



SGS



Chino Acoustics



Acoustic Space Creator
Restore to the Most Authentic Sound

Chino Acoustics

Witteveen Projectinrichting
Ouderkerk a/d Amstel
Tel: 020 - 496 5030
info@witteveen.nl
www.project-inrichting.nl
www.scheidingswand.net

Contents

01	Introduction	18	Wood-wool Acoustic Panel
02	Contents	19	Vibration Damping Materials
03	Wooden Grooved Acoustic Panel	20	MgO Sound Insulation Board
04	Wooden Grooved Acoustic Panel	21	Sound Insulation Felt
05	Wooden Perforated Acoustic Panel	22	Eco-wood Panel
06	Wooden Perforated Acoustic Panel	23	Movable Partition
07	Pattern Wooden Acoustic Panel	24	Movable Partition
08	Wooden Decorative Panel	25	Movable Partition
09	Acoustic Diffusers	26	Movable Partition
10	Wood Colour Chart	27	Slatwall
11	Polyester Fiber Acoustic Panel	28	Slatwall Color Chart
12	Polyester Colour Chart	29	Aluminium Profile
13	Sound Absorption Wool	30	Hook for Slatwall
14	Fabric Acoustic Panel	31	Display Shelf
15	Fabric Colour Chart	32	Certification
16	Suspended Absorber	33	Partial Project List
17	Fiberglass Ceiling	34	Basics of Acoustics

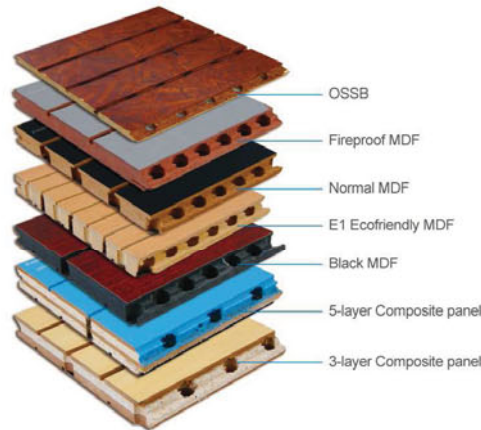
Wooden Grooved Acoustic Panel

wooden grooved acoustic panel is one of the most advanced and efficient absorption products available today for reducing reverberant sound levels in many environments, such as gymnasiums, hotels, exhibition centers, schools, studios, reception areas, lecture theatres, offices and commercial buildings. They are developed based on acoustical theories, and manufactured by advanced equipment and technology. Thanks to the ingenious design and all kinds of decorative surfaces, these acoustic panels are not only easy to install, but also visually attractive.

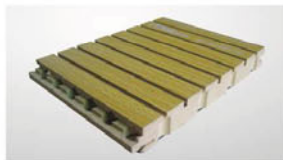
Specifications

1. Structure: Base Material, Finish & Back Finish
2. Basic Material: E1 MDF, FR MDF, MgO Combination Board etc.
3. Front Finish: Melamine, Natural Wood Veneer, Paint, etc.
4. Back Finish: Black Fleece
5. Standard Size: 2440*192mm, 2440*128mm
6. Standard Thickness: 12/15/18mm
7. Standard Pattern: 13-3, 14-2, 28-4, 59-5
8. Acoustic Principle: Resonance Absorption
9. Formaldehyde Emission: Can Meet Both China & EU Standard Class E1
10. Frame Retardant: Can Meet China Standard Class B, BS476 Part 7 Class 1, etc.

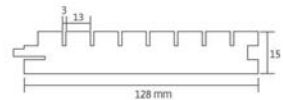
wooden grooved acoustic panel is made up of a series of longitudinal slats and grooves. Each panel has a machined tongue down one long edge and a machined groove down the other long edge. Each end is square edged. Four standard patterns of grooved acoustic panels are available: 13-3, 14-2, 28-4, 59-5, which are named by the width of the slats and grooves. For example, version 13-3 has slots machined at every 16 mm resulting in each slot being 13mm wide and each groove being 3mm wide.



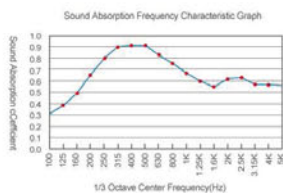
Base Material Comparison



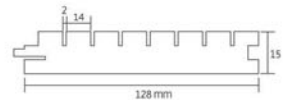
Pattern 13-3



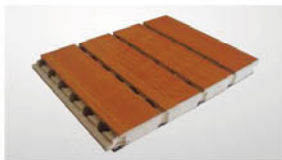
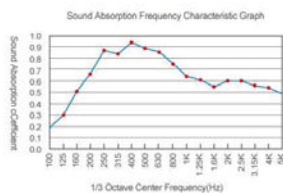
(Pattern 13-3) Perforation Rate: 12%



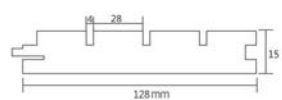
Pattern 14-2



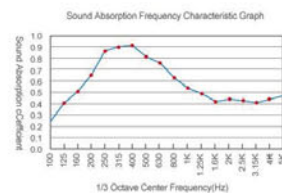
(Pattern 14-2) Perforation Rate: 7.5%



Pattern 28-4



(Pattern 28-4) Perforation Rate: 7%



Wooden Grooved Acoustic Panel

Installation

A) Preparation

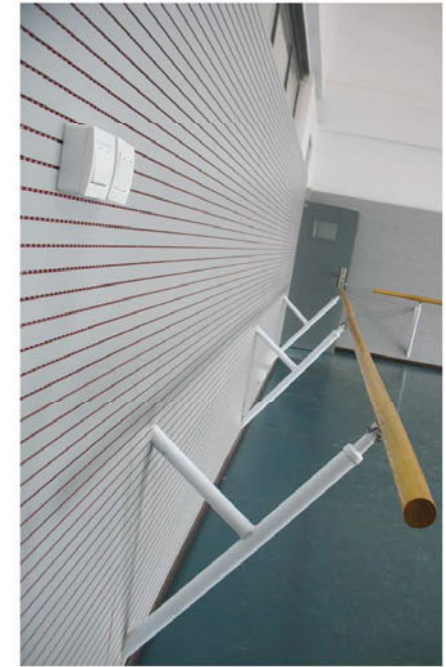
1. The place of installation must be dry, with the lowest temperature no less than 10 degrees Celsius.
2. After installation, the largest humidity changing rate of the place of installation should be between 40% to 60%.
3. The acoustic panels to be installed must be placed in place of installation for at least 48 hours in order to adapt to the indoor environment.
4. The distance between each wood keel must be less than 500mm and that between each light steel keel should be no more than 600mm.

