

# ALDABRA

**Elevate Every Space** 

# **ALDABRA**

We dedicate ourselves to the best thermal break aluminium fenestration systems that elevate every space—architecturally, aesthetically, and environmentally. Situated in Stellenbosch, Cape Town, we serve homeowners, architects, and developers who demand more from their builds.



### **ZEPHYR SERIES**



A symphony of quality innovations unfolds with micro vents, lift & sliding, turn & tilt systems and more, each a vital note in a harmonious collection.



### **MICRO VENTILATION**

Optimized for natural airflow, smart ventilation, and seamless indoor-outdoor comfort.

The flagship "Zephyr" range creates an ambiance of openness and circulation.

Combined with architectural living spaces, while keeping homes safe from intruders.



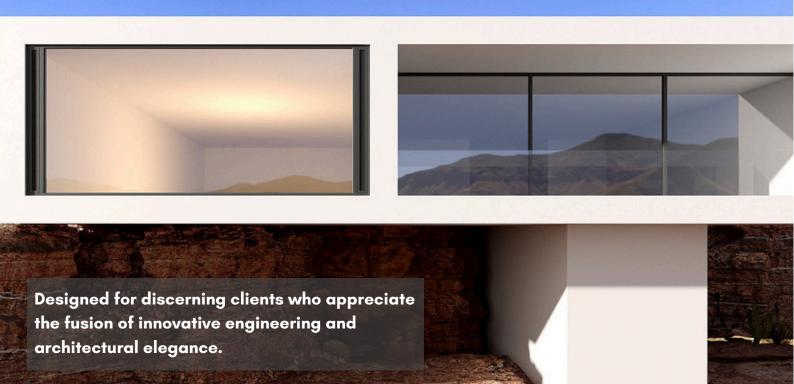
# Advanced Security & Airflow

The Zephyr micro-vent features an integrated stainless steel screen and multi-point locking as standard, ensuring robust security. It allows for controlled ventilation with a maximum opening width of 100mm, preventing accidental falls and deterring burglars, all while maintaining excellent airflow.





Micro-ventilation design minimizes visual obstruction, offering a wider field of view while maintaining proper airflow. The vent meets all safety regulations—wide enough for ventilation but narrow enough to prevent intrusion.







# TURN & TILT SYSTEMS: VERSATILITY AND SECURITY

The Turn-and-Tilt system combines safety, advanced ventilation, and energy efficiency. This dual functionality makes it an ideal solution for both modern residential homes and high-performance commercial spaces. Optional features, such as integrated stainless steel security screens or burglar bars, can be seamlessly added for enhanced protection.





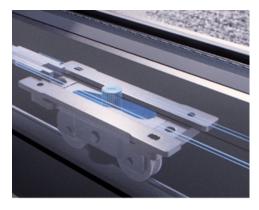
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## LIFT & SLIDE SYSTEMS: EFFORTLESS OPERATION FOR GRAND OPENINGS

Aldabra's pinnacle of engineering for large glazed panels. Designed for seamless integration into expansive architectural designs, these systems provide effortless operation, allowing single, massive panels to glide open with minimal force.





When closed, an innovative mechanism lifts the panel, creating a comprehensive, weather-tight seal that offers superior insulation and protection against the elements. This unique operation also reduces stress on the wheels and tracks, significantly extending the system's lifespan and ensuring long-term reliability.



#### **FOLDING DOORS**

Aldabra's Folding Doors are defined by premium heavy-duty hardware, setting them apart from conventional systems. Engineered for effortless operation, they glide open and close with ultrasmooth precision, requiring minimal effort while delivering maximum durability and performance.





Aldabra also offers the folding doors an innovative anti-pinch system that prevents fingers from getting caught between panels during operation. The smooth-gliding mechanism enables effortless folding of even large panels while maintaining balanced weight distribution between top and bottom tracks.









