

40MM WINDOW SERIES

MAIN FEATURES

- For low to high rise applications.
- A fully integrated window system that incorporates a range of profiles that form a number of window types including:
 - Glazed frames and sashes for general commercial applications.
 - Glazed frames and sashes for strip windows.
 - Curtain walling.
 - Hopper windows.
 - Pivoting windows (horizontal plane only recommended).
 - Glazed frames seismically separated from the building structure.
- Substantially sized box section extrusions allow large sashes up to 1600mm high x 1000mm wide dependent on glass used (in awning and casement applications).
- Compatible with Magnum commercial door.

FRAME TYPES

Facing Frame (08600) bead glazed head, sill and jamb for maximum 15mm single glazing and 24mm double glazing. This section has 25mm of weather facing cover.

Typical Chair Frame (08640 / 08641) for maximum 15mm single glazing and 24mm double glazing, for use in strip windows and other applications.

Unequal Leg Chair Frame (08642 / 08643) for maximum 15mm single glazing and 24mm double glazing, for use in rebated openings.

Fin Pipe Chair Frame (08653) for maximum 15mm single glazing and 24mm double glazing, for use in faceted windows.

Hopper Frame Adaptor (08656) fits into the above frames to accommodate the (08655) hopper sash.

Pivot Window Frame Adaptor (08658 / 08659) fits into the above frames to accommodate the (08657) pivoting sash.

Internally Glazed Frame (08646) for maximum 15mm single glazing and 24mm double glazing.

MULLIONS

Standard Box Mullion (08610)

Finned Mullion (08614)

Internal Box Mullion (08611)

Finned Split Mullion (08617)

Internal Box Mullion (08620)

External Heavy Duty Mullion (08618)

Internal Heavy Duty Box Chair (08622)

Corner Post (90°) (08652) for corner windows.

Fin Pipe (08654) for faceted windows.

Heavy Duty Box (08623)

All of the above are for maximum 15mm single glazing and 24mm double glazing.

NOTE: 08618, 08622 and 08623 have screw ports and when coupled with 08619 become mullions.

TRANSOMS

Box Transom (08625)

Finned Transom (08624)

Internal Box Transom (08627)

Internal Heavy Duty Box Transom (08628)

All of the above are for maximum 15mm single glazing and 24mm double glazing.



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SASH TYPES

Pocket Glazed Sash (08603) for maximum 6.38mm glazing.

Heavy Pocket Glazed Sash (08605) for maximum 6.38mm glazing.

Heavy Beaded Sash (08606) for maximum 15mm single glazing and 24mm double glazing. **Stepped Beaded Sash** (08607) for maximum 15mm single glazing and 24mm double glazing.

Non-Facing Sash (08609) for maximum 15mm single glazing and 24mm double glazing. **Double Glazed Sash** (08604) for maximum 24mm double glazing.

Internally Glazed Sash (08608) internally beaded for maximum 15mm single glazing and 24mm double glazing.

Hopper Sash (08655) beaded, for maximum 15mm single glazing and 24mm double glazing. **Pivot Sash** (08657) beaded, for maximum 15mm single glazing and 24mm double glazing.

GLAZING BEADS

Beads come in three types to cater for different looks and glass thicknesses:

Sloped as standard for single glazed sashes and fixed lights (match box sashes).

Square to achieve a strong, solid look with single glazing(beaded sash required to match fixed glazing).

Double Glazed (Flat / Flush) where double glazing is used.

COLONIAL GLAZING BARS

These come in three bar widths -18mm, 24mm and 28mm. For single glazing the raised bar is adhered to the glass exterior with the matching size flat bar applied to the inside. For double glazing the flat bar must be used both internally and externally.

40MM SEISMIC SYSTEM

This option is suitable for banks of windows requiring seismic separation in low to medium rise applications and is also required for continuous strip windows that exceed the facing frame extrusion length of 5m.

Outer Frame. The (08467) section is used at the head with (08650) at sill, (08648 / 08649) at the jambs and (08651) as a seismic transom.

Inner Panels. Constructed from (08645) chair frame with split mullions (where required to make transportable unit sizes) chosen according to span. Alternatively constructed from (08646) internally glazed chair frame.

40MM CURTAIN WALL SYSTEM (WITHIN 150MM MULLIONS)

This is based on the (08481) peripheral frame and mullion with an inserted subframe (08662) at head and sill, (08660) as the mullion for fixed panes, and (08645) as the mullion to accommodate an opening sash.

Both external and internal corners are assembled using the (08482) corner frame and (08471) corner splice.

FLASHINGS

Commercial systems often require project specific flashings dependent on application, cladding type and site exposure. Refer to your FIRST™ manufacturer for specific installation information.

CURVING

FIRST™ has a range of 40mm window 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, 20 micron thickness. Other colours and thicknesses are available.



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GLASS

Single glazing to a maximum of 15mm depending on the system chosen and double glazing to a maximum 24mm thickness in accordance with NZS 4223:Glazing in Buildings.

Internally glazed sashes and seismic chair frames are available.

The full range of glass types can be included in this product. 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.

INSTALLATION

Depending on the type of project, windows may come fully assembled and glazed or be assembled on site from pre-made modules. For the 40mm curtain wall glazed panels are generally pre-assembled at the factory and fixed to continuous runs of curtain wall mullion on site. Shop drawings can be supplied by FIRST™ manufacturers when specified.

SIZES

40mm sashes are capable of a range of sizes, with awnings up to 1600mm high x 1000mm wide and casements up to 1600mm high x 800mm wide recommended. Larger sashes are able to be constructed dependent on the width, height, weight (including glass), hardware and wind zone. Consult your FIRST™ manufacturer for advice on appropriate sized sashes fit for purpose.

HARDWARE

Window fasteners for standard opening sashes are available in a variety of styles, including the Miro™ or Icon wedgeless. The high specification Avon fastener, with key locking as an option, may be advisable in commercial settings. Other security hardware can also be fitted.

Hopper windows are usually mounted on friction stays at the sill and restricted at the head. A spring latch and keeper lock the window in place. Hopper windows can also be used with window control actuators for remote opening and closing. A maximum sash opening of approximately 100mm applies with friction stays or 140mm with restrictors.

Pivot windows open inwards from the top like a hopper window and are usually operated by window control gear. Alternatively they can be opened by hand using a snap-open window fastener.

Control gear for remote windows is available using flexible cable or shaft and lever technologies.