

Bradnam's
signature
Thermal Break

WINDOWS & DOORS

Setting the standards
in energy efficient window
& door systems



Bradnam's
windows & doors

The Bradnam's Difference

What is the signature Thermal Break Difference?

Thermally Broken Frame

Signature Thermal Break windows and doors use reinforced polyamide extrusions to separate the exterior and interior of the aluminium frame.

The reinforced polyamide extrusions act as insulated barriers within the window and door frames, keeping heat in during winter and keeping heat out during summer.

Insulated Glass Unit (IGU)

IGUs are designed to improve the thermal performance of windows and doors.

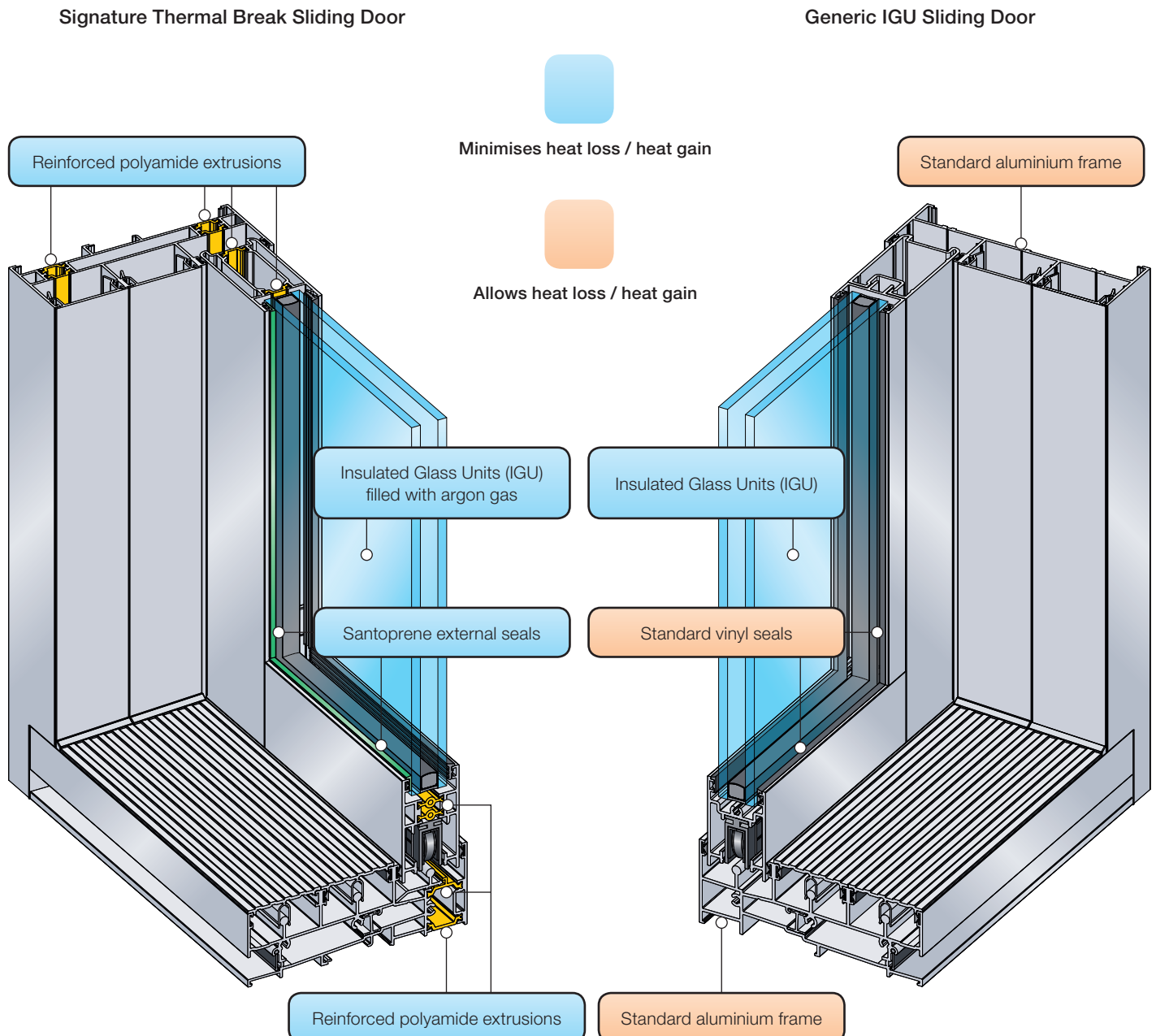
Two panes of glass separated by a sealed air space filled with argon gas provide a thermal break, restricting the transfer of heat from the outside to the inside and vice versa.