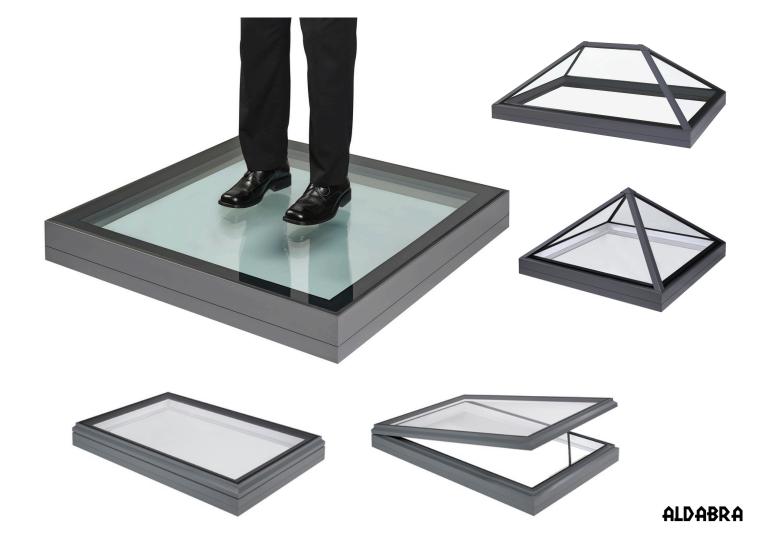


#### THE SKYLIGHT

Aldabra skylight combines functionality with elegance, featuring remote-controlled operation and rain sensors for automatic closure. The specialized Low-E glass reduces solar heat gain while maximizing natural daylight, and integrated blinds offer precise light control.

Fixed Skylights are also available per client request for simpler installations.





### ZEPHYR SERIES TECHNICAL PARAMETER

	Micro-Vent	Turn & Tilt	Lift & Slide	Folding	Skylight
Profile Thickness			2.0mm		
Minimum Wall Width	78mm	105mm	102mm	93mm	/
R-Value			<u>≥</u> 4.0		
Intruder Proof	•	•	•	•	•
Stainless Steel Screen	•	•	Optional	1	1
Glass Specification	5mm + 12 Argon + 5mm LOW E + 1.14 PVB + 5mm				
PVDF Powder Coating	•	•	•	•	•
Vertical Drainage	•	•	•	•	•
Multipoint Lock	•	•	•	•	•
Insulation Sealant	EPDM (M - Class Rubber)				
Thermal Break Profile		PA66GF25	(Nylon & Fiberg	lass)	
Wind Resistance			Level 9		
Water Tightness			Level 6		
Air Tightness			Level 8		
Sound Reduction			≥38dB		
Hardware Brand	STORO	WEHAG	SOBINCO	STORO	НОРРЕ

### ZEPHYR SERIES TECHNICAL PARAMETER

2.0-2.2mm intruder-proof thermal break aluminium profile

PVDF powder coating

Internal vertical drainage system

PA66FG25 Insulation Sealant

**EPDM** Sealing rubber

Double-glazed low-E & laminated high-impact glass with argon gas filling

(5mm + 12mm Argon + 5mm Low-E + 1.14PVB + 5mm)

Multi-point locking

Intruder-proof ventilation

Optional feature list:

High-transparency SS ecurity screen(SU316)

Burglar bar

Two-tone colors

glass specification

hardware and handles

Locking options



100000 starts



Water tightness Level 6



Wind resistance performance Level 9



Air tightness performance Level 8



Sound insulation performance  $\geqslant 35dB$ 

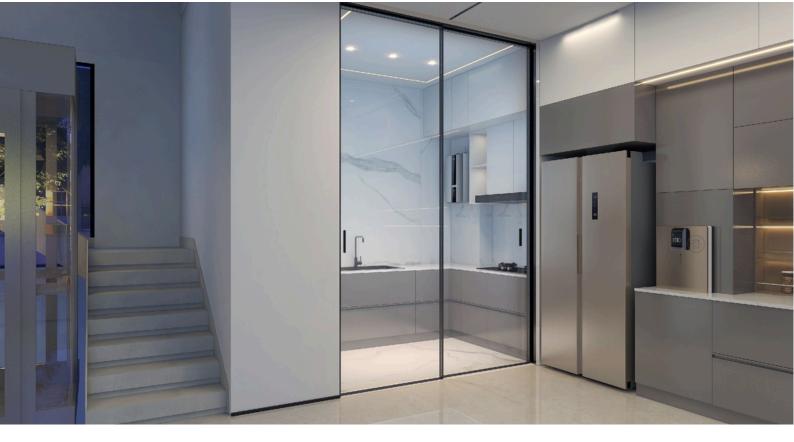


Thermal insulation performance  $K \leq 2.4$ 

### **EDGE SERIES**



The Edge Series emphasizes minimalist design with ultra-slim profiles and sleek hardware, all while maintaining peak performance and elegance.



