Title	Manufacture screen printed glass		
Level	4	Credits	10

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

Classification	Glass and Glazing > Glass Processing and Manufacturing	
Available grade	Achieved	

Guidance Information

1 Legislation, guidelines, and standards relevant to this unit standard include: <u>Health and Safety at Work Act 2015;</u> <u>Building Act 2004;</u> Safe Use of Machinery: Best Practice Guidelines; available at <u>www.worksafe.govt.nz;</u> 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.

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

Job specifications refer to the scope of the work being undertaken. It includes the objectives, quality requirements, deliverables, timeline, budget etc.

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

Workplace procedures refer to the documented procedures specific to a workplace that set out the standard and the required practices of that workplace. This may include job specifications, procedures, practices, manufacturer recommendations, technical data sheets and material safety data sheets.

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.

4 Recommended skills and knowledge Unit 28759, *Demonstrate knowledge of manufacturing screen printed* glass or demonstrate equivalent knowledge and skills.

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.
 - Range preparation may include but is not limited to 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, tables and screens.
- 1.2 Glass to be used in manufacturing is checked.
 - Range checks may include but are not limited to 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.
 - Range preparation may include but is not limited to 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.
 - Range preparation may include but is not limited to 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.
- 2.2 Ink is applied.
- 2.3 Printed glass is transferred from table to dryer without damage to the glass or the printed surface.

- 2.4 Dryer temperature is set correctly, and drying is completed.
- 2.5 Inspection of print quality is completed as dried glass is transferred to the transport trolley.
- 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.
- 2.7 Work documentation is completed.
- 2.8 Clean-up is completed in accordance with legislative, sustainable, and environmental considerations.
 - Range clean-up may include but is not limited to personal hygiene and use of protective clothing and equipment, use of required solvents, water blasting of screens, storage and/or disposal of used solvents, and leaving the work area in a work-ready condition.

Planned review date	31 December 2029
Flaimed review date	

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	31 December 2026
Rollover and Revision	4	25 August 2022	31 December 2026
Review	5	24 October 2024	N/A

Consent and Moderation Requirements (CMR) reference0073This 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 <u>qualifications@hangaarorau.nz</u> if you wish to suggest changes to the content of this unit standard.