

## **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