

### Products

#### **Product names:**

- APL Commercial Series 40mm aluminium window
- APL Commercial Series 40mm aluminium Seismic System
- APL Commercial Series 100mm aluminium Shopfront window
- APL Commercial Series 100mm aluminium Flushglaze strip window
- APL Commercial Series 125mm aluminium Flushglaze curtain wall
- APL Commercial Series 150mm aluminium Flushglaze curtain wall
- APL Commercial Series 125mm aluminium Structural Glaze curtain wall
- APL Commercial Series 150mm aluminium Structural Glaze curtain wall
- APL Commercial Series 168mm aluminium Structural Glaze curtain wall
- APL Commercial Series 175mm aluminium Structural Glaze curtain wall
- APL Commercial Series Magnum Door.

#### Version: V1

**Product line:** Aluminium curtain walls, windows and doors – non-thermally insulated **Product identifier**: see product names **Product description:** windows and doors, curtain walls

### Composition

#### Commercial Series ranges are made from:

- Aluminium extrusions
- Hardware, which may be made from powder coated zinc, stainless steel or aluminium
- Insulated glass units
- Sealants
- Glazing gaskets
- Fixings (stainless steel screws and bolts)
- Bracketry (aluminium and steel)
- Accessories may include extruded aluminium head flashings, sill trays or sill support bars, and purpose-folded aluminium flashings.

### Scope of Use

The APL Commercial Series aluminium curtain walls, windows and doors mentioned in this document are non-thermally insulated products that are suitable for a wide range of commercial settings. They may comply in some circumstances with New Zealand Building Code clause H1 Energy Efficiency when used in conjunction with high performing Low-E double glazing.



### **Compliance with New Zealand Building Code and Relevant Standards**

All APL window systems are tested for compliance in the company's IANZ-accredited test booth. Test reports are available.

The ranges listed above under 'Products' have been manufactured and tested to comply with applicable sections of the New Zealand Building Code and in conformity with the New Zealand Standards as listed below:

- Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4. Products meet the requirements arising for loads from self-weight, wind and impact, i.e. B1.3.3 (a), (h) and (j)
- Clause B2 DURABILITY: Performance B2.3.1 (b) 15 years, B2.3.1 (c) 5 years and B2.3.2
- Clause E2 EXTERNAL MOISTURE: Performance E2.3.2. Window and door units conform and contribute to the wall cladding system meeting this requirement. See Paragraphs 14.1-14.4
- Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1, F2.3.3 (a) and (b)
- Clause F4 SAFETY FROM FALLING: Performance F4.3.1
- Clause G4 VENTILATION: Performance G4.3.1 and G4.3.3
- Clause G7 NATURAL LIGHT: Performance G7.3.1 and G7.3.2
- Clause H1 ENERGY EFFICIENCY: Performance H1.3.1 and H1.3.2E selective compliance depending on the product and glazing format
- NZS 4211: Specification for performance of windows (incl. serviceability, deflection, operation of opening sashes, air infiltration, water penetration, ultimate strength, torsional strength of sashes)
- NZS 4284: Testing of Building Facades (incl. serviceability deflection, air infiltration, water penetration, ultimate strength, seismic, seal degradation)
- NZS 4223.3: Glazing in buildings Human impact safety requirements
- NZS 3604: Timber-framed buildings
- Powdercoat or paint systems meet Window & Glass Association NZ Powder Coating Quality Assurance System (PQAS)
- Powdercoatings formulated to meet AS 3715 and AAMA 2605
- Anodised surface finishes meet Window & Glass Association NZ Voluntary Specification SFA 3503-03:2005, Specification for Anodic Oxide Coatings on Wrought Aluminium for External Architectural Applications.

#### **Supporting Documentation**

Additional documentation and technical information is available in support of the above statements at the links below: Information on warranty provisions and installation can be found at these links:

\* Warranty provisions and maintenance guidelines:

https://issuu.com/aplnz/docs/care\_maintenance\_first\_\_agp

\* Installation guidelines:

The commercial curtain walls, and windows and doors covered by this document generally require specialised, site-specific installation. These products are installed by qualified technicians who ensure compliance with Building Code Clause B1 Structure and Clause E2 External Moisture. Installation guidelines relating to the insertion of windows and doors in low-rise residential settings can be found at:

https://www.eboss.co.nz/assets/literature/165/32363/WGANZ-Guide-to-E2-AS1-Amd-8-V1.5-August-19.pdf



