

## Achievement Standard

**Subject Reference** Design and Visual Communication 1.4

**Title** Use instrumental drawing techniques to communicate own product or spatial design outcome

**Level** 1      **Credits** 5      **Assessment** External

**Subfield** Technology

**Domain** Design and Visual Communication

**Status** Approved      **Status date** December 2023

**Planned review date** December 2028      **Date version published** December 2023

### Purpose Statement

Students are able to use instrumental drawing techniques to communicate own product or spatial design outcome.

### Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<ul style="list-style-type: none"> <li>Use instrumental drawing techniques to communicate own product or spatial design outcome</li> </ul>	<ul style="list-style-type: none"> <li>Use instrumental drawing techniques to communicate details of own product or spatial design outcome</li> </ul>	<ul style="list-style-type: none"> <li>Use instrumental drawing techniques to communicate precise details of own product or spatial design outcome</li> </ul>

### Explanatory Notes

1 *Use instrumental drawing techniques to communicate own product or spatial design outcome* involves:

- creating orthographic (2D) and paraline (3D) drawings that visually communicate surface features.

*Use instrumental drawing techniques to communicate details of own product or spatial design outcome* involves:

- creating orthographic (2D) and paraline (3D) drawings that visually communicate the technical features.

*Use instrumental drawing techniques to communicate precise details of own product or spatial design outcome* involves:

- creating orthographic (2D) and paraline (3D) drawings accurately, that visually communicate the construction or assembly features.

- 2 *Surface features* are the exterior visual elements that demonstrate the shape, size and form of a design outcome.
- 3 *Technical features* are the detailed aspects of a design outcome, such as its internal components, internal details, internal spatial relationships or additional information beyond the main outline.
- 4 *Construction or assembly features* provide precise details and accurate information that demonstrates how a product design outcome is assembled or a spatial design is constructed, including the materials or parts required to realise the outcome and how components fit together.
- 5 *Instrumental drawings*, which can be referred to in this context as technical drawings or mechanical drawings, are 2D and 3D representations of projected views of a 3D object. They require the use of manual drawing instruments or computer-aided software, and associated techniques, conventions, and scale.

Examples of *instrumental drawing techniques* include:

- orthographic projection
- paraline drawing (isometric, oblique, or planometric drawings).

Examples of conventions used in *instrumental drawing techniques* include:

- line types and symbols
- labelling (sheets, views, details)
- dimensioning and recognised scale.

Labels may be written in either English or te reo Māori.

- 6 Refer to the NCEA [glossary](#) for Māori, Pacific, and further subject-specific terms and concepts.
- 7 This achievement standard is derived from the Technology Learning Area at Level 6 of *The New Zealand Curriculum*: Learning Media, Ministry of Education, 2007.

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## Replacement Information

This achievement standard and AS92000-AS92002 replaced AS91063-AS91069.

**Quality Assurance**

- 1 Schools and institutions must have been granted consent to assess by NZQA before they can register credits from assessment against achievement standards.
- 2 Schools and institutions with consent to assess must engage with the moderation system that applies to those achievement standards.

Consent and Moderation Requirements (CMR) reference 0233

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