B) Installation

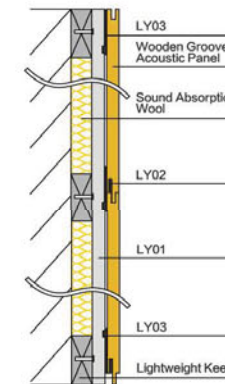
1. Confirm the places of installation, determine the horizontal and vertical lines, and determine reserved measurements for the electric wire socket, pipes, etc.
2. Calculate the actual construction measurements and cut part of acoustic panels if needed.
3. Start to install and follow the rules: from left to right, from bottom to top. For horizontally installation, make the grooves up; for vertical installation, make the tongues on the right. For real wood veneer acoustic panels that have requirements on the direction of the stripes, the panels should be installed according to pre-marked sequence numbers.

C) Installation System

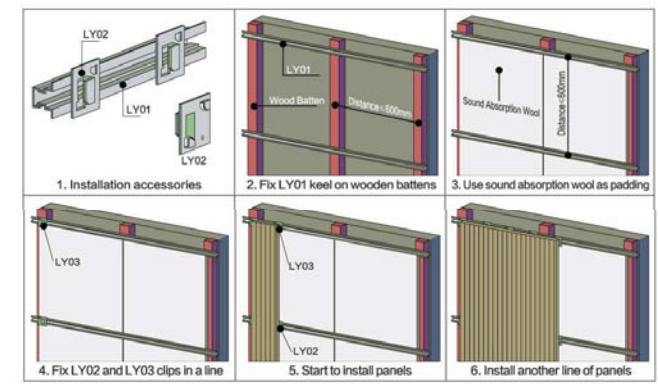
1. Lightweight steel keel system
2. Wooden batten system



Yunnan Arts College Dance Training Room



Cross-section Structure



Installation: Lightweight Steel Keel System

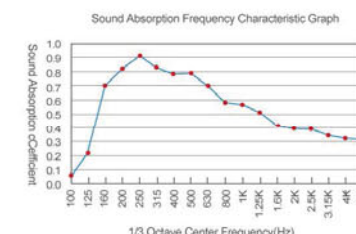
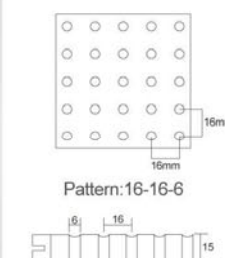
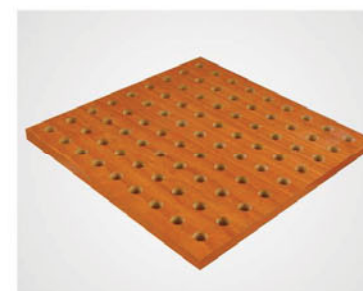
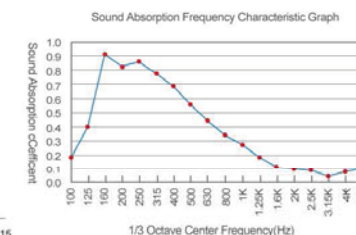
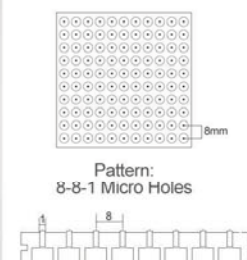
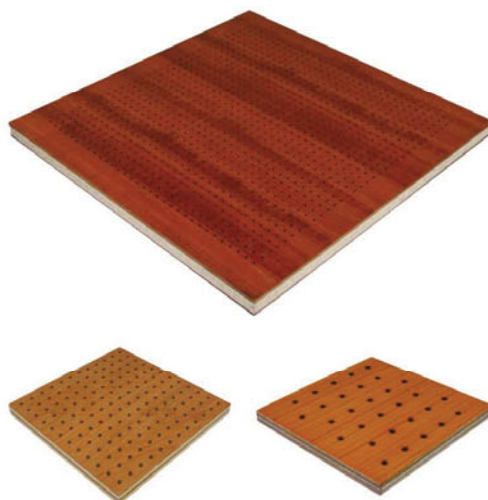
Wooden Perforated Acoustic Panel



Wooden Perforated Acoustic Panel is a kind of wooden acoustic panels with holes on both front and back sides. The holes can be drilled from the surface directly to the back or the holes in the surface are small while on the back are big. The diameters of the holes on two sides are different. It is widely used for walls and ceilings.

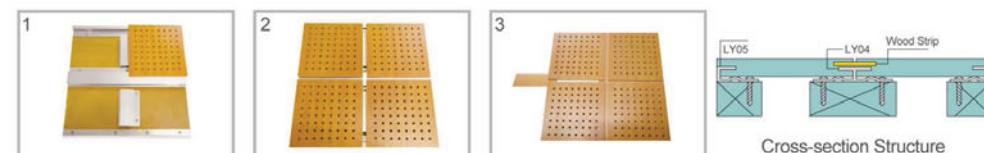
Specifications

1. Structure: Basic Material, Finish & Back Finish
2. Basic Material: E1 MDF, FR MDF, MgO Combination Board etc.
3. Front Surface: Melamine, Natural Wood Veneer, Paint etc.
4. Back Surface: Black Acoustic Felt
5. Standard Dimension: 600*600, 1200*600, 1200*1200, 2400*1200mm
6. Standard Thickness: 12/15/18mm
7. Distances of two holes: 8/8mm, 16/16mm and 32/32mm
8. Diameter of holes: 1,2,3,4,5,6,8,10,12mm, etc.
9. Popular Patterns: 8/8/1, 16/16/3, 16/16/6, 32/32/6, 32/32/8, etc.
10. Acoustic Principle: Resonance Absorption
11. Eco-Friendly: Can Meet both China & EU Standard Class E1
12. Fire Resistance: Can Meet China Standard Class B1 & BS476 Part 7 Class 1

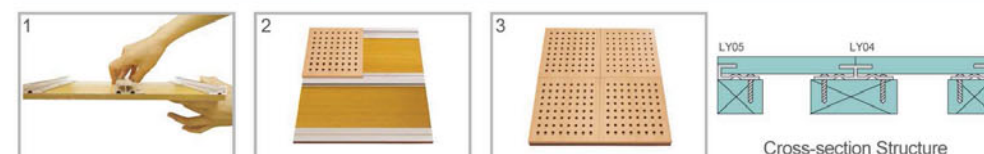


Since wooden perforated acoustic panel, wooden special pattern acoustic panel (See Page 7) and wooden decorative panel (See Page 8) have similar structure, they also share the same installation systems. As all wooden panels expand with heat and contract with cold by nature, it's strongly recommended to use our installation system I (with gap) to install.

