





SCOON ACOUSTICS



Welcome to the world of SCOON ACOUSTIC.

SCOON ACOUSTIC is considered one of the finest divisions of Durdoor International Company, which has a global character and has relationships throughout the Middle East and around the world. Durdoor works to understand, appreciate and utilize multicultural influences in finishing choices, design and sound control requirements. These global experiences led to the development and improvement of sound insulation products and technologies.

durdoor focus on providing integrated acoustic decoration solutions services for spaces including offices, theatres, stadiums, multi-function halls, arts centers, cultural centers, auditoriums, museums, high-end exhibition halls, home theatres, schools and other interior decoration and sound design. We are committed to the concept of integrated service in the finishing materials industry and enjoy perfect sound decorated solutions.



Polyester Fiber Acoustic Panel



Product features: SCOON polyester fiber acoustic panel with high density, environmental protection, fire proof, wide frequency sound absorption, strong decoration, simple construction, easy cutting, no dust pollution and other properties, many color and decorative shape choices, can well meet customer's acoustic and decoration requirements. The highest fire resistance grade B1, the highest environmental protection grade E1.

Sound absorption coefficient: (Tested by authority laboratory) sound coefficient can be adjusted according to installation structure

Frequency (Hz)	125	250	500	1000	2000	4000
9m9mm Sound absorption coefficient α	0.23	0.57	0.75	0.82	0.68	0.62

Installation accessories: light steel keel, 9mm plywood batten, gun nails, nail free glue

Material consumption: refer to acoustic design

Product specification

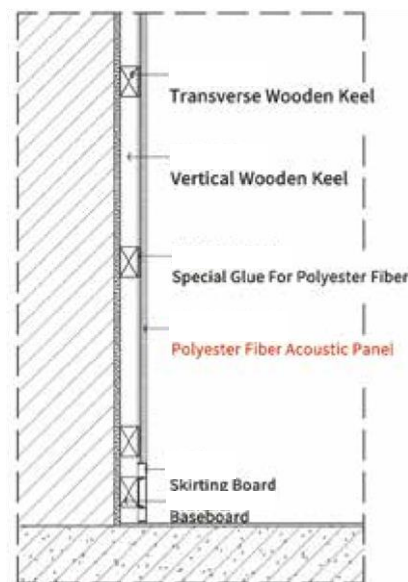
Substrate: 100% polyester fiber

Corner processing: chamfering

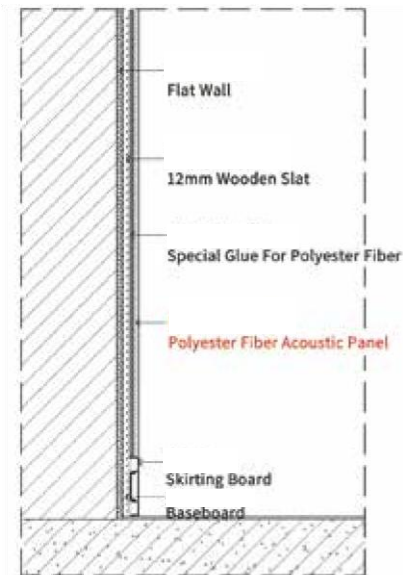
Density: 160-229kg/m³

Color: a variety of colors for customers to choose.

Product specification: 2420mm length x 1220mm width x 9mm thickness



Polyester Fiber Acoustic Panel Wall Installation(Cavity)



Polyester Fiber Acoustic Panel Wall Installation(Paste Direct)





Polyester Fiber Hard Acoustic Panel Series

SCOON Polyester Fiber Hard Acoustic Panel Series is a kind of wall decoration panel which and mostly used on the interior wall. The material used is soft in texture and soft in color, which can soften the overall space atmosphere and improve the level of its deep three-dimensional feeling.

In addition to the space beautification function, more importantly, it has the functions of flame-retardant, sound-absorbing, sound-proof, moisture-proof, mildew proof, anti-bacterial, water-proof, oil-proof, dust-proof, pollution-proof, anti-static and anti-collision, which is more cost effective.

Sound absorption coefficient: (Tested by authority laboratory) sound coefficient can be adjusted according to installation structure

Frequency (Hz)	125	250	500	1000	2000	4000
9mm Sound Absorption Coefficient α	0.44	0.80	0.85	0.82	0.73	0.86





Polyester Fiber Hard Acoustic Panel Series

1. Structure: High-quality fiber panel is pressed by over 200 degrees temperature with fabric finish, forming a whole, never deformation panel ;

2. Density: 120 ~ 300kg / m³ ;

3. Acoustics: Noise reduction coefficient $NRC \geq 0.75$, tested according to GB / T20247-2006 《Sound Absorption Measurement in Acoustic Reverberation Room》 ;

4. Fire resistance: Grade B1 combustion performance (can be Grade A), tested according to GB8624-2017 《Classification of Combustion Performance of Building Materials and Products》 ;

5. Environmental protection: E1 Grade, tested according to GB18580-2017 《Formaldehyde Release Limit in Wood-based Panel of Interior Decoration Materials and Its Products》 ;

6. Waterproof: The boards are fine dense and impervious to water, basically forming a lotus leaf effect;

7. Decoration: The decorative surface can be diversified, which can be used for fabric, leather, and other protective surfaces. Any material in high definition can be painted or embroidered. It can also be curved, concave-convex and other special-shaped surfaces

8. Applicable places : restaurant, conference room, office, hotel, banquet hall (can be painted).

Product Specification (Commonly Used)

length : 1220mm 2500mm 3000mm

width : 1210mm 2420mm

thickness : 5mm 9mm 12mm

it can cut to any shape easily at site installation.





Polyester Fiber Hard Acoustic Panel Series

Acoustic Painting Panel

SCOON Acoustic Painting panel is made by high-tech printing Technology. It can achieve the expressive effect of the original art, and also allows sound waves to enter the base material and be absorbed effectively and reduced by the panels. Besides, it is flexible and changeable on size, which can satisfy the sound-absorbing scheme of large-scale pictures. It's very suitable for spaces with particularly high acoustic requirements and need to absorb noise in a wide frequency range. This biggest size 1.4m x 6.0m, the thickness can be 20mm, 25mm or 50mm.

Sound absorption coefficient: (Tested by authority laboratory) sound coefficient can be adjusted according to installation structure.

Frequency (Hz)	125	250	500	1000	2000	4000
9mm Sound Absorption Coefficient α	0.44	0.80	0.85	0.82	0.73	0.86



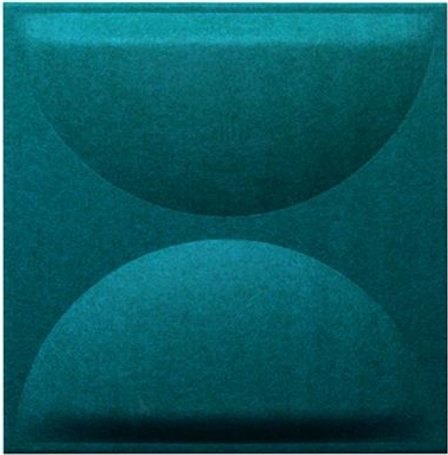


PRODUCT CENTER

- 3D TILES
- EMBOSSING SERIES
- WAVES SERIES
- DESKTOP SCREEN
- FLPPR SCREEN
- HANGING SCREEN
- SLASH AND BACKSLASH
- CARVED SERIES
- PRINTING SERIES
- TELEPHONE BOOTH SERIES



