BRITAL
ALUMINIUM SYSTEMS DESIGN

SPECIFICATION
For the
Supply and Installation of

BRITAL TB-68-CASE

Thermally broken
Open in Casements

Issue date	Revision	Comment
29/04/09	R0	Draft
05/05/09	R1	Approved for Issue

BRITAL TB-68-CASE
Thermally broken
Open in Casement
Windows

SPECIFICATION

1.0 Scope

1.1 Thermally Broken open in casement windows shall be BRITAL TB-68-CASE manufactured from extruded aluminium sections.

2.0 Materials

2.1 All extruded aluminium provided shall be grade 6063 T6 and shall be extruded to BSEN12020 and supplied only by BRITAL approved aluminium extrusion companies.

2.2 All assembly screws shall be grade A2 or A4 austenitic stainless steel (class 70).

2.3 All extruded gaskets, weather seals and setting blocks shall be supplied by Technical Seal, the specified BRITAL gasket supplier as detailed in BRITAL Technical Manuals.

2.4 All woven weather seals shall be supplied by Technical Seal, the specified BRITAL weather seal supplier as detailed in BRITAL Technical Manuals.

2.5 Thermal Break windows shall incorporate glass reinforced polyamide thermal breaks supplied by Technoform specifically for use on the BRITAL Window system.

2.6 Ironmongery for shutters shall be supplied only by BRITAL specified supplier, all fittings shall be manufactured in material designed to resist corrosion. All fittings shall be made to fit the BRITAL sections and shall be installed into grooves extruded in the sections wherever possible.

2.7 The wall thickness of structural members shall comply with the requirements of BS8118 Pt1 and shall not be less than 1.5 mm (nominal).

3.0 Construction

3.1 BRITAL TB-68-CASE thermally broken casement windows shall be supplied in pre assembled frames.

3.2 All seals shown in BRITAL Fabrication Manuals shall be properly installed.

3.3 All joints shall be formed from using accurately mitre cut and jointed with either extruded aluminium crimped corner cleats or cast aluminium or aluminium corner mechanical cleats secured by tightening a stainless steel screw. All joints shall be fully sealed during construction.

3.4 Drainage shall be achieved via prepared slots in the frames covered with plastic drain hole covers as specified in the BRITAL Technical Manuals.

3.5 All glazing shall be supported by BRITAL EPDM setting block sections of Shore A hardness 85 +/-5, as detailed in BRITAL Technical Manuals.

3.6 All glazing shall be retained in position by means of extruded EPDM glazing gaskets.

3.7 The nominal cover between the rebate of the sections and the glazing shall not be less than 15 mm.

3.8 All insulated glass units shall be manufactured and installed in accordance the relevant British Standard, such as BS 5713 or BS EN 1279 Pts 1to 6 inclusive. (or equal approved other national standard)

3.9 The performance of the glazing shall also be in accordance with the requirements of any local building codes / regulations .

4.0 Performance

4.1 BRITAL casement windows shall be constructed in accordance with the Brital Fabrication Manuals and shall perform in accordance with the relevant standards for weather resistance.

4.2 Air Permeability shall: be in accordance with BS EN 1026;2000 & BS EN 12207:2000 class 2

4.3 Water Resistance shall; be in accordance with BS EN 1027;2000 & BS EN 12208;2000 class 8A

4.5 The windows and doors shall be designed to resist the maximum expected 3 second wind gust with a return period of 50 years.

4.6 Wind Resistance

At the maximum design wind load, the maximum deflection on the Brital window members shall not exceed: Span/ 175

4.7 Impact Resistance

All glazing / infill in risk areas as defined in BS 6262 part 4 shall be manufactured from safety glass, that shall be marked to show it's type and manufacturer.

4.8 Restrictors

All windows designed to open shall be restricted to a degree that will prevent the risk of someone falling out of the building, such as according to BS 8213 pt 1

5.0 Finishes

All exposed aluminium extrusion surfaces shall be finished to either:

5.1 Polyester Powder Coat

Polyester Powder coating shall be applied in accordance with either BS6496 or BSEN 12206. The film thickness shall be no less than 40 µm and on average no less than 50 µm.

5.2 Anodising

Anodised aluminium should be either Natural (silver) or coloured to BS1615, BS3987 or BSEN 12373. Minimum thickness of anodic coating shall not be less than 25 µm.

6.0 Supply & Installation

6.1 BRITAL Windows and doors shall only be supplied and installed by Approved contractors.

6.2 The design and installation shall be in accordance with BRITAL Fabrication and Installation Manual.

6.3 All working drawings produced by the approved BRITAL fabricator shall be submitted to BRITAL for review and comment prior to the commencement of erection on site.

7.0 Submissions

7.1 Prior to fabrication, the approved BRITAL sub-contractor shall submit sample boards showing samples of all relevant extrusions, gasket and ironmongery, relevant to the project.

8.0 Protection and Cleaning

8.1 All visible surfaces of the aluminium sections shall after finishing be protected with self-adhesive low-tack tape.

8.2 The low-tack tape shall be removed prior to hand over, either by the Window Fabricator or the Main Contractor (subject to agreement between the two).

8.3 The protective tape shall not be left on the aluminium sections longer than necessary.

9.0 Operation and Maintenance

9.1 The windows shall be operated and maintained in accordance with the recommendations found in the relevant section of the BRITAL Specifiers Manual

9.2 All replacement glazing shall be carried out in accordance with the recommendations found in the relevant section of the BRITAL Specifiers Manual