



The best of both worlds: energy efficient hardwood windows and doors with low maintenance exterior aluminium cladding. Made in Australia from plantation grown Victorian Ash timber and Australian glass with patented German hardware.



Range inclusions

- Internal IV 68mm hardwood timber frame, external aluminium cladding
- Custom made to almost any size and shape
- Triple glazed with 2x 16mm argon gas filled gap
- Double glazed with 1x 22mm argon gas filled gap
- German hardware fittings
- Pronounced joints
- Timber spray painted with low VOC paints or stains
- Aluminium powder-coated in large range of colours
- Timber and cladding separated by 3mm clip system to stop condensation and subsequent rot
- Noise reduction up to 43dB
- Standard industry warranties apply and 10 years warranty on glass
- Suitable for Passive House
- U-values from a very low 1.0

Available in the range:

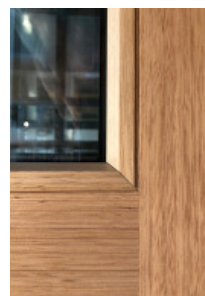
Windows: European style tilt & turn, fixed picture, clerestory/tilt, sliding, shapes

Doors: lift-slide sliding, giant lift-slide, stacker sliders, corner lift-slide, bi-fold, French, single hinged glass doors





High performance windows and doors, made in Australia from plantation grown hardwood timber or FSC® certified timber and Australian glass with patented German hardware.



Range inclusions

- Hardwood timber or FSC® certified Manilkara
- Custom made to almost any size and shape
- Frame thickness IV 78mm for triple glazed
- Frame thickness IV 68mm for double glazed
- Double glazed with 14-20mm argon filled airgap, depending on glass thickness
- Triple glazed with 2x 12-16mm argon-filled airgap, depending on glass thickness
- German hardware fittings, recessed mounted
- Flat joints
- Spray painted with low VOC paints or stains
- Timely delivery and installer training
- Industry warranties apply and 10 years warranty on glass
- Noise reduction standard 35dB, can be increased up to 45dB
- U-values from a very low 0.8
- Suitable for Passive House

Available in the range:

Windows: European style tilt & turn, fixed picture, clerestory/tilt, sliding, heritage, shapes

Doors: lift-slide sliding, giant lift-slide, stacker sliders, corner lift-slide, bi-fold, French, single hinged glass doors





Superior energy savings in domestic sized windows and doors, made in Australia from plantation grown hardwood timber and Australian glass with patented German hardware.



Range inclusions

- Hardwood timber or FSC® certified Manilkara
- Frame thickness: IV 68mm
- Custom made to 2.4m height
- Double glazed with 14-20mm airgap
- German hardware fittings, partly surface mounted
- Pronounced joints
- Spray painted with low VOC paints or stains
- Timely delivery – Installer training
- Standard industry warranties apply and 10 years warranty on glass
- Noise reduction up to 38dB
- U-values from a very low 1.8

Komfortline

A great way for builders and savvy home owners to add value and achieve superior energy savings with paint-ready windows and doors.

Range inclusions: All inclusions as for Komfort+, however Komfortline is primed only and ready for painting.

Available in the range:

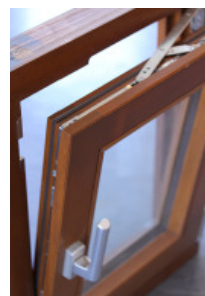
Windows: European style tilt & turn, fixed picture, clerestory/tilt, sliding

Doors: lift-slide sliding, bi-fold, French, single hinged glass doors





Extremely high energy efficiency and very low air infiltration, European style, made in Australia. Choose from Wood-Alu and Architectural Timber windows and doors with triple glazing, soft coat low-E glass and extra seals



Range inclusions

- Custom made to size and shape
- Frame thickness IV 82mm
- Triple glazed Low-E glass with 2x 14mm-16mm argon-filled airgap
- German hardware fittings, extra seals
- Spray painted with low VOC paints or lasur
- Timely delivery – link to installation videos supplied
- Industry warranties apply and 10 years warranty on glass
- Noise reduction up to 43dB
- U-values from a very low 0.8

Different U-value Certification Calculations

Windows around the world get tested and certified using different criteria. The Australian Fenestration Rating Council (AFRC) uses the North American National Fenestration Rating Council (NFRC) system. Europe uses ISO 10077-2 and ISO 15099, and in addition there is the Passive House Criteria and ift Rosenheim Directive WA15/2.

The important differences between the systems are:

- Boundary conditions
- Calculating solar heat gain (Solar Heat Gain Coefficient (SHGC))
- Methods of accounting for solar glass effects
- Reference sizes
- Installation values

According to the board of the AFRC, the base for a window assessment in Australia is as per ISO-15099. Climate protocol considering local conditions, which are different to the USA, Canada and Europe, must be included. In addition, a much smaller specimen type to that used in Europe is used in Australia as the base of the evaluation.

This gives a different U-value and SHGC to other countries. W/m²-K might be kW, but if other parameters are used, the outcome differs. NATHERS asks for 27 parameters (factors) for input to produce a window rating (this is before the window has been installed). Paarhammer's products are WERS rated and the Passive House Range achieved Certified Passive House Component.

You can be certain that Australian made Paarhammer products will perform exactly like European imported windows and doors and will reach all Passive House requirements. In addition you will enjoy local backup, service and warranties.

Available in the range:

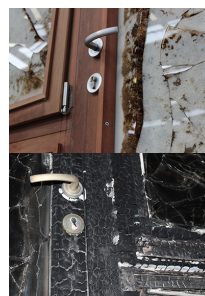
Windows: European style tilt & turn, fixed picture, clerestory/tilt, sliding, heritage, shapes

Doors: lift-slide sliding, giant lift-slide, stacker sliders, corner lift-slide, bi-fold, French, single hinged glass doors





Safety for all Bushfire Attack Levels (BAL's), including BAL-FZ, without the need for shutters. Tested, approved, compliant.



Range inclusions

- Custom made, size limitations apply
- Frame made from self-extinguishing, FSC® certified, Manilkara Bidentata
- Double glazed with special fire protection glazing
- German hardware fittings
- Finished with Adler Lignovit Lasur wood preservative, or low VOC spray-painted or stained in the colour of your choice by request
- U-values from a very low 1.4
- Ember / flyscreens for all windows as per Australian Standard
- Suitable for Passive House
- Tested, approved and compliant to all relevant Australian Standards
- Compliance certification supplied with windows and doors

Available in the range:

BAL-40 Windows: European style tilt & turn, fixed picture, clerestory/tilt, sliding, shapes

BAL-40 Doors: French, bi-fold and lift-slide doors, single hinged glass doors

BAL-FZ Windows: European style tilt & turn, fixed picture, clerestory/tilt, sliding, shapes

BAL-FZ Doors: French doors, lift-slide doors, single hinged glass doors

2 Options for BAL-FZ windows and doors

Tested to AS1530.8.2

Measured heat flux during the test 365mm from the unexposed side of the glazing (inside) reached a radiation level of 1.1 KW/m² for Paarhammer tilt & turn windows, fixed window, hinged door and French doors, and below 1.0 KW/m² on lift-slide sliding doors.

To put this into perspective, **naked skin can tolerate of 5KW/m² for approximately 10 seconds.**

Tested to AS1530.4 (-/30/-)

Limitation: '...those elements of the building that are less than 10m from the edge of the classified vegetation shall conform to AS1530.8.2.'

Measured heat flux during the test 365mm from the unexposed side of the glazing (inside) resulted in a radiation level of almost 25KW/m².

