

MAIN FEATURES

- These can include raking or curved windows, greenhouse, box and bay formats and glass block windows
- Windows made in shapes outside the square or rectangular are manufactured from Residential or upgrade frames (Metro Series, APL Architectural Series etc) and technical information on those suites should be consulted.
- Curving of windows is possible in several suites but confirmation should be sought before design specifications are prepared
- Greenhouse, box and bay windows all project from the wall of a house
- Greenhouse windows normally have a sloped glass top while a box window is capped by the eaves
- All three formats can be ventilated with awning, casement or sliding windows, while full height bays can incorporate doors
- Glass block windows are available using an 80mm-thick block
- A range of glass block patterns is available
- Compatible with adjoining residential windows and doors through the use of a coupling bar
- The glass block system has 90° or 135° corner posts available.

FRAME TYPES

Standard Frame from the awning window range is used with greenhouse, box and bay window formats, together with either 90° or 135° corner posts.

Chair Frame from the awning window range is used at the top of the greenhouse window. 80mm Glass Block Frame is a stand alone frame which can be fixed directly into a wall or coupled with Residential window and door frames.

SASH / DOOR TYPES

Awning, casement and sliding windows can be used for ventilation in greenhouse, box and bay windows. In full height bays, French doors or sliding doors can be used.

VENTILATION

Aerovent passive ventilator able to be fitted at the head of all beaded products. Sashvent allows ventilation through a series of slots in the bottom rail of a sash. Ventient, a naturally automated trickle ventilator, is fitted at the window head.

CURVING

A range of awning window extrusions can be curved to suit most requirements. The glass block frame can be curved subject to radius limitations.

FINISH / COLOUR

Powder Coated in a wide range of colours.

Anodised silver or bronze as standard, 12 micron thickness. Other colours and thicknesses are available.

GLASS

Double glazed units to a maximum of 24mm thickness are possible. Minimum single glazed glass thickness is 4mm. Other glass thicknesses may be used in accordance with NZS4223: Glazing in Buildings. The full range of glass types can be used in greenhouse, box and bay windows. For further information consult your local manufacturer.

PERFORMANCE

Our windows and doors comply with NZS4211: 2008 Performance of Windows. Certificates provided on request. A guarantee for all products is provided under normal conditions of use against failure of materials and workmanship for five years from the date of practical completion.

CONSTRUCTION & PERFORMANCE – GLASS BLOCK WINDOWS

Separation strips are placed in the vertical and horizontal joints between the glass blocks. They are made of plastic with an inbuilt that accepts a galvanised metal reinforcing bar.

The 80mm glass block system can resist an ultimate wind pressure of 4kPa for reinforced spans up to 2.86m in length. For spans between 2.86m and the maximum 3.5m, the UWP is 2kPa. These design wind pressures are based on the glass block size of 190mm x 80mm with the reinforcing bars at every joint. For designs outside this range please consult your manufacturer. The system has been tested to the German DIN standards for static load, pendulum impact and wind face loads. It has also been tested by BRANZ for seismic racking, pendulum impact and wind face loads. It is the subject of a BRANZ Appraisal certificate number 192 (1990). The certificate is available from BRANZ.