

## E 120 – Glazed Fire Door and Partition [SH85] – Powder coated

### **Application – Heavy Duty**

### **Material – Galvanized steel**

#### Standard & certification:

Hollow metal un-insulated glazed fire rated doors as per IS16947, for stability and integrity satisfying the test criteria IS/ISO 834-1 & IS/ISO 3008-1 for integrity (E120) for 120 minutes fire rating. Pressed galvanized steel conforming to IS 277 with the following specification.

#### Frame:

Door frame shall be single rebate profile of size 125 x 60 mm made out of 1.6 mm (16 gauge) minimum thick galvanized steel sheet. Frames shall be butted/mitered and with mandatory provision for smoke seal and field assembled with self-tabs. All transom profiles and side panels shall be from similar profile and should be as per the tested specimen. For partitions, the glass should be held in its place with the help of minimum 1.2 mm GI beading with 19 mm height, which can be clamped to the profile by 8 mm x 19 mm steel screws at every 250 mm c/c and a ceramic tape of the cross section of 4 mm x 13 mm as per the test evidence. All provision should be mortised, drilled and tapped for receiving appropriate hardware. Door frames shall be with back plate bracket and anchor fasteners for installation on a finished plastered masonry wall opening. Frames shall be grouted with fire rated puffer and the gaps shall be sealed with silicon sealant. The supports for mounting the system from top shall be included as per design requirement per design requirement.

#### Shutter:

Door leaf shall be 60 mm thick fully glazed Type SH85 with minimum 60 x 85 mm profile step box section for taking glass elements. Door leaf shall be manufactured from 1.2 mm (18 gauge) minimum thick galvanized steel sheet. For doors, the glass should be held in its place with the help of minimum 1.2 mm GI beading with 19 mm height, which can be clamped to the profile by 8 mm x 19 mm steel screws at every 250 mm c/c and a ceramic tape of the cross section of 4 mm x 13 mm as per the test evidence. The internal construction of the door should be rigid reinforcement pads for stability of profile. The infill material shall be honeycomb core and steel reinforcement. All doors shall be prepped with necessary reinforcement for hinges, locks, and door closers. For pair of doors integral astragals has to be provided on the meeting stile for both active and inactive leaf. Glazing kit to be provided along with steel beading for concealed site fixing without visible screws.

## Glass & Glazing:

Glass shall be minimum 8 mm thick toughened E120 for integrity only. Non-wired toughened glass with a light transmission of minimum 90% and a sound reduction of minimum 32dB. The glass should be compliant to class 1(C)1 category of Impact Resistance as per EN 12600.

## Finish:

All doors and frames shall be finished Pure Polyester Powder coated and shall have passed minimum 500 hours of salt spray test.