



AKINCO represent Middle East's leading company in the field of noise control and sound proofing solutions covering all architectural, mechanical and industrial acoustics requirements.

Product Profile



AKINCO delivers optimised solutions for every acoustic demands

Welcome to **AKINCO**

AKINCO represent Middle East's leading company in the field of noise control and soundproofing solutions covering whole MENA region. AKINCO is technology driven business-to-business Company that has unique expertise in acoustics, vibration control and other industrial applications related to noise issues. At the heart of the organization are our people who focus on what is important to the customer. We develop the most effective design and our clients get benefit from our knowledge and experience. Once the product is ready for market, we supply just-in-time so that your production line never comes to a standstill.

Our areas of expertise ranges from recording studios to office, restaurants, buildings, industries and school. **AKINCO** range of products do the job and adds aesthetic values to any environment. We have solutions in all price ranges. **AKINCO** Team includes Acoustic Engineers, specialized in Building acoustics, Designers, and Senior Acousticians certified from Institute of Acoustics (IOA)-UK.

We also utilize our Research Department to develop customized products to satisfy your every need. **AKINCO** has the most advanced software tools available to accurately simulate the finalized acoustic result. **AKINCO** is committed to personal attention to your project. At **AKINCO**, we will go the extra step to solve your Space and Noise Control concerns.

Core Values



Superior Customer Service

Our passion is to improve sound and noise issues for our customers. Our aim is to use our technical expertise to ensure that each customer is presented with most effective solution for their concerns taking in to consideration the aesthetic preferences and budget constraints.

Region Servicing

Being a part of various industrial, residential and hospitality projects, AKINCO is delivering noise control solutions to **U.A.E, OMAN, SAUDI ARABIA, QATAR, KENYA, TANZANIA, AZERBAIJAN, Egypt, Africa** etc.



Materials Origin

Quality materials from **United Kingdom, Scandinavian, Turkey, Germany, Belgium, USA and Portugal**, AKINCO fulfill need of Acoustic market in MENA Region.

Acoustic Fabric Panels

Fabric wrapped acoustic panels are a great solution for sound absorption and noise control for different types of rooms. The panels are Class A fire rated, and there are different types depending on your requirements. They can even have custom artwork on the face. They are used on many different types of rooms; restaurants, studios, sound recording, broadcast, auditoriums, conference rooms, churches and many more.

AKINCO Fabric Wrapped Wall Panels answer your acoustical and aesthetic needs with their strong sound absorbing performance, durability and elegant appearance. These panels are used for sound reduction and reverberation control. Available in a wide variety of sizes, thickness and colors.



AKINCO Wall Panels allow you to create an effective sound control treatment that is distinctly appropriate for your environment. Standard color options are the Camira Cara or Guilford fabric FR701 Style 2100 series line. Designer selected fabric wrapped sound panels available upon request. The **AKINCO** Fabric Wrapped Wall Panel is Class A fire rated and offers various edge details as well as installation options.

The acoustics of a room are one of the most important, yet often overlooked, features of its environment. In the same way that light is a key consideration when designing a space - identifying where it should be maximized, minimized, and reflective surfaces avoided - sound should be given the same concern.

A room with good acoustics controls the noise levels so that the sound and clarity of the voice is not lost. Our System allow you to create an effective sound control treatment that is distinctly appropriate for your environment.

Applications

- Houses of Worship
- Teleconferencing and Video conferencing Rooms
- Multi-Purpose Rooms, Halls and Sports Halls
- Home Theaters and Auditoriums.
- Offices
- Museums & Recreational Areas
- Restaurants
- Schools
- Corridors/Lobbies
- Corporate Offices



Features

- Elegant aesthetic
- Variety of sizes and colors
- Reduce reverberation and echo
- Improves speech intelligibility.
- Reduce cost for wall painting
- Easy to fix & repair
- Easy to clean
- Unlimited design possibilities
- Compatible with industry standard lighting, speaker, and security services

Technical Details

Sizes	:	Choose from standard sizes or custom sizes upto 4'x8'
Thickness	:	1" & 2" (Standard) 1/2" up to 4" available (custom made)
Fire Rating	:	Class A
Density	:	96-120 Kg/m ³
Fabric Finish	:	Camira Cara or Other Finishes as required
Mounting options for walls	:	Impaling clips (Default), Mechanical Z-clips
NRC	:	1" (0.95) 2" (1.15)
Edge Detail	:	Options for Square, Bevel, Radius, or Miter Edge
Edge Construction	:	PVC, Wooden Metal or Chemically Hardened (Hardened edges PVC, wooden, Metal provide additional edge protection and a crisper edge appearance.)

PERFORMANCE

Performance and sound absorption(HZ)								
Thickness	125	250	500	1000	2000	4000	NRC	Class
25mm	0.33	0.92	0.93	0.99	1.09	1.04	0.95	A
50mm	0.39	1.04	1.09	1.09	1.13	1.16	1.15	A

Acoustic Stretch Fabric Wall System

The twin problems of reflection and reverberation may require that surfaces be acoustically treated and covered with fabric as a decorative finish.

Our Stretch Wall System is a virtually seamless acoustic panel system, configured and installed on site at your facility. Any number of available fabrics are stretched over acoustical substrate and tucked into the highimpact, extruded PVC track. This track allows us to cover large spans of space, create curves or shapes and easily installs around existing obstacles in the room.

A stretch wall system is the obvious choice for a clean looking, flexible system that will surely meet the design and acoustic goals for any project.



AKINCO high tension fabric mounting system revolutionizes the way fabric can be applied to walls as both a decorative and acoustical wall finish.

Acoustically treating walls has become as much as necessity for helping one listen to sound as quality speakers and systems are to transmitting sound.

Any number of available fabrics are stretched over acoustical substrate and tucked into the high-impact, extruded PVC track. This track allows us to cover large spans of space, create curves or shapes and easily installs around existing obstacles in the room. We achieve the required acoustic balance by using a variety of substrate and fabric combinations. Stretched fabric systems offer architects extreme design flexibility without sacrificing quality sound control.

Applications

- Houses of Worship,
- Corporate offices,
- Healthcare, Restaurants, Schools and Universities,
- Teleconferencing and Videoconferencing Rooms,
- Broadcast and Recording Studios,
- Multi-Purpose Rooms, Home Theaters and Auditoriums.
- Sports Halls, Cinemas and Recreational areas



Features

- Covers Any Size Wall, No Wall Preparation
- No Lath, No Staples, No Welting/Gimp
- Excellent Acoustical Control Finish
- Flexible Choice of Fabrics
- Removable & Replaceable Fabric
- System is Reusable, Completely customizable
- Seamless appearance, Maximum Flexibility
- Unlimited Design Possibilities
- Ability to Cover long spans of wall space
- Absorb, Block or Diffuse Sound
- Variable Acoustical Substrates
- Fabric is Interchangeable
- Reduce reverberation and echo
- Improves speech intelligibility
- All Walls and Ceiling systems are installed free of adhesives and sealants.

Technical Details

Sizes	:	Choose from standard sizes or custom sizes upto 1.6m x height
Thickness	:	1" & 2" (Standard) 1/2" up to 4" available (custom made)
Fire Rating	:	Class A
Density	:	48-120 Kg/m ³
Fabric Finish	:	Camira Cara or Other Finishes as required
NRC	:	1" (0.95) 2" (1.15)
Edge Detail	:	Options for Square, Bevel, Radius, or Miter Edge
Fixing	:	PVC profiles fixing on complete Gypsum or Plywood Substrate
Core	:	Fiber glass acoustic insulation Polyester acoustic insulation

PERFORMANCE

Performance and sound absorption(HZ)								
Thickness	125	250	500	1000	2000	4000	NRC	Class
25mm	0.33	0.92	0.93	0.99	1.09	1.04	0.95	A
50mm	0.39	1.04	1.09	1.09	1.13	1.16	1.15	A

Acoustic Foam Panels

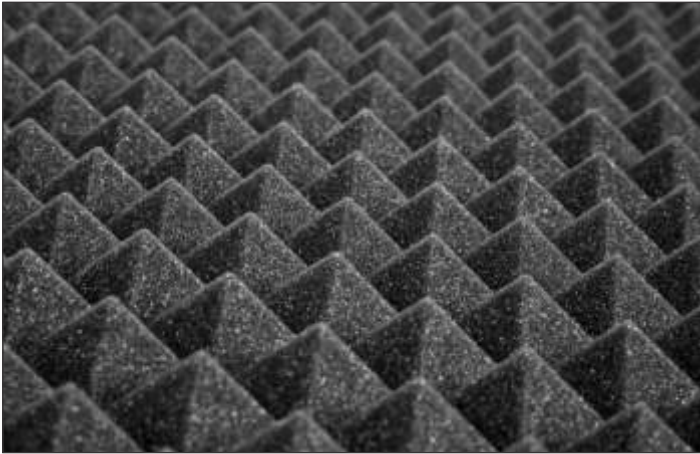
The most cost effective method for controlling unwanted sound wave reflections in a room is to apply thick sound foam panels around the room's perimeter. As the sound waves enter the foam, the pores accept the energy and begin to vibrate. This conducts low grade heat, which means the sound energy is converting to kinetic energy, removing the reflection echoes from the room. Foams come in many shapes and sizes, in both class B and class A rated fire codes. Sound Foam Panels for public venues, such as hospitals, schools and churches, should be cut from melamine foam, which is class A fire approved. Industrial, recording, studio and residential treatments will typically target class B rated foams, made from open cell polyurethane foam.



