

Title	Manufacture laminated 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 to manufacture laminated glass and manufacture laminated 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 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 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 Standard:

New Zealand Standard (NZS) 4223.3:2016 *Glazing in buildings – Human impact safety requirements*, available at <http://www.standards.co.nz>.

Outcomes and performance criteria

Outcome 1

Prepare to manufacture laminated glass.

Performance criteria

1.1 Material used in manufacturing laminated glass is checked in accordance with worksite requirements.

Range checks include – glass size, thickness and type match with requirements of works or customer order; interlayer type, colour and thickness match with requirements of work or customer order; glass quality (free from seeds, feather, chips or edge damage); glass free from grease or dirt.

1.2 Glass is prepared for manufacturing in accordance with worksite requirements.

Range preparation includes – washing glass using washing machine, checking glass quality to ensure no scratches or watermarks are left after washing, laying-up-of glass and interlayers to meet work or customer order requirements.

Outcome 2

Manufacture laminated glass.

Performance criteria

2.1 Edge tape is applied to glass perimeter in accordance with the job specifications and worksite requirements.

2.2 Resin quantity based on measurement of glass is calculated in accordance with worksite requirements.

2.3 Resin is prepared and mixing machine is set in accordance with worksite requirements.

2.4 Resin is pumped into laminations and injection port is sealed in accordance with worksite requirements.

2.5 Injected laminate is inspected for faults in accordance with worksite requirements.

Range faults include – bubbles, cracks.

2.6 Curing of laminate is completed using ultraviolet lamps or heat cure in accordance with worksite requirements.

2.7 Completed laminates are inspected and approved laminates are marked with a permanent mark in accordance with the requirements of NZS 4223.3:2016.

2.8 Work documentation is completed in accordance with worksite requirements.

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.