

<b>Title</b>	<b>Draw and form simple patterns for plumbing and gasfitting sheet metal components</b>		
<b>Level</b>	<b>2</b>	<b>Credits</b>	<b>3</b>

<b>Purpose</b>	<p>This unit standard is for people who work in the plumbing and gasfitting industries.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> <li>– establish information and dimensions for sheet metal components for plumbing or gasfitting;</li> <li>– draw simple patterns in two dimensions on card for sheet metal components for plumbing or gasfitting components; and</li> <li>– form three-dimensional plumbing or gasfitting sheet metal components in card from patterns.</li> </ul>
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<b>Classification</b>	Plumbing, Gasfitting and Drainlaying > Core Plumbing, Gasfitting, and Drainlaying
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 Definition
 

*Other services* – any existing installed services such as water, gas, electricity, or telephone network cables.

*Specifications* – include written specifications, plans, instructions, or information measured from job.
- 2 Competence for this unit standard is intended to be demonstrated using cardboard patterns that represent the intended form of sheet metal components. Evidence is required for two components.
- 3 All practical activities must be carried out in a way that avoids harm to people and damage to property, environment, other services, materials, tools, and equipment.
- 4 Candidates must hold a current limited certificate or exemption under supervision as issued under the Plumbers, Gasfitters, and Drainlayers Act 2006.

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### Outcomes and performance criteria

#### Outcome 1

Establish information and dimensions for sheet metal components for plumbing or gasfitting.

**Performance criteria**

- 1.1 Establish component dimensions and geometric information from specifications that will enable patterns to be drawn.

**Outcome 2**

Draw simple patterns in two dimensions on card for sheet metal components for plumbing or gasfitting.

Range patterns include simple folded components.

**Performance criteria**

- 2.1 Draw patterns in accordance with specifications using parallel line development.

- 2.2 Draw patterns in accordance with specifications using simple radial development.

Range may include – cowls, cones, buckets, funnels.

- 2.3 Develop true shape pattern of an angled cut to a square component in accordance with specifications.

**Outcome 3**

Form three-dimensional plumbing or gasfitting sheet metal components from patterns.

**Performance criteria**

- 3.1 Form patterns drawn in outcome 2 into components from card or sheet metal in accordance with specifications.

- 3.2 Modify patterns of components that are not able to be formed in accordance with the original pattern to meet practical requirements.

<b>Planned review date</b>	31 December 2022
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**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	23 January 2009	31 December 2022
Review	2	28 September 2017	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0003
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

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**Comments on this unit standard**

Please contact The Skills Organisation [reviewcomments@skills.org.nz](mailto:reviewcomments@skills.org.nz) if you wish to suggest changes to the content of this unit standard.