3D TILES



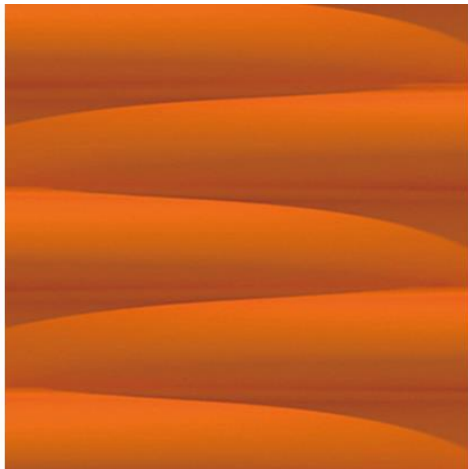
BY-053



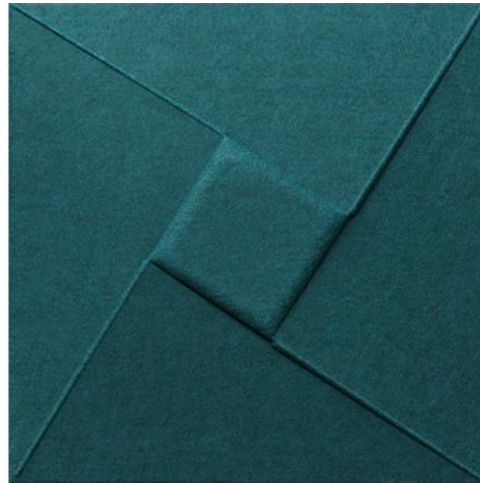
BY-046



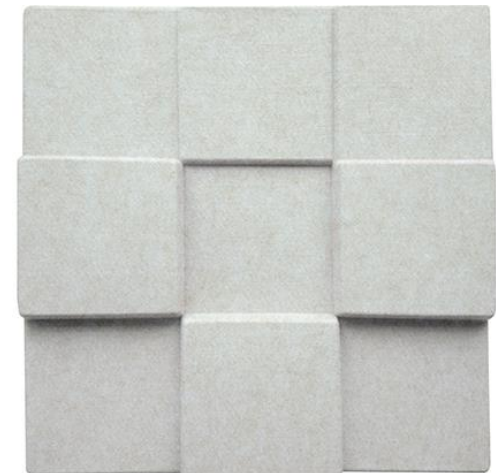
BY-050



BY-002



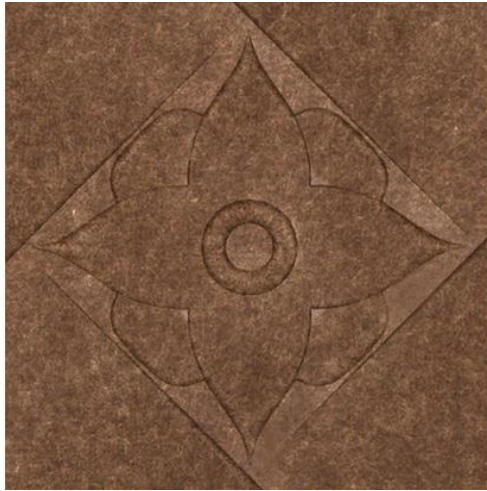
BY-031



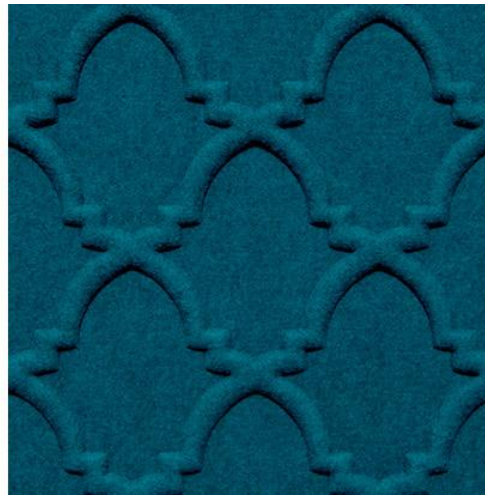
BY-011



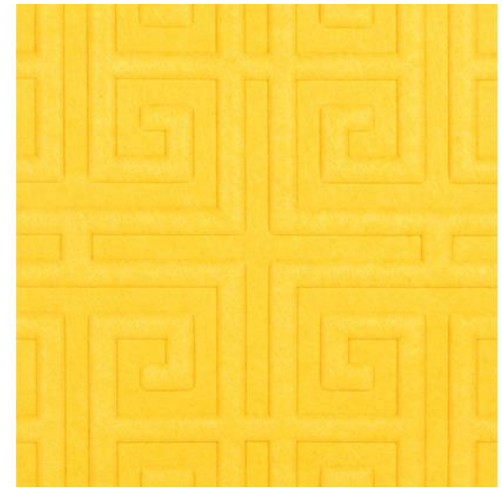
EMBOSSING SERIES



BX-005



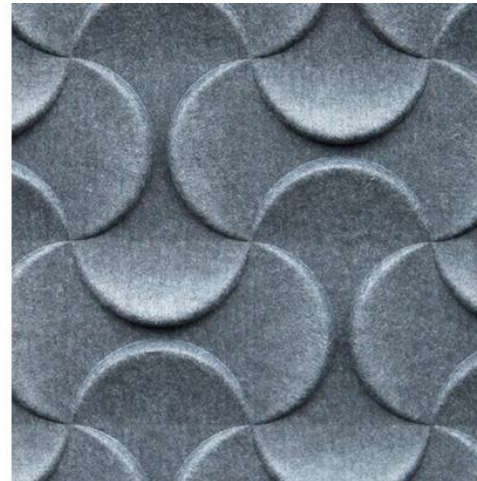
BX-007



BX-006



BX-015



BX-016



BX-017



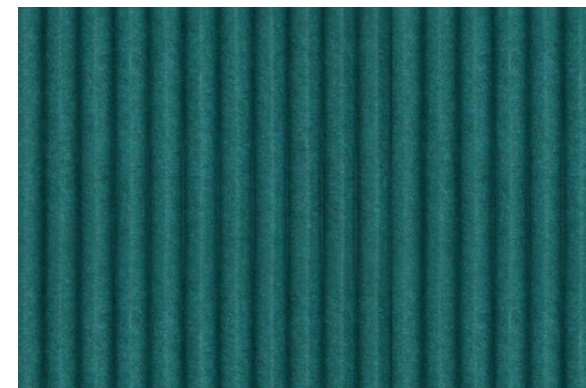
WAVES SERIES



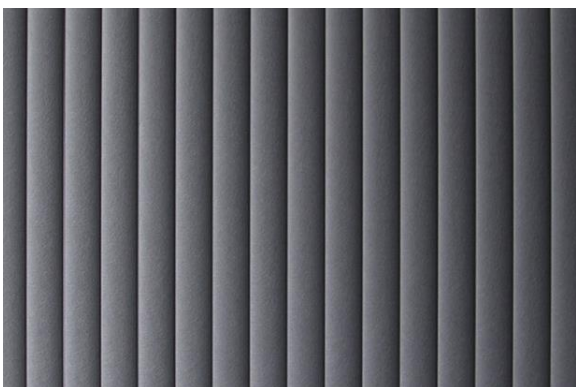
H-DH-120



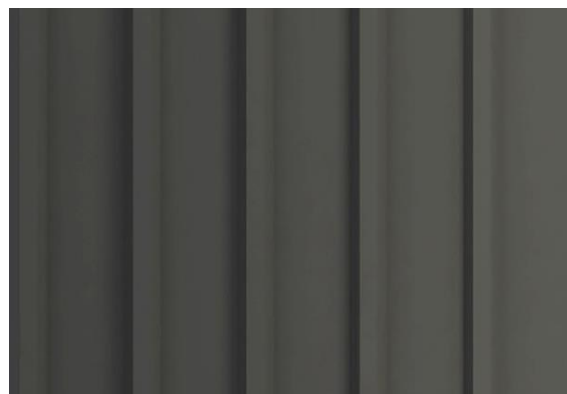
H-DH-70



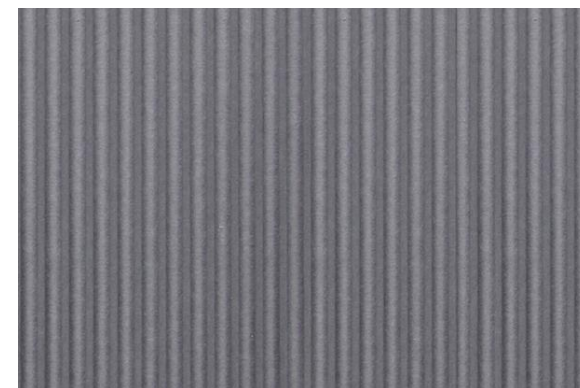
H-DM-001



H-DS-75(L)



H-DM-003



H-DM-002



DESKTOP SCREEN



ZP300-1180



ZP300-1000



ZP300-800



LZP660-787-410



FLPPR SCREEN



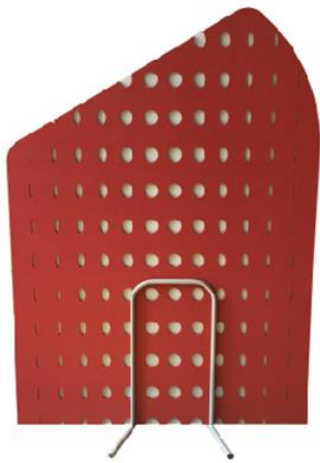
LD-PB-12



LD-PB-06



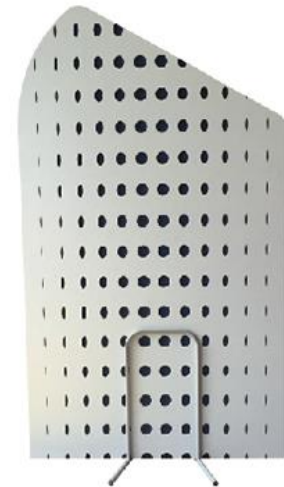
LD-PB-05



LD-DK-04



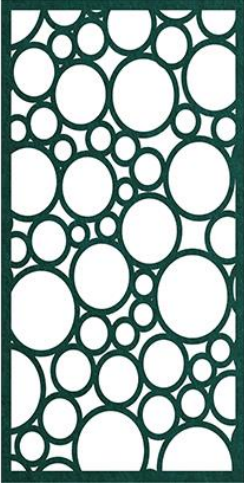
LD-DK-06



LD-DK-05



HANGING SCREEN



DK-136



DK-135



DK-109



DK-107



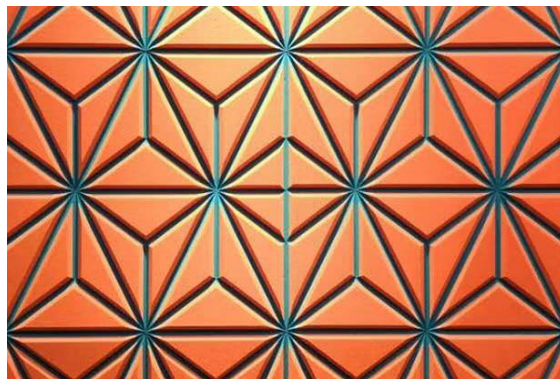
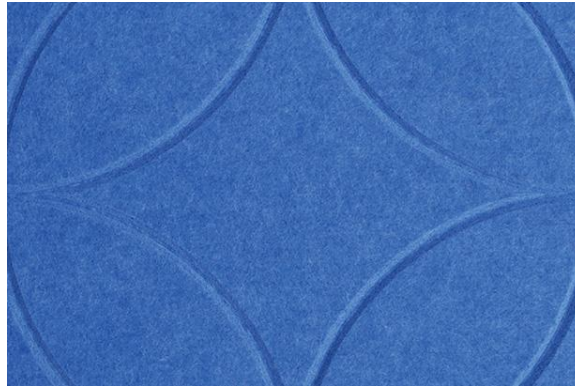
DK-78



DK-06



SLASH AND BACKSLASH





CARVED SERIES





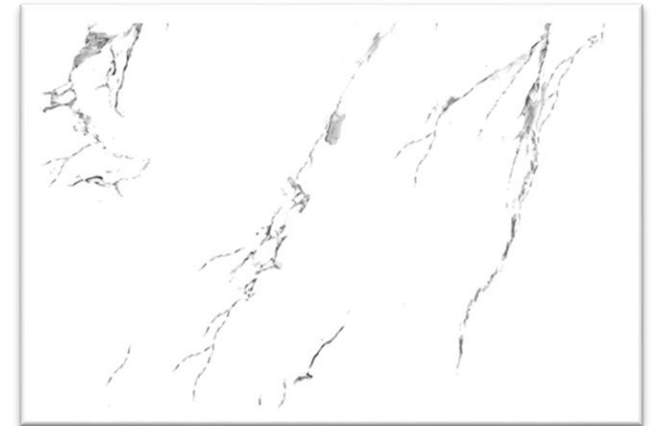
PRINTING SERIES



USABUV00018-01



USABUV00016



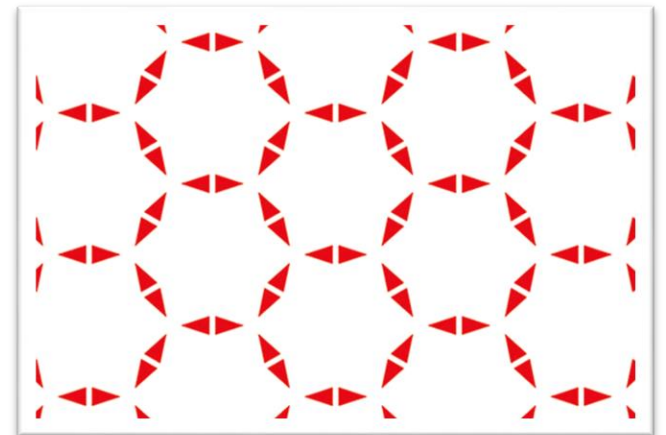
BUV0002



USABUV00016-0000



USABUV00015



BUV1033



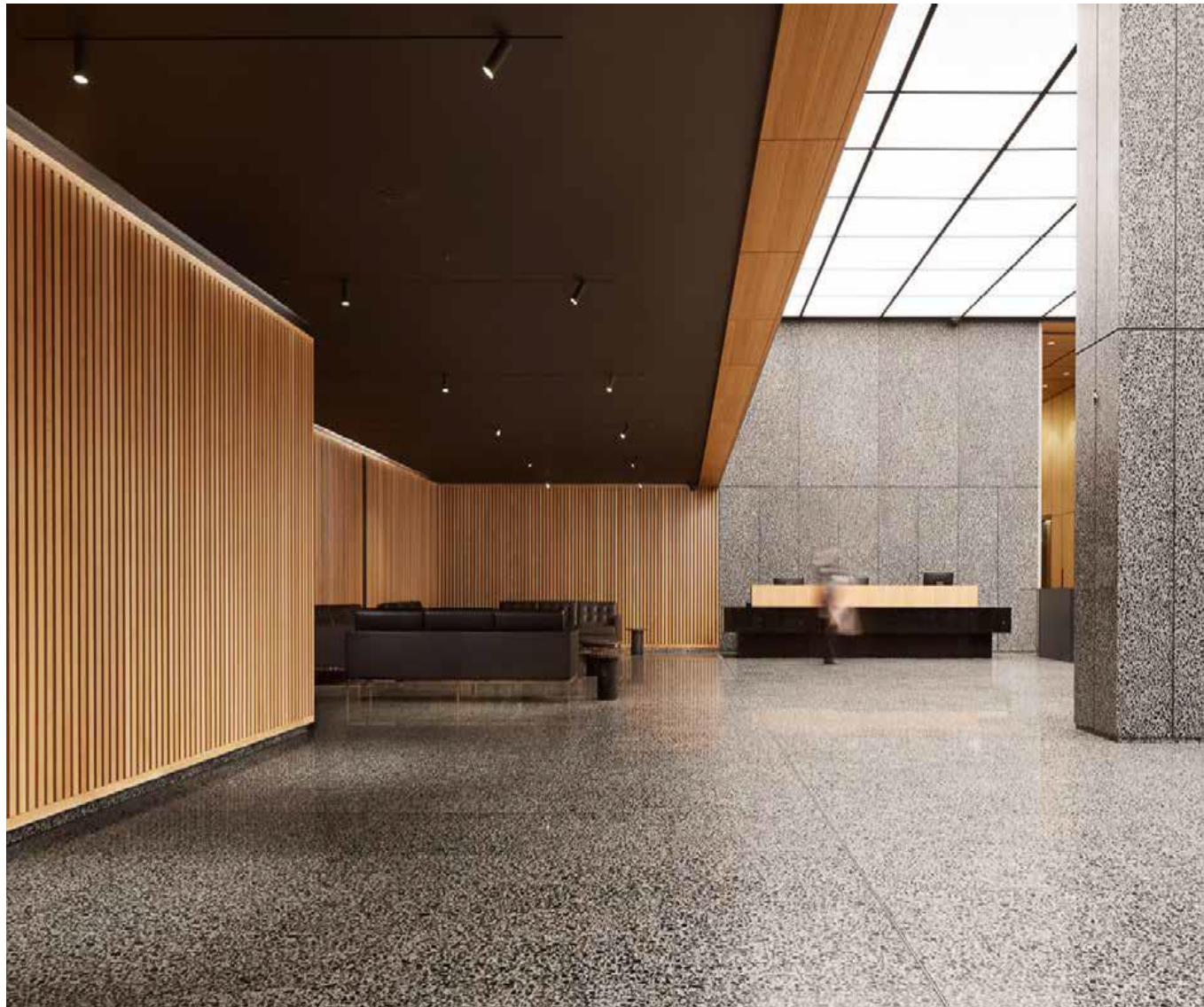
TELEPHONE BOOTH SERIES





Slatted Acoustic Panel

Features: Each piece of Tenge strip board is handmade with formaldehyde free sound absorption PET and environment-friendly wood as the bottom substrate. The surface can be made into melamine, wood leather, cloth, leather and other finishes according to customer requirements. This not only enhances the visual sense of decoration, but also creates a quieter and more comfortable environment. This product is made of environment-friendly materials and has the report and certification of the authority. It is the first choice of sound absorbing decorative materials for office space, commercial space, living room, bedroom and cinema.





