

Specification for 120 minutes rated (FD 30 PI) Partially INSULATED Fully Glazed Metal fire door

SI No	Description
	<p>Providing of 120 min partially insulated (FD 120 PI) Fully glazed Metal Fire rated doors system for Integrity and Insulation Criteria as per IS: 3614:2021 (ammendment 2023) and BS: 476 part 22 tested at any Govt of India undertaking lab, with standard heating conditions as specified in IS 17518 (Part 1) to achieve E120 for 120 mins fire rating and EI 30 for 30 minutes insulation, Pressed galvanized steel conforming to IS 277.</p>
	<p>Door Frames: Door frames shall be single rebate frame profile of size 125 x 60 mm made out of 1.60mm (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 stool screws at every 250 m 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.</p>
	<p>Door Shutter: Door leaf shall be 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 25 mm height, which can be clamped to the profile by 6 mm x 19 mm steel screws at every 250 m 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 15x2mm 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.</p>
	<p>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(8)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.</p>