Acoustic foam, commonly referred to as soundabsorbing foam or soundproof foam, is available in many different colors, surface patterns, thickness and NRC (noise reduction coefficient) ratings. They can be in the form of wall panels, ceiling panels and ceiling clouds, ceiling tiles for glue on applications, or fitting in a T-grid.

Note that the thicker panels will perform better with low base frequencies like drums, machinery, barking dogs, etc...while thinner panels work just fine for human voice.

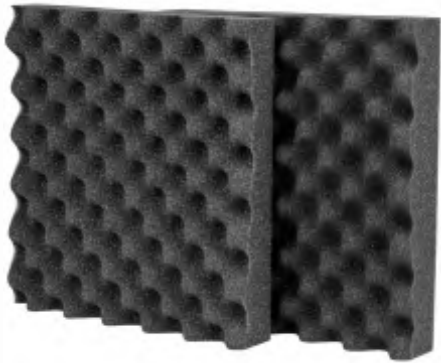
acoustic foam panels are a cost-effective solution with many of the same amazing soundproofing qualities found in our other foam products. These panels are thinner than others, using less material but still providing quality sound absorption.



- Open Cell Polyurethane Foam
- High density acoustic foam cell structure for maximum noise absorption.
- Attenuate sound pressure build-up in rooms.
- Helps to flutter echoes and reduce excess reflections and reverberation.
- Improves vocal clarity and acoustics of your room.
- Ideal for use in recording studios, home theatres and karaoke rooms etc.

Because our acoustic foam panels are constructed with flexible polyurethane foam, each panel has a dense, uniform cell structure. They are consistently compact, allowing for maximum energy absorption and resistance — from soundwaves to heat, airflow and chemicals.

The panels are effective energy absorbers, but they're also incredibly safe.



Features

- Recycled Materials
- Class A – Non-Flammable (as per ASTM E-84)
- Lightweight, Easy to Install (Self adhesive sticker backing)
- Impact Resistant, Durable
- Low Cost, Fiberglass Free
- No Formaldehyde – No VOC'S
- Hi-Performance Acoustical Absorption
- Noise reduction coefficient - 0.70



PERFORMANCE

Frequency (Hz)								
Freq-HZ	125	250	500	1000	2000	4000	5000	NRC
50mm Thickness	0.29	0.53	0.69	0.81	0.84	0.97	0.97	0.70

Polyester Acoustic Panels

AKINCO Polyester Acoustic Panels are sound absorbing panels developed with environmental friendliness in mind. The panels are made from 100% polyester (60% PET-recycled fiber and 40% PET-virgin fiber) and are 100% recyclable. These Panels offer many environmental advantages over the traditional fiberglass sound absorption panel.

These utilize our sustainably sourced, 100% recyclable, lightweight and durable high-performance PET material. Our PET panels comes in a wide range of colors and finishes, including 3D designs with customization, available to help you achieve the look you need while you build noise reduction into your spaces.

Due to its porous internal structure, polyester acoustic non-woven fiber panel has such a function. The polyester acoustic panel soundproofing board has a dense porous cavity structure that converts heat through the sheet as internal energy returns. Therefore, it has excellent sound absorbing properties.



Today, noise pollution can be seen everywhere, so our daily lives may not be quiet. But with the polyester fiberboard, you can enjoy a quiet living space. But it's so popular, not just because of the sound-absorbing effect, here we take a look at its advantages.

The recycled PET fibres are predominantly sourced from bottles and other recyclable PET consumables. Panels are made by compressing FR oil-free PET fibres which go through a spinning, punching and baking process. We have identified the perfect density that offers a great balance between acoustic performance and rigidity.

We manufacture panels in various colors and thicknesses of 9mm, 12mm & 25mm. This is a great product for sustainable specification!

Features

- Formaldehyde free, No binding agents
- No odor and dust free, Class A Fire Retardant
- No risk of skin irritation or respiratory problems
- 60% PET-recycled content, 100% recyclable
- Fire resistant material
- Best in class - acoustic performance



Cleaning & Maintenance

Use a tacky lint roller to remove all loose dirt and dust or vacuum lightly with clean brush attachment. If still dirty, use a mild detergent with warm water and scrub lightly. Be sure to test in a small unnoticeable area first to make sure there are no adverse reactions to your solution. Blot dry with a clean absorbent cloth.

Along with the many environmental advantages, the polyester Panels also offer several other advantages that standard fiberglass panels cannot match, such as:

- higher tackability and abuse resistant
- higher degree of resiliency for the board itself
- Panels can be put up without a fabric covering



Technical Details

- Sizes : 4' x 8' and Custom Sizes
- Thickness : 9mm/12mm/25mm
- Fire Rating : Class A per ASTM E84
- Density Change : 80kg/m³, 120kg/m³, 250kg/m³
- Color : White standard or as required from color chart
- Edge Detail : Square or bevel
- Mounting options : Impaling Pins and construction adhesive or mechanical fasteners as appropriate (by others)
- NRC : 1/2" (0.90) 1" (0.85)

PERFORMANCE

Performance and sound absorption(HZ)								
Thickness	125	250	500	1000	2000	4000	NRC	Class
12mm High Density	0.90	0.79	0.87	0.92	1.03	1.14	0.90	A
25mm Medium Density	0.88	0.64	0.82	0.91	0.91	1.02	0.85	B

Anti-Shock Padding on walls

High-quality gym, sports hall wall pads to provide heavy-duty protection.

Our pads bond a 2" (50mm) thick, 3.5 lb. (1.5kg) density, polyurethane foam to a 7/16" (11mm) thick wafer board and then fully wraps the unit. We use a vinylcoated polyester covering, enhanced by leather-like emboss pattern.

Ideal for basketball courts, gymnastics areas, wrestling rooms, rehabilitation centers, any surface area where padding is needed.

Pads available with a 1" (25mm) lip at top and bottom for easy installation over finished or unfinished walls.

Other mounting options including concealed z-clips or aluminum channel



We will custom make pads to fit corners, columns, beams, doors and stage fronts

Minimize the risk of injury in gymnasiums, athletic centers, and all-purpose rooms. It's easy to pad almost any obstruction, corner, I-Beam, post, or column with our custom-designed padding.

Our Wall Padding assures comfort and personal protection, made up of 30 to 50mm thick foam with a plywood/ cement board backing to fix to the wall, and covered in your choice of colors from our range of covering material.

It can be used in areas where there is the potential for injury and provide a safe environment for those with challenging behaviors particularly when combined with our floor matting.

Application

- Reverberant Noisy spaces where panels must resist damage from impacts, abrasion or moisture
- Gymnasiums
- Recreational Facilities
- Multi-Purpose Rooms
- Convention Centers



Features

- Superior abrasion and puncture resistance.
- It is manufactured with anti-fungal and anti-bacterial agents to keep the mat looking new after years of dependable service.
- The mat is easily cleaned with a mild soap disinfectant.
- Custom padding is available. Choose either 14-oz vinyl fabric or our extra heavy duty, 18-oz. per square yard, double coated polyester fabric.
- 18-oz vinyl fabric is available in different colors.

Technical Details

Composition:

weight approx. 610 g/m²
PVC-coating approx. 89 %
Polyester/Viscose-Jersey approx. 11 %
thickness 1.1 mm ± 0.1

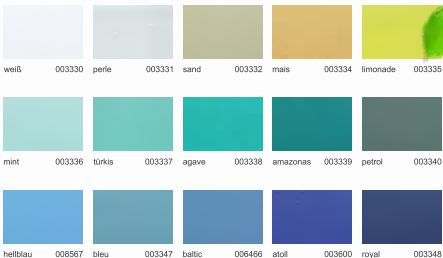
Characteristics:

- Leather-like
- Soft
- Elastic
- Scratch-proof
- High Durability
- Dirt Resistant

Functions:

Flame retardant acc. to EN 1021/ part 1 and 2
non-abrasive acc. Martindale
EN ISO 5470-2 > 100.000 cycles
UV-resistant acc. DIN EN
ISO 105-BO2 grade = 6
sea water resistance acc. DIN EN ISO 105 E02
resistance to repeat flexing
acc. DIN 53359 length/across
50,000 cycles
ÖKO TEX Standard 100

Consisting of a 20mm to 50mm thick polyethylene foam (free of chlorofluorocarbon) (fire-proof Retardant Class B-1) homogeneity and permanently elastic, on which 1 mm vinyl top material is fixed by the only means of heat lamination in the factory. The full service of top layer and elastic material are permanently connected. It is easy to clean and cannot be infested with mites and don't require anti-bacteria treatment.



Base Traps

Bass traps are acoustic energy absorbers which are designed to damp low frequency sound energy with the goal of attaining a flatter low frequency room response by reducing LF resonances in rooms. They are commonly used in recording studios, mastering rooms, home theatres and other rooms built to provide a critical listening environment. Like all acoustically absorptive devices, they function by turning sound energy into heat through friction.

Designed to provide effective low frequency absorption between 60–125 Hz, it delivers maximum effectiveness between 75–100 Hz.



The wedge shaped foam in this new version, has two functions, providing sufficient mid-high frequency absorption to control corner reflections without deadening the sound, while simultaneously acting as a diffuser. The new design allows neutral aspect that can be used in a greater variety of spaces by designers, looking for interior design compatibility.

Base Trap is highly recommended for smaller rooms with low frequency issues. The panel can be used in different corner positions and its modular structure allows further units to be added as required. Low frequencies tend to collect in corners and cause

problems, such as boosting the apparent amount of bass in the room (creating "nodes"). Therefore, corner "bass trapping" is critical for smoothing out the sound of any room. The Bass Traps from AKINCO, enables control of low frequency sounds, unlike any other product. Your low-end sound will be pure and true, not just big. Experience the difference.