Slatted Acoustic Panel



Light White Oak



Grey Oak



Light Smoke Oak



Marbling



Light Walnut



Walnut.JK



W.Oak



Iron-grey



Dark Smoke Oak



Dark Walnut



Natural Oak



Black



Slatted Acoustic Panel

Model	MA35-15,MA27-13
Length	600mm 2400mm 3200mm 3600mm
Width	600mm
Slat Width	35mm / 27mm
Gap Width	15mm / 13mm
Thickness	21mm(9mm PET base board with 12mm wooden slat)
Base Material	100% Polyester Acoustic Panel (class A flame retardant from ASTM E84 standard)
Wooden Slat	High Density Fiber Board, Solid Wood
Finish	Melamine/veneer/HPL/Painting
Installation	Glue, wood frame, gun nail





Slatted Acoustic Panel

Advantage

1. Stable product quality and zero complaint.
2. Standard products, available for stock.
3. Functional products with sound absorption, strong decorative.
4. Wide range of applications: suitable for both house and industry decoration.
5. Applicable online sales and distributor channel sales.
6. 100% recycled material.

Laboratory measurement: NRC= 0.7

Standard: GB/T 20247-2006/ISO354:2003

Certificate: CE, Fire retardant certificate, etc.





3D Art Polyester Fiber Acoustic Panel



This series of products has modern curves, geometric shapes and smooth edges, which is the product of the designer's combination of natural laws and modern aesthetics. The 3D design has its own cavity, which has a more significant effect on low-frequency processing than the flat design, and the concave and convex parts can fully diffuse the excess sound rays, which can achieve full-frequency sound absorption and diffusion, making the sound of the whole place clearer and fullness; let acoustics and modern decorative aesthetics better blend together.

Sound absorption coefficient: (Tested by authority laboratory) sound coefficient can be adjusted according to installation structure

Frequency (Hz)	125	250	500	1000	2000	4000
9mm Sound Absorption Coefficient α	0.24	0.57	0.81	0.92	0.68	0.58





3D Art Polyester Fiber Acoustic Panel

This series of products has modern curves, geometric shapes and smooth edges, which is the product of the designer's combination of natural laws and modern aesthetics. The 3D design has its own cavity, which has a more significant effect on low-frequency processing than the flat design, and the concave and convex parts can fully diffuse the excess sound rays, which can achieve full-frequency sound absorption and diffusion, making the sound of the whole place clearer and fullness; let acoustics and modern decorative aesthetics better blend together.

Product Specifications: Length: 500mm Width:500mm

Thickness:20mm/25mm/48mm/53 mm size can be customized)

Advantages: light weight, strong decoration, good sound absorption performance, environmental protection & high-quality products

Applicable place: Office Space, Clubhouse, Sports Hall, Public Area

Finish: may colors choice

Material consumption: refer to Acoustic Design





Fabric Acoustic Panel

Hydrophobic & formaldehyde free fabric acoustic panel

Product Specification (Commonly Used)

length : 595mm / 1195mm

width : 595mm

thickness : 25mm / 50mm

density : 48kg/m³ / 64kg/m³ / 80kg/m³ / 96kg/m³



Right Angle Small



Chamfer (routine)



Big Chamfer



Resin Frame



Aluminum Frame



Soft Frame



Fabric Acoustic Panel

Products Information

Base material: hydrophobic & formaldehyde free white glass wool

Frame: resin frame, aluminum frame, soft frame

Finish: fabric series, leather series, fiber glass fabric series

Hydrophobic rate: $\geq 98\%$

Moisture content: 0.4%

Shrinkage temperature of thermal load: 380 °C

Fire protection: class A (base material)

Environmental protection: no formaldehyde release

Construction: consistent with the fabric acoustic panel, it can be pasted, buckled and nailed

Sound absorption coefficient: (Tested by authority laboratory) sound coefficient can be adjusted according to installation structure

Frequency	125	250	500	1000	2000	4000
25 25mm Sound Absorption Coefficient α	0.38	0.77	0.91	0.88	0.86	0.89
25mm Sound Absorption Coefficient α	0.61	0.98	1.00	0.85	0.98	0.95





Full-frequency Absorption Fabric Acoustic Panel

Base material: Owens Corning cotton, glass cotton, red glass cotton

Frame: resin frame, aluminum frame, soft frame

Finish: fabric series, leather series, fiber glass fabric series

Fire protection: class A (base material)

Environmental protection: no formaldehyde release

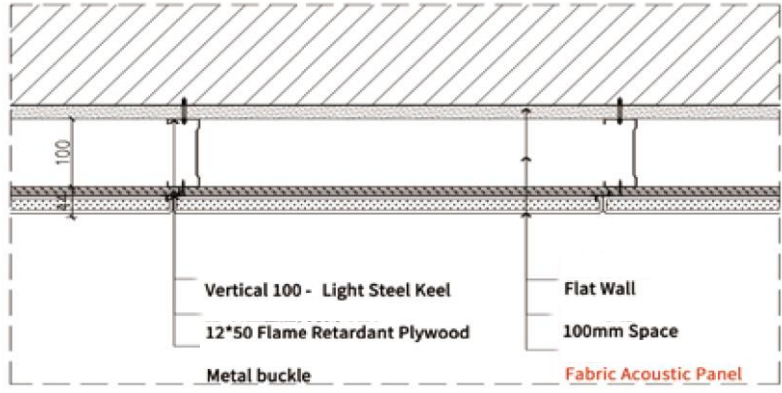
Construction: consistent with the fabric acoustic panel, it can be pasted, buckled and nailed.

Largest size: 1.4m wide x 6m (within)

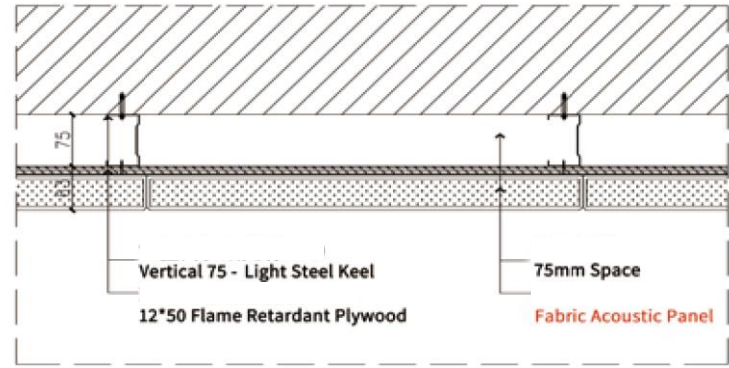
Sound absorption coefficient: (Tested by authority laboratory) sound coefficient can be adjusted according to installation structure

(Hz)Frequency	125	250	500	1000	2000	4000
25mm Sound Absorption Coefficient α	0.21	0.55	0.82	0.72	0.69	0.67
50mm Sound Absorption Coefficient α	0.33	0.64	0.75	0.80	0.80	0.77

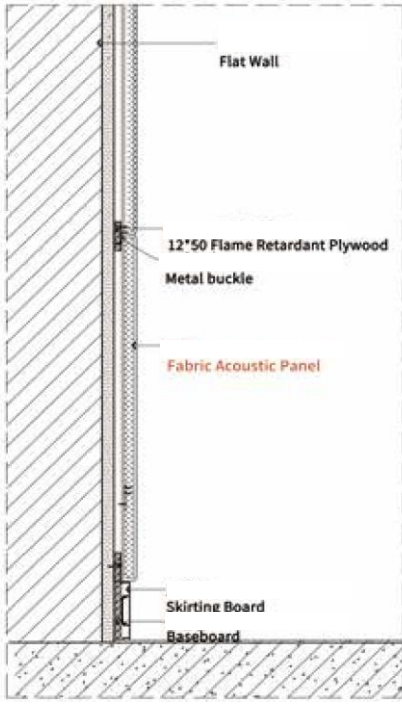




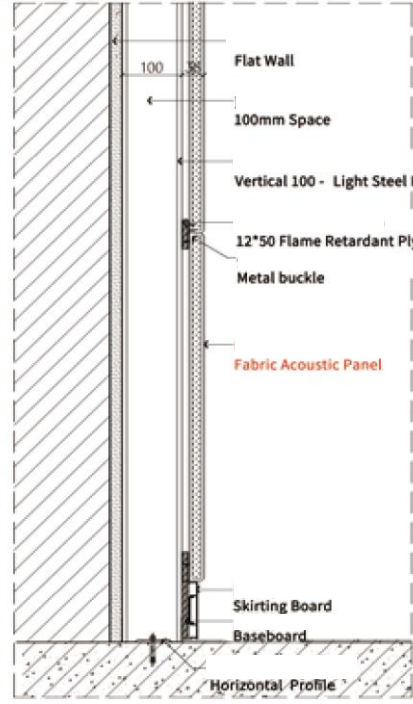
clip installation horizontal section drawing



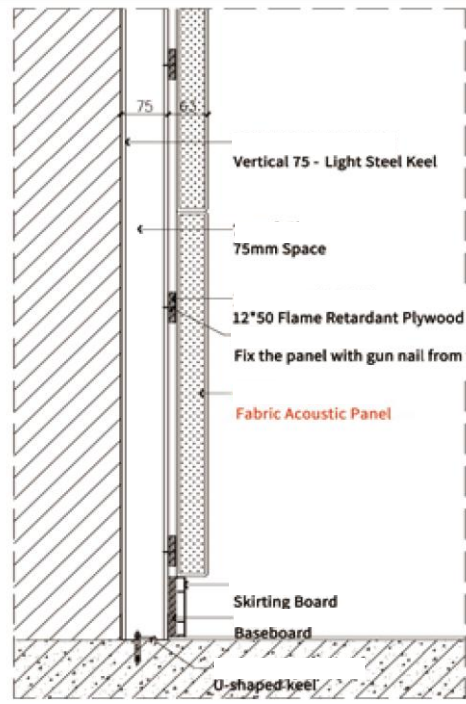
nail and wood batten installation horizontal section drawing



pasted to backboard installation vertical section drawing



clip installation vertical section drawing



nail and wood batten installation vertical section drawing



Fabric Acoustic Panel Project Case

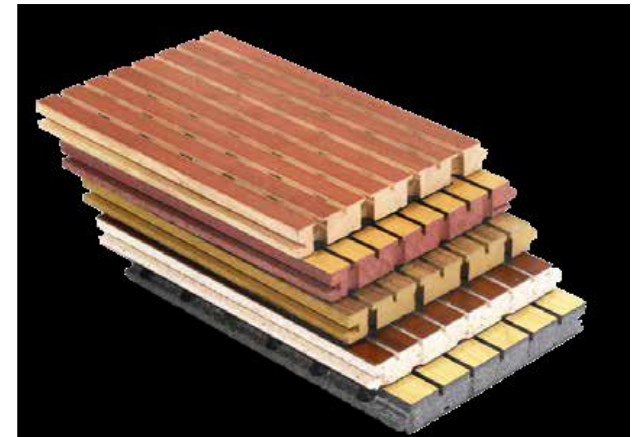




Standard Acoustic Panel Series

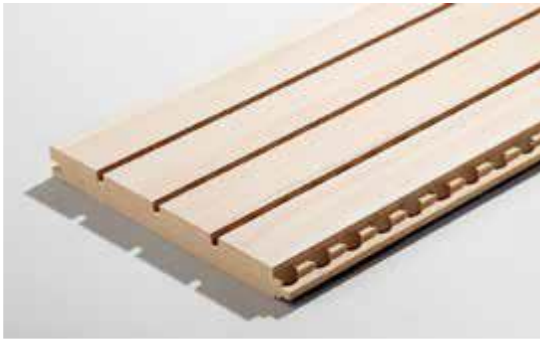
Characteristics: Full frequency sound absorption and high efficient on low frequency. No dust pollution, anti-static, water proof and moisture- proof, long lime usage. Simple installation, short construction period and low installation cost.

Fire resistance, A2 fire resistance can meet the project's high fire proof requirement. Generous and beautiful decorative effect. The perforated rate, finish color and groove width can be changed according to requirements.