Installation System I (with gap)



Installation System II (without gap)



Wooden Decorative Panel

If no perforation is made on the panel, wooden perforated acoustic panel becomes wooden decorative panel with no sound absorption effect. Wooden decorative panel is widely used as wall panel in hotels, exhibition halls, offices, traffic stations, hospitals, etc.

Specifications

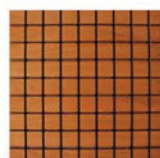
1. Structure: Basic Material, Front Finish
2. Basic Material: E1 MDF, FR MDF, MgO Combination Board etc.
3. Front Surface: Melamine, Natural Wood Veneer, Paint etc.
4. Standard Dimension: 600*600, 1200*600, 1200*1200, 2400*1200mm
5. Standard Thickness: 12/15/18mm



Pattern Wooden Acoustic Panel

Special pattern wooden acoustic panel derives from wooden perforated acoustic panel. It has the same structure as wooden perforated acoustic panel with more decorative surface patterns. Other than several standard patterns, it can be customized with the design provided by customer. It's also used for walls and ceilings.

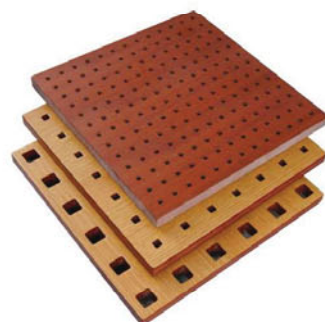
Standard size:
600*600, 1200*600, 1200*1200, 2400*1200mm



Cross Grooves



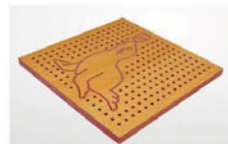
M Pattern



Square Holes



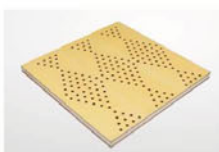
Group Square Holes



Animal Shapes



U Pattern



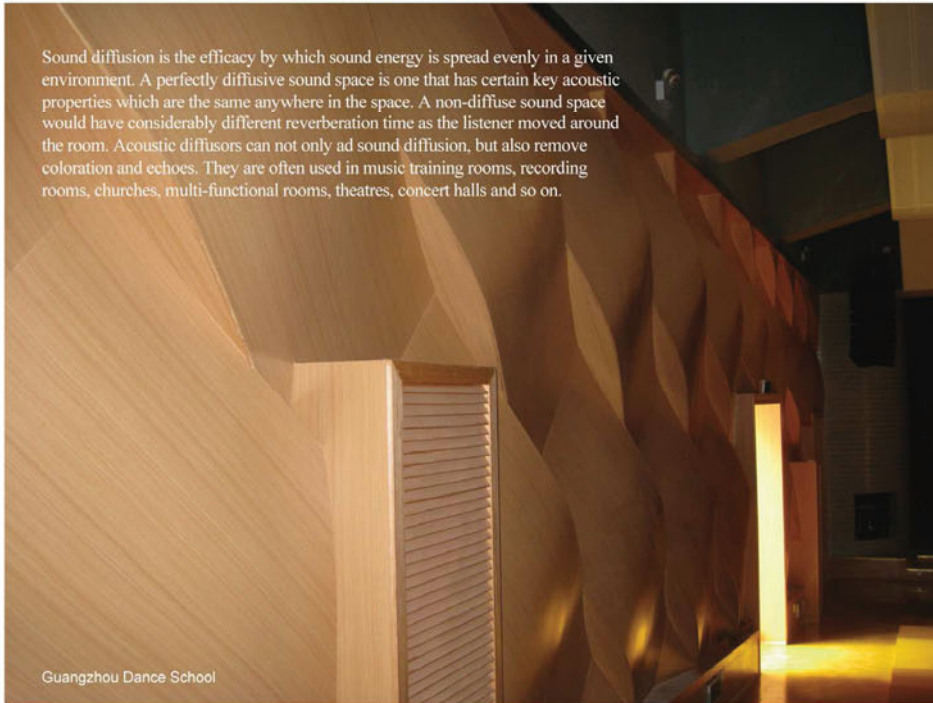
Rhombus Pattern



Long Slots

Acoustic Diffusers

Sound diffusion is the efficacy by which sound energy is spread evenly in a given environment. A perfectly diffusive sound space is one that has certain key acoustic properties which are the same anywhere in the space. A non-diffuse sound space would have considerably different reverberation time as the listener moved around the room. Acoustic diffusers can not only ad sound diffusion, but also remove coloration and echoes. They are often used in music training rooms, recording rooms, churches, multi-functional rooms, theatres, concert halls and so on.



Guangzhou Dance School



1D QRD Diffuser
600x600x100mm



2D QRD Diffuser
600x600x100mm



Triangular Diffuser
2440x128x25mm



Sound Absorbing
& Diffusing Panel
600x600mm



Conical Diffuser
600x600mm



Arc Diffuser
2440x128x15mm















MLS Diffuser
600x1200mm

Wood Color Card

LYS001	LYS002	LYS005	LYS006	LYS008	LYS010	LYS019	LYS020
LYS022	LYS025	LYS026	LYS025	LYS027	LYS028	LYS029	LYS030
LYS031	LYS032	LYS033	LYS037	LYS041	LYS045	LYS046	LYS047
LYS049	LYS050	LYS051	LYS052	LYS054	LYS056	LYS057	LYS058
LYS060	LYS063	LYS064	LYS065	LYS067	LYS073	LYS074	LYS076
LYS120	LYS079	LYS101	LYS102	LYS103	LYS104	LYS105	LYS106
LYS107	LYS108	LYS109	LYS110	LYS112	LYS113	LYS114	LYS115
				MELAMINE LAMINATION			
LYS116	LYS117	LYS118	LYS119				

LYM081	LYM083	LYM086	LYM088	LYM089	LYM090	LYM091	LYM094
LYM095	LYM096	LYM100	LYM120	LYM121	LYM122	LYM123	LYM124
				REAL WOOD VENEER			
LYM125	LYM126	LYM127	LYM128				

Polyester Fiber Acoustic Panel Colour Chart

							
LY001 White	LY002 Light Tan	LY003 Deep Tan	LY004 Silver Gray	LY005 Light Yellow	LY006 Orange	LY007 Beige	LY008 Earth Yellow
							
LY009 Light Green	LY010 Grass Green	LY011 Light Red	LY012 Red	LY013 Light Sea Blue	LY014 Blue	LY015 Dark Red	LY016 Dark Green
							