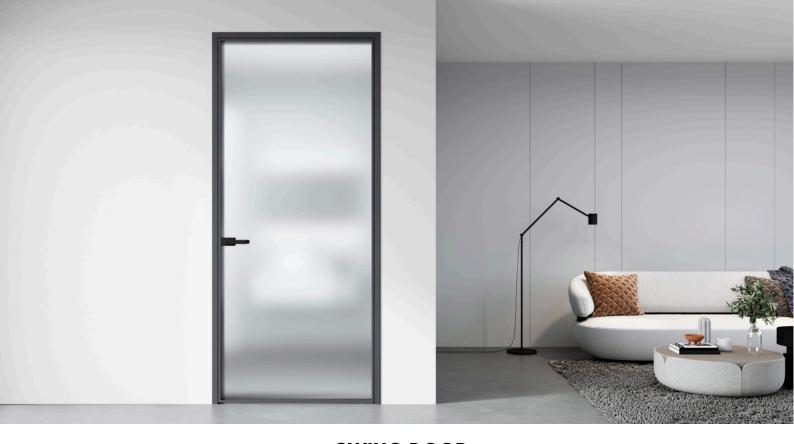
#### **INTERIOR SLIDE DOOR**

Aldabra's Ultra Sleek minimalist sliding doors feature whisper-quiet mechanisms, crafted for enduring reliability and seamless performance. At the same time, the sliding doors feature soft-close mechanisms and synchronised movement across two/three track configurations.



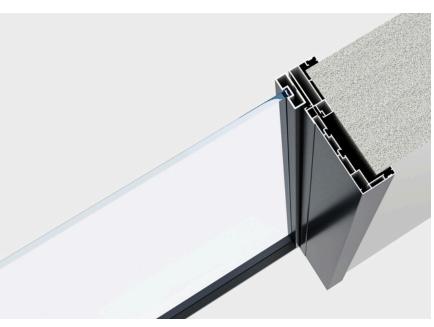




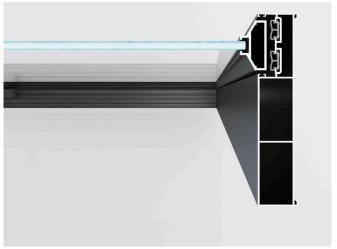


#### **SWING DOOR**

Designed with slim aluminum profiles, Aldabra's swing door offers a sleek, minimalist look without compromising strength. The magnetic mortice lock ensures a smooth, silent close, while its clean lines and durable build make it ideal for modern homes and commercial spaces.



Ultra-sleek multi-cavity profile still holds Aldabra's pursuit of quality & durability.





### EDGE SERIES TECHNICAL PARAMETERS

	Swing Door	Slide Door	Top Hung
Profile Thickness		2.0mm	
Minimum Wall Width	78mm	105mm	102mm
R-Value		> 3.0	
Glass Specification		8mm	
PVDF Powder Coating	•	•	•
Insulation Sealant		EPDM	
Multipoint Lock	•	•	•
Wind Resistance		Level 5	/
Water Tightness		Level 3	/
Air Tightness		Level 4	/
Sound Reduction		≥38dB	≥50dB
Hardware	STORO	STORO	STORO

#### **EDGE SERIES GLASS OPTION**



Copper ruby glass / opaque 4mm + wired glass + 4mm



Copper ruby glass / transparent
4mm + wired glass + 4mm



Simple emery 8mm



Elegant brown double-sided oil-sand etched glass 8mm



Luxury tiled glass / opaque 4mm + laminated + 4mm



Luxury tiled glass / transparent 4mm + laminated + 4mm



Luxury gilded / opaque 4mm + wired glass + 4mm



Luxury intelligent / opaque 4mm + wired glass + 4mm

### EDGE SERIES TECHNICAL PARAMETERS

#### Optional Features:

- Top Hung / Trackless System: Experience seamless operation with our top-hung trackless systems, providing an unobstructed floor and a clean aesthetic, perfect for modern Cape Town homes.
- Pocket Door: Maximize your living space with our integrated pocket door solutions, where doors slide
  discreetly into a wall cavity, offering a sleek and space-saving design for any interior.
- Flush Track: Achieve a minimalist and hazard-free transition between spaces with our flush track system, designed to be level with your flooring, enhancing both safety and design appeal.