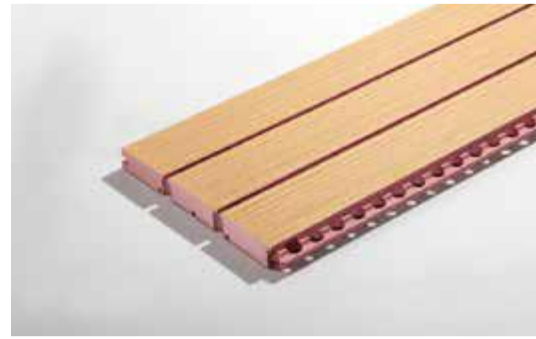




Base Material of Grooved Acoustic Panel



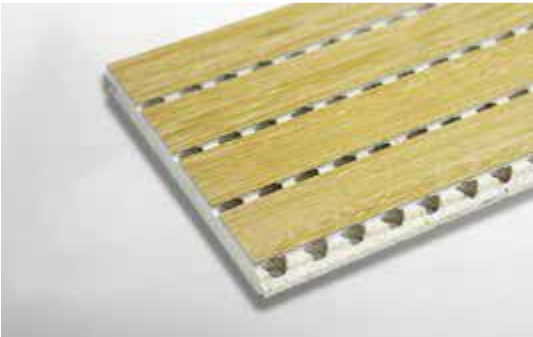
E1 class environmental protection base material



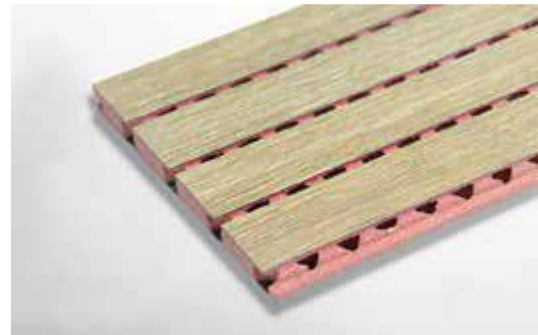
E1 grade flame retardant base material



Black Mgo base material



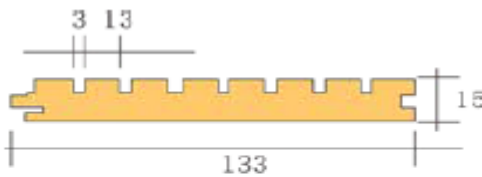
White Mgo base material



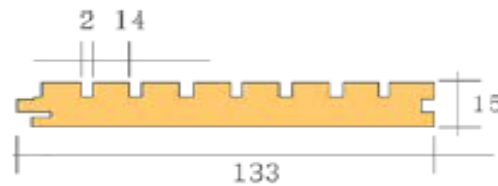
Red Mgo base material



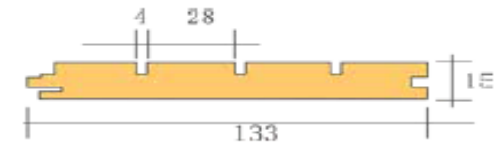
Carbon fiber board base material



Standard model 13/3
Perforation rate 12.8%



Standard model 14/2
Perforation rate 7.5%



Standard model 28/4
Perforation rate 9%

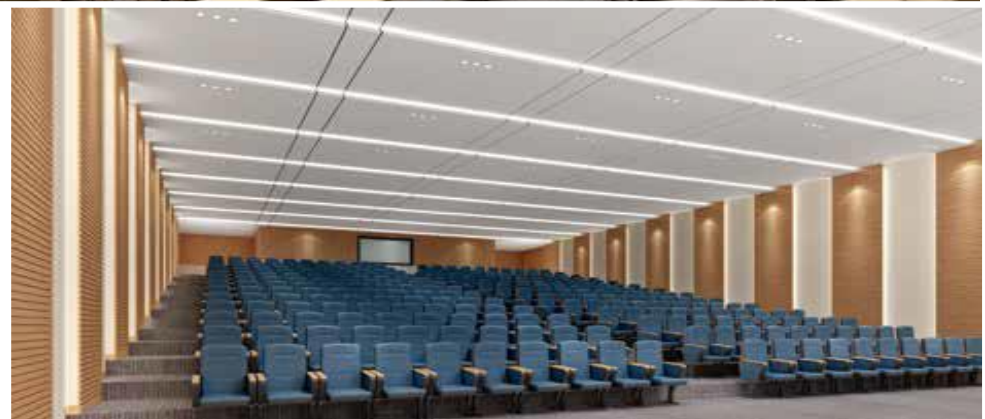


Sound absorption coefficient: (Tested by authority laboratory) sound coefficient can be adjusted according to installation structure

Frequency (Hz)	125	250	500	1000	2000	4000
Sound absorption coefficient α	0.38	0.81	0.91	0.68	0.62	0.55

Frequency (Hz)	125	250	500	1000	2000	4000
Sound absorption coefficient α	0.33	0.89	0.47	0.52	0.34	0.28

Frequency (Hz)	125	250	500	1000	2000	4000
Sound absorption coefficient α	0.32	0.73	0.82	0.53	0.39	0.4





Perforated Acoustic Panel Series

Characteristics:

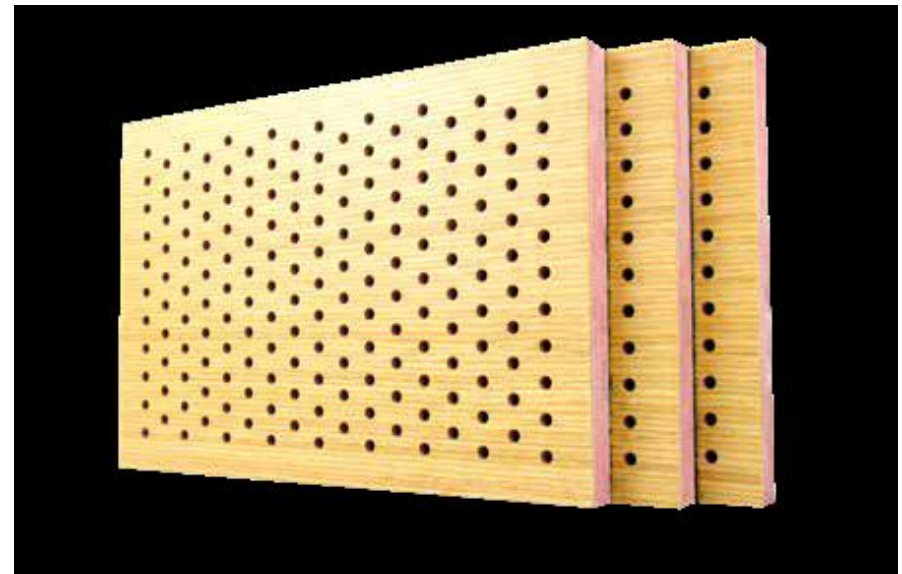
Perforated Acoustic Panel is a kind of resonant sound absorption material directly perforated on density board.

Perforated Acoustic Panel has strong selection on sound absorption spectrum.

It has good sound absorption performance on medium and low frequency.

The sound absorption effect of medium and high frequency can be improved with acoustic cotton filled behind the panel cavity.

Perforated hole diameter and distance can be adjusted according to customer requirements.





Standard Perforated Acoustic Panel

Material consumption: refers to acoustic design

Structure: Perforated on High density base materials, with black acoustic tissue behind.

Finish: melamine, natural veneer, fireproof board, painting, metal surface, veneer, leather surface, etc..

Model: E-shape hole: E32/12; E32/10; E16/8; E16/6 ; E16/4

V-shape hole: V32/12; V32/10; V16/8; V16/6; V16/4

Installation accessories: light steel keel, 12mm plywood batten, sound-absorbing cotton and steel wire, special keel etc.

Advantages: Perforated Acoustic Panel is a kind of resonant sound absorption material directly perforated on density board.

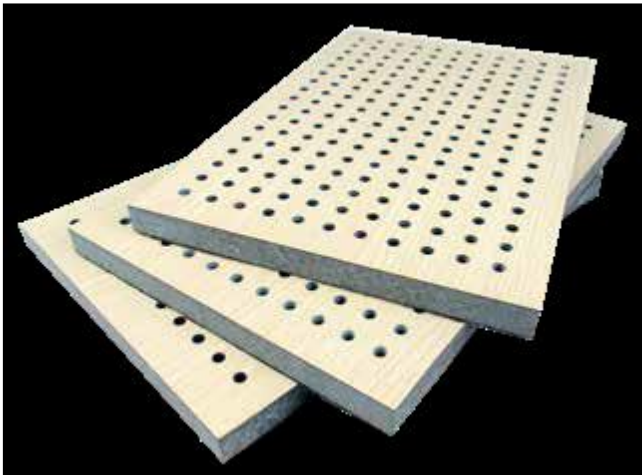
Perforated Acoustic Panel has strong selection on sound absorption spectrum. it has good sound absorption performance on medium and low frequency. The sound absorption effect of medium and high frequency can be improved with acoustic cotton filled behind the panel cavity . Perforated hole diameter and distance can be adjusted according to customer requirements.

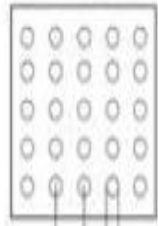
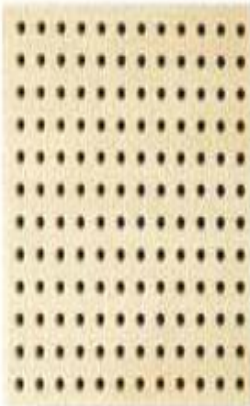
Regular size: Length:605mm/1210mm x width:605mm x thickness:12mm/15mm/18mm

Specifications: Length : 600mm/1200mm/2400mm width : 600mm/1200mm thickness : 12mm/15mm/18mm

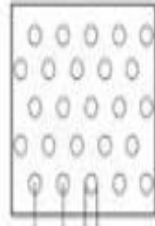
or customize other specifications (tolerance: width ± 1 mm, length ± 2 mm, thickness ± 0.2 mm)

Application: Gymnasium, multi-function hall, concert hall, Grand Theatre, conference room, lecture hall, family cinema, hotel and so on, which require high field of acoustics.





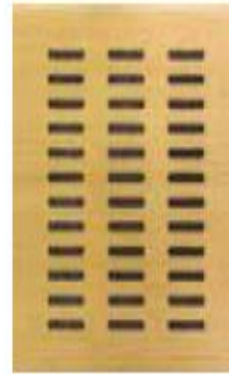
16mm 6mm



16mm 6mm

Type: E-shape hole E16/6
Perforated rate:12.5%

Type: V-shape hole V16/6
Perforation rate:12%



型



32mm 6mm

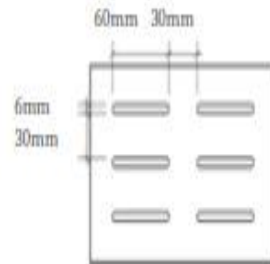


32mm 6mm

Type: E-shape hole E32/6
Perforated rate:4.2%

Type: V-shape hole V32/6
Perforation rate:4%

型



1-6

Type: U-shape hole E60-30-6
Perforation rate:9.2%





Micro-perforated Acoustic Panel

Micro perforated acoustic panel is a composite structure with a diameter of 0.5-3mm perforated surface sheet and a diameter of 8-12mm perforated base sheet at the back, which forms a micro-porous resonant sound-absorbing material.

Advantages: Use high-density board as base material, due to its micro-hole structure, it can form a low-medium frequency band, which has a better sound-receiving effect, at the same time, the surface is no-hole feeling, easy clean, beautiful and generous. The highest fire proof can be Grade A.

Applicable place: widely used in various public spaces, theaters, gymnasiums, conference rooms, Banquet Hall and other acoustic places with high decoration requirement ;

Installation accessories: light steel keel, 12mm plywood batten, sound-absorbing cotton and steel wire, special keel etc ;

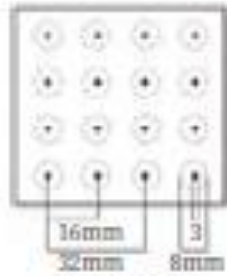
Material consumption: refer to acoustic design ;

Finish: Wood grain color or custom pure color according to requirement.

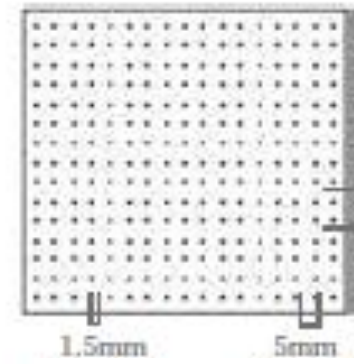
Sound absorption coefficient: (Tested by authority laboratory) sound coefficient can be adjusted according to installation structure.