Manufacture location: New Zealand Legal and trading name of manufacturer: Architectural Profiles Ltd (also known as APL Window Solutions) Manufacturer address for service: 19 Northpark Drive, Hamilton 3200 Manufacturer website: aplnz.co.nz Manufacturer email: apl.techinfo@aplnz.co.nz Manufacturer phone number: 07 849 2113 Manufacturer NZBN: 9429040093352

### Warnings and Bans







# Products

#### **Product names:**

- APL Commercial Series 168mm aluminium Structural Glaze curtain wall
- APL Commercial Series 200mm aluminium Structural Glaze curtain wall

#### Version: V1

Product line: Thermally insulated curtain walls Product identifier: see product names Product description: Curtain walls

### Composition

#### Commercial Series ranges are made from:

- Aluminium extrusions
- Polyamide thermal insulating profiles
- Hardware, which may be made from powder coated zinc, stainless steel or aluminium
- Insulated glass units
- Sealants
- Glazing gaskets
- Structural sealants
- Fixings (stainless steel screws and bolts)
- Bracketry (aluminium and steel)
- Accessories may include extruded aluminium head flashings, sill trays or sill support bars and purpose-folded aluminium flashings.

#### Scope of Use

The APL Commercial Series aluminium curtain walls listed in this document are thermally insulated products suitable for a wide range of commercial settings. They comply with New Zealand Building Code clause H1 Energy Efficiency (all climate zones) when used in conjunction with high performing Low-E double glazing. They include thermal insulators for maximum performance — reinforced polyamide inserts. Products include panelised curtain walling and awning and casement windows.



# **Compliance with New Zealand Building Code and Relevant Standards**

All APL window systems are tested for compliance in the company's IANZ-accredited test booth. Test reports are available.

The ranges listed above under 'Products' have been manufactured and tested to comply with applicable sections of the New Zealand Building Code and in conformity with the New Zealand Standards as listed below:

- Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4. Products meet the requirements arising for loads from self-weight, wind and impact, i.e. B1.3.3 (a), (h) and (j)
- Clause B2 DURABILITY: Performance B2.3.1 (b) 15 years, B2.3.1 (c) 5 years and B2.3.2
- Clause E2 EXTERNAL MOISTURE: Performance E2.3.2. Window and door units conform and contribute to the wall cladding system meeting this requirement. See Paragraphs 14.1-14.4
- Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1, F2.3.3 (a) and (b)
- Clause F4 SAFETY FROM FALLING: Performance F4.3.1
- Clause G4 VENTILATION: Performance G4.3.1 and G4.3.3
- Clause G7 NATURAL LIGHT: Performance G7.3.1 and G7.3.2
- Clause H1 ENERGY EFFICIENCY: Performance H1.3.1 and H1.3.2E
- NZS 4211: Specification for performance of windows (incl. serviceability, deflection, operation of opening sashes, air infiltration, water penetration, ultimate strength, torsional strength of sashes)
- NZS 4284: Testing of Building Facades (incl. serviceability, deflection, air infiltration, water penetration, ultimate strength, seismic, seal degradation)
- NZS 4223.3: Glazing in buildings Human impact safety requirements
- NZS 3604: Timber-framed buildings
- Powdercoat or paint systems meet Window & Glass Association NZ Powder Coating Quality Assurance System (PQAS)
- Powdercoatings formulated to meet AS 3715 and AAMA 2605
- Anodised surface finishes meet Window & Glass Association NZ Voluntary Specification SFA 3503-03:2005, Specification for Anodic Oxide Coatings on Wrought Aluminium for External Architectural Applications.

### **Supporting Documentation**

Additional documentation and technical information is available in support of the above statements at the links below:

information on warranty provisions and installation can be found at these links:

\* Warranty provisions and maintenance guidelines:

https://issuu.com/aplnz/docs/care\_maintenance\_first\_\_agp

\* Installation guidelines

The commercial curtain walls covered by this document generally require specialised, site-specific installation. These products are installed by qualified technicians who ensure compliance with Building Code Clause B1 Structure and Clause E2 External Moisture.