- High density, open-celled acoustical foam
- Absorbs low frequencies to smooth out a room's overall bass response



Area of Application

- Listening Rooms, Home Theaters,
- Recording and Broadcast Studios,
- Post Production Studios,
- Office, Rehearsal Rooms,
- Conference and Teleconference Rooms,
- Public Spaces, Auditoriums, etc.

Installation

Place: Corner,
Fixing Type: Glued, fixed

Technical Details

Size	: 24" or 48" height
Material	: Open-cell PU-based foam
Intended Use	: Interior, sound absorption for corners
Finish	: Natural Grey/ Black
Pattern	: Flat or Convoluted
Service Temperature	: -40 deg. F to 350 deg. F
Exceptional low frequency response	
Mold-resistant	



- Yields a more balanced listening environment by controlling bass build up and cancellation through out a room
- Partially formulated out of soy components to reduce petroleum based chemical usage in an effort to curb dependence on fossil fuels

Acoustic Wooden Panels

AKINCO Wooden panels are powerful union between architectural and acoustical performance. These panels are typically mounted with a porous, sound absorbing core behind, such as fiberglass / polyester board with appropriate density for optimum performance and to meet the requirements of the design with wooden acoustic panels our mission is to combine discipline quality and precision to provide superior solutions with high performance sound absorption and diffusion qualities.

The structure of hole perforations / grooves in front and back is based on scientific calculations and acoustic principle. Wooden acoustic panels have high sound absorptions performances in low and mid frequencies.



The use of fire-resistant products indoors is extremely important for the health and safety of people indoors. Our company acts with this awareness and attaches importance to the production of fire resistant acoustic and decorative panels. We can provide fire resistance in all the raw materials we use and the applications made on them.

With a large range of perforation designs and finishes, we give you great creative scope when designing functional spaces to create both acoustic ceilings and acoustic walls.

Produced to your exact dimensions in our factory-applied finishes, our Perforated Timber Panels arrive on site ready to install, needing no on-site cutting or finishing.

Our ability to produce our acoustic panels in bespoke sizing, finishes and patterns gives you the ability to create the aesthetics and atmosphere that is so important to your interior's success.

Applications

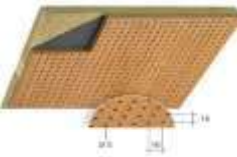
- Restaurant, Office, Hotel Lobby and Banquet Hall
- Church Acoustics, Classroom, Auditorium, Lecture Hall
- Home Theater, Recording Studio, Entertainment Facility
- Lobbies and Reception
- Multipurpose Halls
- Public and Governments offices



Features

- Configurations available for NRC = 0.65 to 0.95
- Offers reflection and reverberation control in a beautiful millwork finish.
- Available in sizes 128mmx2440mm, 600mmx1200mm, 1200mmx1200mm and 1200mmx2400mm & thicknesses 12mm, 15mm and 18mm.
- Choose from any commercially available wood veneers, laminates or paint colors.
- Decorative and easy to install with Metal profile and Clip system
- Can be integrated with several standard grids for ceiling mounting.
- Optional Panel cores are high recycled content, ULEF, Class A Applications Fire Rated and FSC certified (as required).

P E R F O R M A N C E

Type	Perforated	Grooved	Micro perforated	Curved
Reference				
Thickness	12, 15, 18mm			
Model	16/8, 32/6, 8/2	29/3, 28/4, 13/3, 14/2	5/1, 3/0.9	All Models
Sizes	1200 x 600mm, 600 x 600mm	128 x 2440, 197 x 2440	1200 x 600mm, 600 x 600mm	All Sizes
NRC	0.6 to 0.9	0.7 to 0.9	0.6 to 0.9	0.5 to 0.9
Finish	RAL Paint, Wood Veneer, Melamine Veneer, High Pressure Laminate			
Installation	Sliding Profile, Clip Fixed	Clip Grooved Fixed	Sliding Profile, Clip Fixed	Grooved Fixed

Whether working on the most complex of structures, or the finest of details, we guarantee exceptional quality, every time. We have a wide range of finishing options including natural veneer, laminate, melamine or RAL colors. We can also provide perforated panels with various shapes, curves and other custom features.

Wood Wool Acoustic Panels

AKINCO Acoustic Wood Wool is an environment-friendly, recyclable material made from wood wool, cement and water. The natural components together provide many functional characteristics. Acoustic Wood Wool stores heat from the ambient air and emits it when the air temperature falls. This contributes to lower energy costs, reduced environmental impact and a stable and comfortable climate indoors.

The open material structure reduces reflection of sound and makes AKINCO Acoustic Wood Wool a good sound absorber. The material dampens noise and contributes to restful acoustics in residential buildings, industrial premises and public spaces. AKINCO Wood Wool is fire resistant and is type-approved as



protective cladding with a class 1 coating. The strong surface can cope with vacuum cleaning, and use of the product in restaurants and other sensitive environments show that the boards do not emit dust or particles.

Our woodwool acoustic panel are used in most types of buildings. In terms of reaction to fire, AKINCO acoustic panels have been tested in accordance with BS 476 and are "Class O" as designated in the British Building Regulations and have a Class 1 Spread of Flame classification.

The surface structure of acoustic panels is determined by the width of the wood shavings (wood wool). Our woodwool panels are available in three different structures; ultrafine (1 mm), fine (2.0 mm) and coarse (3 mm).

Panels are available as untreated and completely natural panels, and as painted panels. The acoustic panels consist of wood wool mixed with either white or grey cement, from these mixtures we produce the two basic variants: natural wood and natural grey. Painted panels are available in any RAL/NCS colour code.

AKINCO acoustic panels can be installed directly onto wooden battens or in a suspended profile system. However, they are most often installed with underlying mineral wool in order to ensure the best sound absorption (up to $\alpha_w = 1.0$).



Features

- Eco-friendly natural product-NO VOC
- Outstanding acoustical properties
- Excellent thermal properties
- Durable and impact resistant
- Termite and vermin resistant
- Non-combustible and does not release fumes
- Non hazardous, Formaldehyde free
- Light weight and strong
- Easy mounting and demounting
- External and internal application.

Technical Details

Sizes	:	1200mm x 2400mm, 600mm x 1200mm
Fire Rating	:	B-S1, Do inflammable
NRC	:	0.8 to 1.0
Fixing	:	Demountable, Direct fix on wall, T24 fixing on ceiling.
Colors	:	Natural or RAL Color

Application

- Offices, Hotels, Shopping Malls, Airports
- Retails, Sports Hall, Auditoriums
- Food Outlets, Cinema
- Schools
- Hospitals
- Night Club/Entertainment Areas
- Multipurpose Halls

PERFORMANCE

Acoustic Performance								
Thickness	125	250	500	1000	2000	4000	NRC	Class
25mm (Thickness) with mineral wool backing	0.28	1.01	0.98	0.71	0.74	0.83	0.85	B

Acoustic Ceiling Baffles

AKINCO Ceiling Cloud/Baffles Mount Panels are the answer to your acoustical and aesthetic needs with their strong sound-absorbing performance, durability and elegant appearance. Once installed, these suspended ceiling clouds will absorb echo and reverberation, improving the room acoustics of the interior space. Available in a wide variety of sizes and colors, AKINCO cloud panels allow you to create an effective sound control treatment that is distinctly appropriate for your environment. These hanging baffles panels come in standard or custom sizes, up to 4' x 8' in 1" or 2" thicknesses.



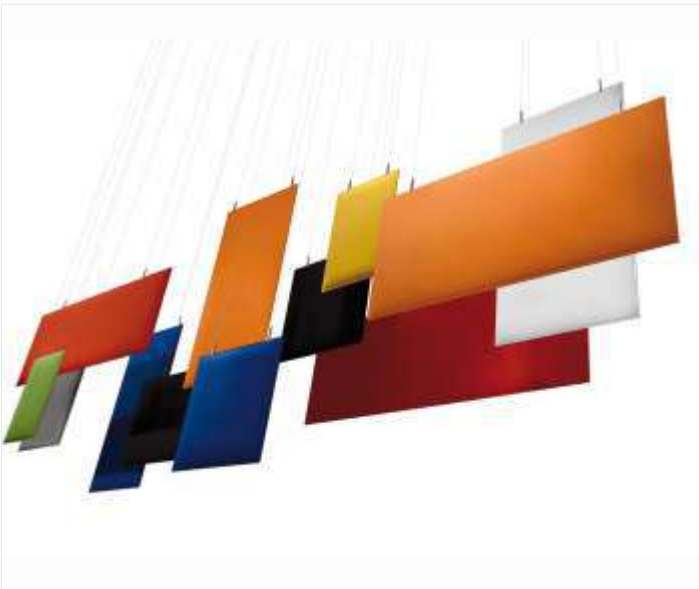
The use of free hanging units as acoustic baffles provide flexibility and a multitude of acoustic solutions to problems related to acoustic design. Where free hanging acoustic units are used to improve poor acoustics, solitary units give the benefit of diffraction, with a larger area of the absorbing acoustic baffle being exposed to the sound field. Both effects can be used to increase sound absorbing properties.

Free Hanging units increase the ability to localise sound resources in the vicinity of a workplace. This increases the sensation of control and create a less stress-induced environment.

