

CLASS 2

Building Product Information Sheet

Product name:

Altus Flushglaze159 System

Product line (the product line from which the product is customised):

N/A

Product description and its intended use (measurements, materials, usage):

- Altus Flushglaze159 System comprises of fully assembled aluminium window joinery units. Commercial door panels may also be added on to suit the building requirements.
- Altus Flushglaze159 System is available in either standard or thermally broken, achieving the same structural performance for both options.
- Altus Flushglaze159 System has been designed for, but is not limited to, use in low and high rise commercial and residential apartments up to 25m, and may also be used in ancillary and outbuildings associated with these residential uses.
- Altus Flushglaze159 System is custom fabricated to the requirements of each project. Units are glazed with single pane glass or insulated glass units (IGUs) into fixed or opening sashes and door panels. Fixed panes can be either captive (beaded) or structurally glazed. Opening sash options include awning and casement windows. Commercial door panels for sliding and bifold styles may also be added on to the system.

Product identifier (if applicable):

Flushglaze159

Place of manufacture: Aotearoa New Zealand Overseas

Legal and trading name of the manufacturer(s):

Altus NZ Limited

Legal and trading name of the importer (if applicable):

Address for service:

STREET NAME 49 Business Parade North

SUBURB East Tamaki

CITY, COUNTRY Auckland

POSTCODE

Website:

www.altus.co.nz

Email address:

Altus.Enquiry@altus.co.nz

Phone No. (if applicable):

0800 925 500

NZBN (if applicable):

9429042187615

Relevant Building Code clauses:

- B1 Structure: Performance clauses B1.3.1, B1.3.2, B1.3.3 B1.3.4.
- B2 Durability: Performance clauses B2.3.1(b) and B2.3.2.
- C4 Movement to a place of safety: Performance clauses C4.3 and C4.5
- D1 Access Routes: Performance clause D1.3.1 (b).
- E2 External Moisture: Performance clause E2.3.2 and E2.3.7.
- E3 Internal Moisture: Performance clause E3.3.1
- F2 Hazardous Building Materials: Performance clauses F2.3.1, F2.3.2, F2.3.3.
- F4 Safety from Falling: Performance F4.3.1 and F4.3.4.
- F9 Means of restricting access to residential pools: Performance clause F9.3.4
- G4 Ventilation: Performance G4.3.1 and G4.3.3
- G7 Natural Light: Performance G7.3.1 and G7.3.2.
- H1 Energy Efficiency: Performance clauses H1.3.1, H1.3.2E and H1.3.3.

Statement on how the building product is expected to contribute to compliance:

- **B1.3.1, B1.3.2, B1.3.3 and B1.3.4:** Altus Flushglaze159 System has been tested in accordance with AS/NZS 4284:2008, and is fabricated to the structural requirements of the Wind Zone specified in the project requirements. Flushglaze159 is glazed to comply with NZS 4223.3:2016 where specified in the project requirements because human impact may occur.
- **B2.3.1(b) and B2.3.2:** Altus Flushglaze159 System can be finished to provide a durability of at least 15 years in all Exposure Zones, except in microclimates where there is evidence of corrosion in adjacent structures caused by industrial or geothermal atmospheres. Durability is dependent on Flushglaze159 being installed and maintained in accordance with Altus NZ Ltd requirements. IGUs comply with the requirements of NZS 4223.2: 2016. Timber reveals comply with NZS 3602:2003. Hardware elements shall meet a durability of at least 5 years.
- **C4.3 and C4.5:** Altus Flushglaze159 System with add on commercial doors can be used within an escape route where relevant considerations are specified in the project requirements.
- **D1.3.1(b):** Altus Flushglaze159 System doors can be used within an access route where relevant considerations are specified in the project requirements.
- **E2.3.2 and E.2.3.7:** Altus Flushglaze159 System has been tested in accordance with AS/NZS 4284:2008, and is fabricated to the water penetration requirements of the Wind Zone specified in the project requirements. Flushglaze159 is suitable for installation in accordance with Acceptable Solution E2/AS1, Third Edition Amendment 10, and can be supplied with sill support bars or support blocks to suit the cladding selection.
Installation details provided by other parties such as architects and cladding system suppliers may also be suitable.