Santoprene External Seals

Santoprene seals are more durable than standard vinyl seals, with less cracking, shrinking and better shape retention throughout the life of windows and doors.

With Santoprene external seals, when the window is closed, it is sealed tight, year after year, minimising heat loss and gain.

Compare Signature Thermal Break to Generic IGU



Industry Leading Energy Performance

Signature Thermal Break Energy Saving Performance*

Single glazed generic window		Generic window with IGUs		Signature Thermal Break	
Heating Climate Location: Queanbeyan		Heating Climate Location: Queanbeyan		Heating Climate Location: Queanbeyan	
Heating / Cooling usage over 12 months per m ²	284MJ/m ²	Heating / Cooling usage over 12 months per m ²	241MJ/m ²	Heating / Cooling usage over 12 months per m ²	209MJ/m ²
Energy savings	0%	Energy savings	15%		

Energy savings
26%

Signature Thermal Break WERS Ratings

Glass Type	Glass Thickness	U value	SHGC
Sliding Doors			
Clear/Air Gap/Clear	4mm/12mm/4mm	3.2	0.62
Energy Tech/Argon Gap/Energy Tech	4mm/12mm/4mm	2.1	0.47
SolTech/Argon Gap/SolTech	4mm/12mm/4mm	2.1	0.31
Energy Tech/Argon Gap/Green	4mm/12mm/4mm	2.3	0.48
Sliding Windows			
Clear/Air Gap/Clear	4mm/12mm/4mm	3.4	0.55
Energy Tech/Argon Gap/Energy Tech	4mm/12mm/4mm	2.5	0.42
SolTech/Argon Gap/SolTech	4mm/12mm/4mm	2.5	0.28
Energy Tech/Argon Gap/Green	4mm/12mm/4mm	2.6	0.42
Awning Windows			
Clear/Air Gap/Clear	4mm/12mm/4mm	3.2	0.53
Energy Tech/Argon Gap/Energy Tech	4mm/12mm/4mm	2.2	0.42
SolTech/Argon Gap/SolTech	4mm/12mm/4mm	2.3	0.29
Energy Tech/Argon Gap/Clear	4mm/12mm/4mm	2.4	0.45
Casement Windows			
Clear/Air Gap/Clear	4mm/12mm/4mm	3.1	0.52
Energy Tech/Argon Gap/Energy Tech	4mm/12mm/4mm	2.2	0.42
SolTech/Argon Gap/SolTech	4mm/12mm/4mm	2.2	0.28
Energy Tech/Argon Gap/Clear	4mm/12mm/4mm	2.4	0.45
Fixed Lites (Externally Glazed)			
Clear/Air Gap/Clear	4mm/12mm/4mm	3.1	0.68
Energy Tech/Argon Gap/Energy Tech	4mm/12mm/4mm	1.9	0.52
SolTech/Argon Gap/SolTech	4mm/12mm/4mm	1.9	0.34
Energy Tech/Argon Gap/Clear	4mm/12mm/4mm	2.2	0.56
Fixed Lites (Internally Glazed)			
Clear/Air Gap/Clear	4mm/12mm/4mm	3.0	0.68
Energy Tech/Argon Gap/Energy Tech	4mm/12mm/4mm	1.8	0.51
SolTech/Argon Gap/SolTech	4mm/12mm/4mm	1.8	0.34
Comfort Plus Clear/Argon Gap/Clear	6.38mm/12mm/6mm	2.0	0.51
Hinged Door			
Clear/Air Gap/Clear	4mm/12mm/4mm	3.1	0.57
Energy Tech/Argon Gap/Energy Tech	4mm/12mm/4mm	2.1	0.43
SolTech/Argon Gap/SolTech	4mm/12mm/4mm	2.1	0.29
Energy Tech/Argon Gap/Clear	4mm/12mm/4mm	2.3	0.47

* Energy reduction savings are based on BERS Pro energy simulation software and the single storey house details below. The figures are indicative only as climate, house design and occupancy lifestyle will affect the amount of reduction in energy savings and star improvement.