Frequency (Hz)	125	250	500	1000	2000	4000	Remark
Sound absorption coefficient α	0.33	0.37	0.77	0.66	0.47	0.48	50mm Back Cavity +50mm 32K Glass Wool





Type: stepped E-shape hole
E16/3-10 Perforation rate: 2.8%



hole diameter hole pitch

10mm
hole pitch

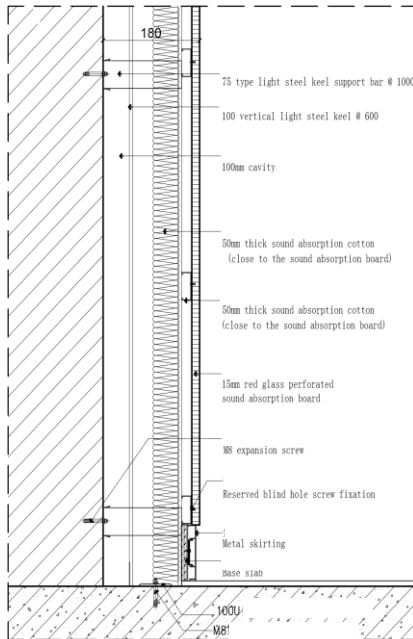




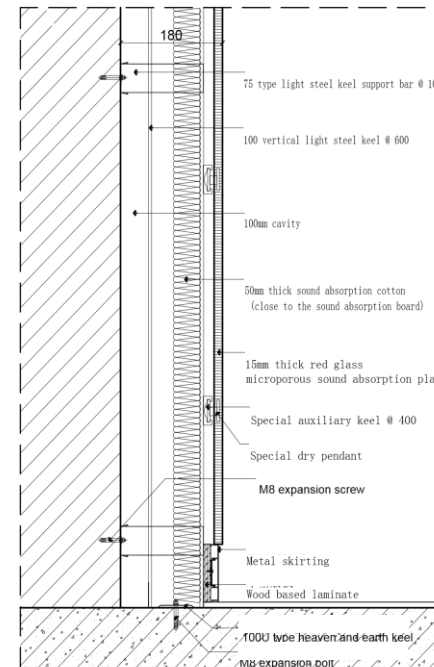
Installation of Perforated Acoustic Panel

Installation:

- a. **Alignment:** according to the installation drawings, and according to the actual size of the site, determine the keel laying space, according to the space with Ink Bucket Bullet Line;
- b. **Laying the main keel:** according to the drawings to determine the distance between the light steel keel, and according to the position of the ink line, with expansion bolts will be fixed to the vertical light steel keel wall;
- c. **Laying auxiliary keel:** determine the distance between auxiliary keels according to the drawing (according to the distance of 400mm) , and fix the 50C-type auxiliary keel on the vertical light steel keel with the wall plate nail;. **Laying special keel:** i-shaped keel fixed on the splint, keel distance according to the need for red glass perforated sound absorption board size.
- d. **Place the sound-absorbing cotton:** 1200 * 600 * 50mm sound-absorbing cotton placed between the keel;
- e. **Install sound-absorbing board:** fix the red glass perforated sound-absorbing board to 50C sub-keel with metal buckles, and leave 1 ~ 2mm expansion joint between the board and the board to reduce the influence of the hot expansion and cold contraction of the board.



Vertical section of perforated sound absorption



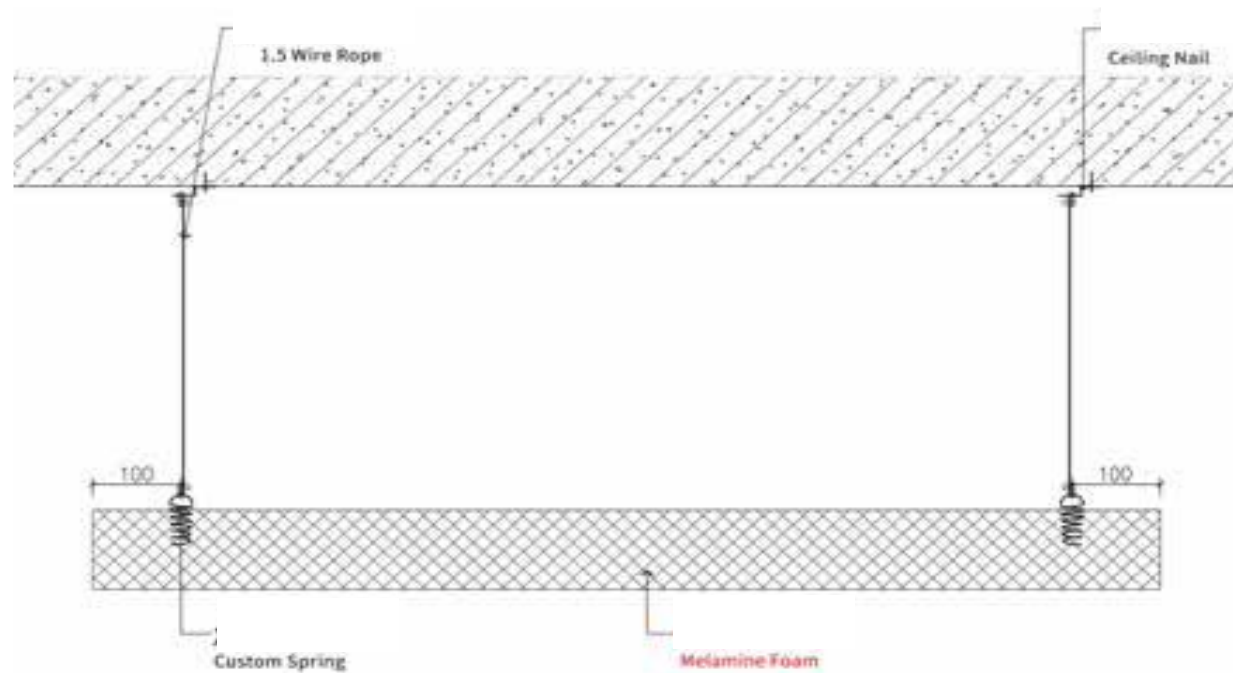
Vertical section of wall installation of micro-hole



Melamine Foam

Sound absorption coefficient: (Tested by authority laboratory) sound coefficient can be adjusted according to installation Structure.

Frequency	125	250	500	1000	2000	4000	Remark
50mm Sound Absorption Coefficient α	0.23	0.45	0.88	0.86	0.84	0.70	NO cavity



Installation Of Melamine Foam Ceiling



Melamine Foam

Product features: Melamine foam has high porosity, which is more than 99%, so that the sound wave can enter the deep inside of foam effectively and transfer to kinetic and hot energy by the internal friction, is consumed and absorbed. So that the reflected sound wave can be effectively eliminated. It can be directly used for indoor sound absorption and noise reduction, no dust or harmful gas release during construction. It also can be used inside the resonant structure to improved the full frequencies sound absorption effect.

Advantage:

- (1) Excellent sound absorption performance: 25mm melamine foam is similar to 50mm 32kg/M3 glass wool on the sound absorption performance.
- (2) It can be processed into any shape of sound absorber, and its work ability and construction environment are much better than traditional foam products.
- (3) It is made of high temperature foaming, with unique chemical stability. Its sanitation can meet the requirements of food hygiene level. It has resistance to chemical reaction, can also be used for household cleaning.
- (4) It's green product, environmental protection, non-toxic and formaldehyde free.
- (5) compared with other sound absorbing cotton board: it has better sound absorption performance, no dust pollution and no harm to human body.

Specification: Length:600mm/1200mm/2400mm width:600mm/1200mm thickness: 25--100mm
(tolerance: length \pm 2mm, width \pm 1mm, thickness \pm 1mm)

Density: 8-10kg/ m³

Applicable places: gymnasium, theatre, auditorium, church, recording room, studio, multi-function hall, home theater, etc.

Installation accessories: light steel keel, 12mmplywood batten, special clip piece.





Wood Wool Acoustic Panel

Characteristics: Wood wool acoustic panel has been produced and used for many years in China , is often used as building sound absorption and temperature reservation material . Wood wool acoustic panel is composed of magnesite and 100% pure wood. which has remarkable sound absorption effect on medium and high frequency noise.



Sound absorption coefficient: (Tested by authority laboratory) sound coefficient can be adjusted according to installation structure

Product Name	Installation conditions	Frequency (Hz)	125	250	500	1000	2000	4000
15mm Wood Wool Acoustic board	50mm rear cavity +50mm 24kg/m ³ glass wool	9mm Sound Absorption Coefficient α	0.44	0.80	0.85	0.82	0.73	0.86



Original color Wood Wool Panel

Product features: Wood wool panel has the features of environmental protection, fire prevention, wide frequency range's sound absorption, simple construction and easy cutting and other properties, the surface can be painted with various color pigment. The surface filamentous texture, giving a raw rough feeling. After installation, the acoustic environment is closer to nature. Fire resistance Grade B1, environmental protection Grade E1.

Product structure: **magnesite + 100% pure wood wool**

Fire rating: **B1 class.**

Environmental protection grade: **E1 Grade, according to GB18580-2017 《Formaldehyde emission limit of wood-based panel and its products》 Standard.**As well as moisture proof, fire prevention, mildew prevention and environmental protection.

Install method: **self tapping screw or special installation keel.**

Density: **580Kg/ m³.**

Color: **can be sprayed to various colors or coatings.**

Installation accessories: **light steel keel, 12mm plywood batten, self-tapping screws etc.**

Applicable places: **Gymnasium, multi-function hall, concert hall, Grand Theater, conference room, lecture hall, home theater, hotel and other places with high acoustics requirements.**

Product specification: **length:2440mm wide:1220mm thickness:15mm / 20mm /25mm.**

Allow tolerance: **length: ± 2mm, width: ± 2mm, thickness: ± 2mm**



Aluminum Grooved Acoustic Panel

Characteristics: Aluminum grooved acoustic panel is made of high-quality aluminum, and it is upgraded and replacement product of grooved wood acoustic panel, perforated acoustic panel, aluminum perforated panel, composite acoustic panel and so on





Aluminum Grooved Acoustic Panel

Aluminum groove sound absorption board is made of high-quality aluminum, and it is upgraded and replaced by wooden slot, perforated sound absorption plate, aluminum perforation plate, composite sound absorption board and so on.

Model:28-4、20-3、33-5 (can be customized)

Material consumption: refer to acoustic design

Installation accessories: light steel keel, sound-absorbing cotton bag, glass fiber felt, black wire mesh, self-tapping screws etc.

Advantage: full frequency sound absorption, fireproof grade A incombustible, no formaldehyde release, moisture proof, moth proof, anti-corrosion, mildew proof, no deformation, good impact resistance , easy cleaning and simple installation, many color choices.

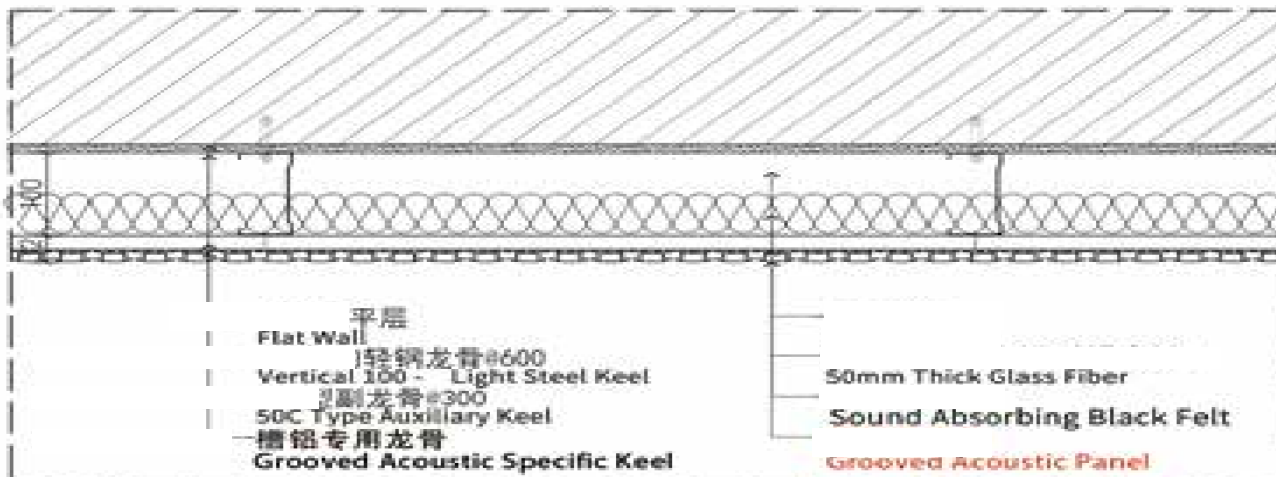
Specifications: 2400mm long x 595mm. wide Patent No. ZL 2019 2 1340360.0

Sound absorption coefficient: (Tested by authority laboratory) sound coefficient can be adjusted according to installation structure.

