

Title	Manufacture screen printed glass		
Level	4	Credits	10

Purpose	<p>This unit standard is for experienced people in the glass processing industry working with specialist glass.</p> <p>People credited with this unit standard are able to prepare for manufacturing screen printed glass and manufacture screen printed glass.</p>
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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 Definitions**

Screen printed glass – glass printed with ceramic enamel (frit) ink which is permanently fused to the glass with heat.

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 and standards relevant to this unit standard include – Health and Safety at Work Act 2015, Resource Management Act 1991 and the following Australia/New Zealand Standards:**

AS/NZS 2208:1996 *Safety glazing materials in buildings*

AS/NZS 2080:2006 *Safety glazing for land vehicles*, available at <http://www.standards.co.nz>.

Outcomes and performance criteria

Outcome 1

Prepare for manufacturing screen printed glass.

Performance criteria

- 1.1 Work area is prepared and personal safety precautions taken 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, tables and screens.
- 1.2 Glass to be used in manufacturing is checked in accordance with worksite requirements.
- Range checks include – glass and the production process to be used match with requirements of works or customer order, glass size is within processing equipment limitations, glass manufacturer's size and processing limitations, printing face, shapes and patterns for printing.
- 1.3 Ink is prepared for printing in accordance with worksite requirements.
- Range preparation includes – selection of ink, checking of shelf life, mixing of ink, recording of works or customer order details with print colour for future reference.
- 1.4 Screen is prepared for printing in accordance with worksite requirements.
- Range preparation includes – selection of screen size, selection of mesh size, checking screen condition, checking of screen marking pattern.

Outcome 2

Manufacture screen printed glass.

Performance criteria

- 2.1 Printing process is set-up in accordance with the job specifications and worksite requirements.
- 2.2 Ink is applied in accordance with worksite requirements.
- 2.3 Printed glass is transferred from table to dryer without damage to the glass or the printed surface in accordance with worksite requirements.
- 2.4 Dryer temperature is set correctly and drying is completed in accordance with worksite requirements.
- 2.5 Inspection of print quality is completed as dried glass is transferred to transport trolley in accordance with worksite requirements.

- 2.6 Where toughening or heat strengthening of printed glass is required, the process is completed to ensure that glass and ink are not damaged or contaminated in accordance with worksite requirements.
- 2.7 Work documentation is completed in accordance with worksite requirements.
- 2.8 Clean up is completed in accordance with legislative and worksite requirements.

Range clean up includes – personal hygiene and use of protective clothing and equipment, use of required solvents, water blasting of screens, storage and/or disposal of used solvents, leaving work area in work-ready condition.

Planned review date	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

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.