In this digitized, amplified, surround sound world, traditional building methods fail to provide for acoustical control of sound. The twin problems of reflection and reverberation may require that surfaces be acoustically treated and covered with fabric as a decorative finish which can be done by hanging ceiling baffles in vertical or horizontal way as per aesthetic finishes required In various colors.

Applications

- Healthcare, Restaurants, Schools & Universities
- Teleconferencing and Video Conferencing Rooms
- Broadcast and Recording Studios
- Multiple purpose Halls, Home Theaters, Auditoriums
- House of Worship
- Corporate offices
- Corridors/Lobbies
- Open Plan offices
- Recreational areas/gyms



Features

- Allows more space on ceiling for services.
- Enables natural light to come through.
- Allows easy access to services located on ceiling.
- Greater area of absorbing material can be used, particularly for high ceilings.
- Can be easily installed on a T-section suspended ceiling grid or individually suspended.
- Can be used where concrete soffit needs to be exposed for thermal reasons.
- Can be of different colors to suit theme.
- Quickly demountable.
- Height can be easily adjusted.
- Colours can be used to create visually stunning effects.
- Fixing Vertical or horizontal per architect Requirement

Technical Details

Sizes	:	Choose from standard sizes or custom sizes up to 4'x8'
Thickness	:	1" & 2"
Finish	:	Camira Cara Fabric
Density	:	96kg/m3 to 120kg/m3
Edge Detail	:	Square, Bevel Wooden or Metal frame
Fire Rating	:	Class A
NRC	:	1" (0.95) 2" (1.15)
Fixing	:	Vertical and Horizontal



PERFORMANCE

Performance and sound absorption(HZ)								
Thickness	125	250	500	1000	2000	4000	NRC	Class
25mm	0.33	0.92	0.93	0.99	1.09	1.04	0.95	A
50mm	0.39	1.04	1.09	1.09	1.13	1.16	1.15	A

Acoustic Ceiling Tiles

In AKINCO we have a wide range of tiles in galvanized sheet steel and aluminum with a powder coated paint finish.

Metal Ceiling Tiles

The tiles can be installed in several different ways: lay in, clip in, hook-on and bandraster hook-on. The necessary suspension sections and components are all available for example hangers, main runner sections, cross sections, wall trims and wall springs etc.

Perforation Patterns: The geometry of are available with various different surface perforation patterns – from large holes to the very finest micro-perforations backed with black acoustic fleece. These facilitate the optimization of reverberation times to suit the acoustics and design requirements of areas.

The optimum acoustic feature of these steel tiles is the 40,000 tiny



holes per m² that provide the reduction of sound energy and a balanced relationship of sound absorption and sound reflection.

Material: Galvanized steel / Aluminium - 0.5-0.7mm

Modern architecture is dominated by hard, reflective constructions and components. Plain, smooth surfaces are increasingly replacing classic sound absorbing areas, often contributing to a noticeably longer reverberation time and leading to unsatisfactory room acoustics. Acoustic ceiling tiles solutions impress with their all-inclusive approach (absorption, reflection, sound attenuation) and make an important contribution to optimum acoustics. Adapted to the sound requirements of different spaces, they combine an attractive aesthetic with unlimited functionality.

Acoustic Spray on Insulation

AKINCO represents Monoglass Incorporated in MENA Region for their products Monoglass acoustic & thermal spray insulation . Monoglass® Spray-On is an engineered product specifically designed as a thermal and acoustic insulation material for a wide variety of applications within the construction industry. Monoglass® is suitable for use in multi-tenancy residences, airports, theaters, auditoriums, churches, schools, swimming pools, hospitals and office buildings.

Monoglass® Spray-On is applied by trained applicators using approved equipment, ensuring quality control and continuity. Since its development in 1979, Monoglass® Spray-On has become one of the leading spray-applied glass fiber insulations world wide, providing superior thermal/acoustic performance than previously available..



Safe

Monoglass Spray-On, made from a minimum of 25% recycled glass, is non-toxic, odorless, and naturally bright white for higher light-reflectance. Monoglass is a noncombustible product, eliminating the concerns and disadvantages of combustible cellular plastic, cellulose or foam insulations. Monoglass Spray-On complies with the California Dept. of Public Health CDHP Standard Method 1.1 requirement for low emitting materials for use in schools and offices.

Monoglass® Spray-On allows for flexibility and freedom of design, providing options previously unavailable to the architect. Monoglass bonds easily to concrete, wood,

steel, gypsum, rigid fiberglass and plastic insulations. The pneumatic application creates a monolithic, carpet-like texture which can be adapted to meet various surface finish requirements.

Monoglass Spray-On combines inorganic glass fiber with low VOC polymer adhesives for a one-pass spray application to any surface configuration. The monolithic application becomes part of the building structure, producing a more effective system which resists heat passage, air leakage and moisture migration. Proven performance, longevity and competitive pricing makes Monoglass the choice of architects, builders and building owners.



Acoustical Performance

Monoglass® Spray-On provides high Noise Reduction Coefficients to control airborne noise within our living and working environments. Monoglass' high Sound Transmission Coefficient values control sound levels between spaces in multitenancy buildings, hotels, offices, condominiums and townhouses.

Thermal Properties

Monoglass® Spray-on has one of the highest R-Values per inch available in a spray applied fiber product. At R-4.0/RSI 0.7 per inch, installations of R-20/RSI 3.5 (overhead) are achieved with only 5 inches of product, with no mechanical support required. Wall applications can be applied to R-28/RSI 4.9 quickly and easily without meshing.

Technical Details

Thermal Resistance	RSI = 28.12 Km2/Wm R = 4.00 ft2 hroF/BTU inch	
Thermal Conductance	KSI = 0.036 W/(moC) R = BTU inch/ft2hroF	
Noise Reduction Coefficient	NRC 0.55 @ 0.7"/17mm NRC 0.80 @ 1.4"/35mm	NRC 0.75 @ 1"/25mm NRC 0.95@ 2"/50mm
Non-Combustibility	Non-Combustible	
Surface Burning Characteristics	Flame Spread = 0 Smoke Developed = 0	
Smolder Resistance	Mass Loss 0.37%	
Air Erosion	No Weight Loss	
Wind Tunnel Test	No Damage or Loss of Material	
Fungal Bacterial Resistance	No Growth of Fungi or Bacteria	



Competitive

Monoglass® Spray-On is installed to a lower density than competitive products thereby reducing installed weight. As a result, high thermal values (R-20/R.S.I. 3.5 on horizontal surfaces, R-28/R.S.I. 4.9 on vertical surfaces) with NRC - 0.95 can be achieved without expensive mechanical support or multi-layer applications. Construction time and costs are reduced with economical, clean and fast installation.

Acoustic Plaster

Akinco acoustic plaster is a market leader in spray-applied acoustic plaster compound which is used for various ceiling and walls surfaces for best in class absorptions.

The Akinco Plaster System is designed to optimize the acoustics of interior spaces. From large theatre halls, offices, classrooms, hotel receptions and private residences the use of hard sound reflective surfaces such as glass, wood and stone can cause excessive sound reverberation which leads to unpleasant noise levels. The correct control of sound can create a calmer and more pleasant environment. The Akinco Plaster System offers a clean flat and smooth mineral surface that can be applied seamlessly over large expanses to both flat and curved surfaces and offers excellent sound absorption.

Akinco acoustic system provides architects, building owners and acoustics experts with viable solutions to match their specific sound absorption requirements for any locations where there is reverberation. These solutions take the form of smooth white surfaces that are homogeneous and jointless.



The basic components consist of our specially structured acoustic panels with their unique acoustic characteristics. They can be bonded to prepared surfaces – concrete or dry (mortarless) ceiling and wall structures. The acoustic coatings (basic+topcoat) are then applied mechanically or by hand to these acoustic panels. The result is always a homogeneous surface.

Acoustic plaster is required in environments where noise reverberation needs to be reduced, like commercial environments such as shopping centers and theatres; able to absorb sound energy, where as standard plaster will reflect it, this energy absorption significantly reduces reverberation creating clearer speech and music. We have installed many seamless plaster solutions internationally, in various types of environments such as universities, restaurants, office spaces, entrance halls, museums, libraries, dining areas as well as some very exclusive private residences.



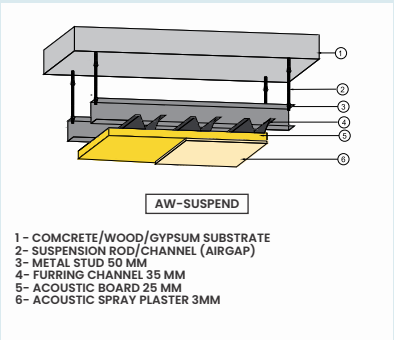
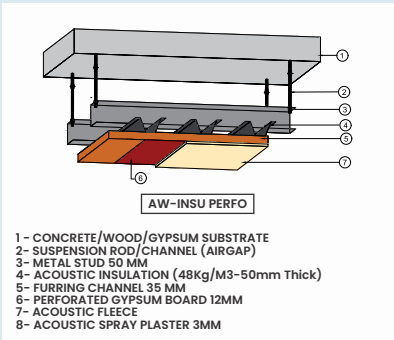
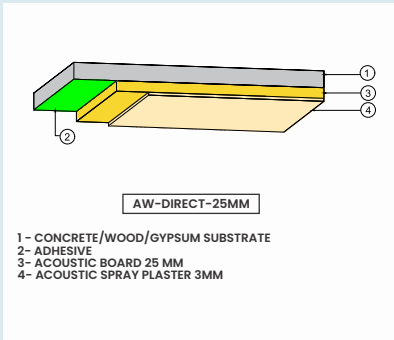
Features

- Improves acoustics and thus speech intelligibility.
- Is suitable for a wide variety of substrates, such as walls and ceilings in many conceivable forms.
- Increases productivity and ensures a pleasant working and living environment.
- Is developed for efficiency and can, therefore, quickly and effortlessly be applied.
- Saves up to 10% on energy costs



Application

- Theatres
- Opera Houses
- Reception areas
- Restaurants
- Corridors
- Museums
- Government
- Buildings
- Hotel Lobbies
- School Class Rooms
- Lecture Halls
- Domestic applications/offices.



