Field   Manufacturing

Review of *Glass and Glazing* unit standards

Subfield	Domain	ID
Glass and Glazing	Flat Glass	2046, 2048, 2057, 2062, 20504, 20512, 20518-20520, 25771, 26031, 26079, 26283, 28757, 28761, 28763-28765, 28770-28772
	General Glass and Glazing	19605-19607, 19610-19612, 19616-19619, 28754, 28755, 28758, 28762

Waihanga Ara Rau Construction and Infrastructure Workforce Development Council has completed the review of the unit standards listed above.

Date new versions published   **November 2022**

Planned review date   **December 2027**

Summary

The review of glass and glazing unit standards in the *General Glass and Glazing* and *Flat Glass* domains followed the qualification reviews of New Zealand Certificate in Glass (Level 3) [Ref: 2944], New Zealand Certificate in Glazing (Level 4) [Ref: 2945], New Zealand Certificate in Glass Processing (Level 4) [Ref: 2946], and New Zealand Certificate in Automotive Reglazing (Level 4) [Ref: 2947] in 2021. Glass and glazing industry organisations, subject matter experts and training providers were consulted via email, online and face to face meetings for this review. Organisations with consent to assess and Hanga Aro Rau Manufacturing Workforce Development Council were consulted during this review.

Main changes

- Unit standards in Manufacturing > Glass and Glazing > Flat Glass were reclassified under Planning and Construction > Construction Trades > Glazing.
- Unit standards in Manufacturing > Glass and Glazing > General Glass and Glazing were reclassified under Planning and Construction > Construction Trades > Glazing.
- Unit standard 19605 in Manufacturing > Glass and Glazing > General Glass and Glazing was reclassified under Planning and Construction > Construction > Core Planning and Construction.
- Seventeen standards will expire without replacement as they are no longer fit for purpose.
- Title changes have been made to nine standards to reflect industry skill and knowledge expectations more precisely.
- Unit standard 28763 will be replaced with two new standards to recognise technical differences in glazing fire-rated and security glass installations.
- Fourteen new standards were developed to meet industry needs.

Category C and D unit standards will expire at the end of December 2024

The last date for assessment of superseded versions of Category B unit standards is December 2024

Impact on existing organisations with consent to assess

Current consent for			Consent extended to		
Nature of consent	Classification or ID	Level	Nature of consent	Classification or ID	Level
Subfield	Glass and Glazing	2-4	Standards	19605, 19607, 19617, 19618, 28754	3
				2062, 20518, 20520, 26079, 28755, 28762, 28764, 28765, 28772	4
Domain	Flat Glass	2-5	Standards	2062, 20518, 20520, 26079, 28757, 28761, 28764, 28765, 28770, 28772	4
Domain	General Glass and Glazing	2-5	Standards	19605, 19607, 19617, 19618, 28754	3
				28755, 28762	4

Impact on Consent and Moderation Requirements (CMR)

All Category B and new standards are covered in CMR 0048.

Detailed list of unit standards – classification, title, level, and credits

All changes are in **bold**.

Key to review category	
A	Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new version number
B	Changes made, but the overall outcome remains the same - the new version of the standard carries the same ID and a new version number
C	Major changes that necessitate the registration of a replacement standard with a new ID
D	Standard will expire and not be replaced

Manufacturing > Glass and Glazing > Flat Glass

ID	Title	Level	Credit	Review Category
2046	Install splashbacks and mirrors	4	10	D
2048	Reglaze frames	4	5	D
2057	Install a glass block wall using a non-mortar system	4	5	D
20504	Measure and glaze bent glass	4	5	D
20512	Glaze Insulated Glass Units (IGUs)	4	5	D
20519	Install toughened glass doors and entrances	4	5	D
25771	Demonstrate knowledge of staining glass	4	5	D
26031	Demonstrate knowledge of solar control, specialist coated glass, and glazing systems	3	4	D
26283	Load and unload vehicles used to carry glass	3	12	D
28771	Install glass into canopies	4	10	D

