

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/dm³, 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, primed with Interpon ALZ90F zinc-rich powder and top-coated with 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/m² (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
- Colours: Wide selection available. See Crittall Duralife™ Standard Colour Guide

CRITTALL WINDOWS NBS SPECIFICATION

T60® RANGE



- 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) |
| Notes <ol style="list-style-type: none"> Windows fitted with remote operating gear (electric or manual) may not achieve the performance listed *Sizes are overall web, <u>outer</u> frame(s) Performance figures for windows vary depending on hardware selection. Maximum shown Performance figures for doors vary depending on threshold selection. Maximum shown | | | | |