme so the learner fully understands the requirements of the qualification, their responsibilities as a learner, and the responsibilities of the centre. This information can be recorded on a learning contract.



## 4 Assessment

Candidates must:

- successfully complete one practical observation assignment and knowledge test for the mandatory unit

### **Time constraints**

The following must be applied to the assessment of this qualification:

- Candidates must finish their assessment within their period of registration

### **Recognition of prior learning (RPL)**

Recognition of prior learning means using a person's previous experience or qualifications which have already been achieved to contribute to a new qualification. RPL is not allowed for this qualification.





## 5 Units

### Structure of units

The unit has the following:

- City & Guilds reference number
- unit accreditation number (UAN)
- title
- level
- credit value
- guided learning hours
- unit aim
- relationship to NOS, other qualifications and frameworks
- learning outcomes which are comprised of a number of assessment criteria
- notes for guidance.

## Unit 230

## Installing water meters and proprietary boundary boxes

<b>UAN:</b>	<b>K/506/1510</b>
<b>Level:</b>	2
<b>Credit value:</b>	4
<b>GLH:</b>	21
<b>Relationship to NOS:</b>	This unit has links to the EU Skills NOS EUSMUNC13
<b>Aim:</b>	The unit covers the knowledge and practical requirements for the installation of water meters and proprietary boundary boxes on pipes. The unit is assessed by practical observation in a realistic working environment and knowledge test.

<b>Learning outcome</b>
The learner will: 1. Understand requirements for the installation of water meters and proprietary boundary boxes
<b>Assessment criteria</b>
The learner can: 1.1 identify <b>industrial standards</b> covering the installation of water meters and boundary boxes 1.2 state the importance of using appropriate <b>personal protective equipment</b> (PPE) when working 1.3 state the importance of maintaining a safe working environment and water hygiene when working 1.4 describe the limits of the water undertaker's responsibility for installation and maintenance 1.5 describe the correct location for a boundary box 1.6 explain hazards associated with the use of CO <sub>2</sub> and cutting out a section of metal pipe on existing service pipes

<p><b>Range</b></p> <p><b>Industrial standards</b>  Manufacturers specifications, Health and Safety at Work Act  WRc 'The Service Pipes Manual', Water Supply (Water Fittings)  Regulations (Schedule 2), Health and Safety Management of Safety  Regulations, Provision and Use of Work Equipment Regulations, Manual  Handling Operations Regulations, Control of Substances Hazardous to  Health Regulations, Construction (Health, Safety and Welfare)  Regulations, Personal Protective Equipment at Work Regulations  Safety, Health and Welfare at Work Act, Safety, Health and Welfare at  Work (Construction) Regulations, Safety, Health and Welfare at Work  (General Application) Regulations, New Roads and Street Works Act,  Code of Practice for the avoiding danger from underground services,  Chemicals Act (CLP) Regulations, European Communities (Drinking  Water) (No. 2) Regulations</p> <p><b>Personal protective equipment</b>  gloves (hands), overalls (skin), boots (feet), high visibility clothing,  goggles (eyes)</p>
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<p><b>Learning outcome</b></p> <p>The learner will:</p> <p>2. Be able to install water meters and proprietary boundary boxes on service pipes</p>
<p><b>Assessment criteria</b></p> <p>The learner can:</p> <p>2.1 select <b>fittings and materials</b> by size suitable for specific installations</p> <p>2.2 identify <b>defects and deficiencies</b> which would cause the installation to leak, have the potential to leak or operate below specification</p> <p>2.3 notify consumers of interruption of supply and the possible effects on electrical earthing systems</p> <p>2.4 interrupt service pipe flow using <b>methods</b> suitable for specific installations</p> <p>2.5 measure and cut square service pipes to remove sections within +5mm of fittings</p> <p>2.6 install <b>fittings and materials</b> in accordance with manufacturer's recommendations and water regulations/byelaws</p> <p>2.7 test service pipes and connections to ensure they are operable under mains pressure without leakage</p> <p>2.8 ensure water supply is flushed through following meter installation</p> <p>2.9 record relevant water meter details following installation</p> <p>2.10 maintain a safe working environment and water systems hygiene during installation</p>