LY017 Green	LY018 Dark Gray	LY019 Black	LY020 Rose Red	LY021 Light Gray	LY022 Goose Yellow	LY023 Sky Blue	LY024 Wine Red
							
LY025 Longan Yellow	LY026 Gray Green	LY027 Telecom Blue	LY028 Tibetan Blue	LY029 Light Sky Blue	LY030 Deep Blue	LY031 Autumn Leave Green	LY032 African Gray
							
LY033 Red Coffee Color	LY034 Bronze	LY035 Coffee Color	LY036 Brown	LY001 10mm Stripes	LY003 Broken Stripes	LY004 30mm Grids	LY006 10mm Grids
							
Printing Pattern-1	Printing Pattern-2	Printing Pattern-3	Printing Pattern-4	Printing Pattern-5	Printing Pattern-6		
							
Printing Pattern-7	Printing Pattern-8	Printing Pattern-9	Printing Pattern-10	Printing Pattern-11	Printing Pattern-12		

Polyester Fiber Acoustic Panel

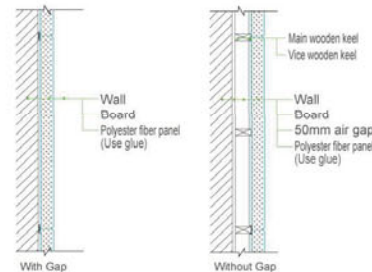
Polyester fiber acoustic panel is made of 100% polyester fiber. It is a good acoustic and decorative material with characteristics of environmental protection, fire retardant, heat insulation, mildew proof, easy cutting, easy removal and simple installation etc.. There are varieties of patterns and colors can be chosen to meet different styles and levels requirements.

Features

- Being made of 100% polyester fiber by hot-pressed to cotton shape. The highest sound absorption coefficient can be 0.94. Many kinds of modern colors can be used with best decorative styles.
- Having good heat insulation performance.
- Fire retardant material with excellent fire proof characteristic.
- Environmental protection product.
- Light weight: 229kgs/m³, 2.07kgs/m²
- Easy to cut by knife.
- Good physical stability. It will not inflate or shrink because of temperature.
- Soft and natural texture. It will not be broken under the huge impact of high elasticity.
- No need of decorative veneer. The required acoustic and decorative effect can be reached by the basic operation, such as pasting, drilling and nailing etc.. It can reduce both cost and period of projects.
- Easy dust removal and maintenance by vacuum cleaner or feather duster.



Standard Size:
L:2420*W:1220*T:9mm
Installation:
Use glue or nails to fix it.



Installation: Cross-section Structure



Polyester Absorber 600x600x50mm

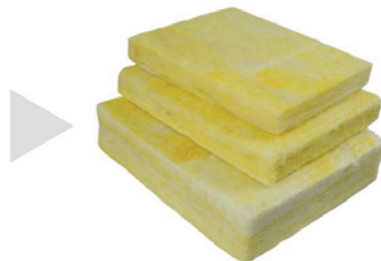


Polyester Acoustic Pyramids

Sound Absorption Wool

Glass Wool

Glass wool is manufactured from a unique rotary flame attenuation process incorporating highly resilient, inorganic glass fibers bonded with a thermosetting resin to form a lightweight, flexible and resilient insulation material. Apart from providing good thermal insulation qualities, it is also an effective sound absorption material. In architectural acoustics, the thickness are 25mm, 50mm, density are 48, 64, 96 kg/m³. According to your design, we can offer you our suggestion.



Standard size: 600*1200mm



Standard size: 1200*2400mm

Polyester Wool

Polyester wool was developed to replace rock wool, glass wool and acoustic sponge as it's more environmental friendly. It's made of 100% polyester fiber and also have excellent sound absorption performance.



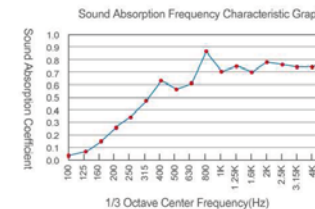
Standard size: 600*1200mm

Melamine Foam

The high degree absorption property, heating resistance, population and exquisiteness of melamine foam, make it widely used in the building area. The acoustics and noise control products which processed with the melamine foam from studio, noise elimination room, office, canteen, theater, gymnasium to industry assemble line, can provide effective insulation performance for all the environments. Acoustics board material, hanging absorption, and metal ceiling board materials which have the decorative using and supported by melamine foam, can improve acoustics efficiency appearance.

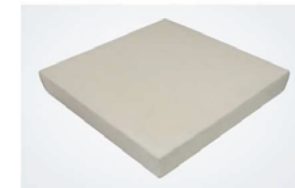
Fabric Acoustic Panel

Fabric acoustic panels have excellent acoustic performance in both mid and high frequency sound. They are decorative and easy to install. The fabrics on the surface are available in different types and a wide range of colors and patterns. Customers can also provide their own fabrics and designs, and the panels can be made in different shapes.



Specifications

1. Structure: Core Material, Finish & Frames
2. Core Material: Glass Wool (Default), Polyester Wool, Melamine Foam etc.
3. Front Finish: Fabric
4. Back Finish: 3mm Cardboard
5. Frames: MDF (Default), Aluminium, Resin etc.
6. Standard Size: 600*600, 1200*600mm
7. Thickness: 25mm, 50mm
8. Standard Edge Type: Bevel Angle, Square Angle
9. Acoustic Principle: Porous Absorption
10. Frame Retardant: Nonfireproof (Default), Fireproof (available).



Square Edge



Bevel Edge

Application

They are widely used in places that need acoustic solution, such as dancing halls, karaoke rooms, restaurants, hotels, home theaters, conference rooms, bowling alleys, gymnasiums, theaters, rehearsal halls and so on.



Foshan Shishan Administration Center

Fabric Colour Chart



Suspended Absorber

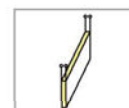


Chengdu Wenjiang Middle School Gymnasium

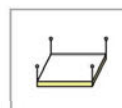
Suspended absorbers have similar structure with fabric acoustic panel. They are mainly made up of fabric, glass wool and MDF or metal frame. A variety of styles are available. There are pyramid style, cross style, arc style, barrel style, etc. Because of the high acoustic absorption performance, they are often used as suspended ceiling in various projects.

Application:
Gymnasium, theater, factory, etc.

Installation:
Use expansion screws, hanging poles etc.



