



ThermalHeart⁺

Range Overview Chart

This chart is designed as a simple tool to see the range capabilities, and features side-by-side comparisons so you can determine the right products to suit the job. For further technical detail please refer to the manufacturing packs on The Hub, the Specifier Guide or EBOSS.

ThermalHEART® Range Overview Chart

ThermalHEART® core design principles



Variable platform design

Variable platform design allows 44mm and 56mm platforms by simply using a different thermal strip. This provides common aesthetics, assembly processes, punching and machining details.

Compatibility

Internal profiles like sashes, panels and mullions are shared across the updated ThermalHEART® ranges to provide a mix-and-match ability while keeping aesthetics and sightlines aligned.

Sharing benefits

Consistent platform details combined with shared internal profiles across the ThermalHEART® ranges facilitates reduced component stock requirements, machining details, assembly details and punch tooling. Sharing across product ranges ultimately enables significant factory efficiencies.

	Residential Series ThermalHEART®	Metro Series ThermalHEART®	Metro Series ThermalHEART® with Centrafix™	APL Architectural Series ThermalHEART®
Product use case	<ul style="list-style-type: none"> Residential terrace and stand alone housing Low rise apartments with a lower performance requirement 	<ul style="list-style-type: none"> Residential terrace and stand alone housing Performance joinery for difficult sites High rise apartments 	<ul style="list-style-type: none"> Residential terrace and stand alone housing Performance joinery for difficult sites High rise apartments Social housing with increased thermal performance targets Passive House compliant option 	<ul style="list-style-type: none"> Residential terrace and stand alone housing Multi-configuration units Commercial grade podium joinery Seismic requirements Opening solutions in facades and speciality storefronts
Typical compliance path	NZBC Clause E2 / AS1 Acceptable Solution		Complies with NZBC Clause E2 via a BRANZ Appraised Alternative Solution Codemark certification CMNZ10033	NZBC Clause E2 / AS1 Acceptable Solution if using facings and reveal adaptors
Frame type	Flat facing frame with internal reveals	Flat facing frame with internal reveals for conventional installation	Patented Centrafix™ design which provides significant thermal efficiencies while also reducing time on site during installation	Equal leg frames, with the ability to add any type of perimeter. High performance draining sill trays, facings, seismic frames, blanks, reveal adaptors
Typical frame assembly	Mitred frames, transported and installed as a single unit	Mitred frames, transported and installed as a single unit		Mitred or square cut frames that can be made and transported in parts and re-assembled on site
Aesthetic - colours	Single colour availability	Dual colour availability		
Aesthetic - frames	Flat facing frame with internal reveals	The deeply set glazing presents a bold external reveal around the frame creates a sense of robustness		The wide based frames present a deep and consistent internal aesthetic with many finishing options
Door panel height	2.2m	2.7m	2.7m	3m
Door panel width - sliding	1.5m	1.5m	1.5m	2.0m and more (if wheel weight not exceeded)
Door panel width - hinged	0.9m	0.9m	0.9m	0.9m
Door panel width - bi-fold	0.9m	0.9m	0.9m	0.9m
Door panel weight - sliding	80kg small rail, 110kg large rail	200kg	200kg	200kg and 450kg with wheel change
Door panel weight - hinged	50kg	80kg	80kg	80kg
Door panel weight - bi-fold	50kg	80kg	80kg	80kg

Glazing	General	Double glazing capability	Double glazing and triple glazing capability
	Windows and sliders	Pressure fit beads to suit 24mm IGU. Wedged beads can be used to allow up to a maximum 32mm IGU.	44mm platform accepts a maximum 32mm IGU / 56mm platform accepts a maximum 44mm IGU
	Hinged and bi-fold doors	Pressure fit beads to suit 24mm IGU. Wedged beads allow up to a maximum 44mm IGU.	Wedged beads allow up to a maximum 44mm IGU
Awning windows	Sizes	44mm platform	44mm or 56mm platform options
	Drainage	Front drainage only	Front or concealed drainage options
	Sash options	Standard lapping sash only	44mm platform: standard lapping sash / 56mm platform: flush sash option
	Mullion options		Various finned and boxed mullions
	Ventilation options		Vented sash fasteners, Sashvent, Aerovent (fully thermally broken) and Ventient
Sliding windows and doors	General	Internal sliding panels	External sliding panels with patent pending design for superior performance
	Sizes	44mm panels with a maximum of 2 sliding tracks	44mm or 56mm panels with a maximum of 2 sliding tracks
	Opening sash	Internal sliding panel allows a sash in the sidelight	Sidelight sashes must be away from the travel path of the sliding panel
	Thermal design	Limited thermal breaks to increase efficiency while achieving required thermal performance.	Fully thermal isolated stiles and multiple rows of thermal breaks across frames
Hinged doors	General	Mitre cut panel via Monticelli jointers shows even sightlines all round. Single option is medium size.	Square cut panel allows multiple rail and stile options together. Small, medium and large sizes can be mixed.
	Hinges	Two adjustable hinges per panel. Quick fit clamp plates slide in the frame and panel, but require limited panel weights.	Two adjustable hinges per panel, large panel weights are available, and a wide span parliament hinge is available to wrap around brick cladding
	Stiles	Stiles allow for up to 2.2m in extra high wind zones	Heavy duty stiles allow up to 2.4m at very high wind zones. Boxed french door stiles allow up to 3.0m at extra high wind zones
Bi-fold windows and doors	Stiles	Stiles allow for up to 2.2m in extra high wind zones	Heavy duty stiles allow up to 2.4m at very high wind zone. Boxed stiles allow up to 3.0m at extra high wind zones
	Adjustability	Jamb pivots allow for adjustment, no height adjustment above the rolling gear	Jamb pivots allow for adjustment as well as height adjustment above the rolling gear

ThermalHeart⁺

- + Thermally efficient frames
- + High performance glass
- + Centrafix™ Installation

Get greater thermal performance

Windows and doors are a complete system with each component contributing to the overall performance and comfort of the home. For the ultimate in thermal performance, the whole window system needs to work together to deliver thermal efficiency.

Combining ThermalHEART® frames with The AGP System® glass has a remarkable impact on thermal performance - almost doubling the performance of standard aluminium joinery, creating warmer, drier and healthier homes. With the innovative Centrafix™ installation method, thermal performance is further increased by over 20%².

¹ Comparison figures are based on complete thermal modelling of an average house lot of Metro Series ThermalHEART® products with The AGP System® double glazing using the WEERS modelling methodology. The benchmark figures were calculated by modelling the same average house lot of products using the equivalent non-thermally improved products glazed with standard double glazing. A "standard aluminium window or door" refers to a non-thermally improved aluminium frame with standard double glazing.

² Centrafix™ comparison figures are based on complete thermal modelling of an average house lot of products installed in 90mm timber framing. The standard installation benchmark was calculated by modelling the same house lot of comparable products using a typical E2/AS1 cavity construction installation on 90mm timber framing.

Thermal performance improvement of standard aluminium window systems

