

Title	Cut glass manually in a glass processing work environment		
Level	4	Credits	5

Purpose	A person credited with this standard are able to: select glass and prepare glass for cutting; and cut glass into regular and irregular shapes manually.
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Classification	Glass and Glazing > Glass Processing and Manufacturing
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Available grade	Achieved
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Guidance Information

- 1 Legislation and references, regulations and/or industry standards relevant to this unit standard include but are not limited to the:
[Health and Safety at Work Act 2015](#);
[Hazardous Substances and New Organisms Act 1996](#);
[Building Act 2004](#);
NZS 4223.3:2016, *Glazing in buildings – Part 3: Human impact safety requirements*;
AS/NZS 4667:2000, *Quality requirements for cut-to-size and processed glass*;
AS/NZS 4668:2000, *Glossary of terms used in the glass and glazing industry*.
available at <http://www.standards.co.nz>.

Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this unit standard will take precedence for assessment purposes.

- 2 Definitions
Irregular shapes include – shapes other than squares, rectangles, and circles.
Job specifications refer to the scope of the work being undertaken. They include the objectives, quality requirements, deliverables, timeline, and budget.
PPE (personal protective equipment) refers to anything used or worn by a person (including clothing) to minimise risks to the person's health and safety.
Regular shapes include – squares, rectangles, and circles.
Shark teeth refer to dagger-like imperfections that start from the score surface. The edge strength and potential for glass breakage increase as the depth, roughness, and number of shark teeth increase.
Workplace procedures refer to instructions to staff on policy and procedures that are documented in manual format and available in the workplace. These requirements include company specifications and procedures, work instructions, manufacturer's specifications, product quality specifications, and legislative requirements.

3 Assessment

Evidence for this unit standard must reflect:

- industry standards, current health, safety, industry, and workplace procedures;
- job specifications and customer requirements;
- industry requirements for commercially acceptable timeframes.

Outcomes and performance criteria

Outcome 1

Select glass and prepare glass for cutting.

Performance criteria

1.1 Preparation of work area and personal safety precautions are carried out.

Range preparation includes – selection and use of protective clothing and safety equipment, identification of hazards and risks, ventilation of production area, clearing work area, ensuring cleanliness of work area.

1.2 Glass is selected for type, thickness, and size and is checked for imperfections before use.

1.3 Cutting plans and labels are made to reduce waste.

Outcome 2

Cut glass into regular shapes manually.

Performance criteria

2.1 Glass is marked and cut into regular shapes.

Range three different methods required – cutting glass with a handheld glass cutter and square, cutting glass with a speed-cutter, cutting glass with a circle cutter.

2.2 Glass is checked for defects and sorted.

Range defects may include but are not limited to – squareness, straightness, dimensional check, scratches, marks, seeds and breakout quality (shark teeth).

2.3 Waste materials are disposed of.

Outcome 3

Cut glass into irregular shapes manually.

Performance criteria

3.1 Glass is marked and cut into irregular shapes.

Range cutting glass with a handheld glass cutter and radius templates, cutting glass with a handheld glass cutter and a physical template. evidence is required for two different methods.

3.2 Glass is checked for defects and sorted.

Range defects may include but are not limited to – squareness, straightness, dimensional check, scratches, marks, seeds and breakout quality (shark teeth).

3.3 Waste materials are disposed of.

Planned review date	31 December 2029
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	24 October 2024	N/A

Consent and Moderation Requirements (CMR) reference	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 if you wish to suggest changes to the content of this unit standard.