BRITAL
ALUMINIUM FACADE DESIGNS

NTB-55 WINDOW SYSTEM SPECIFICATION OPEN-IN CASEMENTS

The system offers non-thermally broken sections to suit the specific project requirements.

Introduction

The basic suite has a 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 up to 35mm thick double glazed units, using standard beads.

As with all Brital systems, the Open-in 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 should be used where additional thermal performance is required.

Scope

This specification defines materials, construction, finishes and size limits for the Open in casement window.

Materials

The aluminium profiles are extruded from aluminium alloy 6060 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 range of 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 non-thermally broken Tilt & Turn window must be the same colour/finish internally and externally.

Construction

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.

Maximum Size Limits for Vent sections

Vent Section	Vent Height	Vent Width	Vent Perimeter
CLAMP ON FITTINGS			
Tilt Before Turn, Tilt & Turn Only sashes			
Standard (BR-TT23)	1800mm	1000mm	5300mm
Large (BR-TT24)	2800mm	1500mm	6700mm
Side Hung Open In Sashes			
Standard (BR-TT23)	2000mm	1000mm	6000mm
Large (BR-TT24)	2800mm	1400mm	6700mm
Bottom Hung Open In Sashes			
* Standard (BR-TT23)	900mm	1200mm	4800mm

*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.

Glazing

Glass is set against co-extruded gaskets externally which are fitted into gasket grooves in the frame upstand. Clip in beads are then fitted to the inside of the frame and held secure by means of colour coded wedge gaskets internally. 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.

For complete details of maximum/minimum sizes and weight restrictions see also the gear manufacturer's details.

Performance

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

Air permeability - BS 6375 : Pt. 1 : 1983 test pressure 600 Pa

Water tightness - BS 6375 : Pt. 1 : 1983 test pressure 600 Pa

Wind resistance - BS 6375 : Pt. 1 : 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.

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BRITAL
ALUMINIUM FACADE DESIGNS

NTB-55 WINDOW SYSTEM SPECIFICATION OPEN-OUT CASEMENTS

The system offers non-thermally broken sections to suit the specific project requirements.

Introduction

The basic suite has a 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 24mm or 26mm double glazed units, using standard beads.

As with all Brital systems, the Open-Out Casement 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 should be used where additional thermal performance is required.

Scope

This specification defines materials, construction, finishes and size limits for the Open-Out Casement window.

Materials

The aluminium profiles are extruded from aluminium alloy 6060 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 range of 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.

Construction

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

Two types of glazing beads are used, the Longest Frame Edge beads are directlty engaged into the frame, whilst on the Shoretest Frame Edge the beads are held secure by means of bead clips. Gaskets are provided internally & externally as described in section 9.

For glass support, setting blocks and flat packers are provided to locate into the sections, also see section 9.

Installation

Detailed installation instructions are provided which should be strictly followed.

Open Out Window Fittings

The sections are designed to suit Master friction hinges, Master operating handle, Espagnolette & keeps at cill and a variety of single point handle options.

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

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

Brital should be contacted for any special operating requirements.

Where windows are at first floor and above Brital recommend the maximum opening should not be more than 100mm.

This can be achieved by using additional Master restrictors.

For complete details of maximum/ minnimum sizes and weight restrictions see also the the hinge manufacturer's details.

Maximum Size Limits for Top Hung & Side Hung Vents

TOP HUNG			
Shutter Type	Max Width	Max Height	Max Vent Weight
Standard	1500	2000	140kg
See sheet TBOC/07/09 for full hinge details.			
SIDE HUNG			
Shutter Type	Max Width	Max Height	Max Vent Weight
Standard	1000	1500	32kg
See sheet TBOC/07/09 for full hinge details.			

Performance

The Brital Open-Out Casement window system has been designed to give the following levels of performance.

Air permeability - BS 6375 : Pt. 1 : 1983 test pressure 600 Pa

Water tightness - BS 6375 : Pt. 1 : 1983 test pressure 600 Pa

Wind resistance - BS 6375 : Pt. 1 : 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

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