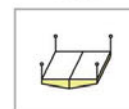
Rectangle Suspended Absorber



Square Suspended Absorber



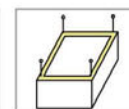
Barrel Suspended Absorber



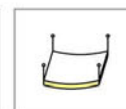
Pyramid Suspended Absorber



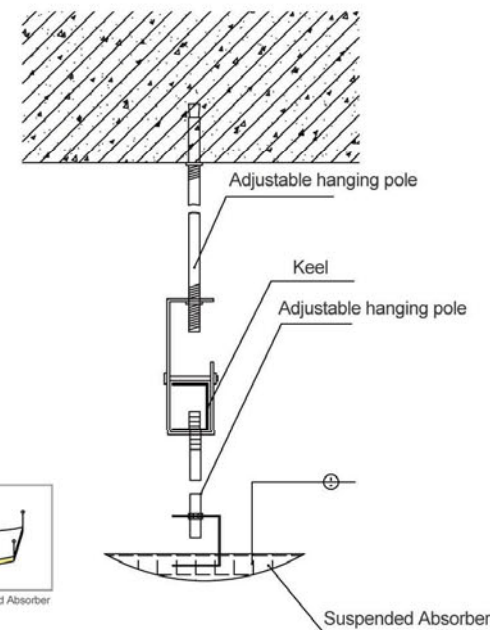
Cross Suspended Absorber



Case Suspended Absorber



Arc Suspended Absorber



Fiberglass Ceiling

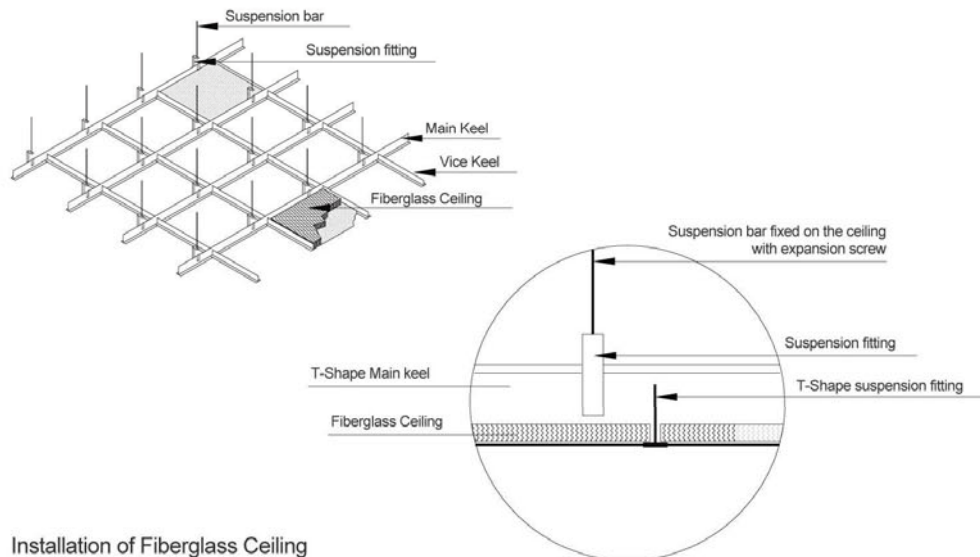
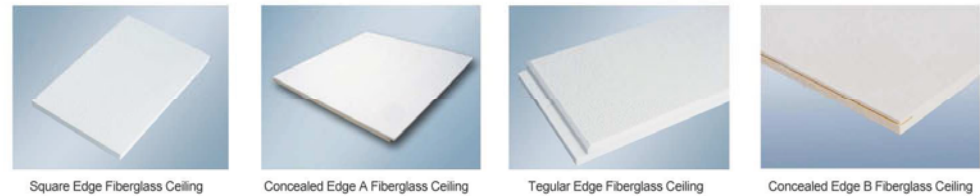
Fiberglass ceiling is made of fiberglass and acoustic transparent wrappage. The fiberglass ceiling has good noise absorption effect and good decoration effect.

Application

Fiberglass ceiling can be widely used in office, shopping mall, hall, classroom, etc. This ceiling material can absorb noise with the fiberglass in it.

Features

1. easy to install, light weight
2. good noise absorption effect
3. good decoration effect
4. environment friendly, human friendly
5. size: 600*600mm, 600*1200mm
6. color: White, black, grey, etc.



Installation of Fiberglass Ceiling

Wood Wool Acoustic Panel

Wood wool acoustic panel is made of wood fiber, cement and minerals under high temperature and high pressure. There are countless pores inside of the panel, which can absorb noise. It not only has great acoustic and decoration effect, but also environment friendly and human friendly. Different painted colors are available by request.

Application: It can be used in conference room, office, hotel lobby, theater, piano room, etc.

Standard Size:
1200mm*600mm
600mm*600mm
2440mm*1220mm
Thickness: 10/15/20/25mm



Colour Chart



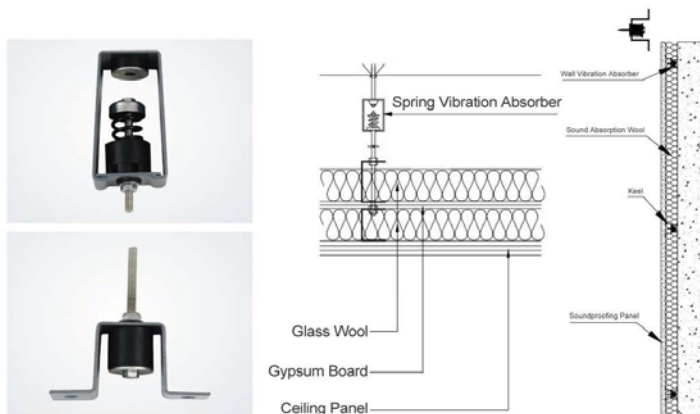
Vibration Damping Materials

Spring Vibration Absorber

Spring vibration absorber can be installed to ceiling or wall. The spring-absorber can reduce ceiling or wall vibration.

Application

Vibration spring-absorber can be widely used in gymnasiums, disco ballrooms, KTV, factory workshops, home cinemas, meeting room, etc.



Vibration Absorption Floor Mat

Vibration absorption floor mat is made from polyethylene. This material is environmental friendly and human friendly.

Acoustics Performance

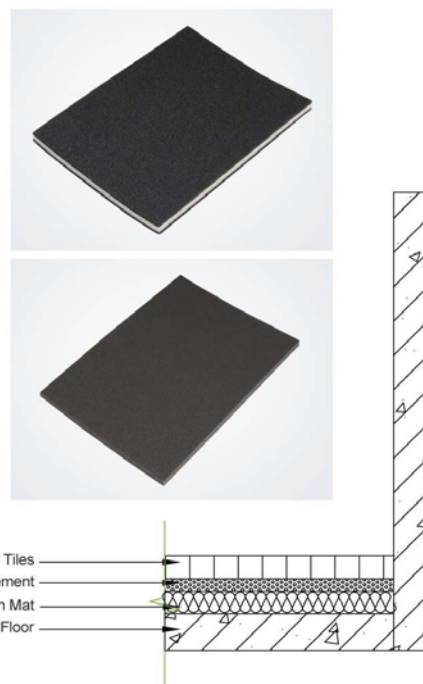
If the original floor can be more than 15cm thick and the sand & cement layer over the vibrating-absorption mat can be more than 4cm thick, airborne sound insulation can reach 55dB, crash sound insulation can reach 46dB.

