

The Standard

of Silence







ABOVE: SIAC factory in Kuala Lumpur, Malaysia BELOW L: Fire-tested door at PSB for up to 4 hours BELOW R: Acoustic Door Test

Profile & History

Established in 1990, SIAC has grown to be one of the leading acoustic organizations in Asia with subsidiaries in Malaysia and Indonesia.

Since the company's inception, SIAC has successfully completed thousands of projects both locally and abroad. This has earned the company its reputation for being a niche player in providing a regional unrivalled service in noise and vibration solutions. Other attributes include the company's comprehensive strategies in solving all types of noise and vibration problems, ranging from simple to complex cases. The personalised service from its team of qualified and experienced engineers also ensure the company's consistency in providing cost effective solutions to its customers at all times. As a result, SIAC has acquired many satisfied clients over the years.

SIAC is certified with ISO 9001, ISO 14001 and OHSAS 18001 for the provision of General Building and Noise Control Engineering. We also conform to the requirements of bizSAFE Star certification by Workplace Safety and Health Council. The Company is ever ready to meet and comply with the anticipated requirements for the future.

Part of our company's long-term objective is to develop new and better products, as well as to provide efficient services and solutions. We will further invest in training, and establish new standards that will advocate sustainable development.

Acoustic Doors

Our doors are tested in certified laboratories to ensure they meet both the fire and acoustics performance.

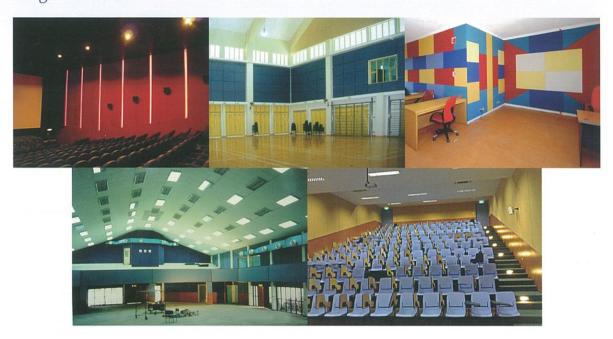


Customized Finished Acoustic Door (STC50)

-))) HIGH-PERFORMANCE ACOUSTIC METAL DOORS are tested in accredited laboratories to attain international standard (ASTM and ISO) and certification up to STC and/or Rw 55, whichever is higher. Our doors can be fire-rated up to four hours for integrity and two hours for insulation in accordance with SS332 and BS 476 Part 22.
- 1))) OVERSIZED OR HUGE ACOUSTIC DOORS AND SLIDING DOORS are also available. These are tailor-made to match client specifications.
-))) COMPOSITE TIMBER DOORS with timber finishing are tested up to STC 44 and can be fire-rated up to one hour in accordance with SS332.
-))) RADIATION SHIELDED DOOR is lined with lead loaded vinyl to protect invasive radioactive rays.
-))) AIR-TIGHT DOORS used in hospitals, clean rooms etc. Air infiltration and exfiltration tests to ensure there are no air leakages for doors assemblies.

Sound Absorption System

May it be fabric, wood, or metal, our sound absorption system range has it all.



- **)))** ECHOMASTER SOUND ABSORPTION FABRIC SYSTEM is manufactured under stringent factory environment ensuring consistency in quality. It reduces distracting echoes and provides a softer and more pleasant ambience.
- **SNAP-TEX FABRIC SOUND ABSORPTION SYSTEM** is a practical system for walls and ceilings that integrate virtually unlimited fabric selections with economical acoustic treatment as well as consistent professional results.
- **NOISETONE SLAT ABUSED RESISTANT SOUND ABSORPTION SYSTEM.** Visually attractive and with good sound absorption properties to meet the most demanding requirements of architects and building professionals.
- **NOISETONE PERFORATED SOUND ABSORPTION SYSTEM** is acoustically engineered to reduce noise build-up and control distracting echoes.