### **CORE SERIES**



Embrace Tranquility with Our Innovative and Sustainable Harmonious Doors and Windows





#### **INWARD/ OUTWARD WINDOWS**

The Core Series emphasizes solid foundations and everyday performance with Aldabra quality. This series offers essential thermal break windows and doors that deliver consistent performance with straightforward design, focuses on core functionality while maintaining Aldabra's signature quality standards and thermal efficiency.







## CORE SERIES TECHNICAL PARAMETER

	In/Outward Window	In/Outward Door	Profile with Screen
Profile Thickness		1.8mm - 2.0mm	
Minimum Wall Width	75mm	75mm	120mm
R-Value		<u>≥</u> 4.0	
Intruder Proof	•	•	•
Stainless Steel Screen	I	/	•
Glass Specification	5mm + 20mm Argon + 5mm LOW E		
PVDF Powder Coating	•	•	•
Vertical Drainage	•	•	•
Multipoint Lock	•	•	•
Insulation Sealant		EPDM	
Thermal Break Material		PA66GF25	
Wind Resistance		Level 9	
Water Tightness		Level 6	
Air Tightness		Level 8	
Sound Reduction		≥38dB	
Hardware	WEHAG	WEHAG	STORO

## CORE SERIES TECHNICAL PARAMETER

R-Value ≥ 4.0

1.8-2.0mm intruder-proof thermal break aluminium profile

PVDF powder coating

Internal vertical drainage system

PA66FG25 Insulation Sealant

EPDM Sealing rubber

Double-glazed low-E, high-impact glass with argon gas

(5mm + 20mm Argon + 5mm Low-E)

Multi-point locking

Intruder-proof ventilation feature (only applies to Micro-vent)

#### Optional feature list:

High-transparency SS Security screen (SU316)