PERFORMANCE

PRODUCT TYPE	125hz	250hz	500hz	1khz	2khz	4khz	AW	NRC
AW-DIRECT 25	0.39	0.55	0.87	0.90	0.81	0.73	0.75	0.80
AW-DIRECT 50	0.50	0.67	0.98	0.96	0.92	0.81	0.90	0.90
AW-SUSPEND	0.25	0.60	0.90	1.0	0.95	1.00	0.95	0.85
AW-PERFO	0.32	0.60	0.74	0.76	0.71	0.75	0.75	0.70
AW- INSU PERFO	0.45	0.79	0.83	0.85	0.88	0.90	0.85	0.85

Acoustic Partitions

AKINCO Partition Wall System is formed by fixing Gypsum board of single-layer or multi-layer on singlelayer or multilayer stud frame, which can provide the most concise and economic space dividing solution with acoustic properties.

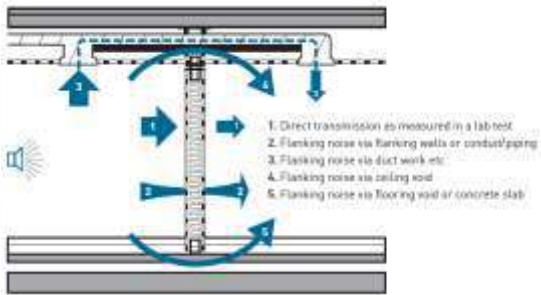
To complete an envelope, secondary walls must be introduced with the same consideration given to mass and air gap as covered in the floor discussion. This solution incorporates all 4 elements of sound proofing- viz decoupling, absorption, mass and damping. The configuration of the wall is determined to meet the client/project specific criteria using our noise prediction software and laboratory test reports



Features

- To meet different performance requirements by selecting different layers and Gypsum boards of various types.
- Dry construction, easy and convenient installation and requires low labor intensity, which effectively shortens the construction period. The range of drywall partitions is the result of decades of experience in developing, testing and supporting warranted systems that meet the needs of the modern building.

Quickly and simply constructed from high quality, components, our partitions are guaranteed to perform. With construction technology moving towards fast pace and light weight construction, drywall partition has been widely adopted across residential, commercial, industrial and warehouse buildings. Besides the lightweight construction, drywall partition is versatile in creating interior spaces while enabling high building performances in thermal, acoustic and fire properties. They cover all applications, from simple space division, through to high performance walls designed to meet the most demanding fire resistance, sound insulation, and impact and height requirements.



Safe & durable : AKINCO partition is fire rated and achieves high fire classification. Therefore it is able to meet building code requiring drywall insulation to be noncombustible; providing a fire safe environment for buildings and its occupants.

This optimized density material provides superior sag resistance and fit. It can be easily cut and trimmed for the best possible fit into the partition wall cavity, assuring there will be no gaps that may compromise the performance of the system. They cover all applications, from simple space division, through to high performance walls designed to meet the most demanding fire resistance, sound insulation, and impact and height requirements.

- Decoupled by insulation strip
- Sound protection RW, R = 40-63dB
- Fire rating up to 120 minutes
- Static wall heights upto 5 meters

Applications

- Private and social housing
- Apartments.
- Healthcare.
- Educational Facilities.
- Recreational areas.
- Industrial Properties.
- Offices
- Clubs/Bars/Restaurent
- Recording and broadcasting house



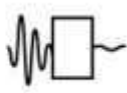
The best approach is resting these walls on the perimeter of the floating floor so the floor isolation system serves the walls as well. If this is not possible, the second choice is supporting the isolated wall on the structural slab with continuous isolation pads, and providing a caulked fiberglass seal between the floating floor.



Airbone



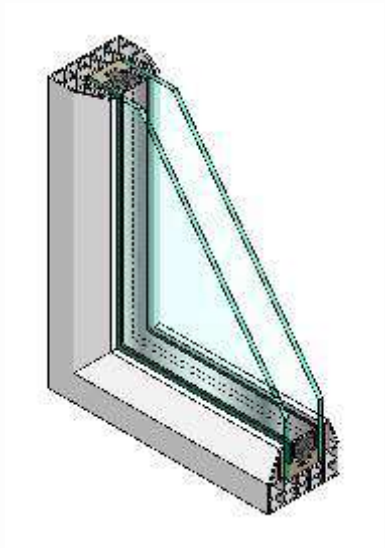
Impact



Vibration Dampening

Features

- A Truly Affordable High Performance Noise Control Window
- Performance Tested & Certified at an Affordable Price
- STC Ratings of 45 to 59 Custom Engineered & Manufactured To Any Size
- Anodized Aluminum Frames with Standard Frame Finishes Of Natural Aluminum & Bronze – Also Available In Other Specialty Finishes
- Fast & Easy Installation – No Need For A Glazing Contractor Or Special Tools
- Custom Soundproof Window Glass Available – Safety Glass, Mirror Pane, Tinted, Etc. (Note: Using Custom Acoustic Window Glass May Change The STC Value)



Application

- | | |
|--|---|
| <ul style="list-style-type: none">• Offices• Bedrooms• Auditoriums• Bars• Restaurants• Conference and board rooms• Open office areas• hotels• Medical facilities• Sports and entertainment venues• Casinos• Retail stores | <ul style="list-style-type: none">• Theaters• Schools• Audiophile rooms• Laboratories• Recording studios• Houses of worship• Manufacturing and industrial facilities• Gun ranges• Music practice and band rooms• Airports• Apartments• Condos and more |
|--|---|



Installation of acoustic glass can cut noise disturbance significantly, meaning that incessant noise of cars, trains or planes needn't echo through your house any more.

Acoustic Doors

AKINCO provides high performance acoustic doors. With an acoustics range from Rw35dB to Rw 52dB our single and double-leaf acoustic door sets are the most efficient, user friendly on the market.

The acoustic range of wooden and steel door sets has been developed using mineral wool cores to meet specific acoustic performance requirements. The range has been tested independently third party tested to ensure the performance characteristics of the door set. The doors consist of door leaves that contain an acoustic infill in the form of mineral rock wool, selected to provide high damping and minimum acoustic



coupling to ensure high transmission loss. The doors come in complete sets that include frames, latch, locking system, hinges and door closer where applicable along with acoustic seals and threshold. High quality powder coating finish is used to ensure best performance and aesthetic appearance.

We specialize in the design and manufacture of acoustic doors, with a reputation for providing custom steel door solutions for the most challenging projects.

Our products are manufactured to stringent quality standards in our factory in UAE. A skilled team of technically qualified supervisory work force complemented by modern machinery manufacture these products to the full satisfaction of our customers.

Our door sets can be made to your exact requirements; in terms of size, material (choice of timber, veneer, RAL color, Metal acoustic core), finish etc.

Floating Floors

Floor isolation systems are incorporated into building design to minimize floor impact noise and airborne sound transmissions. Additional designed floor slab is supported by resilient mounts installed on the structural main slab. The design of an effective isolation system is dependent on several factors including:

- Required noise criteria to achieve.
- Mass & Stiffness of the structural slab.
- Isolation mounts natural frequency and damping characteristics.
- Space or Air gap to be created.
- Design of the floated slab.
- Control of sound flanking paths.



Creating air gap between the main and floated floors while decoupling the two floors with the appropriate resilient mount effectively reduce noise transmission. Airborne and impact noise transmissions are greatly reduced between the room incorporating the floating floor system and other floors of the building. AKINCO floating floor systems offers the largest variety of isolation mounts with natural frequency as less than 10Hz to fit specific applications.

Suitable for both new build and refurbishment projects, these acoustic solutions are available in a range of combinations and system depths and offer extremely high standards of acoustic control.

The innovative cradle and batten systems also offer the ability to be levelled on site to eliminate variations in the structural floor surface and provide access for services.

The term "floating" simply refers to the fact the floor isn't fixed to the subfloor. This type of floor is kept in place by its weight alone and provides additional spring action. Floating floor over concrete is found in various gyms and dance studios but is suitable for any areas that require a comfortable underfoot.

Acoustic floating floors are perfect for insulating your property to prevent the transmission of unwanted sound.