^{*} All **Sound Absorption Systems** are tested in accordance to ASTM C423 and are rated with NRC 0.75 or above on "A" mounting.



Room Acoustics and more...



))) ACOUSTIC ALUMINUM CEILINGS. The perforated aluminum ceiling system can either be a "clip-in" or "lay-on". Lined with non-woven SOUNDTEX Membrane, the system provides effective noise absorption that is suitable for all buildings.

))) SEAMLESS CEILING.

Elegantly finished, the sound absorption ceiling plays a part in controlling the reverberation time. Flexible in use, the seamless ceiling system can also be installed in curved forms and circular segments.

- **))) RESILIENT CEILING** provides structure isolation between floors. The resilient hangers isolate the vibration and improve sound transmission loss from the upper floor.
- **CEILING BAFFLES** reduce reflected noise and provide acoustical conditioning for industrial and commercial facilities. Panels can also be attached to walls or suspended from ceilings.
- **SPRAY-ON ACOUSTIC CELLULOSE SPRAY.** When applied, the spray-on system is able to reduce the built-up noise. The monolithic spray-on insulation can reduce high levels of heat loss/gain found in buildings.
- **)))** REFLECTIVE AND DIFFUSE CEILING SYSTEM. Commonly used in concert halls, auditoriums, drama and rehearsal studios, etc. Specially engineered to reflect and diffuse the sound source. The ceiling's architectural aesthetics coupled with the excellent sound system further enhance the ambience of a performance.
- **OPERABLE WALL OR MOVABLE WALL SYSTEM.** Superior acoustic performance combined with reliable ease of operation, provides privacy and maximum utilization of space.
- **Proof of the Street Name of the**
-))) ACOUSTIC FLOATING/RAISED FLOOR.

The acoustic raised floor provides solutions for both vibration and impact attenuation. Available systems are the Lift Slab (jack-up) and Rail Type System.



Custom-Engineered Acoustic Structures

These laboratory certified and tested modular panels are custom-made to meet users' requirements. They range from audiometric booths, music practice rooms, audio and visual recording studios, equipment and machinery enclosures, etc.

- **)))** ACOUSTIC ENCLOSURES. The modular components are flexible in design. They can be assembled to create structures of virtually any size and shape. Relocation and change in sizes will not affect its acoustic performance. Predictable and guaranteed acoustic performance allows the acoustic characteristics of a complete structure to be determined at the design stage.
- **))) MEDICAL AND LIFE SCIENCES ROOMS** for audiological examination and Psycho Acoustic Research rooms/booths.
- **)))** ANECHOIC AND REVERBERATION CHAMBERS. Designed and fabricated to ISO standards, these modular chambers can be dismounted and relocated without affecting its primary standards and requirements.
- **)))** ACOUSTIC LOUVERS. Rugged high performance aerodynamic acoustic louvers with tested acoustic and pressure drop performances. Available in galvanized steel, aluminum or stainless steel. Used in enclosures, screens, equipment rooms, noise barriers, cooling towers etc.
-))) ACOUSTIC BARRIERS. A properly designed acoustic barrier can reduce noise up to 10 dB. The noise barrier is both absorptive and with good transmission loss properties.
- **))) DUCT AND FAN SILENCERS AND ATTENUATORS.** Custom-engineered, low noise, energy efficient, proven and certified performance silencers and attenuators for all industries. Clean-Flow Silencers are fibre free for use in clean rooms and surgical theaters.
- **)))** BARIUM LOADED VINYL ACOUSTIC MAT. Suitable for use to reduce the transmission of noise through floor, cross talk between rooms, as acoustic barriers, by lagging high-velocity water pipes, ducts, fans, and etc. to eliminate break out noise.
- **))) VIBRATION CONTROL.** The Company offers a wide range of architectural isolation products that can control the transmission of noise and vibration throughout the building structure. Products include Spring Isolators, Resilience Hangers, Elastomeric Mounts, Jack-up Floor System, Building Bearings, Sway Braces, etc.
- **SEALING SYSTEM FOR DOORS AND WINDOWS.** Functionality design performance-based sealing system that works right for specific application to block out air, light, water, fire, smoke, and noise.
- **)))** INTUMESCENT FIRE AND SMOKE SEALS for doors and windows. Developed intumescent solution meeting international pressure code requirements for fire doors and windows.



