

The system offers enhanced thermally broken window sections to suit the specific project requirements

Introduction

The basic suite has long leg outer frame section to allow the window to be fitted at the back of the reveal.

Also included in the basic suite of profiles are a range of vent and mullion/transom sections.

Various other profiles can be designed and incorporated allowing architects to achieve flexible designs.

The system is glazed internally to accommodate 28mm to 56mm double glazed units, using standard beads.

As with all Brital systems the Tilt & Turn window system is manufactured to exacting standards, enabling economy to be combined with strength to give many years of aesthetic, trouble-free operation.

Thermal Performance

The Brital thermally broken system in conjunction with the correct glass specification, is designed to provide optimum thermal performance.

Scope

This specification defines materials, construction, finishes and size limits for the Tilt & Turn window.

Materials

Aluminium profiles are extruded from aluminium alloy 6063 T6 complying with the recommendations of BS EN 12020-2:2008 / BS EN 755-9:2008

Finishes

The range of sections can be provided in either of the following finishes:

1. Anodised to BS 1615 or BS 3987 (Natural or Coloured)

2. Powder organic coated to BS 6496

Subject to Brital approval other finishes may also be used.

The Brital thermally broken Tilt & Turn window can accommodate a different colour/finish internally to that used externally.

Construction

The frame members are mitre cut at 45°, corners are reinforced with extruded aluminium crimping cleats and corner braces. A secure joint is formed by pneumatically crimping into the extruded crimping cleat.

Mullion & Transom bars are cut, shaped and fixed securely to the frame by means of stainless steel screws.

All frame joints are sealed during construction against entry of water. Extruded weatherstrips and glazing gaskets are provided to resist the ingress of water.

Glazing

Glass is set against EPDM gaskets externally which are fitted into gasket grooves in the frame upstand. Clip in beads and EPDM gaskets are then fitted to the inside of the frame.

For glass support BR setting blocks and flat packers are provided to locate into the sections.

Installation

Detailed installation instructions are provided which should be strictly followed.

Open In Window Fittings

The sections are designed to suit clamp fixed Tilt before Turn fittings, Turn only fittings (side hung) and Tilt only fittings (bottom hung) with a variety of handle options.

Brital are able to advise on a full range of fittings and accessories.

See gearing manufacturer's details for gearing options, maximum/minimum window sizes and weight restrictions.

Brital should be contacted for any special operating requirements.

Brital recommend the use of restrictors to prevent the window opening more than 90° in the side hung mode.

* Where larger bottom hung windows are required, Brital recommend the use of Tilt & Turn gear with a Turn Lock to prevent opening in the side hung mode.

Maximum Size limits for Vent Sections

Vent Section	Vent Height	Vent Width
Clamp On Fittings		
Tilt Before Turn, Tilt & Turn Only Sashes		
Standard (TT103-34-104)	2700mm (Max)	1350mm (Max)
	500mm (Min)	500mm (Min)
Side Hung Open In Sashes		
Standard (TT103-34-104) with BR-3520.71 hinges	2100mm (Max)	900mm (Max)
	500mm (Min)	500mm (Min)
Standard (TT103-34-104) with BR-8060 hinges	2700mm (Max)	1350mm (Max)
	1000mm (Min)	500mm (Min)
Bottom Hung Open In Sashes		
Standard (TT103-34-104)	900mm (Max)	1200mm (Max)
	500mm (Min)	500mm (Min)

Performance

The Brital Tilt/Turn window system has been designed to give the following levels of performance.

Air permeability - BS6375: Pt1:1983 test pressure 600 Pa

Water tightness - BS6375: Pt1:1983 test pressure 600 Pa

Wind resistance - BS6375: Pt1:1983 test pressure 2400 Pa

These levels of performance should be sufficient for any location within the Middle East, however, should higher levels of performance be required for any reason, Brital's advice should be sought.

Development

Our policy is to continually research the market for new and improved products. We must therefore retain the right to amend specifications without prior notice.

It is recognised by Brital that in some instances special sections may be required for particular projects. When this occurs it may be possible to produce bespoke sections subject to there being sufficient quantity and adequate time.