Burglar bar

Colors

glass specification

hardware and handles



100000 starts



Water tightness Level 6



Wind resistance performance Level 9



Air tightness performance Level 8

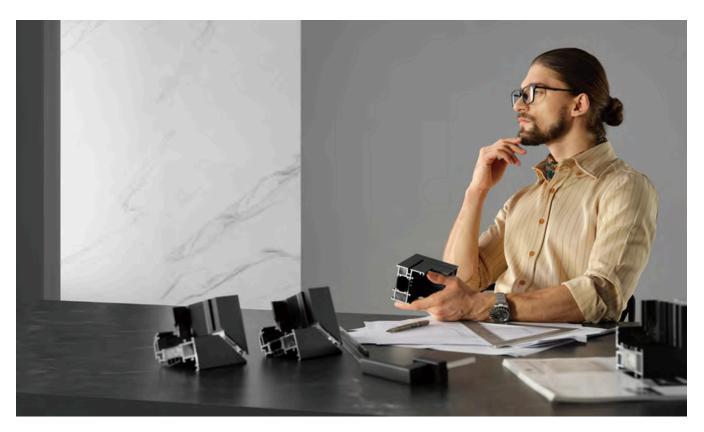


Sound insulation performance ≥35dB



Thermal insulation performance  $K \leq 2.4$ 

### HIGHLIGHT FEATURES



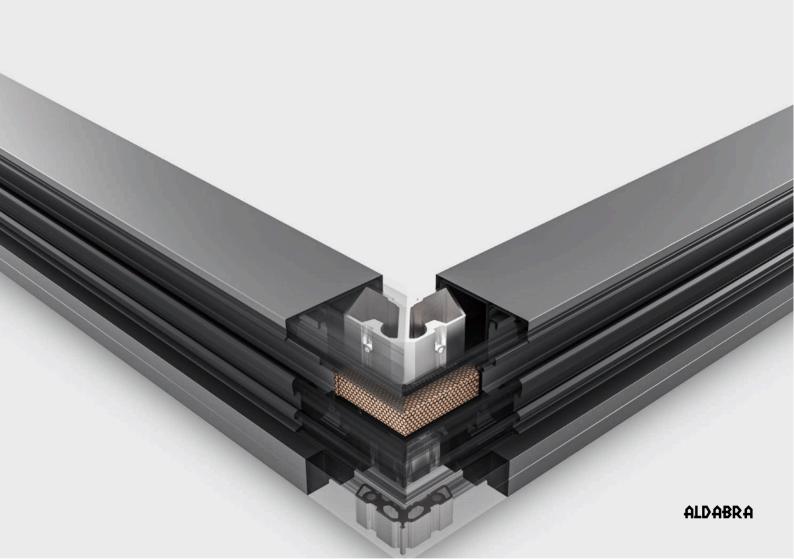
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#### THE PROFILE

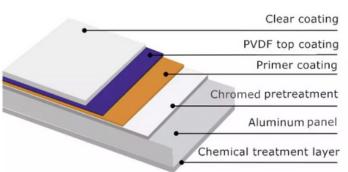


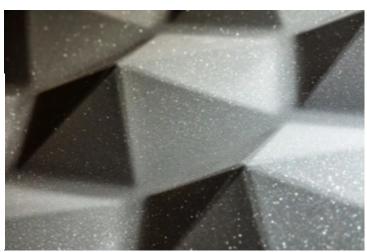
### ≥2.0mm ALUMINUM THERMAL BREAK PROFILE

Our multi-cavity thermal break aluminum profile (>2.0mm) is a cornerstone of Aldabra's superior performance. This advanced design significantly reduces heat transfer, improving energy efficiency and preventing thermal bridging. Strategic reinforcements enhance structural integrity and durability while maintaining optimal thermal performance.



#### PVDF COATING



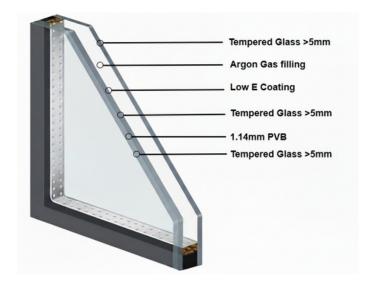


PVDF (Fluorocarbon liquid coating) is a specialised multi-layer coating that offers superior durability and resistance. This powder coating protects our products from extreme weather and is an excellent choice for coastal regions.

#### Key benefits:

- Chemical Resistance: Highly resistant to a wide range of acids and solvents.
- Thermal Stability: It can with stand high temperatures, typically up to 150  $^{\circ}$  C (302  $^{\circ}$  F).
- $\hbox{- UV Resistance: PVDF offers excellent protection against ultraviolet radiation.}\\$
- Mechanical Strength: It exhibits high tensile strength and impact resistance.
- Minimal maintenance with resistance to fading and cracking.

#### **THE GLASS**

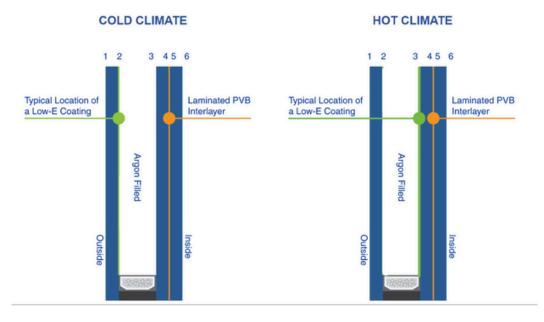


Aldabra's IGU selections focus on optimizing thermal efficiency, sound insulation, and safety while maintaining excellent clarity and light transmission. Each pane serves a specific purpose in the overall system, from UV protection to security enhancement. The multi-layered construction creates a robust barrier against environmental factors while contributing to the window's overall performance rating.

#### What is Argon Gas?

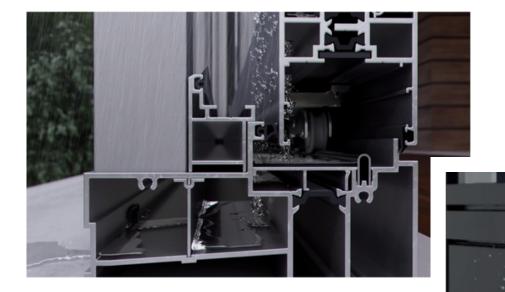
An invisible, inert gas that fills the space between window glass panes. This noble gas creates an excellent thermal barrier between panes of glass. It prevents frost buildup during cold weather, reduces heat transfer, and makes windows significantly more energy efficient.

