

Specification for 2 Hr Fire Rated (FD 120 ID) FULLY INSULATED Acoustic Door

SI No	Description
	<p>Providing of fully insulated (FD 120 ID) Acoustic Fire Door to effectively control noise in conference rooms, broadcasting studios, theatres and music practice rooms. for Integrity and Insulation Criteria as per the 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 the required integrity and stability (i.e. to restrict the heat radiation, temperature rise on the non fire side to the maximum of 140° C above the ambient temperature on the exposed surface of the shutter. The accoustic fire doors are tested with NCBN technology ("Non Combustible by Nature") duly tested for sound insulation as per ISO 10140-2 / ASTM E 90 for sound transmission loss evaluation of 42db in reverberation chamber at ARAI.</p>
	<p>Door Frame: Providing & Fixing Frames for Fire resistant door shutters Engineered treated hardwood / DVL Frame densified and pressure treated with fire retardant chemicals in vacuum impregnation vessel under 160 PSI pressure as per IS:401 and kiln seasoned to moisture below 15% as per IS:1141 of section 140 X 70 mm spray quoted with 2 coats of In tumescent paint of minimum 200 micron, with 1 row of non brush type intumescent strip (imported) of size 20mmx4mm concealed in the groove of the Frame for fire and smoke sealing, along with acoustic seal, etc. complete as per direction of Engineer in Charge</p>
	<p>Shutter: Supplying & Fixing of 75mm thick asbestos free, - Integrity and (Full) Insulation composite Acoustic Door Shutter complying with with fire performance - FD 120 ID as per IS:3614:2021 (ammendment 2023), Deurcore comprising of 2x12mm Calcium Silicate boards over Chemically treated (with Fire retardant chemicals in vaccum pressure impregnation vessels under 160 psi pressure as per IS:401 and kiln seasoned to moisture below 15% as per IS:1141) internal timber (Engineered treated hardwood / DVL, densified to 810 kg/cum) frame work of 100x36 mm with 36mm thick infill of ceramic fiber (density 128 Kg/cum), vermaculite mix faced with 6mm Fire retardant High Density fibre ply, internally lipped with hardwood beading and pasted in Hydraulic Press under 25 MPa, spray quoted with 2 coats of in-tumescent paint of minimum 200 micron, and with single row of non brush type intumescent strip of size 10mmx4mm affixed on periphery for fire and smoke sealing in the slit on all edges of shutter except bottom and placement of 3 mm thick rubber membrane, at the inside face, sandwiched between calcium silicate board & high density fire retardant ply, without any external lipping in shutters, etc complete.</p>

Specification for Composite Acoustic Door

SI No	Description
	Providing of Acoustic Door to effectively control noise in conference rooms, broadcasting studios, theatres and music practice rooms duly tested for sound insulation as per ISO 10140-2 / ASTM E 90 for sound transmission loss evaluation of 42db in reverberation chamber at ARAI.
	<p>Door Frame: Providing & Fixing Frames for Acoustic door shutters with double rabbet of 68mm Engineered treated hardwood / DVL Frame densified and pressure treated with chemicals in vacuum impregnation vessel under 160 PSI pressure as per IS:401 and kiln seasoned to moisture below 15% as per IS:1141 of section 120 X 70 mm spray coated with 2 coats of Intumescent paint of minimum 60 micron, with 1 row of Hafele Acoustic seals concealed in the groove of the Frame for noise control, etc. complete as per direction of Engineer in Charge</p>
	<p>Shutter: Providing & Fixing of 65mm thick Acoustic Door Shutters with wooden structure Deurcore comprising of Chemical treated internal timber with anti termite chemicals in pressure impregnation vessels under 160 PSI pressure as per IS:401 and kiln seasoned to moisture below 15% as per IS:1141 frame work of 100x 48 mm with 48 mm thick infill of ceramic vermiculite mix of density 54Kgs/CMT, 3mm sheet rubber interlayer sheet on one side for acoustic property, faced with 6mm High Density Waterproof Ply conforming to IS Code 2201, internally lipped with hardwood beading, and pasted in Hydraulic Press under 50 tonnes pressure, spray coated with 2 coats of PU paint of minimum 60 micron of color of engineer choice (any Veneer or Lamination will cost extra), without any external lipping.</p>