

<b>Title</b>	<b>Process glass using a Computer Numerically Controlled (CNC) machine</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>8</b>

<b>Purpose</b>	<p>This unit standard is for experienced people in the glass processing industry.</p> <p>People credited with this unit standard are able to prepare for processing and process glass using a CNC machine.</p>
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<b>Classification</b>	Glass and Glazing > Glass Processing and Manufacturing
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 Definition  
*Worksite requirements* – refer to instructions to staff on policy and procedures which are documented in memo or manual format and are available in the workplace. These requirements include – company specifications and procedures, work instructions, manufacturer’s specifications, product quality specifications, legislative requirements.
- 2 Legislation relevant to this unit standard includes – Health and Safety at Work Act 2015.

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### Outcomes and performance criteria

#### Outcome 1

Prepare for processing glass using a CNC machine.

#### Performance criteria

- 1.1 Machine head is set-up to meet requirements of the job specifications and a test piece of glass is run to check settings in accordance with worksite requirements.

Range set-up requirements include – thickness of glass, speed, wheel pressure, edge finish, mitre angle, bevel width, residual edge, V cut size, machine is adjusted as required, water pressure, nozzle size.

- 1.2 Preparation of work area and personal safety precautions are carried out in accordance with worksite requirements.
- Range preparation includes – selection and use of protective clothing and safety equipment, identification of hazards, ventilation of production area, clearing work area, ensuring cleanliness of work area.
- 1.3 Processing area is checked to ensure it is clear of debris and abrasive material before work commences in accordance with worksite requirements.
- 1.4 Machines, wheels and tools are selected and prepared to enable the work to be completed to the job specifications and without damage to the glass or to the tools and equipment in accordance with worksite requirements.
- Range preparation includes – checking and dressing tools and wheels, checking coolant and water tanks, checking coolant and lubricant flow, checking for machine wear, completing pre-use service.
- 1.5 Glass is checked to ensure it is ready for processing in accordance with worksite requirements.
- Range requirements include – correct type, size, weight and thickness; freedom from seeds, feather, chips, edge damage, surface damage.
- 1.6 Lifting gear for large glass are selected and operated to enable glass to be loaded onto the machine without damage to the glass or the machine, or danger to people in the workplace.

## Outcome 2

Process glass using a CNC machine.

### Performance criteria

- 2.1 CNC machine is operated in accordance with worksite requirements.
- 2.2 Glass is cleaned after use in accordance with worksite requirements.
- Range cleaning includes – hand wash and dry, machine wash and dry.
- 2.3 Finished glass is checked to ensure it meets the job specifications and is free from surface or edge damage.
- 2.4 Finished glass is labelled or marked and prepared for dispatch or further manufacturing in accordance with worksite requirements.
- 2.5 Work area and equipment are left clean and free from debris in accordance with worksite requirements.

<b>Replacement information</b>	This unit standard and unit standard 20509 replaced unit standard 2040.
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<b>Planned review date</b>	31 December 2022
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#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	27 April 2004	31 December 2013
Review	2	21 May 2010	31 December 2017
Review	3	18 June 2015	N/A
Rollover and Revision	4	25 August 2022	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0073
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

#### Comments on this unit standard

Please contact Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council at [qualifications@hangaarorau.nz](mailto:qualifications@hangaarorau.nz) if you wish to suggest changes to the content of this unit standard.