

ACOUSTICS DOORS

Acoustic wooden doors are extremely high performance sound reducing door sets. These high quality door sets are available in a wide range of finishes .They are used wherever high sound reduction performance is required between noise sensitive areas.

Leaf of acoustic wooden door is made up of an acoustic sandwich panel core, hardwood or marine plywood structure with rubber stripping in the recesses and on the bottom, surfaced on both sides with 2.5mm thick high-pressure laminate in desired veneer over MDF board. The core of the door is made up of a sandwich panel of different materials in order to achieve good sound refraction and therefore good acoustic performance.

PROPERTIES

Acoustic door sets are high performance constructions and are available in two standard acoustic ratings :

- » Doors are supplied complete with their own mounting frames
- » Low Cost – High Performance
- » STC Ratings Up To 56
- » Custom Acoustic Door to Any Size Specification
- » Adjustable Soundproof
- » Protects from Heat, Smoke & Flame.
- » Non-metallic, Asbestos free, Non-Hazardous and Eco-Friendly.
- » Medium in weight-Neither too light nor too heavy.
- » Highest screw holding capacity among all kinds of Fire Doors.
- » Easy to install, handle, repair and replace if necessary.
- » Excellent sound insulation and acoustic properties.
- » Original imported fire rated glasses, heat activated intumescent seals, non-combustible boards and other components.
- » All wood used inside is 160 PSI pressure treated with Fire Retardant and anti-termite chemicals.
- » Complete service from concept, designing, manufacturing & installation.
- » Unique MS Rabbet for Double leaf doors.
- » Spray painted for excellent finish.

TECHNICAL SPECIFICATIONS

- 45/55 mm thick asbestos free composite fire; flame, smoke and heat guard for 60/120 minutes.
- Conforming to BS476 Part 22 and IS 3614 Part II as per prototype tested at National Test House (Govt of India) and CBRI, Roorkee.
- Two 6/8 mm non combustile boards sandwiching 25/32 mm thick insulation fire resistant filler, faced with 4 mm fire retardant high density fibre board.
- Internal lipping treated with fire retardant chemical with heat activated, brush-type intumescent fire seal strips of size 10x4 mm for smoke sealing mounted on all sides of the shutter except bottom.
- Mounted on frames with 4 Nos. 100mm x75mmx 3mm heavy duty hinges.
- Fire rated clear I wired vision glass of sizes 200 mm x 300 mm or 200 mm x 800 mm as per requirement prefabricated inside the shutter under 50 tonnes pressure and beaded with MS Channel.

ACOUSTIC FIRE RATED DOORS

Pro-Acoustics fire resistant doors that prevent the spreading of smoke or flames to other areas. These doors are very strong and robust. These acoustic fire resistant doors are manufactured according to the specification of the client based on our assessment of the location of installation. The doors are easy to install and have a good finish.

- From 20 - 42 dB sound proof.
- Fire rating of 30min /60min /120min available.
- Any top surface finish like veneer, laminate, texture can be made.
- Acoustic doors without fire rating also available.

AREAS OF USE

Acoustic fire doors have a high usage and most commercial areas should be using them. The general areas of use for fire doors are kitchens, machine and plant rooms, workshops, storerooms, laboratories and service ducts. Other areas where they should be used are as doors to staircases and corridor partition doors in large residential and commercial buildings. In case of a fire the fire door will prevent the flames and smoke from spreading through the exit doors, thus providing a good escape channel.



LEAD LINED FIRE RATED DOORS

Lead Lined Fire Rated Doors are supplied as a complete assembly with lead lined frame and architraves and the door leaf has an offset lead barrier to ensure that protection extends across the latch area.

Lead Lined Fire Rated Doors can incorporate vision panels within limitations using glass to the same lead equivalence and within dimensions specified in any applicable fire regulations. All glass is held in place with precision cut hardwood beads. Options include sand blasted, toughened, acoustic and double glazed sealed units. Privacy panels such as Vistamatic are available with standard sizes of 400mm square and 800mm x 250mm.

- Radiation proof for MRI, CT Scan & OT.
- Must use for any high radiation environment.
- Available with any lead thickness between 2mm to 3mm.
- Fire rating available from 60min to 120min.



AREAS OF USE

For hospitals, doctors, laboratories, dental practices, universities and vets. Manufactured in our workshops by experienced craftsmen to ensure quality.

CLEAN ROOM DOORS

Clean Room Doors Crystal Cleanroom equipment within the Cleanroom for Biotech Pharmaceuticals, Microelectronics, Laboratory, Semi conductor units and Hospitals. The equipments are designed with durability, ease of use, compactness and aesthetics in focus. Pro-Acoustics product standardization ensures the deliveries are faster, and also enables our clients, easy access to the spares of each component. Our design engineers have also worked to ensure these equipments integrate easily with our cleanroom



panels. Various designs and patterns which adorn the interiors of the place. PU coated with germicidal, fungicidal paint. Spray painted in pharma blue I green for highest quality clean room applications. Super toughened glass Fitted with brush seals or imported drop seals as per client requirements.

AREAS OF USE

- Pass Box
- Airflow Unit
- Bio-Safety Cabinet
- Modular Wall Partitions
- Modular Ceiling Partitions

ACCESSORIES

FIRE RATED HARDWARE



Door Closer



Hinges



Panic Bar



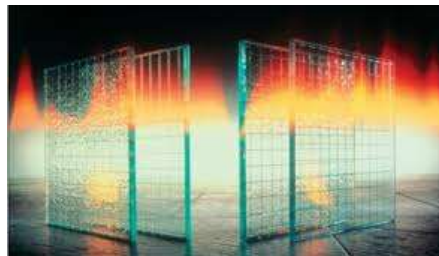
Floor Spring

All kinds of fire rated hardware and accessories like panic bars, floor spring, drop seals etc.

FIRE RATED VISION GLASS



Clear Vision Glass



Wired Vision Glass

FIRE RATED INTUMESCENT STRIPS/SEALS



- Certified under BS-476 Part 22 & 31.1
- Smoke Seals to EN 1634-3
- Brush type seals available for both fire, dust and smoke sealing (both hot and cold).
- All seals are supplied with self-adhesive backing tape.

FIRE RETARDANT PAINT

A passive fire protection mechanism when applied to partitions, walls, cables, doors, etc. On heating it puffs up to produce a tough insulating foam over the surface thereby protecting the materials. It is termed as Intumescent coating.

FLAME RETARDING PROCESS:

Above a certain temperature, chemical reactions occur within the Intumescent coating causing it to expand many times its original thickness to provide an insulating foam-like coating or 'char' to protect the substrate. It does not release any kind of intoxicating fumes or hazardous gases in burning.

The Following Process Occurs:

- Initial softening of the polymeric binder (which makes up the paint).
- Release of an organic acid, due to reaction at high temperature.
- Carbonization of the binder.
- Expansion (the coating is puffed up) of the coating through release of gas.
- Strengthening of the expanded coating through a cross-linking reaction.
- It's permanent binder keeps the retardant properties intact for long span of time.

During test the flame on the specimens self extinguished when flame source was removed. No heat penetration was noted in the coated specimens. Wood was found unaffected beneath, for a given duration.

NOTE: All specifications are subject to change due to continuous improvements