# Performance Specification for Steel Doors to 3 Storey Blocks of Flats

# 1. Scope of Work

The Contractor shall be fully responsible for the removal and disposal of original doors/side screens and the supply and installation of high performance glazed steel doors/screens and all ancillary items, into prepared openings, fully in accordance with this specification. The contractor shall identify the existing wires/cables and remove or reposition as required to carry out the installation. NB It is the contractor’s responsibility to liaise with service provider of all the existing cables to ensure permissions are granted to remove and re-fix in new location. Please note the new doors will be fitted forward of the existing doors. (liaise with steel door manufacturer).

The Contractor shall ensure that the design, materials and workmanship comply with all current Codes of Practice, British Standards, Building Regulations and any other relevant legislation or practice.

Notwithstanding the specification outlined herewith, the appointed door sub-contractor will be fully responsible for ensuring that the product being offered together with all fittings, fixings and subsidiary items are suitable for their intended use.

**2.Size And Quantity**

It will be the responsibility of the contractor to establish exact manufacturing sizes and quantities prior to manufacture.

**3.Warranty**

All doors and screens proposed for shall have a minimum life expectancy of 25 years. The contractor may be required to enter into a separate design agreement and form of warranty.

All doors to have low profile silver threshold (suitable for wheelchair users)

Gaskets and weather strips to BS 6093:2006 +A1:2013.

**4.Glazing**

All doors and screens 10mm double toughened laminated glass.

All glazing is to comply with the requirements of BS 6262-1: 2017 , current Building Regulations and Regulation 14 of the Working Health and Welfare 1992 Approved Code of Practice. (Minimum standards of impact performance levels – January 1996).

**5.Gaskets** and Weather Strips to BS 6093:2006 +A1:2013

**6.Finish**

All stainless steel section are to be polyester powder-coated. (Ral No. 9910 White Gloss either prior to fabrication. The coating is to comply with BS6496: 1984 and have a minimum continuous film thickness of 40 microns and be applied by an applicator licensed by the Powder Manufacturers. The process must be applied in accordance with the manufacturer’s recommendations including all anti-corrosion pre-treatments and carry a 25-year guarantee.

**7.Protection**

The contractor shall be responsible for providing and maintaining all protection against damage to the units in the works, during delivery to site, storage, positioning and until each unit is completely erected and fixed on site and accepted.

Transport, handling and storage shall be carried out in such a way that no stress or damage is caused.

**8.Installation**

Original doors/side screens to be removed and disposed of. Openings to be made trim and square for installation of new units and interfaces between new steel frames and structure to be capped with PVCu trims.

All units and bars shall be erected square, plum and in proper alignment with other finishes and material and so fixed as to remain permanently square.

Joints between frames and building surrounds shall be sealed internally where necessary and bedded and sealed externally.

**9.Fixings**

The contractor must allow for carrying out all drilling, plugging, rag-bolting etc to permit the fixing of the whole installation.

All fixings must conform to all statutory requirements both as to strength and type.

**10.Sealants**

The contractor will be responsible for the supply and application of all necessary sealants. Sealant material for external application and internal application to be selected from BS6213 suitable for the purpose of sealing doorframes.

Waterproofing perimeter sealing of the doors is to be achieved by the use of silicone sealants to joints conforming to the manufacturers design recommendations.

**11.Cleanability**

All doors and glazing on this project are to be cleaned internally and externally.

**12.Generally**

The specification of all components and finishes, the standard of the assembly, the

methods of fixing, the water-tightness and air tightness of the completed installation,

the ease of operation and re-glazing, the appearance and durability and any other

relevant factors shall all be to the satisfaction of the project manager.

**13.Health And Safety**

A full Method Statement and Risk Assessment will be required for each installation.

**Performance Specification for External Entrance Stainless Steel Portcullis Style Security Doors for 3 or more Storey Blocks of Flats**

**Door Frames to comply with Part M requirements:**

**Material** - All sections are to be stainless steel

**Frame sections** – Fabricated in 100 x 50 x 2 mm hollow box section (and 60 x 40 x 2mm hollow box section for mullions and transoms to form extra side panels when required).

**Timber Inserts** – All Frame sections to havehardwood timber inserts as fixing medium for all mechanical fixings.

**Finish –** All stainless steel surfaces to have 240 grit polished finish – grain to run lengthways where possible. Alternatively a 2part powder coated finish in any standard RAL colour is available.

**Welding -** On all joints of steel sections, concealed welding processes to be used leaving no visible welds.

**Frame Fixings** Steel Sleeve M10 Fixings– Frames to be fixed using frame fixings to be minimum length of 90mm with minimum of 8 fixings per jamb and maximum pitch of 300mm

**Glazing Rebate** – combination of 50 x 6mm, and 80 x 6mm 1.4301 / 304, welded internally at not less than 150 mm c/c.

**Glazing Beads** - 40 x 20 x 1.5mm hollow box section. Concealed welding processes to be used. Welded as a frame.

**Glazing Fixings** N8 Five lobe pin torx tamper proof stainless steel fixing– all visible fixings to glazing beads to be maximum pitch of 300mm

**Glazing material** - 6.4mm Laminated clear glass toughened

**Glazing Weatherproofing** – the glazing method is double sided security tape both sides of glazing for impact resistance and security. Fully waterproofed using a high grade silicone sealant (BS95/3199) internal bead to any externally exposed glazing.

