

## **L10 - WINDOWS**

### **316 STEEL WINDOWS AND DOORS:**

- Manufacturer and reference: Crittall Windows Ltd, **T60®** Thermal Break
- Manufactured generally in accordance with BS 6510
- Operation and strength characteristics: To BS 6375: Part 2 and BS EN 14024
- Weathertightness: To BS 6375: Part 1
  - o Exposure Category (Design Wind Pressure): Up to 2000 (Pa)
  - o For air permeability, watertightness and wind resistance data see Table AA
- Construction
  - o All frames have welded corners and are flat and square within normal manufacturing tolerances of +/- 1.5 mm
  - o Thermally broken profiles tested in accordance with EN 14024 with density of 1.8 kg/dm<sup>3</sup>, tensile strength of 600 MPa and E-modulus of 25000 MPa
- Thermal break: Profiles feature integral polyurethane GRP thermal isolators (67% fibreglass content)
- Product range: Fixed lights (single section), top hung, projecting top hung, side hung, bottom hung and french casement open in and open out, internally glazed configurations available.
- Sightlines for T60® profiles:
  - o Fixed frames: 25mm / 40mm
  - o Operable windows: 45mm / 60mm
  - o Glazing bars: True, 40mm. Simulated divided light grids available from 19mm
- Glazing details
  - o Will accept insulating glass units up to 36mm in thickness
  - o Frames are delivered unglazed for site glazing - Crittall will supply frames only, or frames with glazing units
  - o The thickness of glazing units will determine the types of gaskets and beads supplied
  - o Wet glazing or gasket glazing options available, depending on application
- Glazing beads
  - o Clip-in polyester powder coated (as frame colour) aluminium glazing beads
  - o Fixed to frames using purpose-made glazing clips
  - o Available in 3 depths to suit varying glass thicknesses
- Weatherstripping: EPDM gaskets secured into grooves of opening frames
- Ironmongery/accessories: See clause 328
- Corrosion protection: See clause 331
- Finish as delivered: See clause 331

### **325 STEEL WINDOWS AND DOORS:**

- Generally, all the foregoing
- Manufacturing undertaken in the Crittall factory by directly employed personnel
- Design, manufacture, and installation carried out under Quality Management Systems certified to BS EN ISO 9001
- Manufacture is undertaken under an Environmental Management System certified to BS EN ISO 14001

### **328 IRONMONGERY/ACCESSORIES**

- Standard provisions: Refer to brochure
- Standard finishes: RTD (Bronze Effect) or Satin Chrome
- Optional hardware/finishes: Available, including multi-point locking option. Consult Crittall

### **331 FINISH COATING**

- Type/reference: Epoxy free Duralife™ polyester powder coating to BS EN 13438, using Interpon D1036 or D2525 powder applied in accordance with BS EN ISO 13438
- Substrate: Thermally broken steel, with protection coating of type ZF100 (Galvannealed Zinc-Iron) at @100 g/m<sup>2</sup> (approximately 6 µm)
- Preparation: Chemical clean and pre-treat the ZF100 coated substrate to provide a surface to which zinc primer and powder coating will adhere
- Covering: Minimum 60 micrometres per coat on all significant surfaces

# CRITTALL WINDOWS NBS SPECIFICATION T60® RANGE



- Colours: Wide selection available. See Crittall Duralife™ Standard Colour Guide
- Process:
  - Coating will be undertaken in the same manufacturing plant as the frame fabrication
  - Applied in accordance with quality control inspection measures conforming to ISO 9001

## 470 SEALANT:

- Joint surfaces are to be clean, grease / dust free and prepared in accordance with the sealant manufacturer's recommendations
- Glazing top-capping, perimeter sealant and coupling sealant is to be a neutral cure, low modulus silicone compliant with BS 5889 Type A 1989

## 552 METAL GLAZED SCREENS

- Multilights / direct-coupled assemblies are available
- A full design / advice service is available

**Table AA**

Type of T60® Window or Door	Frame Size Performance Split-Limits*	Air Permeability to BS EN 12207	Watertightness to BS EN 12208	Wind Resistance to BS EN 12210
		Class (Pa)		
Fixed Light (single section)		4 (600)	E1200	C5/B5 (2000)
Side Hung open-out	≤810 x 1610mm H	4 (600)	E900	C5/B5 (2000)
	≤810 x 2210mm H	4 (600)	E900	C4/B4 (1600)
	≤1010 x 2410mm H	3 (600)	E750	C4/B4 (1600)
Side Hung open-in	≤810 x 1610mm H	4 (600)	E900	C5/B5 (2000)
	≤810 x 2210mm H	4 (600)	E900	C4/B4 (1600)
	≤1010 x 2410mm H	3 (600)	7A (300)	C4/B4 (1600)
French Casement open-out	≤840 x 1610mm H	4 (600)	9A (600)	C3/B3 (1200)
	≤840 x 2210mm H	4 (600)	8A (450)	C3/B3 (1200)
	≤1990 x 2410mm H	3 (600)	8A (450)	C3/B3 (1200)
French Casement open-in	≤840 x 1610mm H	4 (600)	9A (600)	C3/B3 (1200)
	≤840 x 2210mm H	4 (600)	8A (450)	C3/B3 (1200)
	≤1990 x 2410mm H	3 (600)	8A (450)	C3/B3 (1200)
Bottom Hung open-in	≤2210 x 810mm H	4 (600)	E750	C4/B4 (1600)
	≤2410 x 1010mm H	3 (600)	7A (300)	C4/B4 (1600)
Top Hung open-out	≤1660 x 690mm H	4 (600)	9A (600)	C3/B3 (1200)
Projecting Top Hung open-out	≤1200 x 1450mm H	4 (600)	9A (600)	C4/B4 (1600)
Single Leaf Door open-out	≤1010 x 2310mm H	2 (300)	8A (450)	C4/B4/A4 (1600)
	≤1010 x 2510mm H	4 (600)	8A (450)	C4/B4/A4 (1600)
Single Leaf Door open-in	≤1010 x 2310mm H	4 (600)	6A (250)	C4/B4/A4 (1600)
	≤1010 x 2510mm H	4 (600)	6A (250)	C4/B4/A4 (1600)
Double Leaf Door open-out	≤1990 x 2310mm H	3 (600)	8A (450)	C3/B3/A4 (1200)
	≤1990 x 2510mm H	3 (600)	6A (250)	C3/B3/A4 (1200)
Double Leaf Door open-in	≤1990 x 2310mm H	3 (600)	4A (150)	C3/B3/A4 (1200)
	≤1990 x 2510mm H	3 (600)	4A (150)	C3/B3/A4 (1200)
<b>Notes</b>				
1. Windows fitted with remote operating gear (electric or manual) may not achieve the performance listed				
2. *Sizes are overall web, <b>outer</b> frame(s)				
3. Performance figures for windows vary depending on hardware selection. Maximum shown				
4. Performance figures for doors vary depending on threshold selection. Maximum shown				

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