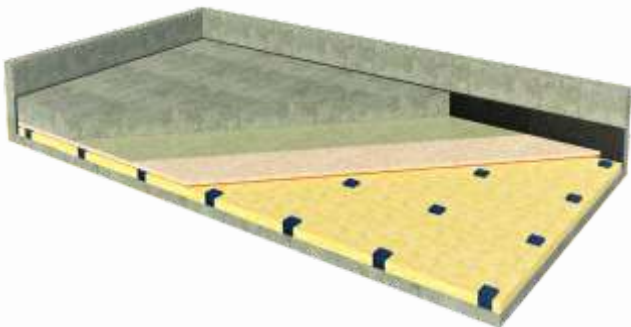
Application

- Performing arts facilities.
- Concert halls, Bowling alleys.
- Nightclub dance floors.
- Broadcasting and recording studios.
- Conference rooms, Gymnasiums.
- Gymnasiums, Home theaters.
- Hospital operating theaters
- Plant rooms, Roof top mechanical equipment
- Chiller and air handling units
- Pumps



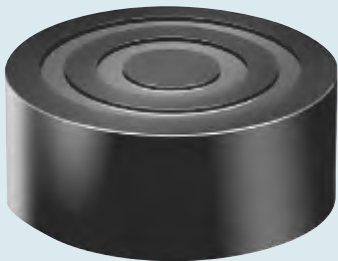
Features

- Greater load capacity at a lower cost
- Can be designed for any load range
- Easy to create 1", 2", 3", and 4" airspaces
- Fast, simple, inexpensive installation
- Factory installation and supervision available
- Natural Frequency constant over a wide load range
- Noise reduction from noisy equipment to below floors
- Creates box in box when used with acoustic walls & acoustic ceilings
- Installation at construction stage avoid expensive treatments at commissioning stage for end user



Acoustic floating floors are designed to offer a robust finish. They are renowned for their quick and economical installation, providing you with the opportunity to walk on them straight away.

When it comes to working with the acoustic floating floors, you can rest assured that they are easy, making it more convenient for you to lay them.

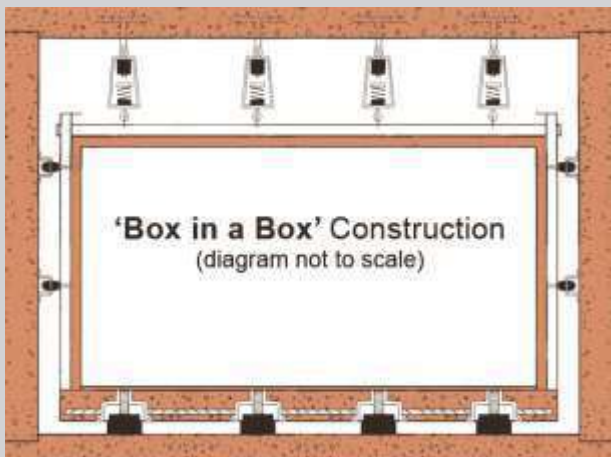


PERFORMANCE

Performance and sound absorption(HZ)										
Octave Frequency Band (HZ)	31	63	125	250	500	1000	2000	4000	8000	STC
Thickness of Floating slab (in.)	9	11	12	13	14	15	16	16	16	14
Transmission loss of 8" Concrete slab (96 lb/ft²)	34	36	37	41	45	49	53	57	61	49

Applications

- Night Club, Dance Bars, Sports Bars etc.
 - Cinema Rooms, Auditorium, Home Cinema
 - Recording Studios, TV/FM Stations etc.
 - Control rooms/Plant rooms
 - Noise sensitive areas/spaces
-
- A Combination of floating floors, floating acoustic walls and acoustic ceiling shall be accompanied by acoustic pocket doors to achieve the desired level of speech privacy .
 - Installation shall be done by professional acoustic installers to avoid the gaps and flanking paths.



Box-in-box is a construction technique that allows a space within a space to be insulated against unwanted extraneous noise and vibration. Such extraneous noise may be airborne (travelling through the air) or they may be structure-borne – travelling through the ground and building structure.

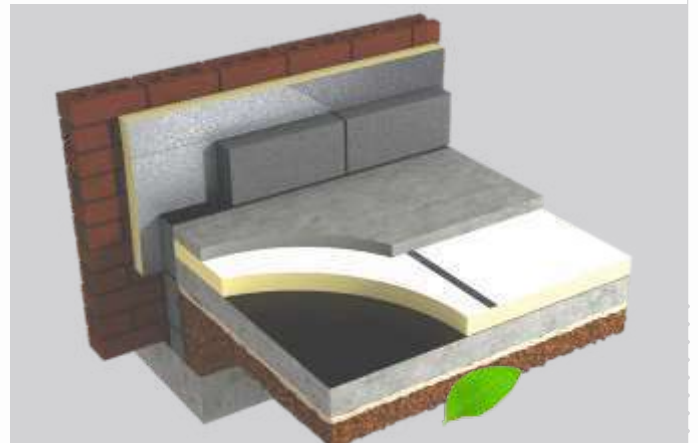
As the name suggests, the technique involves constructing a room within a room (which may be the building structure), so that the inner room is acoustically isolated from the outer. This will involve isolating the walls, floors and ceiling of the inner box and using resilient mountings to achieve this.



The air gap serves as the isolator. The purpose of the vibration mounting is to provide structural support without voiding the air gap. Since each mount is a potential transmission path, it is logical that the fewer mounts or support points, the better the chance of protecting and not bypassing the air gap.

Acoustic Underlay

Our impact resistant acoustic underlays are high quality products suitable for every floor covering. They provide high impact sound insulation values, are very durable and low in emissions. Acoustic Underlay is a permanently elastic material and can be supplied in rolls, sheets or molded parts. Acoustic Underlay is suitable for all applications which require attenuation of impact sound and vibration, durability and resistance to mechanical loads. Acoustic Underlay can be used for a wide variety of sports surfaces, floor covering, impact protection, sheets and tiles for building protection materials for vibration control and anti-slip mats for securing loads. Our acoustic underlay products have an excellent ratio



between impact thickness and impact sound improvement with negligible creep behavior, even under high static or dynamic continuous loads. These layers are installed before the floor covering is added, whether it's carpet, tiles, floorboards or a floating floor. The underlay is rolled out to the subfloor (usually either a wooden frame or concrete slab) all the way to the edge.

Our Underlay is a flat, resilient, reduced sound transmission mat made from 94% recycled rubber content, used directly under hard surface floor finishes and over concrete and wood construction.

It is used when superior sound control is required in multi-family housing, high-rises, or commercial buildings and protects ceramic tile, porcelain, and stone from substrate cracks.

Engineered for direct adhered floor coverings such as tile, stone, wood, and vinyl floor coverings.

It has been environmentally designed for sound isolation and impact noise control under floating laminate flooring, under screed, under tiles, engineered wood and solid wood flooring. It is an excellent choice for commercial and residential installations. The product system has been engineered for all sub-



Applications

- Floor covering, impact sound insulating layers in flooring constructions
- Floor covering for outdoor applications, impact protection flooring and elastic components
- Vibration insulation, impact sound insulation, shock absorption
- Hotels
- Hospitals
- Residential Towers
- Gymnasiums
- Office towers
- Apartments

Technical Data

Material	:	Fine granulate of recycled rubber with cork and a PU elastomer bonding agent
Surface	:	Fine granulate texturing
Density	:	700kg/m3, Width: 1000mm +/- 1.5%
Thickness	:	2/3/4/5/6mm +/- 0.3mm
Colour	:	Black (granulate)
Tensile strength	:	0.6N/mm2
Fracture strain	:	20%
Service temperature range	:	-30°C to 80°C
Impact Isolation Class IIC	:	55 to 70
ΔLW	:	18to22dB

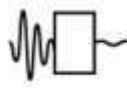
floors. It provides maximum performance for minimum thickness combining an impact and vibration damping and sound absorber with a decoupled noise barrier.



Airbone



Impact



Vibration Dampening

Acoustic Vinyl Barrier

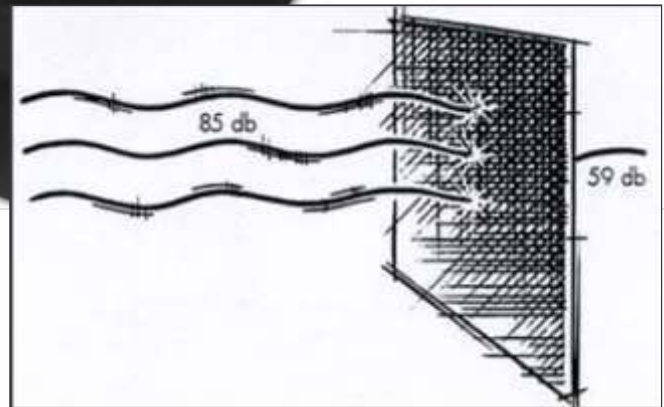
Our mass loaded flexible noise barrier is High Performance acoustic sound isolation product. The product was developed to reduce the noise break-out from pipes, valves, Fan Housing and ductwork in commercial, industrial and domestic buildings, Ideal for both pipe and duct lagging applications. The highly dense and flexible mass loaded flexible barrier provides excellent sound reduction properties, whilst the decoupling layer breaks the vibration path between the substrate and the mass barrier.

Specification

Density: 2-10Kg/m²

Thickness: 2mm/3mm

Weighted Sound Reduction Index Rw: 27dB



Features

- Excellent acoustic performance
- Maximizes noise control by providing high sound Isolation.
- Excellent flame resistance
- Long useful life
- Easy to cut and install
- Reduces Sound Transmission
- Improve Communications, Health & Safety

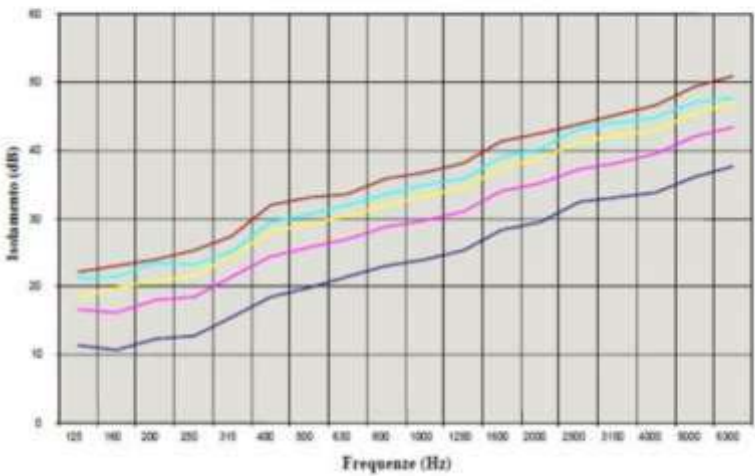
Application

- Hydraulic and waste pipe lagging in all locations
- Air-conditioning duct lagging and shrouds
- Compressor & Spa motor wraps
- Acoustic Wall, Acoustic Partition, Acoustic Ceiling
- Drainage Pipes, Plantrooms, Generator Rooms.