### LOW E COATING



In Aldabra's glazing systems, the Low-E (low emissivity) coating is applied to the inner surface of the glass chamber, where it's protected from damage and delivers maximum performance. This advanced layer reflects heat back indoors in winter and reduces solar gain in summer, ensuring year-round comfort and efficiency. By blocking harmful UV rays, it also safeguards floors, furniture, and fabrics from fading—making it a durable, energy-efficient solution tailored to South Africa's diverse climates.

### VERTICAL DRAINAGE



All Aldabra profiles feature a built-in concealed vertical drainage system—an innovative advancement in window and door design. Hidden within the frame, this system efficiently channels water away without disrupting the clean aesthetic. Engineered pathways ensure effective drainage even during heavy rain, protecting the structure from water buildup and potential damage.

#### **OPTIONALS: SECURITY SCREEN & BURGLAR BAR**



Aldabra's stainless steel (SU316) security screen's key benefits:

- Enhanced Security: Multi-point locking system ensures protection even with windows open.
- Pest Control: Blocks flies, mosquitoes.
- Pet Friendly: Great for keeping pets inside the house.
- Exceptional Durability: SU316 stainless steel resists rust and corrosion, even in coastal climates.
- Easy Maintenance: Designed for simple removal, cleaning, and long-term upkeep.

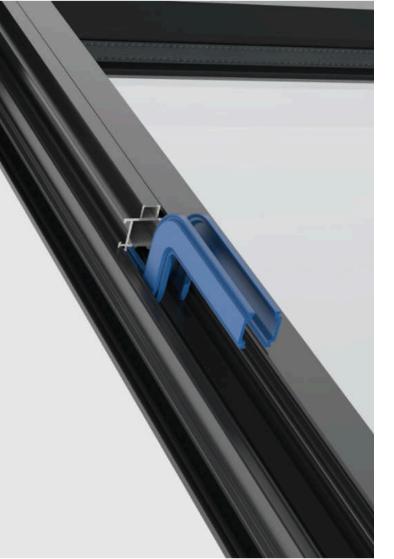


#### THE HARDWARE



Fitted with premium European hardware, Aldabra systems offer precise calibration and intruder-proof multi-point locking for maximum protection. Reinforced frames meet stringent safety standards, with tamper-resistant mechanisms and hardened steel components ensuring exceptional durability and security at key points.





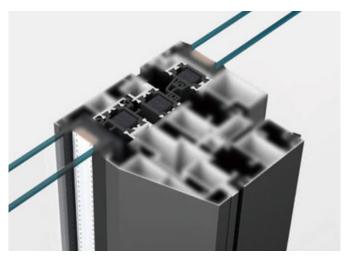
#### **EPDM SEALANT**



EPDM Seal is a material that excels in weather resistance, protecting against UV rays, ozone, and temperature changes. It provides excellent sealing, insulation, noise reduction, durability, and moisture control.

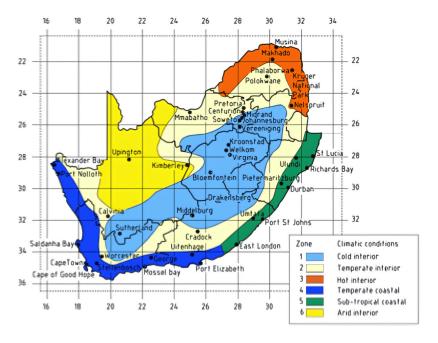
#### **PA66FG25**





Polyamide 66 (PA66) & 25% glass fiber (GF) is a high-performance material used in our systems to provide excellent insulation between metal structures. This durable composite material is also found in automotive components like power steering pump reservoirs where strength and longevity are essential.

