

## MAIN FEATURES

- A thermally efficient range of windows and doors that comply with NZBC clause H1 Energy Efficiency (all climate zones) when used in conjunction with high performing Low-E double glazing
- Ideal for minimising the transfer of heat or cold to reduce overheating or condensation
- The ThermalHEART® insulator or thermal break is made from glass fibre-reinforced nylon (polyamide) and is placed between the aluminium exterior and interior
- Standard glass thickness (IGU) of 24mm (must include Low-E coating to be compliant in most residential situations). A 32mm IGU can be used with a wedged bead.
- Frames are based on a large 44mm platform ensuring suitability for a wide range of residential projects
- Jointing process for window and door profiles ensures optimum straightness and rigidity
- Products include fixed, awning and casement windows, sliding, stacking and bi-folding windows and doors, and hinged and French doors
- Hinged door and bi-fold door panels lap over the frame for superior aesthetics, air tightness, weather tightness, security and thermal performance
- Recommended maximum 2200mm high doors in Extra High wind zones — for larger sizes consider using Metro Series ThermalHEART®

## DOORS

**Hinged Doors** have 56mm thick panels and are available in open-out and open-in formats. Panels lap over the frame for assured weather tightness and thermal performance. The open-in frame will also accommodate entry doors with a thickness range of 38-48mm. The open-out frame and open-in frame can include integrated overlights and sidelights or can be coupled with any other product for larger sidelights and overlights. French doors have flush meeting stiles for a clean look. For thermally efficient formal entrance doors thermally improved Axis or Latitude panels are available. Cedar panels can also be used.

**Bi-fold Doors** are bottom rolling with an in-frame track. Panels are 56mm. Integrated Overlights can be included.

**Sliding Doors** slide on an internal track with fixed or sashed sidelight. The (22000) frame is used for single track sliders (single panel or bi-parting panels) and the (22150) frame for stacking sliders. A large rail (22330) option is available or a small rail profile (22340) for a leaner look. Corner sliders (90°), internal or external format, are available with special meeting stile (21655 / 22680). Stiffening boxes or fins project internally or externally depending on wind exposure and door format. Overlights can be included.

## GLAZING BEADS

Residential Series ThermalHEART® windows use square beads.

## FINISH / COLOUR

Powdercoated in a wide range of colours. The thermal break is painted the same colour as the aluminium.

## **GLASS**

Standard glass panel thickness (IGU) of 24mm but 32mm IGU can be used with a wedged bead. Must include Low-E coating to be compliant in most residential situations. Glass thickness and type to be used is covered by the Human Impact Safety requirements of NZS4223.

## **PERFORMANCE**

Complies with NZ 4211: 2008 Performance of Windows. A guarantee for all Altherm windows and doors is provided under normal conditions of use against failure of materials and workmanship for a period of five years from the date of practical completion.

## **SIZES**

Hinged Doors are rated to a maximum size of 2200mm high x 900mm wide in Extra High wind zones. For larger sizes consider using the Metro Series ThermalHEART®.

Bi-fold Doors have recommended maximum dimensions of 2200mm high x 900mm wide in Extra High wind zones. Higher doors may be possible in lower wind zones.

Sliding Doors have recommended maximum dimensions of 2200mm high x 1500mm wide in Extra High wind zones. Larger heights or widths may be possible with different aspect ratios or in lower wind zones. Sliding door rollers are rated to 55kg each, allowing double glazed doors of maximum 110kg weight. For larger doors designers should also consider using the Metro Series ThermalHEART®.

## **HARDWARE**

For hinged doors a range of lever locks are available including the Urbo, Miro (powdercoated) and Icon (stainless steel) options with key or interior snib. French doors can have a lever handle on both panels (activating two-point locking at top and bottom) or a lever lock on the active panel and flush bolts in the leading edge of the lazy panel.

Bi-fold doors have swivel operator choices – Miro, Urbo or Icon (stainless steel) with locking pins at head and sill. A 'D' handle / hinge is also available for overheight doors.

For sliding doors, surface mounted or mortice lock options are available.