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| Title | Describe and create technical drawings for design and construction | | |
| Level | 3 | Credits | 15 |

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| Purpose | People credited with this unit standard can: <ul style="list-style-type: none"> describe technical drawing for design and construction, and create sketches and technical drawings for design and construction. |
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| Classification | Construction > Architectural Technology |
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| Available grade | Achieved |
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Guidance Information

- Definition**
Drawing means drawing with the aid of drawing equipment including manual instruments and computer aided drawing software.
- Evidence** must be provided using computer-aided drawing software, manual drawing instruments and freehand sketching, and be set out in accordance with NZ/AS 1100.301:1985 and industry best practice.
- Reference publications** relevant to this unit standard:
 NZS/AS 1100.301:1985 *Technical drawing – Architectural drawing*,
 SAA/SNZ HB 1:1994 *Technical drawing for students*,
 available from Standards New Zealand at <http://www.standards.co.nz>.

Outcomes and performance criteria

Outcome 1

Describe technical drawing for design and construction.

Performance criteria

- Describe the purpose of the content that makes up a set of technical drawings.

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| Range | includes but is not limited to – plans, elevations, sections, construction details, keys, legends, location, assembly, component, schedules. |
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1.2 Describe the purpose of the lines used on technical drawings.

Range outlines, dimension lines, hidden detail, centre lines, break lines, reference lines.

1.3 Describe the purpose of symbols used on technical drawings.

Range symbols may include materials, doors, windows, fittings and furnishings, referencing.

1.4 Describe drawing methods in terms of their practical application.

Range one-point perspective, two-point perspective, isometric, oblique, third angle orthographic projection.

Outcome 2

Create sketches and technical drawings for design and construction.

Range third angle orthographic projections – elevations, plans, sections, details; pictorial projections – isometric, oblique, one-point perspective, two-point perspective.

Performance criteria

2.1 Apply freehand and computer aided sketching techniques to accurately communicate design and construction.

2.2 Produce drawings which communicate all construction information relevant to the intended project.

Range terminology and abbreviations, materials, scale and layout of drawing sheets, use of drawing conventions, line weight, line quality, text dimensioning, referencing, use of mathematical calculations to verify design.

2.3 Produce drawings in accordance with New Zealand standards and industry best practice, using both manual drawing instruments and computer aided drawing software.

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| Planned review date | 31 December 2027 |
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Status information and last date for assessment for superseded versions

| Process | Version | Date | Last Date for Assessment |
|--------------|---------|-------------------|--------------------------|
| Registration | 1 | 18 March 2011 | 31 December 2016 |
| Review | 2 | 22 May 2014 | 31 December 2024 |
| Review | 3 | 29 September 2022 | N/A |

Consent and Moderation Requirements (CMR) reference

0048

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@waihanga.nz if you wish to suggest changes to the content of this unit standard.