Consultancy, Project Management & Other Engineering

As an engineering-based Company, we have also developed special services and products for specific needs.



Oil & Gas Enclosure

Performance Louvers

Psychoacoustic R&D Chamber

- **DIAMETER SERVICES.** Our expertise allows us to provide services on noise and vibration in a broad range of projects. It covers sound insulations, acoustic product design, architectural acoustics, audio-visual equipment, environmental noise and vibration control, noise mapping, expert witness services and planning advice as well as training, development, building and construction design, acoustic installations, testing and commissioning.
- **IDENTIFY and SET MANAGEMENT.** SIAC's ability to liaise and work in conjunction with major civil contractors through the design and construction phases and our accomplishment in the field of Total Project Management, as well as its technical capability in the design of complex and sophisticated engineering has won many contracts.
- **))) GENERAL BUILDING ENGINEERING.** Architectural interior and exterior claddings. Vitreous Enameled Panels, Aluminium Composite Panels, Honey Comb Composite Panels, glazing and other metal works for the building industry and more. Our team can assist and provide solutions to engineering problems.
- **))) PERFORMANCE/WEATHER LOUVERS.** High resistance to weather and easy to install with a full range of finishes. Proven performance and tested to the requirements contained in the 4th Edition of the HEVAC Technical Specification "Laboratory testing and rating of weather louvers when subjected to simulated rain". Available in single and double bank.
- **IDENTIFY and SHIELDING.** Lead Loaded Vinyl with required lead equivalence to shield off radiation. Installed in hospitals and R&D centers, lead loaded vinyls were tested by the Department of Scientific Service Institute of Science and Forensic Medicine for its lead equivalent.
- **))) ELECTROMAGNETIC SHIELDING.** Developed special copper-loaded paint that shield off electromagnetic radiation.
- **SUPERSONIC WIND TUNNEL.** The Company developed supersonic blow down type wind tunnel capable of operating in both Mach 1.5 and Mach 2 supersonic flow regimes by means of interchangeable nozzles for the purpose of learning, research, and development.

Typical Applications of our Products and Services:

Building and Construction

- Offices
- Hotels & Resorts
- Residential
- Commercial Buildings
- Entertainment and Recreation
- Studios
- Educational Institutions
- Sports Facilities
- Medical Institutions
- House of Worship
- Airports

Infrastructure

- Mass Rapid Transport
- Barriers
- Power Plants

Medical and Life Sciences

- Test Cells
- Audiology Screen Rooms
- Hospitals and Clinics
- Speech Therapy Rooms
- Counseling Rooms
- Observation Rooms

Broadcast & Recording Studios

- Radio and TV Broadcasting Studios
- Audio and Video Recording Studios
- Control Rooms
- Dubbing Booths
- Vocal Booths
- Editing Rooms
- Home Studios
- Rehearsal Halls
- Music Practice Rooms
- Production Studios

Entertainment/Recreation

- Home Theaters
- Cinemas
- Sports Halls
- Gymnasiums
- Indoor Swimming Pools
- Fitness Centers
- Pubs & Clubs
- Restaurants
- Function Halls
- Multi-purpose Halls

Performance Spaces

- Auditorium
- Concert Halls
- Theaters
- Convention Centers
- Multi-purpose Halls
- Opera Houses
- Ampitheaters
- Clubs

Industrial

- Power Plants
- Press Shops
- Machine Shops
- Engine Test Facilities
- Plasma Spray Booth
- Test Cells
- Hush Houses
- In-Plant Offices
- Marine Industries
- Oil & Gas Industries

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