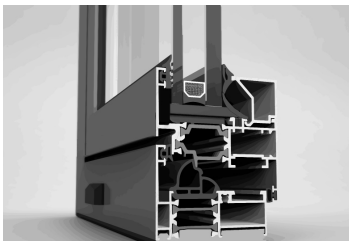
Technical Data Sheet

Integra 6000™ - Integral Rain Screen Window System

Product Description

A single platform window system engineered to deliver unlimited configurations of fixed and operable windows within one system, along with the superior thermal performance you've come to expect from Alumicor



Recommended use

Ideal for the institutional, as well as commercial and residential markets

Composition & Materials

- 6063 alloy, T5 temper aluminum extrusions
- Polyamide thermal break
- Waterproof EPDM gaskets
- Silicone setting blocks

Finishes

Anodic coated finishes in Class I and Class II and architectural painted finishes are available

Limitations

- Overall frame height and mullion spacing limitations; refer to wind load charts or contact Alumicor
- Doors cannot be hung from the framing

Technical Services

Contact any Alumicor regional office by visiting www.alumicor.com

Warranty

Alumicor standard warranty applies. Hardware is warranted by the hardware manufacturer. Extended warranties may be available. Alumicor's product warranties can be viewed at www.alumicor.com

Installation

Alumicor recommends that installation be by authorized Alumicor dealers. Contact your Alumicor representative to confirm the trade contractor is authorized to install Alumicor products. Specifiers may wish to incorporate the requirement of a Product Confirmation as a submittal requirement. Adhere to design, specifications, manufacturers published manuals and recommended industry practice.

Features & Benefits

- Integral design allows for many configurations without the need for additional subframes
- Fully fabricated by Alumicor
- Available in 2 $^{3}/_{8}$"(60mm), 4" (100mm) and 6" (150mm) depths of horizontal and vertical intermediates and frame. The varied options allow for limitless creation of unique architectural details
- Available in fixed, awning, hopper, casement open-in and combination units, as well as large size capacities
- ITGRseal™ rain screen, reduces cost of caulking, backer rod installation and makes glass replacement easier
- Split finish for unique interior and exterior design considerations
- Modern handle for open–in designs with various finish options
- Accommodates 1" double glazed sealed units
- Sloped sills for better drainage
- Protected condensation drains allow water to escape to the exterior
- Concealed hinges for sleek sight lines for open-in vents
- Multi-point locking open-in hardware with polyamide connecting rods which offer quieter operation
- Thermal break is 23% longer than the competition for greater thermal performance and increased resistance to condensation
- Optional insulating foam in frame, sash and around glazing unit for accredited laboratory confirmed 10% improved thermal system performance, condensation resistance and acoustic performance
- Central gasket system with vulcanized corners for superior air/water performance
- True thermally broken open-out window adapter - no exposure to a cold air filled cavity
- NAFS-AW-PG85 rated for open in and fixed

Filing System

MasterFormat, UniFormat or OmniClass

Design Considerations

It is important for designers and specifiers to ensure that competent manufacturers representatives are involved in the early stages of project design
Some of the considerations that must be addressed at early design development are:

- Minimum and maximum size limitations
- IGU make-up
- SSG interfaces
- Operating hardware selection
- Integration of the operable insert into a compatible fixed framing system

Applicable Standards

NAFS- AAMA/WDMA/CSA 101/I.S.2/A440-11
NAFS -AAMA/WDMA/CSA 101/I.S.2/A440S1-17 Canadian Supplement
ASTM E283 Standard Test Method for Determining Rate of Air Leakage through Exterior Windows, Curtain Walls and Doors under Specified Pressure Differences across the Specimen.
ASTM E547- Standard Test Method for Water Penetration for Exterior Windows, Skylights, Doors and Curtain Walls by Cyclic Static Air Pressure Difference
ASTM E331 – Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference
AAMA 910 – Voluntary Life Cycle Specifications and Test Methods for AW Class Architectural Windows and Doors
ASTM E330 – Standard Test Method for Structural Performance of Exterior Windows, Doors Skylights and Curtain Walls by Uniform Static Air Pressure Difference
ASTM F588 – Standard Test Methods for Measuring the Forced Entry Resistance of Window Assemblies, Excluding Glazing Impact

