



Skills England

Standard Draft Preview

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Standard in development
L2: Domestic Plumber
Version 2.0

Title of occupation

Domestic Plumber

UOS reference number

ST1452

Core and options

No

Level of occupation

Level 2

Occupational maps data

Route: Construction and the built environment

Pathway: Building Services Engineering

Cluster: Utilities installation and maintenance operative or technician

Typical duration of apprenticeship

24 months

Target date for approval

01/08/2027

Resubmission

No

Would your proposed apprenticeship standard replace an existing framework?

No

Does professional recognition exist for the occupation?

Yes

Regulated occupation

Is this a statutory regulated occupation?

No

Occupational summary

Domestic plumbers work in people's homes and on housing sites within the construction, plumbing, heating and utilities sectors. Their main role is to install, test, repair and maintain plumbing systems, in line with current regulations and good practice.

A domestic plumber works with a wide range of plumbing systems and equipment including hot and cold water systems, pipework for kitchens, bathrooms and utility rooms, above

ground sanitation and rainwater systems, sanitary appliances and components. Along with heating components such as radiators and pumps, water storage vessels and cylinders and associated controls.

Day to day duties of a domestic plumber may include installation consisting of measuring, marking, cutting, bending and jointing different types of pipes and tubes. Fitting sanitary appliances such as toilets, basins, baths, showers and kitchen sinks. Installing hot and cold water systems, pumps and valves. Setting up rainwater and above ground sanitation systems along with following drawings, plans and manufacturer instructions.

A domestic plumber will also carry out tasks of maintenance and repairs, such as fixing common issues like leaky taps, blocked wastes, dripping pipework and faulty WCs. Investigating and repairing faults across the installation, replacing worn or damaged components as well as testing the systems.

A domestic plumber will also need to work safely and look after the safety of others, keep the work area tidy and respecting customers' property, provide good customer service when working in a domestic dwelling and work as part of a team with other trades such as electricians, joiners, plasterers and tilers.

A person in this occupation can progress from the level 2 domestic plumber apprenticeship onto the level 3 Advanced Plumbing and Heating Engineer (ST1463) apprenticeship, this builds on existing plumbing knowledge, covering more complex plumbing and heating systems, fault finding and system design.

Alternatively, a person can progress onto the level 3 Gas Engineering Operative (ST0155) apprenticeship to specialise in installing, servicing and maintaining gas systems and appliances; or the level 3 Low Carbon Heating Technician (ST1020) apprenticeship, developing skills in renewable heating technologies.

These routes enable apprentices to develop advanced technical skills and broaden their career opportunities following the completion of the level 2 domestic plumber apprenticeship.

Disclaimer: the definition of the term "system" relates to the pipework, the components and the controls and does not include the energy source such as domestic natural gas, solid fuel, LPG, oil, renewable technologies. A domestic plumber is not responsible for connection to the energy source.

Typical job titles

Domestic plumber

Plumber

Plumbing operative

Are there any statutory / regulatory or other typical entry requirements?

No

Occupation duties

DUTY	KSBS
Duty 1 Work within health, safety, and welfare requirements to safeguard themselves, clients, visitors to site, and the general public.	K1 K2 K3 K6 K7 K13 K14 K15 K21 K22 K23 K24 K27 K28 K29 K35 K36 K37 K38 K39 S1 S2 S3 S8 S9 S15 S16 S17 S18 S19 S21 S22 S23 S26 S27 B1 B3 B5
Duty 2 Carry out pre-installation checks prior to the installation of plumbing, above ground sanitation and rainwater systems.	K2 K3 K5 K6 K7 K8 K10 K11 K12 K16 K17 K18 K19 K38 K39 K40 S2 S3 S5 S6 S7 S10 S11 S12 S13 S27 S28 B1 B2 B4 B5
Duty 3 Carry out preparatory work for the installation of plumbing, above ground sanitation and rainwater systems.	K3 K5 K6 K8 K9 K10 K11 K12 K13 K16 K17 K18 K20 K28 K34 K38 K39 K40 S3 S5 S6 S7 S8 S10 S11 S12 S14 S22 S27 S28 B1 B2 B4 B5
Duty 4 Install cold water systems, hot water systems and domestic heating systems.	K3 K4 K5 K7 K8 K12 K13 K15 K18 K19 K21 K22 K33 K34 K36 K38 K39 K40 S3 S4 S5 S6 S7 S8 S12 S13 S14 S15 S16 S27 S28 B1 B2 B4 B5
Duty 5 Install above ground sanitation systems.	K3 K4 K5 K7 K8 K9 K13 K18 K27 K28 K29 K33 K34 K36 K38 K39 K40 S3 S4 S5 S6 S8 S12 S21 S22 S23 S27 S28 B1 B2 B4 B5
Duty 6 Install gutter and rainwater systems.	K3 K4 K5 K8 K9 K13 K18 K27 K28 K29 K33 K34 K36 K38 K39 K40