Manufacture location: New Zealand Legal and trading name of manufacturer: Architectural Profiles Ltd (also known as APL Window Solutions) Manufacturer address for service: 19 Northpark Drive, Hamilton 3200 Manufacturer website: aplnz.co.nz Manufacturer email: apl.techinfo@aplnz.co.nz Manufacturer phone number: 07 849 2113 Manufacturer NZBN: 9429040093352

### Warnings and Bans







# Products

#### **Product names:**

- APL Residential Series aluminium windows and doors
- APL Metro Series aluminium windows and doors
- APL Architectural Series aluminium windows and doors

#### Version: V1

Product line: Aluminium windows and doors – Non-thermally insulated Product identifier: see product names Product description: windows and doors

### Composition

#### Windows and Doors for Residential Purposes are made from:

- Aluminium extrusions
- Hardware, which may be made from powder coated zinc, stainless steel or aluminium
- Insulated glass units
- Sealants
- Glazing gaskets
- Aluminium entrance doors may contain Styrofoam fill
- Fixings (stainless steel screws)
- Accessories may include extruded aluminium head flashings, sill trays or sill support bars, and plastic injection-moulded soakers.

### Scope of Use

APL Residential Series, APL Metro Series and APL Architectural Series aluminium windows and doors are non-thermally insulated windows and doors and will not comply in most circumstances with New Zealand Building Code clause H1 Energy Efficiency (all climate zones). These products can only be used in settings where compliance with New Zealand Building Code clause H1 Energy Efficiency is not applicable. They need to be used in defined maximum sizes according to the wind exposure.



# **Compliance with New Zealand Building Code and Relevant Standards**

All APL window systems are tested for compliance in the company's IANZ-accredited test booth. Test reports are available. The ranges listed above under 'Products' have been manufactured and tested to comply with applicable sections of the New Zealand Building Code and in conformity with the New Zealand Standards as listed below:

- Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4. Products meet the requirements arising for loads from self-weight, wind and impact, i.e. B1.3.3 (a), (h) and (j)
- Clause B2 DURABILITY: Performance B2.3.1 (b) 15 years, B2.3.1 (c) 5 years and B2.3.2
- Clause E2 EXTERNAL MOISTURE: Performance E2.3.2. Window and door units conform and contribute to the wall cladding system meeting this requirement. See Paragraphs 14.1-14.4
- Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1, F2.3.3 (a) and (b)
- Clause F4 SAFETY FROM FALLING: Performance F4.3.1
- Clause G4 VENTILATION: Performance G4.3.1 and G4.3.3
- Clause G7 NATURAL LIGHT: Performance G7.3.1 and G7.3.2
- NZS 4211: Specification for performance of windows (incl. serviceability deflection, operation of opening sashes, air infiltration, water penetration, ultimate strength, torsional strength of sashes)
- NZS 4223.3: Glazing in buildings Human impact safety requirements
- NZS 3604: Timber-framed buildings
- Powdercoat or paint systems meet Window & Glass Association NZ Powder Coating Quality Assurance System (PQAS)
- Powdercoatings formulated to meet AS 3715 and AAMA 2605
- Anodised surface finishes meet Window & Glass Association NZ Voluntary Specification SFA 3503-03:2005, Specification for Anodic Oxide Coatings on Wrought Aluminium for External Architectural Applications.

#### **Supporting Documentation**

Additional documentation and technical information is available in support of the above statements at the links below:

Information on warranty provisions and installation can be found at these links:

\* Warranty provisions and maintenance guidelines:

https://issuu.com/aplnz/docs/care\_maintenance\_first\_\_agp

\* Installation guidelines:

[E2/AS1 installation document]

https://www.eboss.co.nz/assets/literature/165/32363/WGANZ-Guide-to-E2-AS1-Amd-8-V1.5-August-19.pdf



Manufacture location: New Zealand Legal and trading name of manufacturer: Architectural Profiles Ltd (also known as APL Window Solutions) Manufacturer address for service: 19 Northpark Drive, Hamilton 3200 Manufacturer website: aplnz.co.nz Manufacturer email: apl.techinfo@aplnz.co.nz Manufacturer phone number: 07 849 2113 Manufacturer NZBN: 9429040093352

### Warnings and Bans







# Products

#### **Product names:**

- APL Residential Series ThermalHEART<sup>®</sup> aluminium windows and doors
- APL Metro Series ThermalHEART® aluminium windows and doors
- APL Metro Series ThermalHEART® with Centrafix<sup>™</sup> aluminium windows and doors
- APL Architectural Series ThermalHEART® aluminium windows and doors
- APL ThermalHEART<sup>®</sup> roof windows
- APL Klima Series<sup>®</sup> uPVC windows and doors.