**Frame Weatherproofing** - high grade silicone sealant (BS95/3199) to seal gap between frame and substrate.

**Door Entry Panel and Backbox Housing -** If Door entry equipment is to be contained within the side panel of a combination frame then a 1.5mm thick 240grit polished stainless steel grade 304 sheet is used as a front panel with suitable apertures for door entry equipment fixed into the glazing aperture as described above. The equipment is contained internally with a 'backbox' tray formed from 2mm stainless steel grade 304 polished 240grit fixed to a hardwood timber frame using glazing bead screws. The timber frame is fixed internally into the glazing aperture from the rear.

**Standard Door Width and Height–** Where possible we will always have a minimum clear opening of 900mm on a *main entrance* (allowing for magpost and door thickness when door is at 90° to frame). To achieve this, a door frame will need to be no less than 1134mm. A minimum clearance height of 1981mm (6'6'') is strived for where possible.

**Threshold –** Threshold plate formed from 90 x 4mm stainless steel and welded to door frame jambs with no visible welds. Fixed to floor substrate with HUS 7.5 x 80mm Screws with maximum pitch of 200mm. 1.5mm Stainless Steel Grade 304 Polished 240Grit Threshold cover riveted to threshold plate to form Part M compliant low profile threshold.

**Magpost –** A full height vertical 'mag-post' formed from 60x40x3mm stainless steel hollow box section and welded discretely to threshold plate, frame head and latching side door frame, to be used to house minimum 2no EM10000 electronic magnetic locks and push to exit button (PTE)..

**Maglocks–** Minimum2 no. mortice mag-locks per post. Dual voltage isolated with rubber packers from frame to reduce noise of slamming. 12v or 24v DC 12v DC current draw…600mA. 24v current draw…300mA. CE Approved. (EM 10000). One lock to be monitored the other un-monitored. 2No Armatures fixed to door.

**P.T.E Button** – Double pole architrave type push button fitted at DDA compliant height from floor, plate fitted centrally on the magpost. This is fixed with tamper proof button head stainless steel machine screws. On inward opening doors the PTE button may be placed on the latching jamb of the frame, a horizontal side transom of a frame or be affixed adjacent to the door on the wall depending on situation and client preference.

**Stop bead** – (For Inward Opening Doors) 40 mm x 20 mm x 1.5 mm hollow Stainless Steel box section welded with no visible welds to head and hinge side of door (Also latching side if magpost not used).

**Internally Opening Doors** – Flush mounted armatures and maglocks are used on inward opening doors or an alternative locking method such as an electric strike can be used in place of a magpost.

**Doors to comply with Part M requirements:**

**Material** - All sections are to be stainless steel

**Door stiles and rails** - Fabricated in 100x50x2mm hollow box section.

**Timber Inserts** - All Door sections to havehardwood timber inserts as fixing medium for all mechanical fixings.

**Finish -** All stainless steel surfaces to have 240 grit polished finish – grain to run lengthways where possible. Alternatively a 2part powder coated finish in any standard RAL colour is available.

**Welding -** On all joints of steel sections, concealed welding processes to be used leaving no visible welds.

**Door Panels Construction** - Outer Glazing rebate frame to be 50 x 6 mm stainless steel 1.4301 / 304S15, 240 grit finish. Vertical Mullion sections to be 30 x 50 x 1.5 mm, 240 grit finish box welded internally to door rails with external 70 x 6mm vertical trims to form glazing rebate welded internally at not less than 150mm c/c.

**Door Glazing beads** - 40 x 20 x 1.5mm hollow box section 1.4301/304, 240 grit polished finish. Concealed welding processes to be used and welded as a frame. Narrower box section (30mm x 20mm x 1.5) used when thicker than standard glazing panels are in use.

**Door Glazing Weatherproofing** - the glazing method uses a 2mm double sided security tape both sides of glazing for impact resistance and security. The unit is fully waterproofed using a high grade silicone (BS95/3199) internal bead to any externally exposed glazing.

**Door Panels material** - 6.4mm clear Laminated Glass toughened

**Door Glazing Fixings** - N8 Five lobe pin torx tamper proof stainless steel fixing– all visible fixings to glazing beads to be maximum pitch of 300mm

**Full height and width gap guard** - Gap guard protection fitted to leading edge of active door and top of both doors formed from stainless steel 3 mm thick 90 degree angle 45mm x 23mm return grade 1.4301 / 304, 240 grit polished finish welded with no visible welding. Rounded corners and foot catch protection to bottom of gap guard.

**Hinges** - High security full-length Warrior Doors designed 3mm stainless steel hinges wound around 8mm diameter pin with 50mm knuckles and with **finger protection** 30mm crank. For inward opening door applications a 15mm straight full-length hinge is used.

**Hinge Fixings** – N10 Torx Tamper Resistant Stainless Steel Woodscrew of minimum length 45mm.

**Armature housings -** Surface mounted, so as to form a minimum **finger protection** gap of 18 mm at a height between 550 and 1420 mm. Armatures fixed with pin torx security fixing housings fixed with minimum 6no stainless steel No.10 x 38mm length, isolated with rubber packers from frame to reduce noise.

**Door Closer type** – Built in transom closers to head of door to meet Part M

**Push Plate / Handles** – Pull handles / push plates to meet Part M

**Kick Plate** – 150mm x width of door (16swg stainless steel to both sides)