



Commercial Aluminium Specifications

L20 DOORS/SHUTTERS/HATCHES 280 - DOORS

Aluminium By Design are a major supplier of windows, doors, low rise curtain walling and roofs for commercial and domestic markets. An extensive range of ancillary items such as door panels and trickle vents are available to complement each product range.

Door and door frames are manufactured from grade 6060/6063 T5/T6. Size tolerances are in accordance with DIN and BS standards.

Co-extruded profiles and EPDM seals are tested in accordance with DIN 7863, TV 110, NFP 85301, ISO 3994. Thermal breaks are formed with polyamide strips PA 6.6 25 reinforced with glass fibre, fitted between aluminium extrusions.

Profiles can be Electrostatic powder coat finished in a range of RAL colours to APA Qualicoat guidelines with the option of BI-colour, different internal and external colours. Other finishes include anodised with EWAA/EURAS-Qualanod quality label. Powder-coated woodstructure finishes are available on request.

ABD Commercial Door – Security rated to LPS1175 Level 2 & EN1627 Level 3.

Designed for use as thermally broken open out or open in, single or double doors, internally and external beaded, with sidelight options, for domestic and light / medium / heavy commercial applications.

Door and door frames are extruded from aluminium alloy 6060/6063 T5/T6 and comply with the recommendations of BS EN 12020-2; 2001/BS 755-9: 2001. Profiles can be Electrostatic powder coat finished in a range of RAL colours to APA Qualicoat guidelines. Other finishes include anodised with EWAA/EURAS-Qualanod quality label.

All doors are hung on aluminium butt / face hinges or transom / floor closer and fitted with hook bolt or roller latch locking mechanisms.

Centre pivot doors are available with an anti-finger trap device.

Glazing conforms to the requirements of BS 6262 and Part 'N' of the Building Regulations for both thickness and type. Weather seals are EPDM set in undercut channels.

Double glazing profiles accommodate 23mm to 32mm units.

Doors are manufactured according to customer requirements from a range of standard profiles and are designed to incorporate a range of options, therefore it is advisable to contact our Technical Department early in the design process.

Doors are manufactured to the required design to within the following maximum limitations (subject to location).

Single door – Max sash width 1150mm. Max height 2500mm.

Double door – Max width 2415mm (overall frame). Max height 2500mm.

Subject to agreement it is possible to exceed these limitations depending on design criteria, contact our Technical Department for details.

Our Technical Department can also provide design and specification guidance and it is recommended that they are consulted early in the design process.

Manufacturer

Aluminium By Design Ltd

Product Reference

ABD Commercial Thermally Broken Door

Materials

All profiles are extruded from aluminium alloy 6060/6063 T5/T6 and comply with the recommendations of BS EN 12020-2; 2001/BS 755-9: 2001.

Thermal

All doors, in conjunction with a suitable glazing specification, to achieve an average project U-value to meet the current requirements of the approved Building Regulation Document L1/L2 for England and Wales

Structure

All structural profiles to be designed so as the maximum deflection of any glass edge into a framing member under wind load shall not exceed L/175 of its span with no evidence of any permanent deformation once the load has been removed. All horizontal framing members to restrict dead load deflection to L/400, up to a maximum of 3mm.

Construction

All doorsets shall be manufactured, installed and glazed in strict accordance with ABD instructions and guidelines as set down in the appropriate technical literature, details and specifications.

Outer frame sections shall be 53mm width with a depth of 100mm.

Door profiles are square cut and a suitable small gap sealer is applied to abutments and joined using mechanical corner cleats.

Drip bar shall be used to all doors.

Fixed Framing thermally broken can be Pocket or Bead glazed. Main framing profiles are square cut. A suitable small gap sealer is applied to abutments prior to jointing with self-tapping screws driven into integral screw ports within the sections. Door profiles are square cut and joined using mechanical corner cleats with a suitable small gap sealer applied to abutments.

Finish

Colour: As required to suit contract. RAL colours in gloss, semi-gloss or matt.

Glazing

Overall unit thickness of 23 to 32 mm.

All doors to be dry glazed using 'snap in' or shuffle extruded aluminium beads and EPDM extruded gaskets.

Ironmongery / Accessories

To suit specific contract.

Fixing

All fixings to be in strict accordance with the relevant British Standards, including BS 6262, and shall ensure the door frame is retained securely within the opening without incurring any damage or distortion to the frame.

Generally, fixings to be positioned 150mm from each corner and each mullion/transom and at centres not exceeding 600mm.

Fixing lugs/straps only to be used where they can be suitably concealed to approval.

All fixing of door frames to the supporting structure to be achieved using a suitable lug and/or frame anchor fixing method capable of accommodating all applicable loads, deflection, tolerances and expansion expected on site.

Details of the proposed fixing method shall be submitted to the project engineer for approval prior to installation.