#### **R-VALUE**

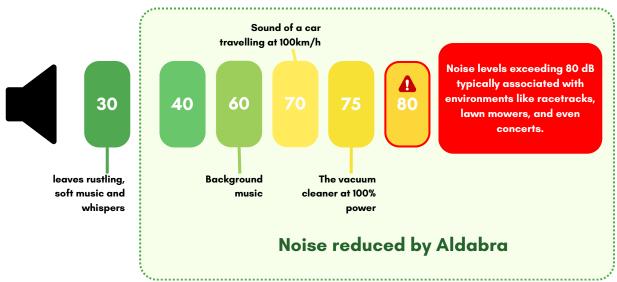


The R-value is the standard measure of insulation performance, indicating a material's resistance to heat flow. A higher R-value represents greater insulating effectiveness.

Aldabra's system achieves an R-value of approximately 4.2 (imperial units:  $ft^2 \cdot {}^{\circ}F \cdot hr/BTU$ ), which is equivalent to  $\approx 0.74 \text{ m}^2 \cdot \text{K/W}$  in metric terms.

This performance level ensures excellent thermal insulation, contributing to improved energy efficiency and occupant comfort in all climates.

### NOISE



#### ≥35dB Sound Insulation

Our advanced multi-layered glass and frame construction achieves a remarkable sound reduction rating of 35dB or higher, effectively blocking out urban noise, traffic, and other external disturbances. This superior acoustic performance creates peaceful indoor environments while maintaining the elegant aesthetics of our window systems.

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### WIND

Level	Rating indicator (Unit: kPa)
1	1.0 ≤ P < 1.5
2	1.5 <u>≤</u> P < 2.0
3	2.0 ≤ P < 2.5
7	4.0 ≤ P < 4.5
8	4.5 ≤ P < 5.0
9	P ≥ 5.0

Wind-load resistance measures how well closed doors and windows withstand wind pressure without damage (such as cracking, panel breakage, bonding failure) or functional problems like loose hardware or opening difficulties, Level 9 resistance means the window can withstand wind pressures above 5.0 kPa (5000 Pa)—enough to resist a category 4 hurricane.

**All Aldabra windows and doors pass the Level 9 wind resistance** testings. Our commitment to quality is demonstrated through extensive testing procedures that simulate extreme weather conditions, ensuring our products maintain their structural integrity and performance even in the harshest environments.

#### AIR TIGHTNESS

Level	Rating indicator q1	
1	4.0 ≥ q1 > 3.5	
2	3.5 ≥ q1 > 3.0	
3	3.0 ≥ ql > 2.5	
	:	
7	1.0 > q1 > 0.5	
8	q1 <u>≤</u> 0.5	

Better airtightness in doors and windows reduces heat loss by minimizing thermal exchange.

Air tightness is measured by air penetration under standard conditions (10 Pa pressure difference).

The 8-level rating system indicates airtightness quality—higher levels mean better performance and energy efficiency.

**Aldabra products achieve Level 8 air tightness**, indicating exceptional performance in preventing air leakage. This superior sealing capability ensures optimal energy efficiency and indoor comfort while reducing heating and cooling costs. Our comprehensive testing procedures verify that all units maintain this high standard of performance throughout their lifetime.

# ALDABRA'S COMMITMENT TO QUALITY AND DURABILITY

At Aldabra, our fenestration systems are engineered with advanced thermal break technology, delivering superior energy efficiency and exceptional weather resistance. Built to exceed international fenestration standards, they maintain structural integrity and peak performance even under the most demanding conditions.

Our expert installation team and rigorous on-site inspections back this innovation. Every unit is precisely fitted to design specifications, ensuring optimal performance and long-term durability. From consultation to final inspection and sign off, our meticulous approach gives clients complete confidence in the quality, security, and longevity of Aldabra's systems.

To reinforce this commitment, all Aldabra hardware is covered by a 2-year warranty, and performance is protected well beyond installation. We stand behind the enduring quality of our products, providing you with lasting peace of mind.

#### **OUR ESTEEMED PARTNERS**

Aldabra is proud to collaborate with leading European and Chinese manufacturers, ensuring that we maintain the highest quality standards across all our products. Each partner is carefully selected for their expertise, innovation, and commitment to excellence in their respective specialties.

These strategic partnerships allow us to leverage cutting-edge technology and manufacturing processes, enabling us to deliver premium security screen solutions that meet the most demanding requirements in modern architecture. Our collective aim is to provide unparalleled quality and performance to our valued clients.













Looking to partner with Aldabra?

Contact luanealdabra.co.za

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