

Demonstrate knowledge of hot water storage systems for plumbing and gasfitting

Level 2

Credits 3

Purpose People credited with this unit standard are able to: describe hot water storage systems for plumbing and gasfitting; describe residential hot water storage heating energy types and sources; and identify hot water storage system components and plumbing.

Subfield Plumbing, Gasfitting and Drainlaying

Domain Core Plumbing, Gasfitting, and Drainlaying

Status Registered

Status date 23 January 2009

Date version published 23 January 2009

Planned review date 31 December 2014

Entry information Open.

Accreditation Evaluation of documentation by NZQA.

Standard setting body (SSB) The Skills Organisation

Accreditation and Moderation Action Plan (AMAP) reference 0008

This AMAP can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Special notes

- 1 The New Zealand Building Code (NZBC) is a schedule to the Building Regulations 1992. It provides requirements for compliance with the Building Act 2004 when constructing a new building or altering an existing one. The NZBC sets out performance standards that building work must meet, and covers aspects such as structural stability, fire safety, access, moisture control, durability, services and facilities.
- 2 The Compliance document for the NZBC, Clause G12 *Water Supplies* is available for download on the Department of Building and Housing website – <http://www.dbh.govt.nz/>.

- 3 Unit 25415, *Demonstrate knowledge of energy efficiency and conservation relevant to plumbing and gasfitting* covers water heating energy efficiency.
 - 4 This unit standard does not apply to instantaneous water heating systems.
 - 5 Definition
Industry practice – sound industry practice that meets legislative requirements.
-

Elements and performance criteria

Element 1

Describe hot water storage systems for plumbing and gasfitting.

Performance criteria

- 1.1 Hot water storage systems are described in terms of water temperature control requirements.
- 1.2 Hot water storage systems are described in terms of requirements for prevention of legionella bacteria.
- 1.3 Hot water storage systems are described in terms of safety from explosion.
- 1.4 Fixtures and appliances that hot water is plumbed to are identified for typical home installations.

Element 2

Describe residential hot water storage heating energy types and sources.

Performance criteria

- 2.1 Types of water heating energy are described for residential use in accordance with industry practice.

Range solar, electric, gas, solid fuel.
- 2.2 Water heating technology is described for residential use in accordance with industry practice.

Range solar types, heat pump, electric, boosted systems.

Element 3

Identify hot water storage system components and plumbing.

Performance criteria

- 3.1 Hot water storage cylinder construction and typical takeoff point locations are identified in accordance with typical cylinder manufacturer construction.

- 3.2 High and low pressure hot water storage systems are compared to each other in terms of advantages and disadvantages.
- 3.3 Valves and controls within hot water storage systems are identified in accordance with the NZBC, clause G12.
- 3.4 Hot water storage system installation layout schematic is described in accordance with NZBC clause G12.
- 3.5 Pipe materials suitable for hot water storage systems are identified in accordance with NZBC clause G12.

Please note

Providers must be accredited by NZQA, or an inter-institutional body with delegated authority for quality assurance, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by NZQA before they can register credits from assessment against unit standards.

Accredited providers and Industry Training Organisations assessing against unit standards must engage with the moderation system that applies to those standards.

Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact The Skills Organisation info@skills.org.nz if you wish to suggest changes to the content of this unit standard.