

## FD 120 – Temperature rise doors [Insulated doors] – Powder coated

### **Application – Heavy Duty**

**Material – Galvanized steel**

#### Standard & certification:

Hollow metal fire doors at all levels from ISO 9001-2015 certified Manufacturer. Fire door should be as per NFPA 80 and NFPA 252. All fire doors should be tested at UL for maximum rating of 120 minutes with 30minutes insulation and shall pass both UL10B and UL10C. Doors shall be made from pressed galvanized steel confirming to IS277 as per following specification.

#### Frame:

Door frame shall be single rebate grooved profile of size 125 x 55 mm made out of 1.6 mm (16 gauge) thick galvanized steel sheet. Frames shall be mitered and field assembled with self-tabs. Frames to have in build grooved sealing system and shall be site fitted with fire rated EPDM gasket as standard. All provision should be mortised, drilled and tapped for receiving appropriate ANSI / UL labeled hardware. Frames should be provided 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.

#### Shutter:

Door leaf shall be 46 mm thick fully flush double skin door with or without vision lite. Door leaf shall be manufactured from 1.2 mm (18 gauge) thick galvanized steel sheet. In addition, the door should have continuous vertical steel stiffeners of 0.8mm sheet at an interval of 150 mm spot welded and smoothened. The gap should be filled with suitable infill material for required rating. All doors should be factory prepped for receiving appropriate hardware and provided with necessary reinforcement for hinges, locks, and door closers as per ANSI Standard. For temperature rise doors the average temperature on the unexposed side should not exceed 232°C for hollow metal doors for the first 30 minutes. The edges shall be interlocked with a bending radius of 1.4 mm. For pair of doors integrated astragals has to be provided on the meeting stile for both active and inactive leaf. Vision lite wherever applicable should be provided as per manufacturers recommendation with a clip on arrangement.

#### Vision glass:

The glass should be 5 mm clear fire rated glass of relevant rating and not exceeding size of 114 sq. inches.

#### Finish:

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