IMPORTANT! Commercial door panels added to the window glazing of Flushglaze159 that require low or no threshold may not comply with E2 clauses. Contact Altus NZ Ltd or discuss with the Altus fabricator for more information.
- **E3.3.1:** Altus Flushglaze159 System is glazed with IGUs to the project requirements, and does not require condensation collection channels to meet the requirements of E3/AS1 Second Edition Amendment 7, Paragraph 1.3 Condensation control.
- **F2.3.1, F2.3.2 and F2.3.3:** Altus Flushglaze159 System is safe when handled in accordance with installation instructions. is fabricated to comply with NZS 4223.3:2016 where specified in the project requirements.
- **F4.3.1 and F4.3.4:** Altus Flushglaze159 System is fabricated with opening restrictors to comply with F4/AS1 Third Edition Amendment 2, Paragraph 2.0 Opening Windows, where relevant considerations are specified in the project requirements.
- **F9.3.4:** Altus Flushglaze159 System may be fabricated with restrictors, door closers and swimming pool barrier latches fitted to opening windows or doors within a wall that forms part of a residential pool barrier. Residential pool barrier designs may comply with F9/AS1 First Edition, or with an alternative design provided by other parties. Flushglaze159 does not include warning signs and door alarms: if these are required by the design then they may be supplied and installed on site by others.
- **G4.3.1 and G4.3.3:** Altus Flushglaze159 System can be fabricated with opening sashes of type and dimensions specified in the project requirements to help provide building ventilation. Ventilation design may comply with G4/AS1 Fourth Edition, Paragraph 1.2 Natural ventilation, or an alternative ventilation system design which utilises opening window sashes and is provided by other parties such as mechanical services engineers could be suitable.

- **G7.3.1 and G7.3.2:** Altus Flushglaze159 System can be fabricated with the area and Visible Light Transmittance (VLT) of glazing specified by the project requirements to help provide natural light and awareness of the outside. Glazing design may comply with G7/AS1 Second Edition or G7/AS2 First Edition, or an alternative glazing design provided by other parties such as lighting engineers could be suitable.
- **H1.3.1(a), and H1.3.2E:** Altus Flushglaze159 System is available in standard or thermally broken and can be fabricated with IGUs made from a range of possible glass, spacer and infill gas types, to suit the window insulation (R-value) requirements of the project. Depending on the window or door type, dimensions and IGU type, R-values between R0.26 and R0.56 can be provided, determined in accordance with either H1/AS1 Fifth Edition Amendment 1, Table E1.1.1, or with H1/VM1 Fifth Edition Amendment 1, Paragraph E1.
Compliance for commercial buildings (those greater than 300m²) will be through H1/AS2 and H1/VM2.

Relevant standards

Altus Flushglaze159 System, and/or its component parts, are tested, fabricated and specified to comply with the following standards, as relevant to the project specifications:

- NZS 4223 *Code of practice for glazing in buildings* - Part 1:2008 Glass selection and glazing
- NZS 4223 *Code of practice for glazing in buildings* - Part 2:2016 Insulating glass units
- NZS 4223 *Code of practice for glazing in buildings* - Part 3:2016 Human impact safety requirements
- NZS 4223 *Code of practice for glazing in buildings* - Part 4:2008 Dead, wind and snow loading
- NZS 4284:2008 Testing of building facades
- NZS 3602:2003 *Timber and wood-based products for use in buildings*
- AS 3715:2002 *Metal finishing – Thermoset powder coatings for architectural applications of aluminium and aluminium alloys.*

- *options for compliance set out in section 19 of the Act (regulations, acceptable solution, verification method)*
- *standard or technical document that describes the performance of the building product or the relevant specifications to which the building product was manufactured*
- *physical properties of the building product*
- *how the building product is intended to be used.*

Limitations on the use of the building product:

Altus Flushglaze159 System is not fire resisting glazing and cannot provide a fire resistance rating.

Altus Flushglaze159 System is suitable for use in high-use situations such as commercial, institutional assembly or industrial buildings.

Altus Flushglaze159 System may not be suitable for use where recommended maintenance cannot be reasonably achieved, including use in buildings taller than three storeys or 10 m in height.

Commercial door panels added to the window glazing of the Altus Flushglaze159 with low or no threshold may not be suitable for exposed areas and will require canopy cover.

