

<b>Title</b>	<b>Demonstrate knowledge of and use fixed machinery in the construction of BCATS projects</b>		
<b>Level</b>	<b>2</b>	<b>Credits</b>	<b>6</b>

<b>Purpose</b>	<p>This unit standard has been designed to be achieved in a building, construction and allied trades skills (BCATS) programme.</p> <p>People credited with this unit standard are able to: demonstrate knowledge of the setting up and operation of fixed machinery; demonstrate procedures for the setting up of fixed machines; demonstrate the correct use of fixed machines for the construction of BCATS projects; and demonstrate knowledge of maintenance requirements for fixed machines.</p>
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<b>Classification</b>	Construction Trades > Building, Construction, and Allied Trades Skills
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<b>Available grade</b>	Achieved
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### Guidance Information

- Definitions**

*BCATS environment* refers to any workplace or context where work or activities related to the building, construction and allied trades sector take place, such as school workshops, training establishments, outdoor areas and industry placement workplaces.

*BCATS project* refers to a project undertaken in a BCATS environment under general supervision, using a range of tools, equipment and materials, and involving standard processes.

*Maintenance requirements* described will be those not requiring the services of a specialist engineer or service technician.

*Workplace practice* refers to the procedures specific to a BCATS environment, which cover the standard and required practices of that environment.
- Information supporting assessment decisions should, wherever possible, be collected naturally as the BCATS project progresses.
- Fixed machinery may include but is not limited to – thicknesser, band saw, bench grinder, drill press, horizontal borer, compound/mitre saw, lathe, surface planer, bench saw, CNC routers, laser cutters, table saw.

- 4 Health and Safety note for schools:  
It is expected that teachers take into consideration *Safety in Technology Education: A Guidance Manual for New Zealand Schools* 2017 and any subsequent versions of this document, available from Ministry of Education website (<https://education.govt.nz>).
- 5 Legislation relevant to this unit standard includes:  
Health and Safety at Work Act 2015;  
Health and Safety at Work Regulations 2016.

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## Outcomes and performance criteria

### Outcome 1

Demonstrate knowledge of the setting up and operation of fixed machinery.

Range at least six fixed machines.

#### Performance criteria

- 1.1 The machine's purpose, advantages and limitations are identified and described in terms of the manufacturer's instructions for use.
- 1.2 The correct setup and safe guarding of the machine are described.
- 1.3 The safe operation of the machine is described.
- 1.4 Items of personal protective equipment for use with fixed machines are identified and described.

### Outcome 2

Demonstrate procedures for the setting up of fixed machines.

Range at least six fixed machines.

#### Performance criteria

- 2.1 Machines are isolated from power supply throughout the setup procedures.
- 2.2 Machines are set up in accordance with job requirements, supervisor's instructions and workplace practice.

### Outcome 3

Demonstrate the correct use of fixed machines for the construction of BCATS projects.

Range at least four fixed machines.

**Performance criteria**

- 3.1 Machines and personal protective equipment are used in accordance with supervisor's instructions and workplace practice.
- 3.2 The machined material is in accordance with job specifications.
- 3.3 Machines and work area are cleaned and cleared after use in accordance with workplace practice.

**Outcome 4**

Demonstrate knowledge of maintenance requirements for fixed machines.

Range at least six fixed machines.

**Performance criteria**

- 4.1 Maintenance requirements for cutting edges, saw teeth or grinder wheels are described in accordance with workplace practice.
- 4.2 Routine maintenance requirements of fixed machinery are described in accordance with manufacturers' instructions and workplace practice.

<b>Replacement information</b>	This unit standard was replaced by unit standard 40554. This unit standard replaced unit standard 12929.
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**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	14 December 2007	31 December 2018
Rollover and Revision	2	20 October 2016	31 December 2020
Review	3	1 November 2018	31 December 2027
Review	4	29 May 2025	31 December 2027

<b>Consent and Moderation Requirements (CMR) reference</b>	0048
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.