Frequency (Hz)	125	250	500	1000	2000	4000	Remark
28-4 Sound absorption coefficient α	0.36	0.77	0.91	0.83	0.70	0.56	50mm Back Cavity +50mm 32K Glass Wool
33-5 Sound absorption coefficient α	0.61	0.96	0.96	0.48	0.72	0.25	100mm Back Cavity +100mm 32K Glass Wool
20-3 Sound absorption coefficient α	0.22	0.52	0.86	0.72	0.70	0.54	100mm Back Cavity +30mm 32K Glass Wool



Color



剖面安装横剖图

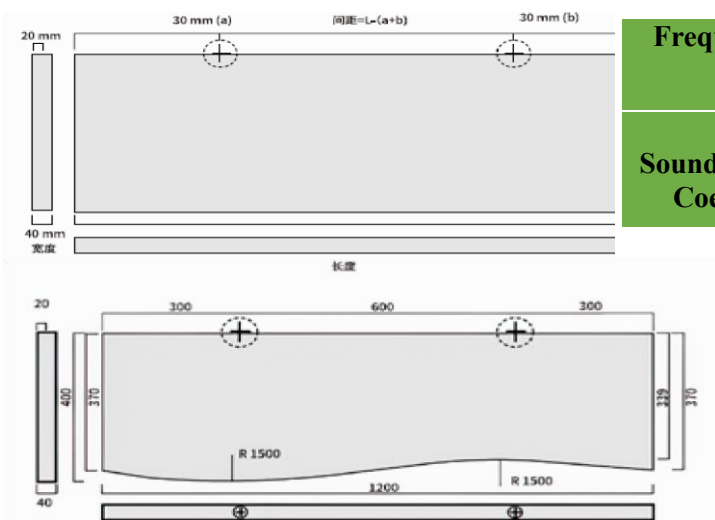
Cross Section Of Grooved Acoustic Panel Wall Installation



Suspended Sound Absorber

Product features:

Art Ceiling Decoration Absorber is a new type of ceiling decoration material, which is made of fire-proof and environmental protection glass fiber as the main material, with proper amount of binder, moisture-proof agent and preservative added, processed, dried and finished. It is suitable for gymnasium, grand theater, radio station, television studio, studio, school, library, cultural center, auditorium, multi-function hall, conference room, concert hall and other places where need higher requirements for sound absorption quality.

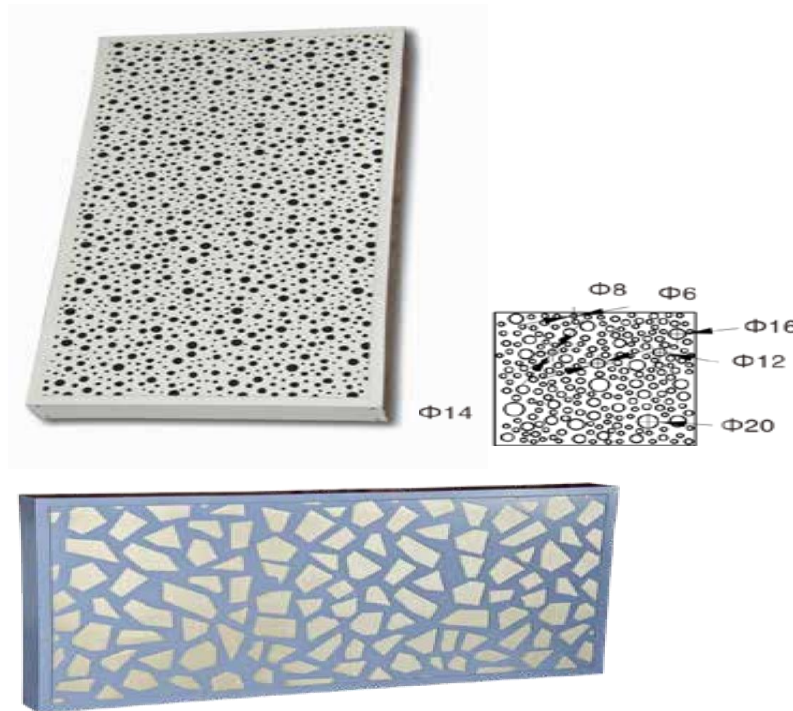


Frequency (Hz)	125	250	500	1000	2000	4000	Remark
50mm Sound Absorption Coefficient α	0.23	0.45	0.88	0.86	0.84	0.70	NO cavity





Suspended Sound Absorber



Sound absorption coefficient:

(Tested by authority laboratory) sound coefficient can be adjusted according to installation structure

Frequency	125	250	500	1000	2000	4000
100mm Sound Absorption Coefficient α	0.65	1.1	0.99	1.17	1.28	1.24



Suspended Sound Absorber

Irregular Perforated Suspended Sound Absorber

Product features: The irregular perforated suspended sound absorber is made of high-quality glass fiber cotton, custom aluminum frame, custom aluminum facing and acoustic dust proof fiberglass cloth. It has the properties of environmental protection, fire proof, high sound absorption, various shape choice and so on. The wide colors and materials selection can well meet the customers any acoustic and decorative requirement. The fire resistance reaches A2 grade and the environmental protection performance reaches E1 grade.

Material consumption: refer to acoustic design

Finish: Custom aluminum finish with many colors' choice

Surface treatment: colored perforated aluminum sheet

Material: 80Kg/m³ Owens Corning Glass wool

Weight: 9.8Kg/m² (50mm thick)

Perforation rate: 32%

Structure: Aluminum alloy frame around, Owens Corning sound-absorbing cotton wrapped with cloth inside, covered with custom perforated aluminum sheet.

Installation method: horizontal / vertical hanging

Installation accessories: Installation accessories: angle steel, light steel keel, screw bolt, pull rivet, wire rope, hanging rings, safety hook etc..

Product specifications: length :1200mm ~2400mm width: 600mm~ 1200mm

Allow tolerance width: ± 2 mm, length: ± 2 mm





Material consumption: refer to acoustic design

Structure: Aluminum alloy frame around, Owens Corning sound-absorbing cotton wrapped with cloth inside, covered with mesh sheet.

Installation method: horizontal / vertical hanging

Installation accessories: Installation accessories: angle steel, light steel keel, screw bolt, pull rivet, wire rope, hanging rings, safety hook etc..

Color: White / cream / black non-combustible cloth, or normal colored fabric choice.

Weight: 50 mm: 6.6kgs/m² 100 mm: 13kgs /m²

Fire resistance: class A /B1 Grade

Environmental protection grade: E1 Grade, according to GB18580-2017 《Formaldehyde emission limit of wood-based panel and its products》 Standard.

Product specifications: length :1200mm ~2400mm width: 600mm~ 1200mm

Allow tolerance : length: ± 2 mm, width: ± 2 mm

Sound absorption coefficient: (Tested by authority laboratory) sound coefficient can be adjusted according to installation structure

Frequency (Hz)	125	250	500	1000	2000	4000
sound absorption coefficient α	0.48	0.75	0.99	1.21	1.19	1.24



Suspended Sound Absorber

Mesh facing Suspended Sound Absorber

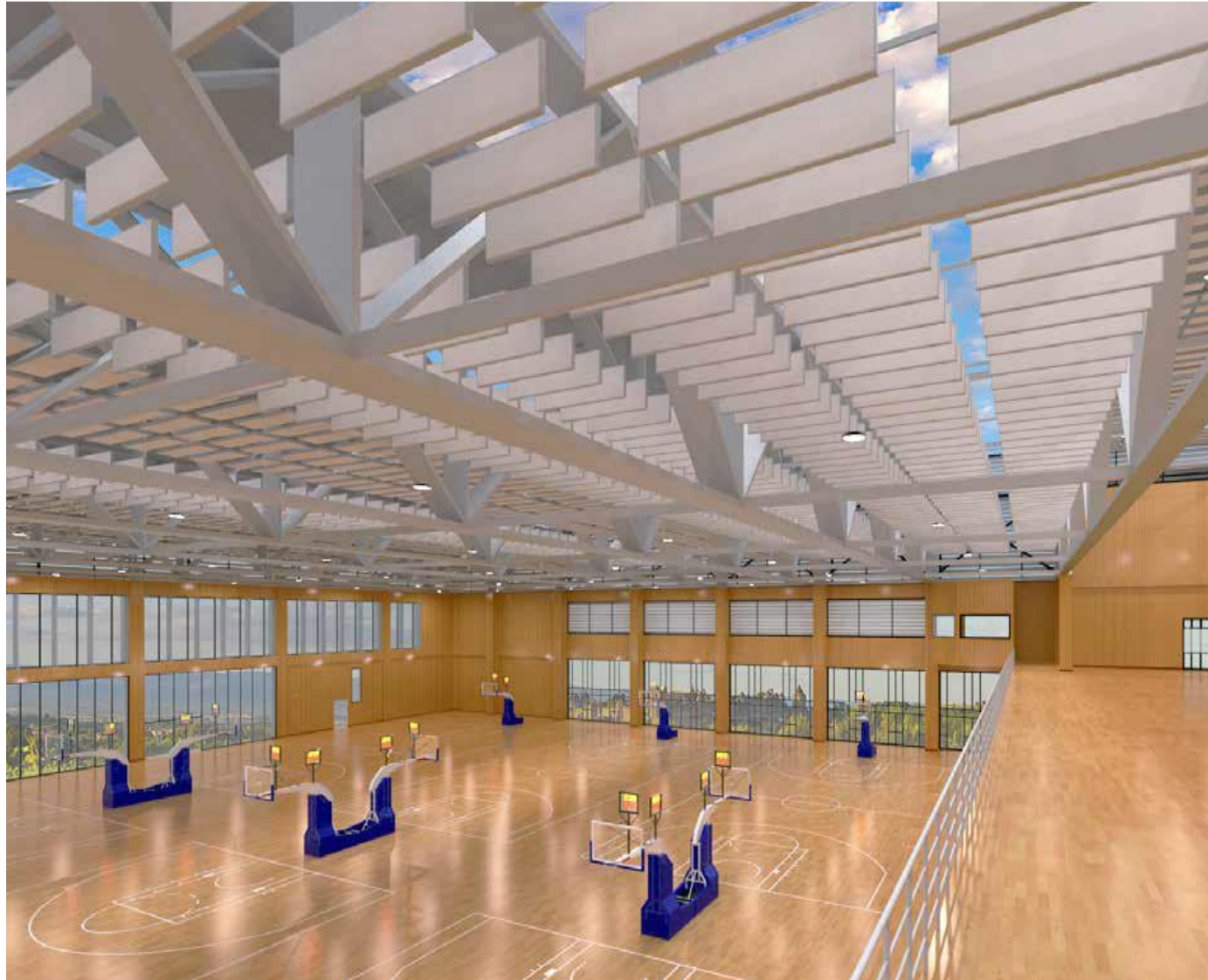




Suspended Sound Absorber Series

Characteristics:

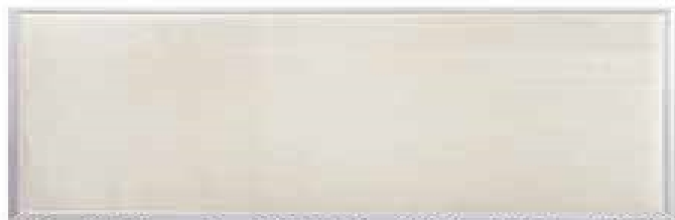
Suspended sound absorber is the only acoustic material with two sides sound absorption. It is widely used in large space ceiling acoustic treatment, which can greatly reduce the cost of acoustic decoration.