TABLE - 1

Transmission Loss (DIN 52210)



Installation Options

- A) With Reinforced self adhesive layer backing.
- B) With Universal Fixing adhesive.

Insertion Loss	25dBA
Transmission Loss	Rw 27

2 Kg/m²

4 Kg/m²

5 Kg/m²

8 Kg/m²

10 Kg/m²



PERFORMANCE

Performance							
3mm Thickness	125	250	500	1000	2000	4000	RW
5kg/m²	19	22	29	33	40	44	27dB

Acoustic Lagging

AKINCO acoustic lagging and Wraps are designed to block noise that transmits through the walls of the pipe or as well as to increase the sound absorption in the cavity. Designed to offer significant reduction of radiated noise, it consists of a loaded vinyl noise barrier with a scrim reinforced aluminum foil facing on one side bonded to a 1" sound absorbing acoustic foam decoupler. Our pipe and duct wrap offers excellent thermal and acoustical performance.

The sound insulation of soil, waste, sanitary drainage and water pipes shall be from acoustic lagging manufactured with acoustic isolation foam and a mass barrier to a total weight of not less than 5kg/m². It should be cut to size to neatly fit all pipe work, and incorporate overlaps on all joints. All joints shall be secured with an appropriate foil tape.



Our high-performance composite acoustic pipe lagging product consists of a reinforced aluminium foil faced, mass loaded flexible vinyl noise barrier bonded to a decoupling layer. The product was developed to reduce noise break-out from pipes, valves, fan housings and duct work in commercial, industrial and domestic buildings. Ideal for both pipe and duct lagging applications and MEP equipment casing.

The unique construction of lagging gives the dual benefits of a noise barrier and a noise absorber. The highly dense and flexible mass layer provides excellent sound reduction properties, whilst the decoupling layer breaks the vibration path between the substrate and the mass barrier, thus allowing the vinyl external wrap to remain flexible and thereby optimize its performance. The external foil facing offers a fire resistant covering and an excellent surface to join adjacent sheets.

With just three steps: cut to size, wrap it around, and tape it on, the installation is quick and easy.

Ideal for downpipes and PVC tubing where the noise of flushing can be annoying. It shall be applied around the tube, taking good care that the lagging material flap is as perfectly sealed as possible.

Sound waves originating from the source will be initially absorbed by the absorber and then blocked by the mass loaded vinyl. Any reflected sound wave components will be further dissipated into the fiberglass absorber.

The trend towards high-density living environments and lightweight building construction over the last decade has required an improvement in the control of noise from waste pipes and general plumbing.

Acoustic Lagging significantly reduces the amount of noise that transmits through the walls ducting and PVC pipes



Applications

- Hydraulic and waste pipe lagging in all locations
- Air-conditioning duct lagging and shrouds
- Compressor wraps
- Spa motor wraps
- MEP equipment casing wraps
- Acoustic Enclosures
- Medical sample moving pipes
- Oil, gas and Industrial pipes

Features

- Excellent Noise Control and Sound Proofing
- Class A Flammability Rating per ASTM E-84
- Maximizes noise control by providing high sound absorption (reverberation control) and superior transmission loss
- Excellent flame resistance
- Long useful life
- Easy to cut, Easy to install, Highly Effective
- Free from odour producing oils and bitumen
- Contain no ozone depleting substances

Technical Details

- Vinyl barrier weight (2mm/ 3mm) 5kg/m2
- Thickness 25mm
- Maximum temperature 80 degC
- Fire performance (AS1530.3) 0,0,0,0-1
- Weighted Sound reduction index RW = 29 db
- Aluminum Covering
- Coverlated egg crate foam

P E R F O R M A N C E

Sound Transmission Losses / Sound Reduction Index								
Freq (Hz)	125	250	500	1000	2000	4000	STC	Rw
Decibles(dB)	16	19	29	38	48	52	32	29

Sound Attenuator

AKINCO offers the design and engineering assistance to integrate our line of duct silencers, sound attenuators into a system solution. As a result you may choose from a selection of standard or custom engineered duct silencers that will satisfy the requirements of each application.

In ventilation systems, noise stems from a variety of components such as the fans or the fire dampers. To comply with a specified noise level, sound attenuators are added to suitable locations in the ventilation system. The sound attenuators should have adequate silencing capabilities, low air resistance and be as small as possible.



For Increased Insertion Loss And Broadband Attenuation Even In The Low Frequency Range

- Attenuation effect due to resonance and absorption
- Energy efficient due to aerodynamically profiled frame
- Absorption material faced with glass fibre fabric as a protection against erosion due to airflow velocities up to 20 m/s
- Absorption material non-combustible, to EN 13501, fire rating class A1
- Operating temperature up to 100 °C



Types-Rectangular and Circular

- Elbow Dissipative
- Cross-Talk for return air in office rooms
- Straight Dissipative
- Custom Designs as Required

Construction Options

Material

- Aluminum
- Galvanized steel sheet
- Stainless Steel

Accessories

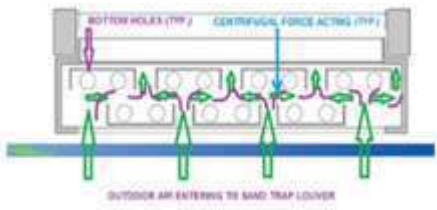
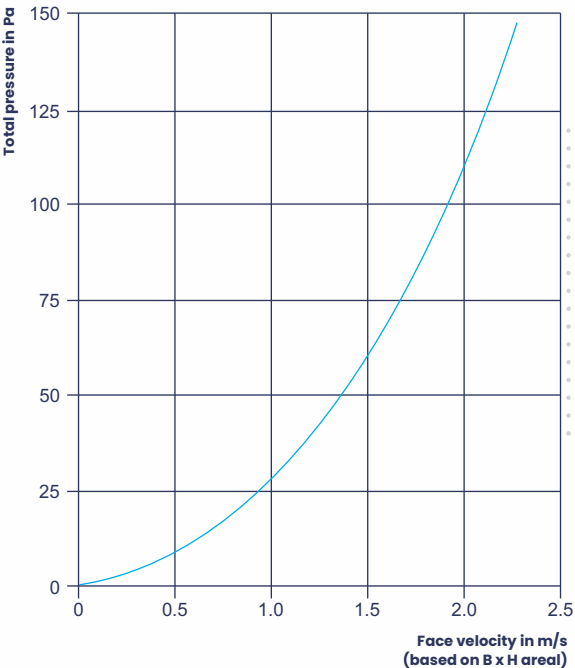
- Bird and insect screens
- Filters
- Dampers



Features

- Maximum width of 2400 mm, maximum height of 2310 mm, maximum area of 4 m² (aluminum variant also for continuous horizontal runs)
- Low differential pressure.
- Low air-regenerated noise
- Available in standard sizes and many intermediate sizes
- Simple and quick installation due to perimeter border
- Variants made of galvanized sheet steel, aluminum or stainless steel
- Flexible arrangement of sections for covering large areas (should then be fixed on a support structure which is to be provided by others)
- Free area of approx 30-35%
- Total differential pressure – exhaust air: 30 Pa at 2.5 m/s
- Sand Rejection Efficiency: 75 -90%

Pressure Drop



Acoustic Louvers

AKINCO Acoustic Louvers are used to reduce mechanical equipment noise transmitted through building openings or from openings in acoustic enclosures or barrier walls. Our Acoustic Louvers are available in galvanized steel, stainless steel or aluminum construction with various surface finishes in order to meet project architectural requirements. We test them according to ASTM E90 for transmission loss and AMCA Standard 500-L for pressure drop, and we can supply them with bird screen and media protection of woven fiberglass cloth or film liner. As with all noise control products, acoustic and aerodynamic performance varies with the design, and the sizing of the louvers is important to minimize concerns of pressure drop and water ingress.

Our acoustic louvers are available in two models, single (type 1) and double (type) banks. The splitters are aerodynamically designed with the sound absorber material.



Applications

Typical applications are silencing for : Outside air intake or exhaust air openings,

- Generator rooms, Mechanical/Plant Rooms
- Ventilation openings in acoustical enclosures and acoustical barriers around cooling towers,
- Air-cooled chillers and other outdoor equipment.
- In substitution of architectural louvers where aesthetics is not of primary concern (e.g. some Water Treatment and Power Plants)

They are commonly seen in office buildings, condominiums, and public buildings and can are sometimes specified when sound attenuators cannot be installed.