Application

Vibration absorption mat can be widely used in disco ballrooms, gymnasiums, KTV, factory workshops, home cinemas, etc. The vibrating-absorption mat can hugely reduce noise coming from vibration.

Installation

1. Make the original floor clean and smooth.
2. Unfold vibrating-absorption mat on the floor, make the mat smooth.
3. Build one layer of sand and cement on the vibrating-absorption mat.
4. Build one layer of floor tiles on top.



MgO Sound Insulation Board

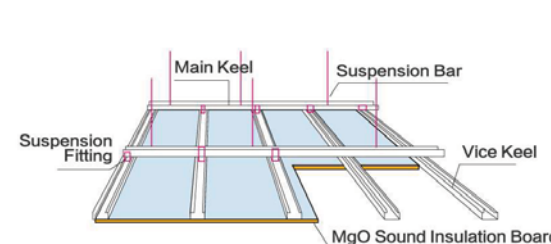
The basic board materials are the environment-friendly board materials which are made in one product modeling by using the modern new technology after many years of research and technical innovation. The materials has a wide scope of application. It can replace the wooden board. That is, it can be applied in the indoor partition wall and ceiling decoration in office buildings, hotels and malls etc., and also be used in such industries as furniture manufacturing, fireproofing doors and ventilation pipes and other industries where board materials are needed.

Specifications

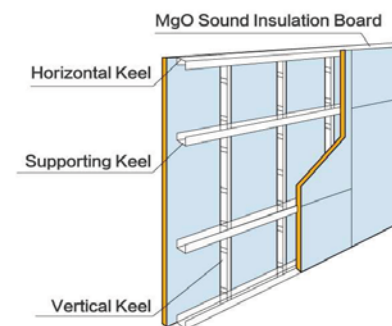
1. Thickness (mm): 3-20
 2. General Size (mm): 915x1830 / 1220x2300 / 1220x2440 / 1220x3000
 3. Color: White / Grey
 4. Type: Normal / Fire proof reinforce
- *Other special size can be made according to the customer's requirement.

Features

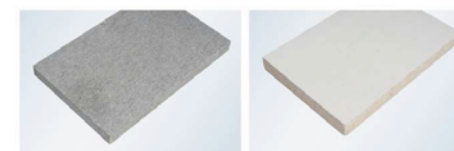
1. 100% free of asbestos, no smoke or poison in case of fire, creating a green and healthy living space.
2. Superstrong heat insulation performance, which saves cold and hot energy.
3. Good fireproofing performance, with incombustibility reaching Grade GB8624-2006A1.
4. Fast and convenient construction, which improves working efficiency.
5. The basic materials have high strength, good stability and good flexibility without any deformation.
6. Superior sound insulation performance, which ensures peaceful and environment.
7. Water resistant and moisture resistant, free from the impact of condensed bead or moist air.
8. The board is light, ageing-resistant and has a long performance life.
9. Protection against mould, bacterium, insects and termites.



Installation for Ceiling



Installation for Wall



Grey

White

Sound Insulation Felt

Sound Insulation felt is made from EPDM rubber, metal powders and some other additives.

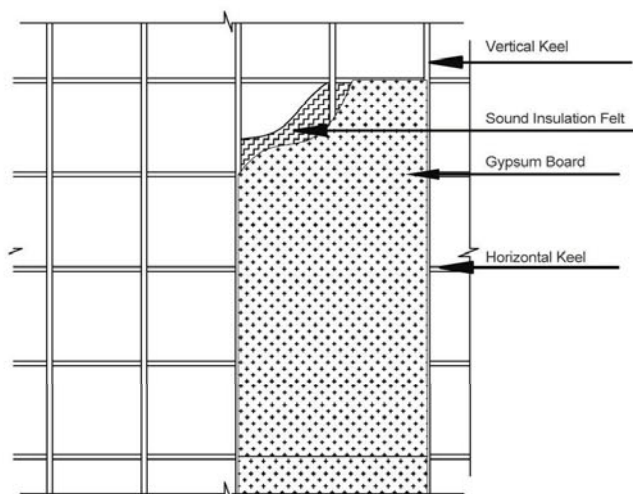
Application

Sound insulation felt can be used in bedroom ,office, Industrial pipe, disco ballrooms, gymnasiums, KTV, factory workshops, etc. The noise deadening felt has good noise-isolation effect.

Name	Size(mm)	Thickness(mm)	Isolation(dB)
Sound Insulation Felt	10000*1000	1.2	22.9
Sound Insulation Felt	10000*1000	2	27.2
Sound Insulation Felt	10000*1000	3	29.3

Features

- 1.Environment friendly, human friendly
- 2.Easy to cut
- 3.Good noise isolation effect
- 4.Fire-proof
- 5.Damp-proof



Installation of Sound Insulation Felt

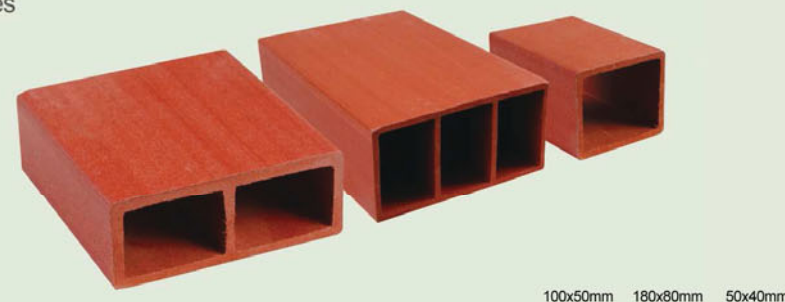
Sound-absorbing Panels Series



Eco-wood Panel

Eco Wood is made of wood wool, resin and a few polymers by extrusion, which not only has real wood features in looks, but also is good at waterproof, mothproof, anticorrosion, heat preservation and so on. It's widely used in tough conditions, such as indoor, outside, dry or wet places, and won't go bad, moldy, cracked or brittle.