Suspended Sound Absorber

Ceiling Suspended Sound Absorber



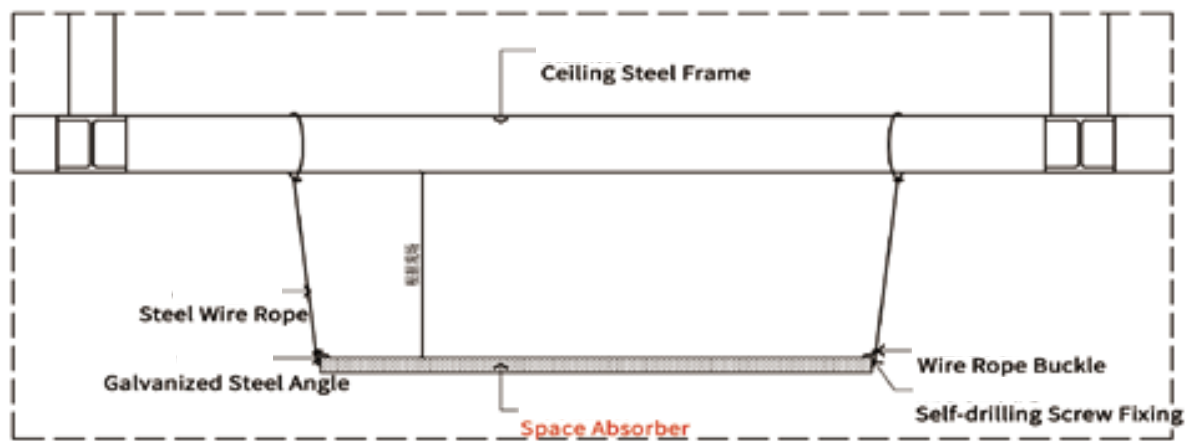
Aluminum frame visible



Aluminum frame invisible

Sound absorption coefficient: (Tested by authority laboratory) sound coefficient can be adjusted according to installation structure

Frequency (Hz)	125	250	500	1000	2000	4000
Interval suspend Absorption Coefficient α	0.41	0.86	1.15	1.18	1.12	1.15
Full suspend Absorption Coefficient α	0.20	0.72	0.92	0.89	0.89	0.88



Horizontal Installation Of Space Absorber ①



Product features: Product features: Suspended sound absorber is made of high-quality glass fiber cotton, custom aluminum frame and sound-absorbing & dust proof glass fiber cloth. It has the properties of environmental protection, fire proof, high sound absorption, various shape choice and so on. The wide colors and materials selection can well meet the customers any acoustic and decorative requirement. The fire resistance reaches A2 grade and the environmental protection performance reaches E1 grade.

Surface treatment: aluminum frame invisible, aluminum frame visible

Finish: fiberglass cloth series, fabric series

Base material: 80kg/m³ Owens Corning Glass wool

Weight: 5.5kgs/m² (50mm thick) 11.5kgs/m² (100mm thick)

Structure: Aluminum alloy frame around, Owens Corning sound-absorbing cotton inside, wrapped with flame retardant fiberglass cloth or incombustible acoustic fabric.

Installation: horizontal / vertical hanging

Installation accessories: angle steel, light steel keel, screw bolt, pull rivet, wire rope, hanging rings, safety hook.

Size: within 1200mm x 2400mm (offer customized shape)





Diffuse & Reflection Series

Diffuse/ Reflection Series

Characteristics: SCOOON Acoustic diffusers adopts QRD diffusion theory. The theory is the quadratic remainder theory, which is based on the quadratic remainder to calculate the different depth of the pedal to form the diffuser. Sound energy goes into different depths, and then is gradually released at different times. The result is that the peaks and valleys are smoother, thus forming a more balanced and neutral listening environment.



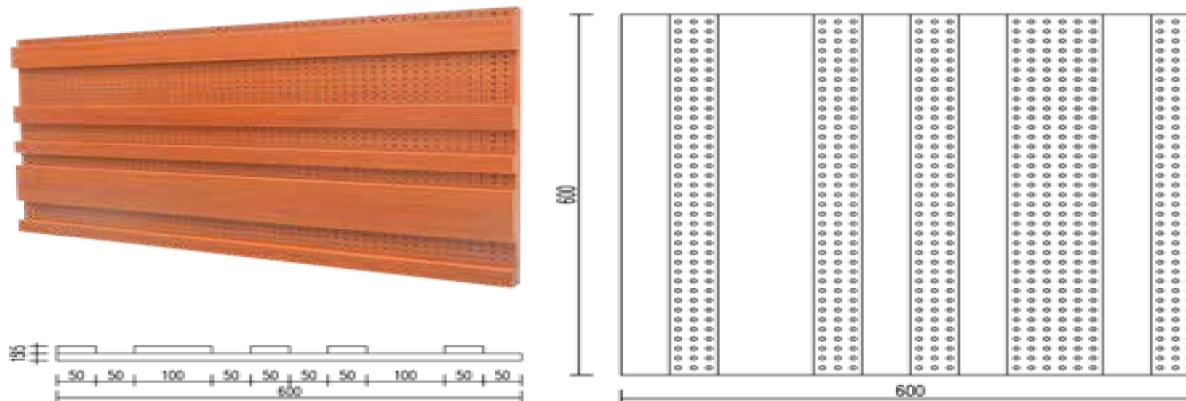


Diffuse / Reflection

MLS Diffuser



Acoustic diffusion is an important part of sound quality construction, including many calculation formula such as Sabine formula or Irwin formula are calculated based on the complete diffusion in the field, so a sound diffusion is not sufficient, it is likely to affect the accuracy of acoustic formula. Therefore, when we create sound environment, we can make the sound field diffusion evenly as an important building sound project, which is conducive to the purity and improvement of sound quality.





- **Product features:**

Compared with the traditional MDF board MLS, the solid wood MLS diffuser adopts the texture of the original solid wood, and no need to veneer again, reduce the production process and more overall and aesthetic. MLS diffuser has excellent diffusion properties. The incident sound energy can be effectively dispersed so as to avoid echo and produce standing wave. The sound field is more uniform, the sound environment is improved, as well as the sound brightness. The frequency range of diffusion (500Hz-4000Hz) up to 20000Hz, and the highest environmental protection reached E1 Grade.

- **Applicable places**

Home theatre, concert hall, opera house, audio visual room, recording studio, leisure place and so on.

- **Product Structure**

Model: **MLS**

Base material: **Rubber solid wood / density board with veneer**

Finish: **Original wood color / paint color**

Density: **25kg-40kg/ m²**

- **Product Specification**

(offer size customization)

length : **600mm/1200mm/1800mm**

width : **600mm**

thickness : **33mm**

Allow tolerance: **length: ± 2mm, width: ± 2mm, thickness: ±0.5mm**



Diffuse / Reflection

Acoustic Decor Wall Panel

Product features: The deco panel, also known as the acoustic reflected panel, is a kind of material that has decorative and reflective function after putting on a decorative layer on the density board. The acoustic reflector is mainly reflective of the sound while the material paint is finished in the factory to avoid the risk of painting on the project site. It has good decoration. The SCOON acoustic decorative panel adopts high quality board, which has the properties of environmental protection, fire prevention and waterproof, and has a wide range of color and material selection. It can well meet the diversified acoustic and decorative needs of customers

Base Material: **density board, white MGO Board, red MGO board, rubber solid wood**

Specifications: **length: 600mm 1200mm width: 600mm (Customize size)**

Thickness: **12mm / 15mm /18mm**

Tolerance: **width ± 1 mm length ± 1 mm thickness ± 0.2 mm**

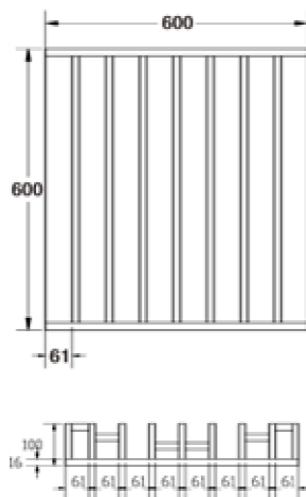
Applicable places: **Theater, Conference Room, Villa, Archives Center, Recording Studio, Multifunctional Hall**





Diffuse / Reflection

- QRD-N1\N2 Diffuser



QRD-N1

Environmental protection: E1 Grade, according to GB18580-2017 Standard for 《formaldehyde emission limit in wood-based panels of interior decoration materials and their products》 ;

Base Material: Rubber solid wood ;

Applicable places: Home Theatre, concert hall, opera house, audio visual room, recording studio, Recreation Club and so on ;

Thickness: 100mm ;

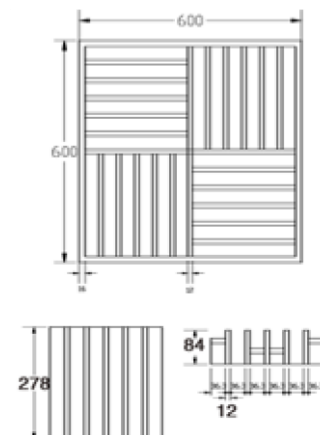
Specifications: length: 600mm / 1200mm / 1800mm width: 600mm

(allowable tolerance: length ± 2 mm, width ± 2 mm, thickness ± 1 mm)

N1 diffusion frequency range (500Hz-2000Hz), up to 2529Hz.

N2 diffusion frequency range (615Hz-1229Hz), up to 2529Hz

- QRD-N1\N2



QRD-N2



Diffuse / Reflection

Product features: N1 solid dispersion can disperse incident sound energy to avoid echo and produce standing wave. The sound field is more uniform, the sound environment is improved, as well as the sound brightness. Diffusion frequency range (500Hz-2000Hz);

N2 (615Hz-1229Hz) up to 2529Hz, the highest environmental performance of E1 class. The theory is the quadratic remainder theory, which is based on the quadratic remainder to calculate the different depth of the pedal to form the diffuser. Sound energy goes into different depths, and then is gradually released at different times. The result is that the peaks and valleys are smoother, thus forming a more balanced and neutral listening environment.





Diffuse / Reflection

-QRD-D1/D2 - QRD -D1/D2 Diffuser

Product features: D1 solid wood diffuser can effectively diffuse sound energy, prevent echo and standing wave, and play an all-round diffusion effect, which can effectively improve the sound brightness and sense of space. Diffusion frequency range: 615Hz-3125Hz. The highest environmental protection performance reaches E1 Grade.

D2 wood diffuser is strictly according to the theory of QRD grid localization sequence formula, diffusion reflection uniform incident sound its groove depth and width in the full range, multi angle, make the voice more supple, more high frequency resonant, with hall-like effect. Diffusion frequency range: 675Hz-2150Hz.

The highest environmental protection performance reaches E1 Grade.





Diffuse / Reflection

Environmental protection: E1 Grade, according to GB18580-2017 Standard for 《formaldehyde emission limit in wood-based panels of interior decoration materials and their products》

.Environmental protection,
no dust pollution .

Base Material : Rubber solid wood.

Applicable places: Home Theatre, concert hall, opera house, audio
visual room, recording studio,

Recreation club, etc..

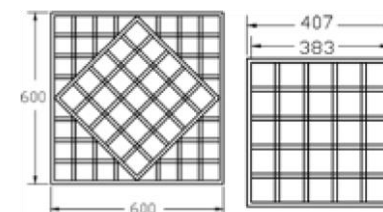
Thickness: 100mm

Specifications: length: 600mm /1800mm / 2400mm width 600mm

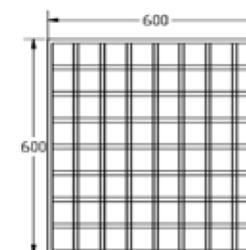
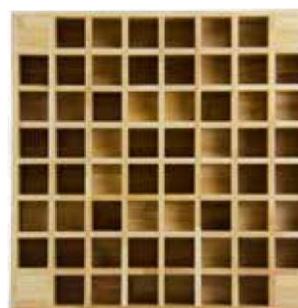
Allowable tolerance: length ± 2 mm, width ± 2 mm, thickness ± 1 mm

D1 diffusion frequency range: 615Hz-3125Hz,

D2 diffusion frequency range: 675Hz-2150Hz.