	S3 S4 S5 S6 S8 S12 S21 S22 S23 S27 S28 B1 B2 B4 B5
Duty 7 Test the plumbing, above ground sanitation and rainwater systems.	K3 K4 K5 K8 K12 K13 K23 K30 K38 K39 K40 S3 S4 S5 S6 S7 S8 S17 S24 S27 S28 B1 B2 B4
Duty 8 Carry out maintenance and servicing procedures on plumbing, above ground sanitation and rainwater systems.	K3 K4 K5 K8 K12 K13 K25 K26 K32 K34 K38 K39 K40 S3 S4 S5 S6 S7 S8 S19 S20 S26 S27 S28 B1 B2 B4
Duty 9 Decommission plumbing, above ground sanitation and rainwater systems.	K3 K12 K24 K31 K33 K34 K38 K39 K40 S3 S7 S8 S18 S25 S27 S28 B1 B2 B4

KSBs

Knowledge

K1: Awareness of health and safety regulations, standards, and guidance and impact on role. Control of Substances Hazardous to Health (CoSHH). Fire safety. Health and Safety at Work Act. Asbestos awareness. Manual handling. signage, fire extinguishers. Safety signage. Situational awareness. Slips, trips, and falls. Working in confined spaces. Working at height. Provision and use of work equipment regulations (PUWER) and Electrical safety. Heat producing equipment.

K2: Hazards and risks that occur in the workplace. Use of safe systems of work, risk assessments, method statements, control measures and toolbox talks.

K3: Health and safety control equipment: personal protective equipment (PPE).

K4: The requirements of Legislation, Regulation, Industry Standards, and other sources of information, including manufacturer instructions, relating to domestic cold water systems, domestic hot water systems, heating pipework, above ground sanitation and rainwater systems.

K5: Environmental and sustainability regulations and guidance. Recycling reuse and safe disposal of waste. Reducing carbon footprint.

K6: Sources of energy and their uses.

K7: Principles and methods for reducing energy and material use within the domestic plumbing industry.

K8: The rainwater cycle, including water sources, methods of collection, storage, conservation, principles and methods of reducing wastage. and the effects of climate change on water supply.

K9: Principles and processes of cold water treatment for public and private water supplies. Distribution methods of treated water.

K10: Properties of materials used in domestic plumbing installations.

K11: Scientific theory and mechanical and electrical principles that are applicable to domestic cold water, domestic hot water, domestic heating pipework, above ground sanitation and rainwater systems.

K12: Principles and techniques for safe electrical isolation.

K13: Principles and techniques of working at height, in excavations and confined spaces.

K14: The use of hand and power tools. Safe and secure storage of tools, materials and equipment.

K15: Principles and techniques of preparing, using, storing and transporting heat producing equipment, including blow torch.

K16: Site preparation principles and techniques for plumbing and heating activities.

K17: Measurement and marking out techniques and units of measurement.

K18: Methods of interpreting relevant information from drawings, specifications, system schematics, work programmes, delivery and advice notes.

K19: Principles and techniques of planning installations and preparing the work area for installing cold and hot water systems and heating pipework.

K20: The types, layout, features and working principles of cold and hot water systems and heating pipework.

K21: Principles and techniques of installing cold and hot water systems and heating pipework, including clips, brackets and components.

K22: Principles and methods of pipework fabrication including bending and jointing and using blow torches, press-fit guns, push-fit and compression fittings.

K23: Principles and techniques for testing, including soundness testing, cold and hot water systems and heating pipework.

K24: Principles and techniques of temporary and permanent decommissioning, cold and hot water systems and heating pipework.

K25: Principles and techniques for planned and reactive maintenance of cold and hot water systems and heating pipework.

K26: Principles and techniques for servicing and maintaining heating system components.

K27: Principles and techniques for installing above ground sanitation and rainwater systems.

K28: The types, layout features and operation principles for above ground sanitation, below ground drainage and rainwater systems.

K29: Principles and techniques for installation of above ground sanitation and rainwater systems in single household dwellings.

K30: Principles and techniques for testing, including soundness testing, above ground sanitation and rainwater systems.

K31: Principles and techniques for the decommissioning of sanitary appliance and rainwater systems including pipework and components.

K32: Principles and techniques for servicing and maintaining sanitary appliance and rainwater systems including pipework and components.

K33: The principles of below ground drainage systems.

