

<b>Title</b>	<b>Draw and form simple patterns for plumbing or 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 or 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; and</li> <li>– form three-dimensional plumbing or gasfitting sheet metal components 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 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to:  
Health and Safety at Work Act 2015.

Any new, amended or replacement referenced standards, codes of practice, guidelines, Building Code Acceptable Solutions and Verification Methods, or authority requirements affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.

- 2 **Definition**  
*Specifications* refer to written specifications, plans, instructions, or information measured from job.
- 3 **Assessment information**  
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.

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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 component using parallel line development.

Range may include – square or round offset component.

### 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.

Range may include – seams, laps, safety edges, fixing tabs.

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<b>Planned review date</b>	31 December 2029
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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	31 December 2028
Review	3	30 May 2024	N/A

**Consent and Moderation Requirements (CMR) reference**

0003

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

**Comments on this unit standard**

Please contact Waihanga Ara Rau Construction and Infrastructure Workforce Development Council [Qualifications@WaihangaAraRau.nz](mailto:Qualifications@WaihangaAraRau.nz) if you wish to suggest changes to the content of this unit standard.