QRD-D1



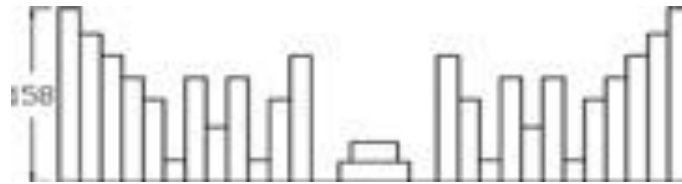
QRD-D2



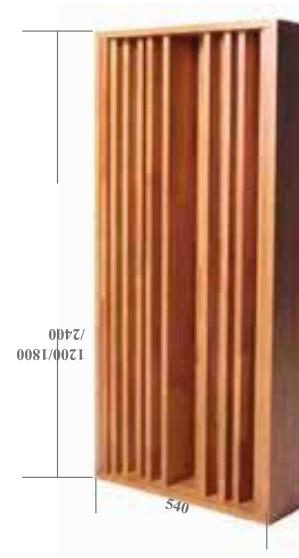
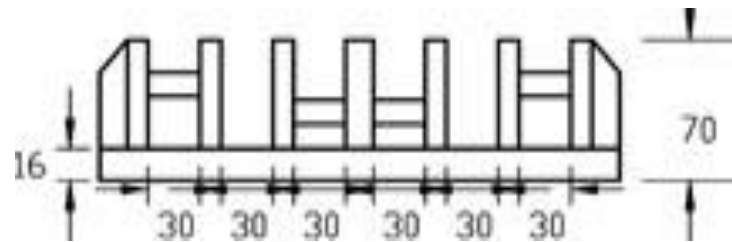
Diffuse / Reflection

QRD-N3 QRD - N3 Diffuser

TianGe Acoustic diffuser adopts the QRD diffusion theory. The theory is the quadratic remainder theory, which is based on the quadratic remainder to calculate the different depth of the pedal to form the diffuser. Sound energy goes into different depths, and then is gradually released at different times. The result is that the peaks and valleys are smoother, thus forming a more balanced and neutral listening environment.



QRD-N4 QRD - N4 Diffuser





Diffuse / Reflection

QRD-N3\N4

QRD - N3\N4 Diffuser

Product features:

The N3 solid diffuser has significant effect, without increasing the reverberation time effect, effectively improve the sound of small space in the dry environment, effectively improve the fullness, clarity and three-dimensional sense, the highest environmental protection performance reaches E1 Grade. N4 solid wood diffuser restores the sense of sound space and improves the sound quality of the hall significantly. The acoustic characteristics are up to the national standard of the same material. When it used with other sound absorbing materials, it can effectively improve the fullness, clarity and three-dimensional sense of the sound quality environment. Diffusion frequency range: 320Hz-3125Hz. The highest environmental performance is up to E1 Grade

Environmental protection:

E1 Grade, according to GB18580-2017Standard for 《formaldehyde emission limit in wood-based panels of interior decoration materials and their products》 ;

Base Material: Rubber Solid Wood;

Applicable places: Home Theatre, concert hall, opera house, audio visual room, recording studio, Recreation Club and so on;

Specifications:

N3: Length:1800mm / 2400mm Width:300mm Thickness:70mm

N4: Length:1200mm / 1800mm / 2400mm Width:540mm Thickness:158mm

Allowable Tolerance: length ± 1 mm width ± 1 mm thickness ± 1 mm

N4 diffusion frequency range: 320Hz-3125Hz.



Diffuse / Reflection

QRD-DW5 QRD - DW5 Diffuser

Product features: QRD-DW5 solid wood diffuser diffuses sound energy through multi-dimensions, multi-directions and multi-angles. The diffuser has good diffusivity and can improve the brightness of sound.

Diffusion frequency range: 675Hz-2150Hz., the highest environmental performance of E1 class.

Environmental protection:

E1 Grade, according to GB18580-2017 Standard for 《formaldehyde emission limit in wood-based panels of interior decoration materials and their products》. Environmental protection, no dust pollution

Model: QRD-Dw5

Substrate: Rubber solid wood

Veneer: log color / mahogany color

Thickness: 350mm

Specifications: length: 1800mm 2400mm width: 350mm

Allowable Tolerance: length is ± 2 mm, width is ± 2 mm, thickness: ± 1 mm





Diffuse / Reflection

Cloud Shape Diffuser

Product features: The cloud shape diffuser is a kind of 3D diffuser. The cloud shape diffuser adopts hyperbolic design to diffuse sound waves in many aspects. The appearance becomes cloud shape, install especially on ceiling, have different visual experience. High-end decorative effect, especially suitable for home theater, recording studio, studio and other small rooms.



Model: **QRD-D8**

Base material: **High-density FRP mould pressing**

Color: **white, gray, blue (customized color)**

Product Features: **cloud diffuser, cloud like double curved surface design, can effectively diffuse low, medium and high frequency, especially in the middle, High frequency range.**

Fire Retardant rating: **Class A, according to GB8624-2012**

Environmental protection: **E1 Grade, according to GB18580-2017 Standard for 《formaldehyde emission limit in wood-based panels of interior decoration materials and their products》.**

Environmental protection, no dust pollution.

Specifications: **length: 600mm width: 600mm thickness: 80mm**

Allowable tolerance: **length: ± 1 mm, width: ± 1 mm, thickness: ± 1 mm**

Installation method: **self-tapping screw fixation**

Install accessories: **12mm flame retardant plywood batten, self-tapping screws etc.**

Application places: **home theater, audio-visual room, recording studio, club and so on**





Sound Insulation Panel

Sound insulation: simply speaking, it is a measure to attenuate sound in the process of sound propagation, so that it attenuates propagation. A sheet made of high-density materials has an average sound insulation of more than 30 dB called the sound insulation board.

Product features: The composite sound insulation board is made of three layers or more of materials with different densities and characteristics, and the material with high molecular damping is added to change the original material acoustic vibration frequency, uses sandwich structure with high pressure composite forming, stroke damping constraint structure, to reduce the sound waves energy around 95%. When the sound

insulation plate begins to vibrate under the impact of sound waves, the polymer material in the middle of the plate will undergo shear stress. Under the action of the contact under compression stress and shear stress, effectively convert the mechanical energy of sound waves into heat energy dissipation, thus improve the sound insulation of the board.

Sound absorption coefficient: (Tested by authority laboratory)

Model	kg/ m ²	(kg)	Specifications	(m ²)	Double layers sound insulation rate	Single layer sound insulation rate	Remark
T-258	18.5	55	1220*2440*16	2.9768	dB	dB	double layer sound insulation board Steel keel: 75 series keels sound insulation board: single/ Filler: 48 kg/m ³ *100mm glass
T-568	24.9	74	1220*2440*18	2.9768	dB	dB	



Sound And Vibration Absorption Mat

I> the sound and vibration absorption mat applicable places:

Sound and vibration absorption mat is mainly used for ground insulation in KTV, disco, gym, machines room, home theater high-end residential district and other strong noise areas. ciple of sound and vibration absorption mat insulation:

II> the principle of sound and vibration absorption mat insulation:

Impact sound isolation: the elastic nano-bubbles forming the whole floor floating building structure, attenuates the sound transmission effect of solid. It decreases the upper ground match effect, enhance acoustic impedance force. Nano bubbles with tiny holes structure generated cavity resonance and weaken sound energy, result in the noise reduction.

Sound insulation effect: Laying the materials on 12-14cm thick concrete floor, paving 4cm thick cement on the surface, which can meet the national sound insulation requirements for floor impact sound less than 75 dB (refers to the downstairs no more than 75 dB)

III>the sound and vibration absorption mat installation method:

- 1、 Smooth, clean surface, cutting as per required size before installation.
- 2、 The product is laid on the floor, the laying position is as high as the kick line seam alignment, and sealed with tape.
- 3、 Avoid leakage or any seam between the product and the ground.
- 4、 After all above process, immediately pave with cement, tile or wood floors.

Table Sound insulation standard for floor plate impact in households GB 50118-2010

Component name	Single value evaluation value of impact Sound Insulation (dB)	
Floor slab for bedroom and living room	Weighted normalized impact sound pressure level L_n, W (laboratory measurement)	< 70
	Weight standardized impact sound pressure level L'_{nt}, W (laboratory measurement)	≤ 70

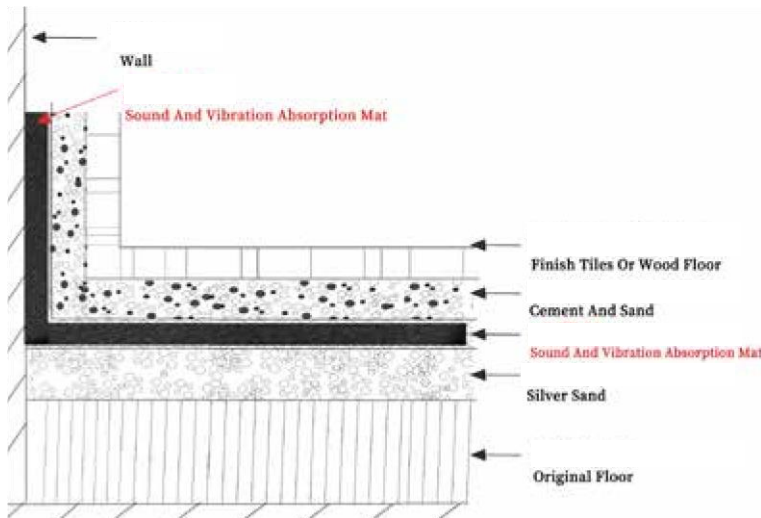


Standard for high sound insulation performance of bedroom and living room floor plates

Component name	Single value evaluation value of impact Sound Insulation (dB)	
Floor slab for bedroom and living room	Weighted normalized impact sound pressure level L_n, W (laboratory measurement)	< 60
	Weight standardized impact sound pressure level L'_{nt}, W (laboratory measurement)	≤ 60

Product features: Sound and vibration absorption mat is made of high density polyethylene foam through nanotechnology. It's a green, economical and durable products with over 70 years service life, having significant effect of reducing the floor impact sound. At the same time, the material is light weight, giving strong load capacity to the construction.

Features: moisture-proof, waterproof, mildew-proof, easy installation, easy cutting.



TD-10A

(Dimension: W970*L10000*T10mm)



TD-10B

(Dimension: W1000*L20000*T10mm)



TD-10C

(Dimension: W1000*L20000*T10mm)



Soundproof Metal Door

SCOOON Soundproof door is made of all-steel material , which is cut out and pressed in one piece, filled with SCOOON special sound-absorbing and shock-absorbing materials, and used with SCOOON special sealing tape and multi-layer folding technology to ensure the sound insulation effect. It can be customized according to the size of the door provided by the customer. The installation method is the same as the ordinary wooden door.

- **Standard Configuration/ with threshold**

Item	Y-01/02 (Panel)
door panel thickness	66mm
metal sheet thickness	1.5mm
door frame inner distance	830mm
wall open size	850mm

- **Standard Specification**

Single Sliding/mm	860 X 2050
Double Sliding/mm	1500 X 2100

- **Soundproof Effect**

Single Sliding	40 - 45 dB
Double Sliding	35 - 40 dB



Threshold drawing



- **Standard Configuration**

Item	Y-05/06 (Panel)
door panel thickness	60mm
metal sheet thickness	60mm
door panel size	800mm
wall open size	960mm

- **Standard Specification**

Single Sliding/mm	800 X 2100
Double Sliding/mm	1500 X 2100

- **Soundproof Effect**

Single Sliding	35 - 40dB
Double Sliding	30 - 35 dB



Door Handle



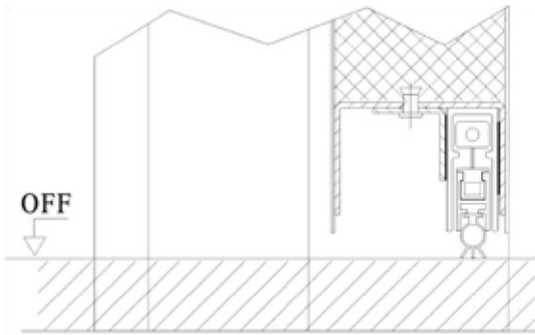
Door Closer

Door Open Mark



Up And Down Sealing

On Door Bottom

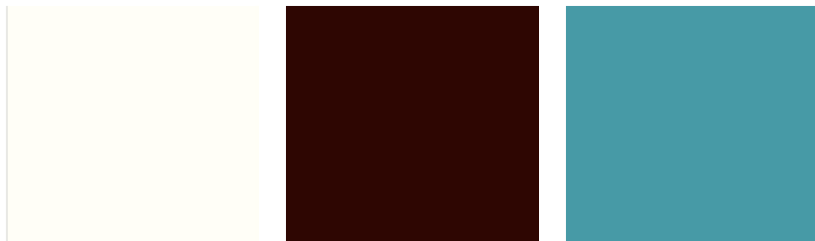


Sinking Bottom Sealing



Applicable places: hospital, school, factory, machine room, KTV, hotel, lab, TV center, culture center, conference hall, studio, recording studio, piano room, theater, cinema, residential, study room etc..

Pure Paint Color Chart



TG -01

TG -02

TG -03

Wood Grain Color Chart



TG -04

TG -05

TG -06

Thanks

DURDOOR

Contact:

Phone: +966 556 006 672

Email: info@DURDOOR.COM

Website: www.durdoor.com