

## E 120 /EI 20 / EW120 – Glazed Fire Door and Partition [SH120] – Powder coated

### **Application – Heavy Duty**

**Material - Galvanized steel**

#### Standard & certification:

Hollow metal Insulated fire rated glazed doors as per IS16947 / IS 3614, for stability, integrity and insulation satisfying the test criteria of IS / ISO 834-1 or ISO 3009 for doors for E120 for 120 minutes fire rating and EI 30 for 30minutes insulation. Pressed galvanized steel confirming to IS 277 with the following specification.

#### Frame:

Door frames and partitions shall be single rebate frame profile of size 125 x 60 mm made out of 1.60 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 25 mm height, which can be clamped to the profile by 8 mm x 18 mm steel screws at every 250 mm c/c and a ceramic tape of the cross section of 5 mm x 20 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 filled with fire rated puff and the gaps shall be sealed with silicon sealant. The supports for mounting the system from top shall be included as per design requirement.

#### Shutter:

Door leaf shall be fully glazed Type SH120 with minimum 60 x 120 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 25 mm height, which can be clamped to the profile by 6 mm x 19 mm steel screws at every 250 mm c/c and a ceramic tape of the cross section of 3 mm x 15 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 mineral wool minimum density of 100 kg. Intumescent seal shall be provided on all around the door leaf of minimum size 15 x 2 mm thick. All doors shall be 60 mm 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 any visible screws.

## Glass & Glazing:

Glass shall be interlayered and fire rated for minimum of 120 minutes of integrity, partial insulation EI 30 (30minutes). Non-wired minimum 11 mm toughened inter layered glass with a light transmission of minimum 89% and a sound reduction of minimum 38 dB. The glass should be compliant to class 1(B)1 category of Impact Resistance as per EN 12600. Radiation shall not be more than Kw15 for the rating of entire duration of the door.

## Finish:

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