Design requirements that would support the use of the building product:

Altus Flushglaze159 System is designed for, but is not limited to, use in projects within the following scope:

- Commercial shopfront areas, low-high rise curtain wall commercial buildings and residential buildings.
- Building height up to 25m timber framed, steel framed or concrete construction.
- All Wind Zones up to and beyond Extra High - excluding add on commercial door panels with low or no threshold.
- All Exposure Zones, except in microclimates where there is evidence of corrosion in adjacent structures caused by industrial or geothermal atmospheres.
- Overall window panel size up to 3.8m high with unlimited width range and over multiple storey's. Limitations on the configuration, maximum dimensions, and weights of individual panels also apply, and are dependent on the panel type and specified structural performance e.g. wind load, seismic load or other building specific requirements.
- Maximum IGU thickness is 28 mm for fixed glazing.
- Design and installation that follows common Acceptable Solutions such as E2/AS1, F4/AS1, G4/AS1, G7/AS1 and H1/AS1.
- Anodised or powdercoat finish to aluminium, selected from the Altus NZ Ltd available colour range.
- Timber reveals pre-primed for site painting, unless otherwise agreed with Altus NZ Ltd.

Altus Flushglaze159 System may be used in projects outside this scope if other parties such as architects or cladding system suppliers establish appropriate design and installation requirements.

Altus Flushglaze159 System achieves an air infiltration rating for air-conditioned buildings (determined in accordance with AS/NZS 4284:2008). Controlling air infiltration helps prevent heat losses from buildings. Commercial door panels added to Flushglaze159 glazing with low or no threshold will not achieve the same air infiltration rating.

Altus Flushglaze159 System is custom fabricated to the requirements of each project. Prior to fabrication, the following project selections must be confirmed by the specifier:

- Unit size.
- Opening panel size(s) and type(s), and configuration of fixed and opening panels, including any specific requirements for doors that are on access routes or escape routes.
- Project Wind Zone.
- Project Exposure Zone.
- IGU and frame performance selections, including R-value, solar heat gain (SHGC), VLT, and safety glazing requirements.
- Safety fittings and hardware: restrictors, door closers and swimming pool barrier latches to be fitted where an opening window or door requires features for safety from falling or is within a wall that forms part of a residential pool barrier.
- Finish requirements and colour for aluminium components.
- Any special requirements for timber reveals. Default specification is pre-primed finger-jointed radiata pine H3.1 treated, suitable for paint finish.

Installation requirements:

- Ensure that the joinery is protected from dust, debris, and moisture if stored prior to installation.
- Inspect joinery thoroughly before beginning installation to ensure it is free from any defects and damage, including damage caused during transit and delivery.
- Check the dimensions and fit of each unit against the rough opening.
- Install the door in accordance with the consented or design drawings and with any specific Altus NZ Ltd installation requirements available from www.altus.co.nz or specified in shop drawings.
- Ensure door and window units are installed plumb, level, and in plane, within the tolerances set out in the **MBIE Guide to materials, tolerances, and workmanship in residential construction**.
- Check and adjust all seals and operating hardware to ensure good fit and proper operation and function without jamming or gaps.
- Ensure drain holes are clear of dirt and debris following installation.

Maintenance requirements:

- Exterior surfaces of Altus Flushglaze159 System should be washed at least once every 3-6 months, and more frequently for buildings in harsh environments (eg, close to beaches and coastlines), and for units that are not completely exposed to regular rain washing, such as those which are partly or fully sheltered by eaves, gable verges, porches, verandah roofs, adjacent buildings trees, landscaping or garden features etc.
- All drain holes in aluminium Altus Flushglaze159 System members should also be cleaned every 3-6 months to prevent the build-up of dirt or debris that could impede the free passage of air and water.
- The tracks and guides (either top and/or bottom) of Commercial door panels added to the Flushglaze159 System should also be inspected and cleaned every 3-6 months to remove any debris and dirt.
- Interior surfaces of Altus Flushglaze159 System should be regularly dusted or wiped with a sponge or soft cloth and warm water. Do not use harsh cleaners or detergents.
- Handles, catches, and similar hardware on Altus Flushglaze159 System should be cleaned regularly with a sponge or soft cloth and warm water, mild detergent may be used for powdercoated or anodised components or use a proprietary cleaning product designed for the hardware finish material.
- Glass surfaces of Altus Flushglaze159 System may be cleaned with a sponge or soft cloth and warm water with mild detergent, or with proprietary glass cleaning products. Abrasive materials should not be used to clean or wipe glass, as this will cause damage to the glass surface.
- All seals, hinges, stays, rollers and other hardware should be checked annually for proper fit and operation, and to ensure all screws and fixings remain tight.

Is the building product/building product line subject to warning or ban under section 26?:

Yes No

If yes, description of the warning or ban under section 26:

Date:

30/10/2023