

OVERHEAD GLAZING & ROOF WINDOWS

MAIN FEATURES

- For commercial and residential applications.
- Glazing bars retain glass in sloping positions.
- A range of overhead glazing configurations is possible including lean-to, ridge line, double pitch and pyramid structures.
- Bars with a drainage system and a condensation drainage system are available.
- A glazing cap system for timber rafters is available.
- Thermally broken Thermal HeartTM opening and fixed roof windows are available.
- These come in standard sizes and are structurally glazed with 24mm double glazed units with self-cleaning glass on the exterior.
- The absence of glazing beads on the Thermal HeartTM options means that they can be made to low pitches i.e. down to a few degrees.
- Different colours for the inside and outside can be chosen.
- Opening options include hand winder, telescopic pole option or motorised opener controlled from a keypad.

SLOPED GLAZING BARS

The main glazing bar or rafter used is (01582), bead glazed for single glazing (maximum 15mm) or double glazing (maximum 25mm), or the heavy duty equivalent bar (01583).

A range of surrounding frame options is available including the fixed skylight frame (01584) and (01409) with drainage provision and optional permanent ventilation.

Glazing bars are also available for general use including pyramid or lean-to skylights.

All of these glazing bar options can be mounted on timber rafters.

A simple two-piece (01411/01412) glazing cap option exists for timber rafters in exterior applications.

ROOF WINDOWS

Opening Roof Windows can be either a stand-alone unit or set within surrounding glazing bars. The stand-alone option is a Thermal HeartTM product with a thermal break in the frame and sash. This minimises transfer of cold and condensation.

Roof Vent in glazing bars is available using the (01579) roof vent subframe.

FLASHINGS

Purpose-made flashings are required on a project specific basis and specifiers and builders should make provision for their supply and installation.

CURVING

FIRSTTM has a range of overhead glazing extrusions that can be curved to suit most requirements.

FINISH / COLOUR

Powder Coated in a wide range of colours.

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

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GLASS

Depending on the glazing bar system chosen single glazing is possible over a range of thicknesses up to a maximum of 15mm. Double glazing to a maximum of 20-24mm is possible, depending on the product chosen. Glass thickness and type is covered by NZS 4223: Glazing in Buildings. Thermal Heart opening and fixed roof windows come as standard with 24mm double glazed units, with the exterior pane in self cleaning glass. Grade A safety glazing must be used for roof glazing. For further information consult your local FIRST™ manufacturer.

PERFORMANCE

Commercial window applications often require project specific testing. Consult your FIRST™ manufacturer for further information and costs.

A guarantee for all FIRST™ products is provided under normal conditions of use against failure of materials and workmanship for five years from the date of practical completion.

INSTALLATION

Because of its size most roof glazing is constructed on site from pre-assembled modules.

SIZE

The selection of glazing bars is, in the main, determined by wind loadings, span limitations, glazing bar spacing and glass thickness. Often an engineer's certificate is required for the design.

Refer to your FIRST™ manufacturer for further information on the appropriate glazing bar and rafter size constraints. With appropriate rafter support FIRST™ glazing bars are capable of glazing a whole building envelope such as an atrium.

The Thermal Heart™ opening and fixed roof windows come in standard sizes. Please consult your FIRST™ manufacturer for the options.

See SASH SIZE TABLE (below) for sash size guidelines for typical roof pitches.

SASH SIZE TABLE *

ROOF PITCH	MAXIMUM SASH WEIGHT	MAXIMUM GLASS AREA
20°	45kg	1.84m ²
25°	47kg	1.92m ²
30°	50kg	2.04m ²
35°	53kg	2.16m ²
40°	56kg	2.29m ²

* Data based on the use of the Skylight Operator by Assa Abloy for maximum 190mm opening and safety glazed with 5mm + 5mm double glazing or 5mm single glazing. Pane width limit of 700mm applies for 5mm toughened float glass. For sash sizes over 2m², consult your FIRST™ manufacturer for advice as to the best glazing configuration. Your FIRST™ manufacturer can also advise sash size guidelines outside the above roof pitch range and for the 230mm opening option.

HARDWARE

Roof window winder options include a manual winder, telescopic pole option or a motorised control winder operated by a remote keypad - maximum four windows per keypad.