#### Version: V1

Product line: Thermally insulated windows and doors - ThermalHEART®, Centrafix<sup>™</sup> and Klima Series<sup>®</sup> Product identifier: see product names Product description: Windows and doors

### Composition

#### ThermalHEART<sup>®</sup> and Centrafix<sup>™</sup> ranges are made from:

- Aluminium extrusions
- Polyamide thermal insulating profiles
- Hardware, which may be made from powder coated zinc, stainless steel or aluminium
- Insulated glass units (double or triple glazing) with Low-E coating and Argon gas
- Sealants
- Glazing gaskets
- Fixings (stainless steel screws)
- Aluminium entrance doors may contain Styrofoam fill
- Accessories may include extruded aluminium head flashings, sill trays or sill support bars, and plastic injection-moulded soakers.

#### Klima Series® range windows and doors are made from:

- uPVC extrusions
- Coated metal screws
- Zinc coated ferrous metals
- Hardware, which may be made from powder coated zinc, stainless steel or aluminium
- Insulated glass units (double or triple glazing) with Low-E coating and Argon gas
- Sealants
- Glazing gaskets
- Fixings (stainless steel screws)
- Accessories may include extruded aluminium head flashings, sill trays or sill support bars, and plastic injection-moulded soakers
- Saveboard<sup>®</sup> panel. More information available at <u>saveboard.nz/</u>



# Scope of Use

ThermalHEART®, Centrafix<sup>™</sup> and Klima Series<sup>®</sup> windows and doors are mainstream product ranges that are suitable for a wide range of residential and commercial settings. They comply with New Zealand Building Code clause H1 Energy Efficiency (all climate zones) when used in conjunction with high performing Low-E double glazing. They include thermal insulators for maximum performance — polyamide inserts. Products include fixed, awning and casement windows, sliding, stacking and bifolding windows and doors, and hinged and French doors. Klima Series<sup>®</sup> includes open-in Tilt and Turn opening windows. These products need to be used in defined maximum sizes according to the wind exposure.

# Compliance with New Zealand Building Code and Relevant Standards

All APL window systems are tested for compliance in the company's IANZ-accredited test booth. Test reports are available.

The ranges listed above under 'Products' have been manufactured and tested to comply with applicable sections of the New Zealand Building Code and in conformity with the New Zealand Standards as listed below:

- Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4. Products meet the requirements arising for loads from self-weight, wind and impact, i.e. B1.3.3 (a), (h) and (j)
- Clause B2 DURABILITY: Performance B2.3.1 (b) 15 years, B2.3.1 (c) 5 years and B2.3.2
- Clause E2 EXTERNAL MOISTURE: Performance E2.3.2. Window and door units conform and contribute to the wall cladding system meeting this requirement. See Paragraphs 14.1-14.4
- Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1, F2.3.3 (a) and (b)
- Clause F4 SAFETY FROM FALLING: Performance F4.3.1
- Clause G4 VENTILATION: Performance G4.3.1 and G4.3.3
- Clause G7 NATURAL LIGHT: Performance G7.3.1 and G7.3.2
- Clause H1 ENERGY EFFICIENCY: Performance H1.3.1 and H1.3.2E
- NZS 4211: Specification for performance of windows (incl. serviceability deflection, operation of opening sashes, air infiltration, water penetration, ultimate strength, torsional strength of sashes)
- NZS 4223.3: Glazing in buildings Human impact safety requirements
- NZS 3604: Timber-framed buildings
- Powdercoat or paint systems meet Window & Glass Association NZ Powder Coating Quality Assurance System (PQAS)
- Powdercoatings formulated to meet AS 3715 and AAMA 2605
- Anodised surface finishes meet Window & Glass Association NZ Voluntary Specification SFA 3503-03:2005, Specification for Anodic Oxide Coatings on Wrought Aluminium for External Architectural Applications.