Single storey house: 147m²
Exterior walls: Brick veneer
Floor coverings: Concrete
Insulation: Ceiling R2.5, Walls R1.3, Floor R1.0

Best in Class



Architectural Symmetry across the range

One Aesthetic across different product platforms

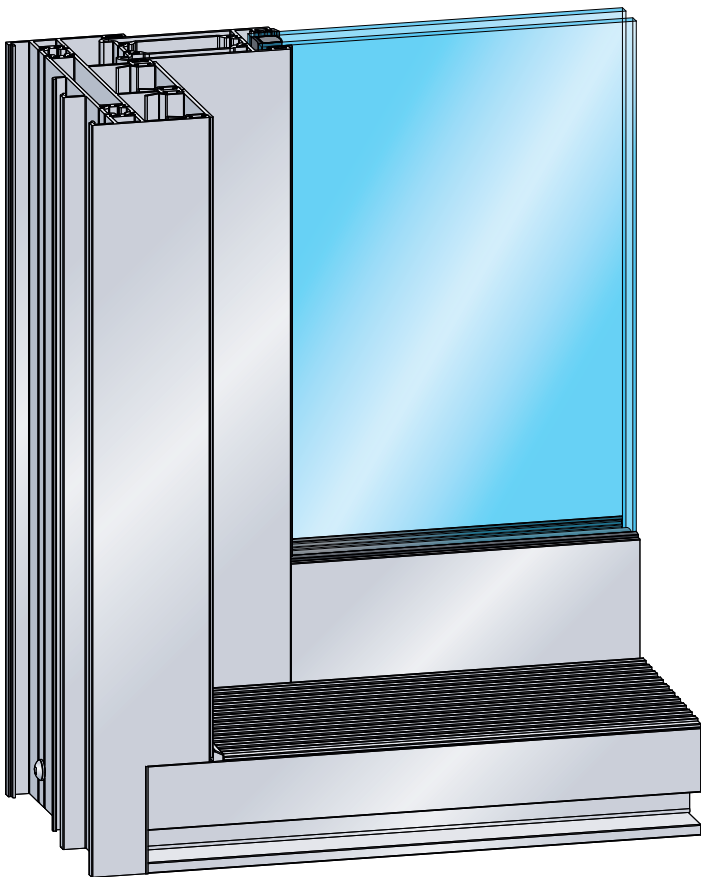
A key feature of the Bradnam's Signature Thermal Break range is its overall visual symmetry within the range and with other Bradnam's window and door products.

This consistency in style and finish eliminates any visual clashes and provides a clean, consistent finish throughout a house.

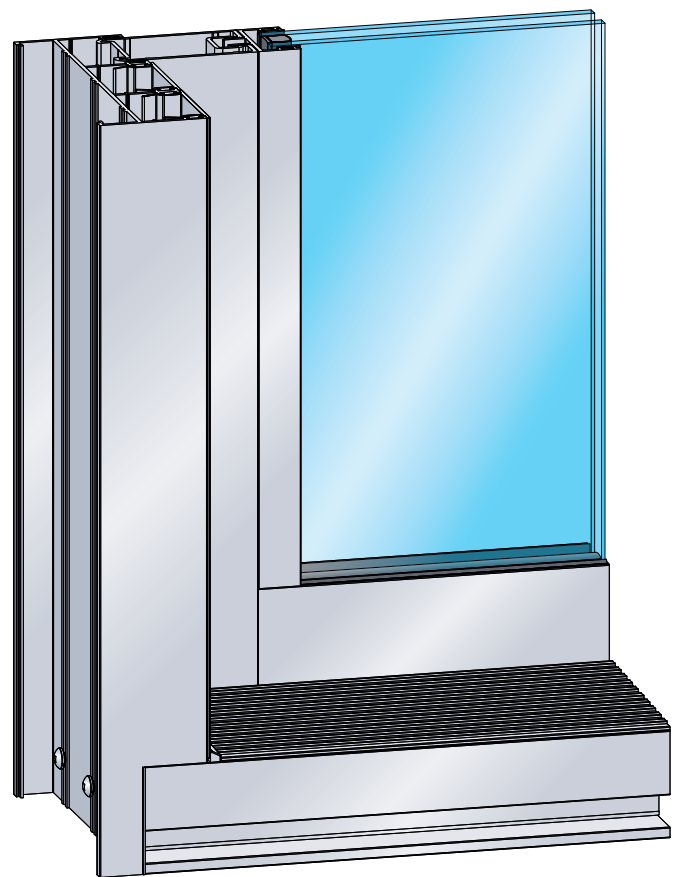
Customers can mix and match products from any one of the Bradnam's 'Essential', 'Signature', 'Commercial' or 'Thermal Break' ranges and know there will be aesthetic sympathy amongst the windows and doors.