Maintenance

Cleaning should be undertaken as soon as possible after installation to remove construction and environmental dirt and impurities. High PH compounds and cementitious products such as mortar must be immediately removed from all surfaces or irreparable damage to finishes will occur. Cleaning should begin at the top of the building and proceed downward in a continuous operation. Care should be taken to prevent the use of procedures and cleaning materials that could damage the finishes of the aluminum, glass, infill panels or adjacent building components. Clean annually using approved, non-abrasive cleaners and potable water. Cleaning of aluminum components should be performed in accordance with AAMA 609.1 and 620.2
Annually clean all dirt and debris from within the sub-frame of the operable window insert, carefully wipe weather and air seal gaskets with a mild soap and water, rinse with clean potable water; lubricate all operating components with manufacturer's recommended lubricant.

Availability & Cost

Availability: Available through authorized Alumicor dealers that are competent in fabrication, assembly and installation of Alumicor products.
Cost: The cost depends upon project design, extent of project, finishes, glazing infills, customer requirements, hardware options and project location. Contact Alumicor regional offices for pricing and/or a list of authorized Alumicor dealers.

Physical Properties

Property	Test Method	Result
Air Infiltration 300 Pa (6.27 psf)	ASTM E283	**Fixed** Allowable - 0.20 L/s.m² (0.04 cfm/ft²) Results - 0.11 L/s.m² (0.02 cfm/ft²) **Hopper & Composite** Allowable - 0.50 L/s.m² (0.10 cfm/ft²) Results - 0.06 L/s.m² (0.01 cfm/ft²) **Casement open-in** Allowable - 0.50 L/s.m² (0.10 cfm/ft²) Results - 0.03 L/s.m² (0.01 cfm/ft²)
Air Exfiltration 300 Pa (6.27 psf)	ASTM E283	**Fixed** Allowable - 0.20 L/s.m² (0.04 cfm/ft²) Results - 0.07 L/s.m² (0.01 cfm/ft²) **Hopper** Allowable - 0.50 L/s.m² (0.10 cfm/ft²) Results - 0.03 L/s.m² (0.01 cfm/ft²) **Casement open-in** Allowable - 0.50 L/s.m² (0.10 cfm/ft²) Results - 0.02 L/s.m² (0.004 cfm/ft²) **Composite** Allowable - 0.50 L/s.m² (0.10 cfm/ft²) Results - 0.07 L/s.m² (0.01 cfm/ft²)
Water Penetration by Cyclic Air Pressure Difference	ASTM E547	Allowable - No uncontrolled water penetration Results - Passed @ 720 Pa (15.04 psf) (**Fixed, Hopper, Casement open-in & Composite**)
Water Penetration by Static Air Pressure Difference	ASTM E331	Allowable - No uncontrolled water penetration Results - Passed @ 720 Pa (15.04 psf) (**Fixed, Hopper, Casement open-in & Composite**)
Life Cycle Testing	AAMA 910	Allowable - No damage to hardware, fasteners, or any other parts after six cycles of high temperature at 82°C (180°F) and low temperature at -18°C (0°F) Results – Passed (**Fixed, Hopper, Casement open-in & Composite**)
Uniform Load Deflection and Uniform Load Structural	ASTM E330	Allowable - L/175 (**Fixed, Hopper, Casement open-in & Composite**) Passed- +4080 Pa, (+85.21 psf) -4080 Pa, (-85.21 psf) Allowable No damage or permanent deformation exceeding 0.2% (**Fixed, Hopper, Casement open-in & Composite**) Passed- +6120 Pa, (+127.82 psf) -6120 Pa, (-127.82 psf)

*Tests performed by Exova, 2395 Speakman Drive, Mississauga, Ontario, L5K 1B3. Copies of test reports available upon request

Alumicor™ BUILDING EXCELLENCE
290 Humberline Drive, Toronto, Ontario, M9W 5S2
Phone: 416-745-4222 Fax: 416-745-4794
info@alumicor.com www.alumicor.com