# **Supporting Documentation**

Additional documentation and technical information is available in support of the above statements at the links below: Information on warranty provisions and installation can be found at these links:

\* ThermalHEART®, Centrafix™ and Klima Series® warranty provisions and maintenance guidelines: https://issuu.com/aplnz/docs/care\_maintenance\_first\_\_agp

\* ThermalHEART® and Klima Series® installation guidelines document https://www.eboss.co.nz/assets/literature/165/32363/ WGANZ-Guide-to-E2-AS1-Amd-8-V1.5-August-19.pdf

\* Centrafix™ system and installation guidelines: https://issuu.com/aplnz/docs/centrafix\_system\_guide



Manufacture location: New Zealand Legal and trading name of manufacturer: Architectural Profiles Ltd (also known as APL Window Solutions) Manufacturer address for service: 19 Northpark Drive, Hamilton 3200 Manufacturer website: aplnz.co.nz Manufacturer email: apl.techinfo@aplnz.co.nz Manufacturer phone number: 07 849 2113 Manufacturer NZBN: 9429040093352

### Warnings and Bans







Single glazed | Version 1.0 | Date 20/07/2023

# **Product name:**

AGP Architectural Glass Products Limited

### **Product line:**

SG Products

# Product description and its intended use

Singled glazed glass products, custom manufactured to the requirements of each project, comprising one of the following:

- Float glass (annealed),
- Toughened safety glass,
- Heat Strengthened glass,
- Laminated glass.

Intended use: glass in windows, doors, roof-lights & curtain wall systems from Architectural Profiles Limited (APL). Through APL's manufacturer network under the brands; Altherm, First, Vantage & Klima Series.

# **Product identifier**

SG Products

### Place of manufacture:

Aotearoa New Zealand

# Legal and trading name of the manufacturer:

Architectural Glass Products Limited.

# **Relevant Building Code clauses:**

- B1 Structure: Performance clauses B1.3.1, B1.3.2, B1.3.3, B1.3.4
- B2 Durability: Performance clause B2.3.1 (b)
- E2 External Moisture: Performance clauses E2.3.1, E2.3.2, E2.3.7
- F2 Hazardous Building Materials: Performance clauses F2.3.1, F2.3.2 & F2.3.3
- F4 Safety from falling: Performance clauses F4.3.1 & F4.3.4
- G7 Natural Light: Performance clauses G7.3.1 & G7.3.2
- H1 Energy Efficiency: Performance clauses H1.3.1, H1.3.2, H1.3.3

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

- B1 Structure: SG Products can be manufactured to the project requirements in accordance with B1/AS1 clause 7.1 NZS4223.1, clause 7.2 NZS4223.2, clause 7.3 NZS4223.3 & Clause 7.4 NZS4223.4 or by specific engineering design to B1/VM1 by other parties.
- B2 Durability: SG Products when installed and maintained in accordance with AGP written instructions will satisfy the durability performance requirements for a minimum serviceability life of 15 years.
- Processed toughened safety glass and heat strengthened glass have a service history in excess of 50 years when used in ordinary conditions of exposure.
- Processed laminated safety glass often requires special glazing consideration to satisfy durability performance requirements in respect of edge de-lamination & AGP instructions & warranty must be adhered to.



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- Safety glass is marked in accordance with NZS4223.3 clause 2.8
- E2 External moisture: Glass is impervious to water. Laminated glass shall be glazed in a free draining APL window system.
- F2 Hazardous Building Materials: F2/AS1 clause 1.0 NZS4223.3. SG Products can be manufactured in accordance with NZS4223.3 for human impact location to the project requirements.
- F4 Safety from falling: SG Products can be manufactured in accordance with NZS4223.3 clause 21 Window glazing safeguarding a fall, to the project requirements.
- G7 Natural Light: SG Products can be manufactured with the area & Visible Light Transmittance (VLT) of the glass specified by the project design requirements, to help provide natural light & awareness of the outside. The project design may comply with G7/AS1 second edition, G7/AS2 first edition, G7/VM1 second edition design by others parties, or an alternative design provided by other parties such as a lighting engineer.
- H1 Energy Efficiency: SG Products can be made from a range of possible glass types, to contribute to the window insulation (R-value) requirements of the project. Depending on the window or door type, dimensions and glass type, determined in accordance with H1/VM1 Fifth Edition Amendment 1, Paragraph E1 to a design provided by other parties such as a mechanical engineer.
- In all these situations SG Products must be transported, handled, installed into an APL window system (brands Altherm, First, Vantage & Klima), cleaned and maintained in accordance with AGP written instructions.