K34: Quality of workmanship.

K35: The members of the construction team and their roles.

K36: Team working and wellbeing principles.

K37: Principles of equity, diversity and inclusion in the workplace.

K38: Written communication techniques: paper based and digital. Plain English principles. Industry specific terminology.

K39: Verbal communication techniques. Giving and receiving information. Adapting style to audience. Barriers in communication and how to overcome them. Industry specific terminology.

K40: Information technology and digital systems used to support. General data protection regulation (GDPR). Cyber security.

Skills

S1: Comply with health and safety regulations, standards and guidance.

S2: Apply safe systems of work and principles and methods that Identify, mitigate and report hazards and risks in the workplace.

S3: Select and use personal protective equipment (PPE).

S4: Comply with industry regulations, standards and guidance.

S5: Comply with environmental and sustainability regulations, standards, and guidance, and apply principles and techniques to segregate, reuse, recycling, and dispose of resources.

S6: Apply principles and methods for reducing the use of energy and materials.

S7: Apply the principles and techniques to carry out safe electrical isolation.

S8: Apply the principles and techniques of working at height when using access equipment. For example, step ups, step ladders, ladders and mobile scaffolds.

S9: Select and use hand and power tools. Secure storage for tools, materials and equipment.

S10: Apply site preparation principles and techniques, including checking for existing damage to fabric, fixtures and fittings.

S11: Apply measuring and marking-out techniques.

S12: Interpret information from drawings, specifications, and system schematics, work programmes, delivery and advice notes.

S13: Apply principles and techniques to plan the installation of cold and hot water systems and heating system pipework.

S14: Apply principles and techniques to prepare the work area in readiness for installing cold and hot water systems and heating pipework.

S15: Apply principles and techniques of installing domestic cold water, hot water and heating systems pipework, including clips, brackets and components.

S16: Apply principles and methods of pipework fabrication including bending and jointing and using blow torches, press-fit guns, push-fit and compression fittings.

S17: Apply testing principles and techniques, including soundness testing, to hot and cold water systems and heating pipework.

S18: Apply principles and techniques to carry out temporary and permanent decommissioning of hot and cold water systems and heating pipework.

S19: Apply principles and techniques to carry out planned and reactive maintenance of hot and cold water systems and heating pipework.

S20: Apply principles and techniques to carry out servicing and maintenance of heating system components, for example circulating pumps, radiator valves.

S21: Apply principles and techniques to install above ground sanitation and rainwater systems.

S22: Apply principles and techniques to prepare the work area in readiness for installing above ground sanitation and rainwater systems.

S23: Apply principles and techniques to install a above ground sanitary appliance and pipework system and a rainwater system.

S24: Apply principles and techniques to test, including soundness testing, a sanitary appliance and rainwater system including pipework and components.

S25: Apply principles and techniques to decommission sanitary appliance and rainwater systems including pipework and components.

S26: Apply principles and practices to service and maintain a sanitary appliance and rainwater systems including pipework and components.

S27: Communicate with others in a written context including internal and external customers, colleagues using industry specific terminology.

S28: Communicate with others verbally including internal and external customers, colleagues using industry specific terminology.

Behaviours

B1: Acts professionally when working with clients, end users, co-workers, other trades, visitors to site and members of the public.

B2: Consider the environment when using resources and carrying out processes.

B3: Contribute to an inclusive and diverse workplace culture.

B4: Respond and adapt to work demands and situations.

B5: Team-focus to meet work goals.

Qualifications

English and maths

English and maths qualifications must be completed in line with the apprenticeship funding rules.

Does the apprenticeship need to include any mandated qualifications in addition to the above-mentioned English and maths qualifications?

Yes

Other mandatory qualifications

Level 2 Diploma in Plumbing Installation

Level: 2

Additional information: BPEC Level 2 Diploma in Plumbing Installation, QN TBC; City and Guilds Level 2 Diploma in Plumbing Installation, QN TBC; EAL Level 2 Diploma in Plumbing

Installation, QN TBC; LCL Awards Level 2 Diploma in Plumbing Installation, QN TBC; NOCN Level 2 Diploma in Plumbing Installation, QN TBC;

Professional recognition

This standard aligns with the following professional recognition:

- Chartered Institute of Plumbing and Heating Engineering for Affiliate membership

Consultation

Progression routes

ST0155 Gas engineering operative v1.3 L3

ST1020 Low carbon heating technician - v1.2 L3

ST1463 - Level 3 Advanced plumbing and heating engineer

Supporting uploads

Mandatory qualification uploads

Mandated degree evidence uploads

Professional body confirmation uploads

Subject sector area

5.2 Building and construction