**Range****Fittings and materials**

fittings – boundary boxes, water meters

materials – pipes, closures, wires, couplings

**Defects and deficiencies**

defective threads, contamination of bore or external surfaces of pipe, meter or fittings and contaminated ground by oil or other substances, missing items (inserts, gripping rings)

**Methods**

deliberate freezing, squeezing off, isolation with stop valve

## **Unit 230**                    **Installing water meters and proprietary boundary boxes**

### Supporting information

#### **Guidance**

Subsequent amendments or replacements to ranged industrial standards should be covered.

This unit will be assessed using a practical observation delivered in controlled realistic working environments and written knowledge test.

Centres must ensure they have sufficient fittings and materials for candidates to be observed by assessors, working on pressurised networks, carrying out practical tasks required. Centres must have the appropriate tools and equipment for carrying out activities across specified ranges.



## Appendix 1 Relationships to other qualifications

### Links to other qualifications

Centres are responsible for checking the different requirements of all qualifications they are delivering and ensuring that candidates meet requirements of all units/qualifications.

This qualification has connections to:

- Level 1 Certificate in Network Construction Operations (Water)

### Literacy, language, numeracy and ICT skills development

This qualification can develop skills that can be used in the following qualifications:

- Functional Skills (England) – see [www.cityandguilds.com/functionalskills](http://www.cityandguilds.com/functionalskills)
- Essential Skills (Northern Ireland) – see [www.cityandguilds.com/essentialskillsni](http://www.cityandguilds.com/essentialskillsni)
- Essential Skills Wales – see [www.cityandguilds.com/esw](http://www.cityandguilds.com/esw)



## Appendix 2 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the **Centres and Training Providers homepage** on **[www.cityandguilds.com](http://www.cityandguilds.com)**.

***Centre Manual - Supporting Customer Excellence*** contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification, as well as updates and good practice exemplars for City & Guilds assessment and policy issues. Specifically, the document includes sections on:

- The centre and qualification approval process
- Assessment, internal quality assurance and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Management systems
- Maintaining records
- Assessment
- Internal quality assurance
- External quality assurance.

***Our Quality Assurance Requirements*** encompasses all of the relevant requirements of key regulatory documents such as:

- Regulatory Arrangements for the Qualifications and Credit Framework (2008)
- SQA Awarding Body Criteria (2007)
- NVQ Code of Practice (2006)

and sets out the criteria that centres should adhere to pre and post centre and qualification approval.

**Access to Assessment & Qualifications** provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The **centre homepage** section of the City & Guilds website also contains useful information on such things as:

- **Walled Garden:** how to register and certificate candidates on line
- **Qualifications and Credit Framework (QCF):** general guidance about the QCF and how qualifications will change, as well as information on the IT systems needed and FAQs
- **Events:** dates and information on the latest Centre events
- **Online assessment:** how to register for e-assessments.



## Useful contacts

<b>UK learners</b> <b>General qualification information</b>	<b>T: +44 (0)844 543 0033</b> <b>E: learnersupport@cityandguilds.com</b>
<b>International learners</b> General qualification information	T: +44 (0)844 543 0033 F: +44 (0)20 7294 2413 E: <b>intcg@cityandguilds.com</b>
<b>Centres</b> Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: <b>centresupport@cityandguilds.com</b>
<b>Single subject qualifications</b> Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 F: +44 (0)20 7294 2404 (BB forms) E: <b>singlesubjects@cityandguilds.com</b>
<b>International awards</b> Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: <b>intops@cityandguilds.com</b>
<b>Walled Garden</b> Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: <b>walledgarden@cityandguilds.com</b>
<b>Employer</b> Employer solutions, Mapping, Accreditation, Development Skills, Consultancy	T: +44 (0)121 503 8993 E: <b>business@cityandguilds.com</b>
<b>Publications</b> Logbooks, Centre documents, Forms, Free literature	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413

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