

Achievement Standard

Subject Reference	Design and Visual Communication 2.31		
Title	Produce working drawings to communicate technical details of a design		
Level	2	Credits	4
		Assessment	External
Subfield	Technology		
Domain	Design and Visual Communication		
Status	Registered	Status date	17 November 2011
Planned review date	31 December 2020	Date version published	20 November 2014

This achievement standard involves producing working drawings to communicate technical details of a design.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<ul style="list-style-type: none"> Produce working drawings to communicate technical details of a design. 	<ul style="list-style-type: none"> Produce working drawings to clearly communicate technical details of a design. 	<ul style="list-style-type: none"> Produce working drawings to effectively communicate technical details of a design.

Explanatory Notes

- This achievement standard is derived from Level 7 of the Technology learning area in *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007; and is related to the material in the *Teaching and Learning Guide for Technology*, Ministry of Education at <http://seniorsecondary.tki.org.nz>.

Further information can be found at <http://www.technology.tki.org.nz/>.

Appropriate reference information is available in *Safety and Technology Education: A Guidance Manual for New Zealand Schools*, Ministry of Education at <http://technology.tki.org.nz/Curriculum-support/Safety-and-Technology-Education>, and the Health and Safety in Employment Act 1992.

This standard is also derived from Te Marautanga o Aotearoa. For details of Te Marautanga o Aotearoa achievement objectives to which this standard relates, see the [Papa Whakaako](#) for the relevant learning area.

- Produce working drawings to communicate technical details of a design* involves:

- producing a set of related scaled drawings
- using conventions
- showing complex visual information.

Produce working drawings to clearly communicate technical details of a design involves:

- producing an accurate set of related scaled drawings that communicate details of a design.

Produce working drawings to effectively communicate technical details of a design involves:

- producing a coherent set of related scaled drawings that communicate details of a design.

- 3 *Working drawings* are a set of related 2D (orthographic) drawings that may include but are not limited to: components, assembly, sectional view, auxiliary view, true shape, surface development, and construction details.
- 4 *Technical details* refer to the information related to the design. They describe the functional and aesthetic qualities of the design.
- 5 Conventions associated with orthographic drawing define such things as: line types (eg construction lines, outlines, and section lines), drawing and text layout, and dimensioning. Conventions include those which are commonly applied within a community of practice eg engineering (eg SAA/SNZ HB1:1994), or architecture – building and landscaping (eg NZS/AS 1100.101:1992 *Technical drawing – General principles*; NZS/AS 1100.301:1985 *Technical drawing – Architectural drawing*).
- 6 A set of related drawings refers to multiple drawings that communicate details of a design's shape and form.
- 7 Complex visual information may include but is not limited to: information not visible in the main outline, multi-component assembly detail, and communication of a design with complex shape and form.
- 8 A coherent set of drawings provides sufficient information to enable a design to be made.
- 9 Working drawings can be constructed using either traditional drawing equipment or computer applications.
- 10 *A design* is a student generated response to a design brief.
- 11 Assessment Specifications for this achievement standard can be accessed through the Technology Resources page found at <http://www.nzqa.govt.nz/qualifications-standards/qualifications/ncea/subjects/>.

Replacement Information

This achievement standard replaced AS90318, unit standard 18995, and unit standard 18996.

Quality Assurance

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

Consent and Moderation Requirements (CMR) reference

0233