This is a radical departure from the traditional design process, which treats different classes of product as stand-alone, separate entities from a design perspective.

With Bradnam's Signature Thermal Break, superior energy performance can be achieved without compromising the aesthetics of a house.



Signature Thermal Break Sliding Door



Bradnam's Commercial Sliding Door

signature
Thermal Break

less energy more savings better future

signature Thermal Break Range

The **Signature Thermal Break** range is a stand-out, not only due to its industry leading energy performance, but also because of its innovative features, superior performance and generous design options. Bradnam's appreciate that customers have both practical and sophisticated requirements – the Signature Thermal Break range is designed to cater for a wide array of architectural moods, from seaside resort to country estate.

Performance Parameters

	Sliding Door	Sliding Window	Awning Window
Frame Size	100mm / 150mm	100mm / 150mm	100mm
Maximum Height	2750mm	1850mm (without low lites)	2150mm
Maximum Width	10800mm	10800mm	2050mm
Maximum Panel Weight	200kgs	160kgs	74kgs
Maximum Water Rating	320pa	320pa	450pa
Maximum Wind Rating	3300 Pa ULS	3300 Pa ULS	3300 Pa ULS
Maximum IGU Thickness	24mm	24mm	24mm
Maximum Acoustic Rating	Rw34	Rw32	Rw34
Maximum Bushfire Attack Level	BAL 40	BAL 40	BAL 40

	Casement Window	Hinged Door	Fixed Lite (Int / Ext glazed)
Frame Size	100mm	100mm	100mm
Maximum Height	1850mm	2450mm	3000mm [^]
Maximum Width	860mm	2000mm ^{**}	3000mm [^]
Maximum Panel Weight	42kgs	60kgs	N/A
Maximum Water Rating	450pa	450pa* / 150pa ^{***}	300pa ^{^^} / 450pa ^{^^^}
Maximum Wind Rating	3300 Pa ULS (with cam handles)	2960 Pa ULS	3300 Pa ULS
Maximum IGU Thickness	24mm	24mm	24mm
Maximum Acoustic Rating	Rw34	Rw31	Rw34
Maximum Bushfire Attack Level	BAL 40	BAL 40	BAL 40

* Open out, single leaf only | ** Double leaf only | *** Open in only | [^] Single F configuration | ^{^^} Internal glazed only | ^{^^^} External glazed only

Key Features and Benefits

Sliding Door

- Multi-track systems enable solutions to almost any high-end application
- High performance roller system ensures smooth sliding action

Sliding Window

- Wide frame makes cleaning a breeze – most vacuum heads fit easily inside the window track
- Integrated track for insect, safety and security screens

Awning Window

- Stylish and high quality hardware with stainless steel chain for ease of operation
- Optional hardware upgrade to twin stainless steel chains for superior operation of large sashes

Casement Window

- Stainless steel stays ensure smooth operation of large sashes
- Sash can be opened close to 90 degrees providing excellent ventilation

Hinged Door

- Parliament Hinge option allows doors to swing outwards 180 degrees (depending on wall thickness)
- Optional 4 point lever compression lock for superior security

Fixed Lite (Int / Ext Glazed)

- External drainage designed for superior water resistance (Ext glazed only)
- Ability to re-glaze internally – ideal for multi storey situations (Int glazed only)

Get a (Thermal) Break from Condensation

Although they may seem the culprit, windows and doors do not cause condensation. In fact, the Signature Thermal Break range is designed to help reduce the incidence of condensation on windows and doors. The reinforced polyamide extrusions and insulated glass unit act as thermal barriers. They keep the interior surfaces of the windows and doors similar to the room temperature. This minimises the incidence of moist air inside the house meeting cooler surfaces, which facilitates condensation.



signature Thermal Break

windows | doors | balustrade | insect & safety screens | showerscreens | mirrors & wardrobes



Australian
Owned & Made

Bradnam's products are proudly made in Australia and designed specifically to meet all Australian conditions

Note: Products may be subject to local variation, regulatory requirements and confirmation of structural performance. Due to continual product development, Bradnam's reserves the right to add, alter or delete any information contained in this brochure without notice.



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For more information call Bradnam's on
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or visit bradnams.com.au