Manufacturing > Glass and Glazing > General Glass and Glazing

ID	Title	Level	Credit	Review Category
19606	Demonstrate knowledge of the history of the glass industry	2	2	D
19610	Demonstrate knowledge of glass types and their application	3	5	D
19611	Demonstrate knowledge of glazing materials	2	2	D
19612	Demonstrate knowledge of glass properties	3	5	D
19616	Demonstrate knowledge of glass ordering requirements	3	3	D
19619	Demonstrate knowledge of plastics used in glazing	2	2	D
28758	Demonstrate knowledge of loading and unloading glass	3	2	D

Manufacturing > Glass and Glazing > General Glass and Glazing
Planning and Construction > Construction > Core Planning and Construction

ID	Title	Level	Credit	Review Category
19605	Provide customer service in the glass, joinery or joinery related industries **Provide customer service in construction related work**	3	5	B

Manufacturing > Glass and Glazing > Flat Glass
Planning and Construction > Construction Trades > Glazing

ID	Title	Level	Credit	Review Category
2062	Glaze solar control and specialist coated glass	4	5 **2**	B
20518	Glaze frameless glass shower doors and screens **Glaze a frameless shower door and screen**	4	5 **4**	B
20520	Install glass balustrade systems	4	5 **7**	B
26079	Make a template for cutting glass	4	5	B
28757	Glaze frames	4	15	B
28761	Install glass floors and treads	4	10 **6**	B
28763 **33082** **33083**	Glaze fire and security glass **Glaze a security glass system** **Glaze a fire-rated glass system**	4 **4** **4**	5 **2** **2**	C
28764	Glaze internal partition systems	4	5	B
28765	Install structural glass assemblies and walls **Install a structural glass assembly**	4	10	B
28770	Assemble glass components using ultraviolet (UV) glue **Assemble glass components using ultraviolet glue in a glazing application**	4	5 **2**	B
28772	Glaze with structural silicone **Glaze a frame or panel using structural silicone**	4	5	B
33084	**Apply codes of practice and industry standards to meet compliance requirements for a glazing installation**	**4**	**5**	**New**
33085	**Maintain health and safety, and mental wellbeing in a glazing operation**	**4**	**10**	**New**
33086	**Plan and cost a glazing installation project**	**4**	**10**	**New**
33087	**Measure, record and communicate glass requirements for a complex glazing application**	**4**	**5**	**New**

ID	Title	Level	Credit	Review Category
33088	**Maintain knowledge of regulations and standards, materials, technology, and methods for the glazing trades**	**4**	**10**	**New**
33089	**Retrofit aluminium window joinery**	**4**	**2**	**New**
33090	**Retrofit timber window joinery**	**4**	**2**	**New**
33144	**Install an Insulated Glass Unit (IGU)**	**4**	**10**	**New**
33145	**Glaze an entrance using frameless toughened glass**	**4**	**10**	**New**
33146	**Install glazing into a glass canopy structure**	**4**	**5**	**New**
33147	**Glaze a frame with monolithic glass**	**4**	**2**	**New**
33148	**Install a splashback and mirror glazing application**	**4**	**3**	**New**
33151	**Re-glaze a window frame**	**4**	**2**	**New**
33154	**Load and unload, and move and store glass from vehicles used to transport glass**	**3**	**5**	**New**

Manufacturing > Glass and Glazing > General Glass and Glazing
Planning and Construction > Construction Trades > Glazing

ID	Title	Level	Credit	Review Category
19607	Demonstrate knowledge of glass industry terminology **Demonstrate knowledge of general glass and glazing industry terms, symbols, and abbreviations**	3	3	B
19617	Price materials for simple glazing work **Calculate material quantities and price a simple glazing work**	3	4	B
19618	Demonstrate knowledge of documentation for glazing work **Demonstrate knowledge of documentation used for glazing work**	3	3	B
28754	Handle, store and move glass	3	5	B
28755	Cut glass manually	4	10	B
28762	Demonstrate knowledge of complex glass handling **Describe how to move large or complex glass panes using mechanical equipment**	4	5	B