

<b>Title</b>	<b>Assemble electronic equipment racks or cabinets</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>20</b>

<b>Purpose</b>	<p>This unit standard covers the mounting and wiring of mechanical and electronic components, modules or sub assemblies on equipment racks or in equipment cabinets.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> <li>–set up the assembly environment;</li> <li>–assemble racks or cabinets; and</li> <li>–check assembled racks or cabinets.</li> </ul>
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<b>Classification</b>	Electronic Engineering > Electronic Manufacturing
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 Range
  - a assembly of electronic equipment racks or cabinets involves mounting of rack or cabinet hardware, electronic components, modules or sub assemblies, interconnecting wiring, and associated checks.
  - b evidence of at least three different types of rack or cabinet assemblies is required.
  - c the assembly process may involve the use of any or all of the following hand or power tools – soldering irons, screwdrivers, spanners, pliers, wire cutters and strippers, power screw and socket drivers, air guns, pneumatic tools, specialist tools, jigs for the given component technology.
- 2 Testing and adjustment of completed racks or cabinets is covered by Unit 12589, *Test and adjust electronic products in electronic manufacturing*.
- 3 References
 

Health and Safety in Employment Act 1992;  
 ANSI/IPC J-STD- 001D, *Requirements for Soldered Electrical and Electronic Assemblies*, February 2005, published jointly by IPC – Association Connecting Electronics Industries and the Electronic Industries Alliance;  
 IPC-A-610D, *Acceptability of Electronic Assemblies*, 2005, published by IPC – Association Connecting Electronics Industries.

- 4 The following apply to all outcomes of this unit standard:
- a all activities are to be completed and reported within agreed timeframes;
  - b all work practices must meet worksite's documented quality management requirements;
  - c all activities must comply with policies, procedures and requirements of the enterprises involved; and any relevant legislative and/or regulatory requirements, which include, but are not limited to, the Health and Safety in Employment Act 1992.

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## Outcomes and performance criteria

### Outcome 1

Set up the assembly environment.

#### Performance criteria

- 1.1 The selection of assembly jigs, tools, and components matches the job instructions.
- 1.2 The workplace layout conforms to enterprise safety standards and presents no uncontrolled hazards to any person.

### Outcome 2

Assemble racks or cabinets.

#### Performance criteria

- 2.1 The assembly operations are in accordance with the job instructions.
- 2.2 Integrity of parts is not affected by assembly operations.
  - Range integrity includes – fit, finish, electrostatic discharge (ESD), other specified build requirements.
- 2.3 Assembly operations meet industry quality standards.
  - Range standards – IPC standards or equivalent, for – mounting, fastening, interconnection, solder joints.

### Outcome 3

Check assembled racks or cabinets.

#### Performance criteria

- 3.1 Checking confirms that assembled racks or cabinets meet enterprise quality standards.
  - Range component mounting, fixture, interconnection, visual appearance.

**This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.**

**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	23 November 2003	31 December 2021
Rollover and Revision	2	19 March 2010	31 December 2021
Review	3	26 July 2018	31 December 2021

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

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