Application

Typically used with vibration isolators for support and isolation of:

- Centrifugal Pumps
- Chilled Water Pumps
- Fire Fighting Pumps
- Swimming Pool Pumps



Features

- Increases the ability of barriers to attenuate noise.
- Tough, abuse-resistant steel construction.
- Designed to withstand substantial loads.
- Structural steel work included on request.
- Weather-resistant and guaranteed rust-proof finish.
- Fully welded steel construction with integral concrete reinforcement fixed at 35 mm above bottom of frame. Range of standard size frames available in three thicknesses 150, 200, 300 & 350 mm. Frame thicknesses not less than $L/12$ where "L" is the longest side of the frame.
- Finished with a single coat of red oxide primer on external surface only.



For every size of base mounted pump AKINCO has an affordable and convenient option for contractors . As a bolt together design using light weight steel sections, the bases can be assembled on site for those hard to get to mechanical rooms or pre-assembled in our shop and shipped to site ready to be filled with concrete.

Vibration Isolators

Spring vibration isolators are used to reduce the transmission of noise, shock, and vibration produced by mechanical, industrial or process equipment subwoofers into or within a building structure.

Spring isolators shall be selected to provide operating static deflections shown on the Vibration Isolation Schedule or as otherwise indicated on the project documents. Springs shall be color coded or otherwise identified to indicate load capacity.

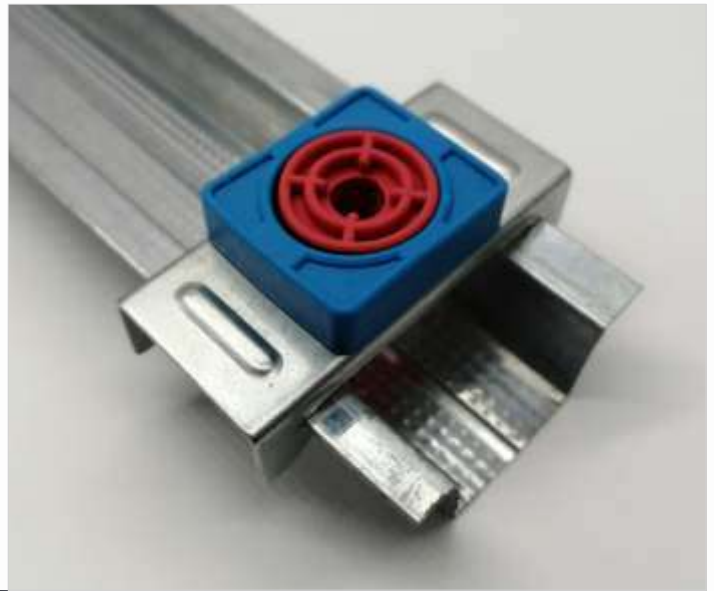
Housed Vibration isolators shall consist of a steel spring and load cap housed in a cast semi-steel or aluminum assembly, with adjustable side plate and sponge neoprene snubbers designed to stabilize the isolators and prevent metal-to-metal connection of top and bottom housing sections.



The resonance frequency of the isolator supporting these floors is normally determined by the architect or an acoustical consultant depending on the input frequencies. Within our range of experience we recommend mountings with a dynamic frequency not exceeding 10 Hz for input no lower than 20 Hz provided frequencies below 30 Hz are limited in amplitude. Steel spring isolators come into their own when the input is more severe or below 20 Hz. The required deflection of the springs is dependent on the input frequency, but most spring work is done with deflections between 0.5" to 2" to provide frequencies in the 4.5 to 3.6 Hz range. When heavy impact is a major factor, springs are always required.

Application

- Pumps
- Fans
- Cooling Towers
- Rooftop Units
- Chillers
- Boilers
- Compressors
- Fancoil units
- Subwoofers
- Additional acoustic ceiling and acoustic wall



Our spring hangers consist of free-standing, laterally stable steel springs in series with a molded elastomeric element assembled into a stamped and welded hanger bracket. The brackets are zinc plated and incorporate color-coded spring elements. To assure stability, the spring element has a minimum lateral spring stiffness of 1.0 times the rated vertical stiffness. The hanger brackets will carry a 500% overload without failure. The spring hangers are available in deflections of 25mm and in capacities up to 32 kg.

Serving various industries, we continually upgrade our springs as superior high tensile strength wire materials become available. This results in safer springs with very low operating stresses and longer life.



We offer full technical backup in areas like product selection and application, design of Mechanical Equipment Room isolation systems, sizing of inertia bases, vibration isolation efficiency calculations etc.



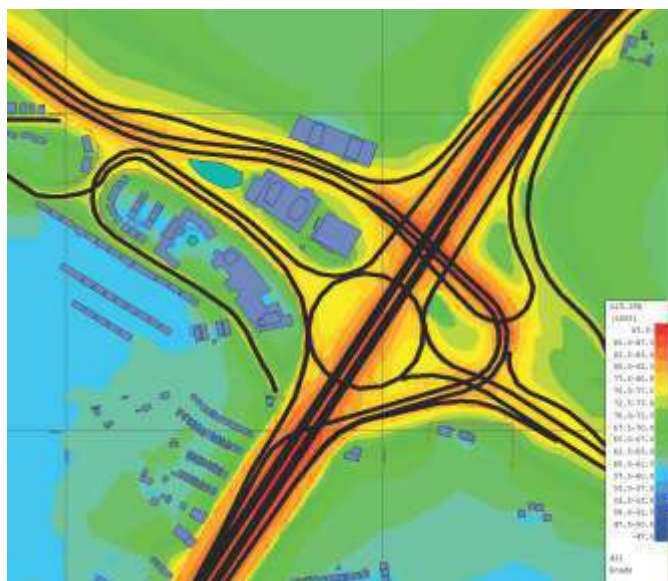
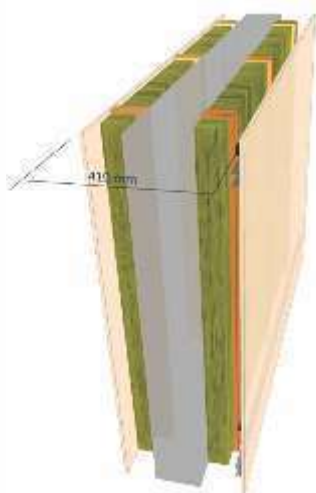
Airbone



Impact



Vibration Dampening



Architectural Acoustics: Using past experience and results from testing and calculations, the acoustic consultant can provide solutions that address sound propagation, speech intelligibility and the enhancement of music, and provide options to mitigate noise within the built environment. The consultant can review plans for new facilities in order to make recommendations on space planning, room shaping, finish selections, construction methods, etc. The consultant can perform tests within an existing facility to assess the acoustic environment and make recommendations as to how to mitigate concerns. Common issues addressed in architectural acoustics: Room Acoustics, Reflections, Reverberation, Absorption, Noise Control, Sound Transmission, Background Noise Level.

Mechanical: Akinco Engineers specializing in industrial noise control typically deal with noise and vibration generated by industrial equipment and machines, and how to control this noise in order to protect industrial workers. The consultant can determine the level of noise exposure and the impact it could have on hearing conservation through testing methods and calculations. Consultants can advise in the selection and/or installation of new equipment or can offer suggestions as to how to mitigate existing noise or reduce noise exposure. Common noise control options include: Equipment Specifications, Enclosures, Isolation methods. Treatment to wall ceiling floors with acoustic material selections in areas such as generator rooms, plant rooms, chiller room noise etc.



Predict transmission loss, impact sound, and rain noise-INSUL

INSUL is a program for predicting the sound insulation of walls, floors, roofs, ceilings and windows. Impact sound and rain noise of floors and roof. The programme can make good estimates of the Transmission Loss (TL) or Impact Sound (Ln) in 1/3 octave bands and Weighted Sound Reduction Index (STC or Rw) or Impact Rating (IIC/LnTw) for use in noise transfer calculations or acoustical design or specification.

Our Clients

Serving our clients - including corporations, Schools, Contractors, Consultants, and government organizations - is a privilege and responsibility that we do not take lightly. Our clients are the key to our success, as we are to theirs. Below are some of the major and recent names we're proud to call our clients. We are committed to expand our boundaries approaching new clients for all the acoustic requirements.

Radisson BLU
HOTEL LUXURY

مبادلة
MUBADALA

Dubai Parks
AND RESORTS

مطارات أبوظبي
ABU DHABI AIRPORTS

مجلس أبوظبي للتعليم
Abu Dhabi Education Council
Abu Dhabi Education Council

DUBAI IRPC FREE Zone
Dubai Airport Freezone
المنطقة الحرة بمطار دبي

DAMAC

دبي دوتي فري
Dubai Duty Free

DIFC Dubai International Financial Centre

DWC
DUBAI WORLD CENTRAL
ديبي وورلد سنترال

emal
الإمارات للألمنيوم
Emirates Aluminium

إينوك
ENOC

FEWA

Jumeirah
HOTELS & RESORTS

Mesab Limited
UAE

Dubai Airports
Connecting the World

النابودة
Al Naboodah

مبنى الفتح
MAINE AL-FUTTAH

مساندة
Musanada

NAKHEEL

أدنوك
ADNOC

الإتحاد
ETIHAD AIRWAYS

موانئ دبي العالمية
DP WORLD

روتانا
Rotana

الهيئة العامة للنقل
RTA

الفهم
ALFAHIM

MILLENNIUM
HOTELS AND RESORTS

LEGO
LEGOLAND DUBAI

MODERMO

تكرير
TAKREER
شركة أبوظبي للتكرير النفط
We Refine Right





ACOUSTICS EXPERTISE

- Auditorium
- Commercial
- Cinema
- Educational
- Environmental
- Health Care
- Hospitality
- Industrial
- Multi Purpose Halls
- Plant Rooms
- Residential
- Shopping Mall



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