

Title	Interpret and apply assembly drawings to ensure product quality		
Level	3	Credits	4

Purpose	People credited with this unit standard are able to demonstrate knowledge of drawing control procedures; identify and interpret assembly drawings; and apply assembly drawing interpretation to meet job requirements and check product quality.
----------------	--

Classification	Manufacturing Skills > Manufacturing Processes
-----------------------	--

Available grade	Achieved
------------------------	----------

Guidance Information

- 1 Legislation relevant to this unit standard includes but is not limited to the: Health and Safety at Work Act 2015.
- 2 Definitions

Company quality control procedures refer to specific details on an engineering drawing covering: checked and approved signatures for the release and use of a drawing; version numbers; compatibility with a master drawing; date of issue stamps; as well as procedures for the copying, recording, filing, and modification of a drawing.

Job requirements refer to specific requirements for the job at hand. These requirements may or may not be covered in the job documentation and may include special instructions, quality requirements expected by the customer, and/or production standards as set down by the workplace.

Pull-in refers to the geometrical performance of an assembled window stay.

Specifications refer to all aspects of a technical engineering drawing which detail the dimensions, tolerances, and design of the completed product.

Workplace procedures refer to procedures used by the organisation carrying out the work and applicable to the tasks being carried out. Examples are – standard operating procedures, site safety procedures, equipment operating procedures, codes of practice, quality management practices and standards, and procedures to comply with legislative and local body requirements.
- 3 Assessment information
 - a All activities and evidence must be in accordance with workplace procedures.
 - b Company procedures for matching a drawing to a product can include colour coded visual systems such as Kanban.
 - c This unit standard is designed for people within manufacturing industries who are engaged in assembly processes and are required to use technical engineering drawings to check product design, set up and use a range of assembly equipment such as jigs, fixtures, hand and power tools; and check

the quality of the assembled product. Drawings are limited to single components and may include assemblies.

- 4 Recommended skills and knowledge
Unit 4433, *Select, use, and care for simple measuring devices used in engineering*, or demonstrate equivalent knowledge and skills.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of drawing control procedures.

Performance criteria

- 1.1 Company procedures for ensuring the integrity of drawings are explained.
- Range company quality control procedures including the right to access, modify, record, file, copy, and issue drawings.
- 1.2 Company procedures for matching the drawing to job requirements are followed.
- Range may include but is not limited to – cross reference checks from visual systems such as Kanban work orders, componentry numbers, drawings of fully assembled products.
- 1.3 Drawing is checked for authorisation, identification, drawing and product numbers.

Outcome 2

Identify and interpret assembly drawings.

Performance criteria

- 2.1 Components and assemblies are identified and interpreted as per job requirements.
- Range may include but is not limited to – hand identification, assembly and friction details, pull-in requirements.
- 2.2 Material requirements are determined and interpreted as per job requirements.
- 2.3 Dimensions and notes are interpreted as per job requirements.
- 2.4 Symbols are identified and interpreted.
- 2.5 Conventions are identified and interpreted.

Outcome 3

Apply assembly drawing interpretation to meet job requirements and check product quality.

Performance criteria

- 3.1 Product features are interpreted and measured.
- Range may include but is not limited to – bearing details, screw holes, lengths, off-set dimensions and centre distances.
- 3.2 Assembly machinery or equipment is set up according to specifications.
- 3.3 Componentry is identified as per product requirements.
- 3.4 Completed product is checked against specifications in accordance with company quality control procedures.
- Range may include but not limited to – dimensions, tolerances.
- 3.5 Variances are reported to supervisor.
- 3.6 Documentation is completed in accordance with company quality control procedures.

Planned review date	31 December 2025
----------------------------	------------------

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	18 December 2002	31 December 2012
Revision	2	12 January 2006	31 December 2012
Rollover and Revision	3	24 August 2007	31 December 2014
Review	4	18 March 2011	31 December 2023
Review	5	26 August 2021	N/A

Consent and Moderation Requirements (CMR) reference	0013
--	------

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

Comments on this unit standard

Please contact Competenz qualifications@competenz.org.nz if you wish to suggest changes to the content of this unit standard.