### Limitations on the use of the building product:

#### SG Products limitations are noted in the SG Products Warranty. Refer to the AGPL website: https://agpl.co.nz

#### **Other SG Products limitations:**

- PVB laminated safety glass ins not to be used around Chlorinated pool enclosures.
- Minimum size AGP toughened 250mm x 102mm or 270mm diagonal.
- Minimum size annealed and laminated 200mm x 150mm
- Maximum long dimension 5000mm (depending on the glass thickness).
- Maximum short dimension 2800mm (depending on the glass thickness).
- Maximum glass thickness 12mm nominal. 15mm & 19mm by special order.
- Minimum glass thickness 4mm.
- Maximum weight 750kg.
- SG Products is not fire resisting glazing.
- AGP Glass to be installed, cleaned and maintained in accordance with AGP written instructions.

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

### SG Products can be manufactured for, but not limited to, use in projects within the following scope:

- All building types.
- All NZS3604 wind zones up to & included Extra High
- All Specific Engineering Design (SED) wind pressures up to a maximum of 10.0 kPa ULS & 10.0 kPa SLS



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#### SG Products is custom manufactured to the requirements of each project. Prior to manufacture, the following project selections must be confirmed by the purchaser:

- Size
- Thickness
- Glass type
- Project wind zone or SED factored wind pressure.
- Glass performance selection, including Ug, solar heat gain (SHGC) or Solar Factor (SF/g-Value), visible light transmittance VLT, safety glass requirements & colour.

### Installation requirements:

SG Products must be installed strictly in accordance with the APL manufacturing pack glazing details or AGP written instruction. refer to branded sections available on the Eboss website.

- https://www.eboss.co.nz/library?Keyword=altherm
- https://www.eboss.co.nz/library?Keyword=first
- https://www.eboss.co.nz/library?Keyword=vantage
- https://www.eboss.co.nz/library?Keyword=klima

Ensure glazing pocket/platform is clean and free of contaminants, drainage holes are clear of dirt and debris. SG Products must be transported, stored & handled in accordance with AGP Glass Handling, Storage & Transportation Guide. https://agpl.co.nz

#### Maintenance requirements:

SG Products, can be damaged during the construction process. Remove any stickers or cork pads that remain on the glass & rinse the glass thoroughly with clean water, then clean in accordance with AGP's Care and maintenance instructions. https://agpl.co.nz.

All drainage holes in the frame must be cleared and cleaned at the same time as the glass. SG Products should be cleaned at least every 3 months.

#### Refer also to:

- AGP Guide To Visual Quality
- AGP Guide To Thermal Stress Breakage
- AGP Guide To Condensation & Dew.
- these are available here: https://agpl.co.nz

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



✓ I



# **Product name:**

The AGP System

# **Product line**

The AGP Insulating Glass Units (IGUs)

# Product description and its intended use

IGUs custom manufactured to the requirements of each project, comprising two or more panes of glass, hermetically sealed with a double edge sealing system.

Intended use: IGUs in windows, doors, roof-lights & curtain wall systems from Architectural Profiles Limited (APL). Through APL's manufacturer network under the brands; Altherm, First, Vantage & Klima Series.

# **Product identifier**

The AGP System

# Legal and trading name of the manufacturer(s):

Architectural Glass Products Limited

### Place of manufacture:

Aotearoa New Zealand

# **Relevant Building Code clauses:**

- B1 Structure: Performance clauses B1.3.1, B1.3.2, B1.3.3, B1.3.4
- B2 Durability: Performance clause B2.3.1 (b)
- E2 External Moisture: Performance clauses E2.3.1, E2.3.2, E2.3.7
- F2 Hazardous Building Materials: Performance clauses F2.3.1, F2.3.2 & F2.3.3
- F4 Safety from falling: Performance clauses F4.3.1 & F4.3.4
- G7 Natural Light: Performance clauses G7.3.1 & G7.3.2
- H1 Energy Efficiency: Performance clauses H1.3.1, H1.3.2, H1.3.3

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

- B1 Structure: The AGP System can be manufactured to the project requirements in accordance with B1/AS1 clause 7.1 NZS4223.1, clause 7.2 NZS4223.2, clause 7.3 NZS4223.3 & Clause 7.4 NZS4223.4 or by specific engineering design to B1/VM1 by other parties.
- B2 Durability: The AGP System is tested in accordance with NZS4223.2 Clause 5.1.2 (b) BS EN 1279.2 & clause 5.1.2.2 (a) BS EN 1279.3 & clause 5.1.2.3 (b) BS EN 1279.1 & BS EN 1279.4 & Clause 5.1.3. The AGP System quality controlled in accordance with clause 5.2 (b) in accordance with the principles & procedures set out in BS EN 1279.6. The AGP System is marked in accordance with clause 5.3. Refer to Window & Glass Association of New Zealand (WGANZ) website for proof of compliance. Only listed on their website if compliant. https://www.wganz.org.nz/double-glazing-manufacturers/
- E2 External moisture: Glass is impervious to water.
- F2 Hazardous Building Materials: F2/AS1 clause 1.0 NZS4223.3. The AGP System can be manufactured in accordance with NZS4223.3 for human impact location to the project requirements.



