

Data specification – Shugg double hung

Frame Dimensions

The Shugg vertical sliding window unit has four guides (two each side) screwed onto adaptors (aluminium frame), which are fixed into an outer frame made by others. The overall depth is 42mm and overall width 45mm.

Frame Types

The Shugg vertical sliding window unit can be installed into all types of aluminium residential and commercial window frames; timber frames both new and existing, aluminium and timber doors, composite frames and internal frames.

Finish / Colour

Powder coated 50–80µ. Standard Duralloy finishes when specified.
Anodised 12µ. Silver, bronze or black. Other anodising can be sourced. All powdercoat brands and finishes can be sourced. Timber – Cedar, Radiata Pine. Other timbers can be sourced.

Hardware – Lock Options

Shugg windows are fitted with a standard knob type spring lock with variable lock open positions when nominated. The alternative push / pull knob type lock is fitted to Shugg windows over 900mm wide (requiring two hands to lift). Knob type locks are coloured to suit the window frames. Keyed locks are available in white, black and satin chrome (lock closed position only). Keyed sill lock is recommended for schools.

Hardware – Lifter / Handle Options

Acrylic lifter blocks are fitted as standard to all residential installations. Aluminium continuous lifters with locks are recommended for all commercial and educational installations.

Pulleys

The standard Shugg has two-keyhole type pulleys fitted with a load capacity of 300kg per pulley.

Cord

The Shugg window uses a 3mm superbraid, which has a high performance polyethylene core with a polyester outer sheath. The cord has a breaking strain of 350kg.

Fixed Base Pane

As an option, a fixed base pane of glass, generally 125mm high, can be installed when windows go down to the floor level. The pane sits on the sill in front of the bottom pane, and means that sand, leaves and small animals do not come through the bottom opening while still allowing ventilation at the top. This makes it ideal for classrooms to control airflows away from the desktop on windy days.

Protecting a level – Swimming pools

When Shugg windows are protecting a level or access to a swimming pool, they should be installed with a 150mm base pane and a keyed lock installed 250mm over the top edge of the bottom pane of glass or 1500mm from the floor when in the closed position. This will restrict the bottom opening to 100mm while allowing 250mm of ventilation at the top.

Glazing

Glass for Shugg vertical sliding windows shall have all exposed horizontal edges polished. All glazing shall be in accordance with the current New Zealand standard. Single glazing of between 5mm – 7mm can be fitted to residential aluminium joinery. 6mm is the standard thickness. Units with 8mm–10mm glass or board products up to 18mm may be used in timber or shopfront frames. Sandblasted or specialist glass may be specified.

Please note: A draft document affecting NZS 4223: Glazing in Buildings: Part 3. Human Impact Requirements is currently in circulation and is likely to be adopted in late 1998. Designers should be aware that this draft will cover the glazing of Shugg vertical sliding windows and states the following:

Clause 321 Two Edge Unframed Windows

Two edge unframed windows in doors, side panels, low level and window seat glazing, for bathrooms, shopfronts, stairwells or when protecting a difference in level, shall be glazed in Grade A Safety Glazing Material to meet the requirements of table 3.3, column 2. All other two edge unframed operable windows shall meet the wind load requirements of Part 1.

Clause 303.10 Schools and early childhood centres

In primary and secondary schools and early childhood centres, all glazing with a sill level less than 800mm above the floor level, ground level or verandah deck level shall be Grade A Safety Glazing Material in accordance with table 3.1 or 3.4. Glazing above 1500mm from the floor shall meet the requirements of this part.

Testing

The Shugg vertical sliding window has a durability guarantee of fifteen years in accordance with the NZBC clause B2 Durability and in particular for Performance B2.3(c) and for five years as outlined in B1.3(d).

Product Testing

- The Shugg vertical sliding window has been laboratory tested by the Architectural Profiles Testing laboratory – 2001. Testing certificate.
- The Shugg vertical sliding window has been laboratory tested by:
 - Altherm Window Testing Laboratory, (registered by Testing Laboratory Registration of New Zealand) Test Certificate no. 1042.
 - Dowell Australis Pty Ltd (registered by the National Association of Testing Authorities Australia) – Test Certificate no. 153.
 - BRANZ Test report MTR 883/MTR868 –Report on the tensile adhesion strength of bonded rigid PVC to glass.
 - BRANZ Test report MTR885/MTR867/MTR875 – Report of the adhesion strength of bonded rigid plastic to glass after heat ageing.
 - BRANZ Test report MTC889 – Report on the shear tensile strength of Acrylic block to glass.
 - Connecting cords – 3mm BSk000B super braid is a high performance polyethylene core with a polyester outer shear.

Our supplier (Kinnears Ropes) has carried out accelerated wear tests that show no visible wear after forty years. Copies of all testing results are available on request.

Sizes

See Technical drawings for frame requirements.

Shugg windows are custom made up to 3000mm high and 1350mm wide.

Minimum frame sizes are 600mm high and 400mm wide.

For sizes outside these guidelines contact Neotechnical Industries.