Square Series



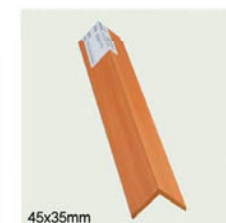
Inner Wall Series



Ceiling Series



Accessories



Basic Board	Hoisting Weight (kg·m ⁻²)	Sound Insulation Coefficient (dB)	Frame Material	Retractable Range of top/bottom(mm)	Partition Dimension (mm)		
					(Min/Max) Width	(Min/Max) Height	Thicknes
MgO Board	24	32	Aluminium	22.5	500~1230	2000~4200	65
MDF Board	24						
Melamine Board	24						
MgO Board	33	40	Aluminium	22.5	500~1230	2000~6000	80
MDF Board	32						
Melamine Board	32						
MgO Board	42	50	Aluminium	22.5	500~1230	3000~9000	100
MDF Board	38						
Melamine Board	38						

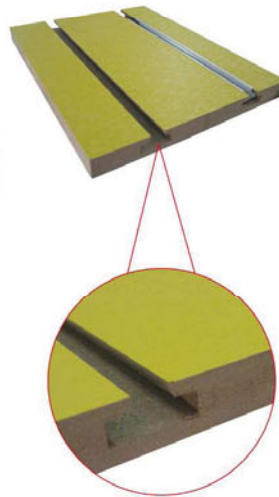


Slatwall

MDF slatwall was developed to display all kinds of products. The manufacturing process starts with quality MDF (medium density fiberboard). A variety of surface treatments are available such as melamine, HPL, natural wood veneer, etc.

Specifications

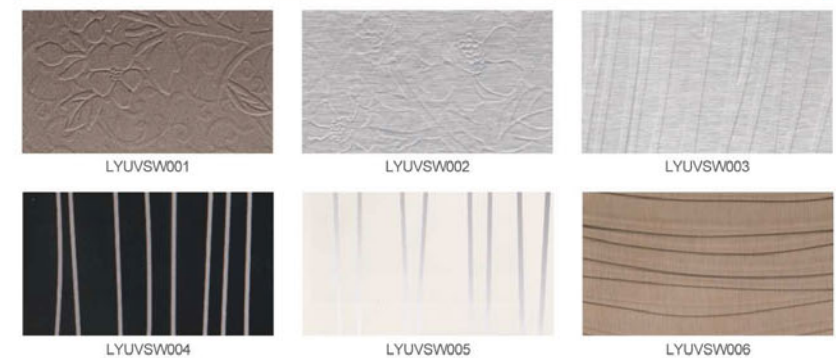
1. Structure: Base material, Surface
2. Surface: Melamine/PVC/HPL/UV/Real wood veneer
3. Base Material: MDF
4. Standard Size:
Horizontal - H1220 x W2440mm (4'H x 8'W)
Vertical - H2440 X W1220mm (8'H x 4'W)
5. Standard Thickness: 18mm
6. Slotted Groove Spacing Option: 75, 100, 150mm



Melamine Colour Chart for Slatwall


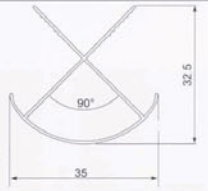
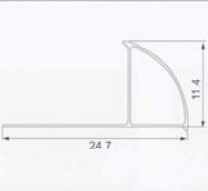
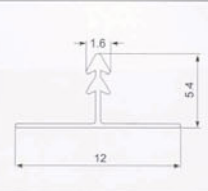

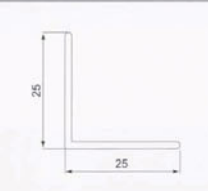
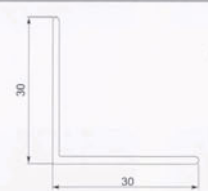
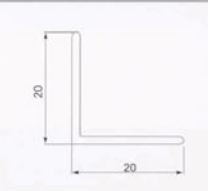

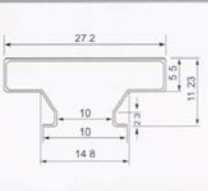
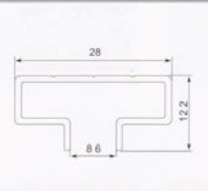
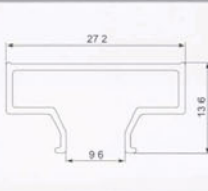
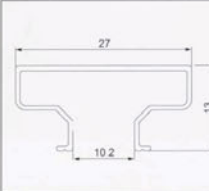
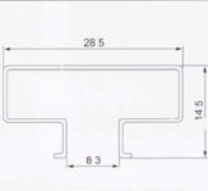
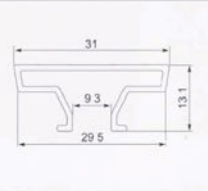
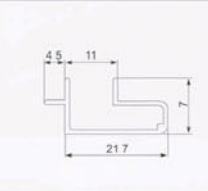
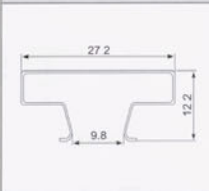
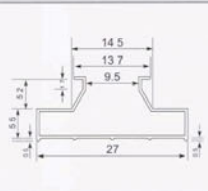
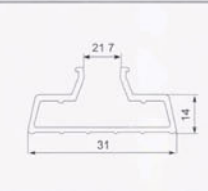
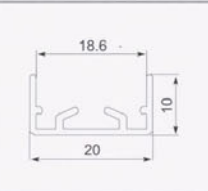


UV High Glossy Colour Chart for Slatwall



Aluminium Profile for Slatwall

Thickness: 0.4mm/0.5mm/0.6mm/0.8mm/0.9mm/1mm
Different sizes and shapes are available.