Version 1.0 | Date 14/06/2023

- F4 Safety from falling: The AGP System can be manufactured in accordance with NZS4223.3 clause 21 Window glazing safeguarding a fall, to the project requirements.
- G7 Natural Light: The AGP system can be manufactured with the area & Visible Light Transmittance (VLT) of the IGUs specified by the project design requirements, to help provide natural light & awareness of the outside. The project design may comply with G7/AS1 second edition, G7/AS2 first edition, G7/VM1 second edition design by others parties, or an alternative design provided by other parties such as a lighting engineer.
- H1 Energy Efficiency: The AGP System can be made from a range of possible glass types, spacer widths and Argon gas, to contribute to the window insulation (R-value) requirements of the project. Depending on the window or door
- type, dimensions and IGU type, R-values between R0.17 and R0.91 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.
- In all these situations The AGP System must be transported, handled, installed into an APL window system (brands Altherm, First, Vantage & Klima Series), cleaned and maintained in accordance with AGP written instructions.

# Limitations on the use of the building product:

- The AGP System is not fire resisting glazing.
- The AGP System limitations are noted in in the AGP Insulating glass unit warranty. Refer to the AGPL website: https://agpl.co.nz
- Other AGP system limitations:
- Maximum IGU thickness 60mm.
- Minimum IGU thickness 14mm.
- Maximum individual pane (glass) thickness 26mm.
- Minimum IGU size 350mm x 180mm.
- Maximum long dimension 5000mm (depending on the glass thickness).
- Maximum short dimension 2800mm (depending on the glass thickness).
- Maximum weight IGU 750kg.
- Silicone secondary sealed IGU required where the seal is exposed to UV light.
- Silicone secondary sealed IGUs required for IGUs near chlorinated pools.
- The AGP System being installed, cleaned and maintained in accordance with AGP written instructions.

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

#### The AGP System can be manufactured for, but not limited to, use in projects within the following scope:

- All type of building types located at less than 800m above sea level.
- All NZS3604 wind zones up to & included Extra High
- All Specific Engineering Design (SED) wind pressures up to a maximum of 10.0 kPa ULS & 10.0 kPa SLS



# The AGP System is custom manufactured to the requirements of each project.

Prior to manufacture, the following project selections must be confirmed by the purchaser:

- IGU size
- IGU thickness
- Glass thickness & type.
- Project wind zone or SED factored wind pressure.
- IGU performance selection, including Ug, solar heat gain (SHGC) or Solar Factor (SF/g-Value), VLT, safety glass requirements, IGU colour.

#### Installation requirements:

The AGP System must be installed strictly in accordance with the APL manufacturing pack glazing details or AGP written instruction. refer to branded sections available on the Eboss website.

- https://www.eboss.co.nz/library?Keyword=altherm
- https://www.eboss.co.nz/library?Keyword=first
- https://www.eboss.co.nz/library?Keyword=vantage
- https://www.eboss.co.nz/library?Keyword=klima

Ensure glazing pocket/platform is clean and free of contaminants, drainage holes are clear of dirt and debris. The AGP system must be transported, stored & handled in accordance with AGP Glass Handling, Storage & Transportation Guide. https://agpl.co.nz

#### Maintenance requirements:

The AGP system includes glass, is a product that can be damaged during the construction process. Remove any stickers or cork pads that remain on the glass & rinse the glass thoroughly with clean water, then clean in accordance with AGP's Care and maintenance instructions. https://agpl.co.nz.

All drainage holes in the frame must be cleared and cleaned at the same time as the glass. The AGP system should be cleaned at least every 3 months.

#### Refer also to:

- AGP Guide To Visual Quality
- AGP Guide To Thermal Stress Breakage
- AGP Guide To Condensation & Dew.
- these are available here: https://agpl.co.nz

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



No