



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

## 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

## 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/m<sup>2</sup>-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.