			
	AA-203	FF-857	YY302
			
	FF-845	FF-846	FF-847
			
	FF-543	YY-802	YY-806
			
YY-808	YY-809	YY-817	YY-818
			
YY-819	FF-543C	YY-821	YY-822

Hook for Slatwall

		
LYHS001	LYHS002	LYHS003
		
LYHS004	LYHS005	LYHS006
		
LYHS007	LYHS008	LYHS009
		
LYHS010	LYHS011	LYHS012
		
LYHS013	LYHS014	LYHS015

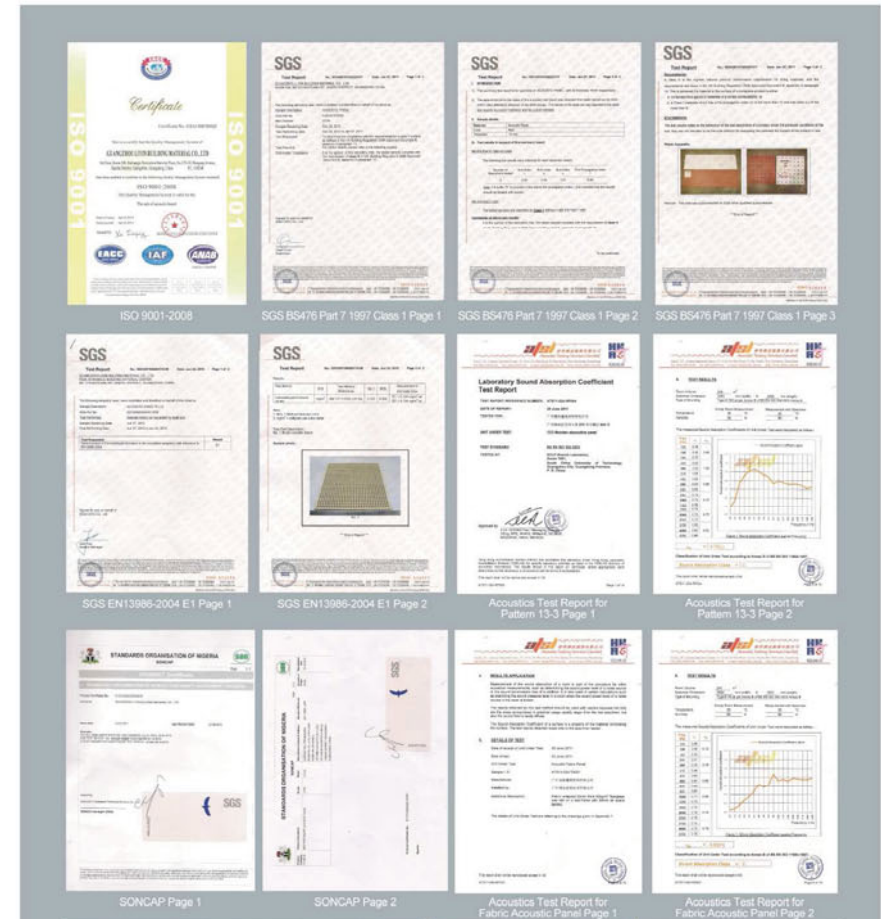
Slatwall Display

Slatwall display is made of MDF board. It combines nice appearance with high display practicality, being widely used in exhibition, supermarket, shop ect. Customized design is welcomed.

Size: 1220mmx2440mm or customize
Thickness: 15mm/16mm/18mm
Finish: melamine, PVC, MFC, HPL
Relevant accessories such as hooks, baskets, shelves are also available.

		
LYSD001	LYSD002	LYSD003
1236*350*1336mm	1250*600*1351mm	1336*350*1336mm
		
LYSD004	LYSD005	LYSD006
1236*600*1375mm	1270*500*1600mm	1236*800*1300mm
		
LYSD007	LYSD008	LYSD009
800*800*1400mm	1000*1000*1346mm	450*450*1330mm

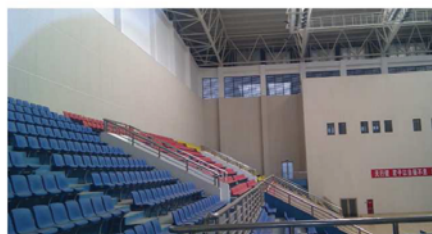
Certification and Test Reports



Partial Project List

Overseas Projects

New Delhi Cultural Arts Center, India
Malaysia University Auditorium
Burundi National Auditorium
Asia Bank, Singapore
Yangon Cinema, Myanmar
Philippines Manila Polo Club
National Court, Nigeria
Long Beach Hotel, Bangladesh
Turkey Caesar Hotel
India Jaipur Hotel
Office Building of Manila City, Philippine
Philadelphia Federation of Chinese Culture, United States
Jerusalem Municipality Office, Israel
Singapore HR Office Room
McDonald's Restaurants, Singapore
Armenian Restaurant
Saudi University Lecture Hall
Stadium of Bangkok University, Thailand
Singapore Airport
Brazil "Rio +20" G20 Summit Translation Room



Sichuan Huili Gymnasium



Zhongshan Gymnasium

China Projects

Huangmei Opera Arts Center
Arts Center of Guangzhou University Town
Bank of America, Hong Kong Branch
Agricultural Bank of China, Guangzhou Branch
The People's Cinema of Tongling
Golden Harvest Cinema
Yuxi Nieer Concert Hall
Conference Rooms of Jordan Road Fire Department
Conference Center of Guangzhou Dongshan Hotel
Court of Nanshan District of Shenzhen
Chongqing Municipal Court
Hefei Exhibition Center
Huizhou Exhibition Center
Dongguan Yueyuan Factory
Guangzhou South China Country Garden
Shunde Country Garden
Xiangya Hospital
Fuli Hotel(Four Stars)
Chongqing Sheraton Hotel
Chongqing Library
Multi-Purpose Room of Wal-Mart's Shenzhen Headquarters
Training Center of Yangquan Coal Industry Group
Museum of Nanyue King in Guangzhou
Office Building of Dongguan Civic Square
Office Building of Foshan Fushibao Electrical Group
Guangdong Opera House
Stanley High School Gymnasium
East Asian Games Main Stadium
Guangzhou TV Studio
Chongqing Cathay Pacific Theater
Lanzhou Grand Theatre
Wuhan Railway Station



Gansu Government Office



Hongkong Po Leung Kuk School

Basics of Acoustics



Building environment not only should be beautiful, but also be of good quality. Architectural design should be people-oriented. What we need to do is to care for millions of people's feeling of hearing. For example, to reduce the noise to a minimum, to make concert halls, theaters to achieve the best acoustic effect, and so on.

—Shuoxian Wu, Member of the Chinese Academy of Sciences

Classification of the Sound

The decibel (dB) is used to measure sound level.

The loudness of sound	0 db	20 db	40 db	60 db	80 db	100 db	120 db
Example	Barely audible voice	Quiet office	Talking in office	Talking loudly	Noisy streets	Noise of a train	Sound of aircraft engine

Difference Between Soundproofing and Sound Absorption Products

Soundproofing products trap the sound. They contain the sound within a space, making it impossible for the sound to move to other parts of the building. They also stop unwanted sound from entering the room.

Sound absorption products soak up sound. They absorb sound waves and prevent them from bouncing off the walls. They improve the quality of the sound within a room.

There is huge difference between soundproofing and sound absorption products, but in actual projects, they are usually used together in order to reach the best acoustic effect.

What's NRC?

To be able to compare the performance of different sound absorption products, we rate them by how much sound they can soak up. This rating is called NRC, which stands for Noise Reduction Coefficient. Generally, the higher the NRC rating, the better the product is at absorbing sounds.