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HECOR®



What is ZUM?

Introducing ZUM, our latest acoustic booth your productivity. line! Designed with your office needs in mind, our booths are born to create perfect working environment, just like having an extra "ROOM" right at your disposal. With modular design, ZUM can be customized to fit your space and quickly assembled within hours, just like a lightning-fast "ZOOM." Carefully engineered sound insulation and absorption ensure that unwanted noise and distractions are minimized, allowing you to effortlessly get into the "ZONE."

To provide a peaceful and quiet workspace, ZUM is equipped with ergonomic seating, sufficient air ventilation and adjustable lighting, to reduce the fatigue or discomfort from long hours of work . You'll feel refreshed and motivated as you dive into your projects, knowing that you have a dedicated space tailored to enhance

Furthermore, rich customizable options available for our booths that allows you to personalize your workspace according to your preferences. Whether you prefer a soothing chat-corner or a "War-room", ZUM has got you covered.

By investing in ZUM acoustic booths, you are not only elevating your productivity but also redefining the way you work. Experience the power of ZUM and unlock your full potential. Say goodbye to noisy open offices and hello to a space that allows you to concentrate, collaborate, and thrive. Get ready to transform your working experience and embrace a new level of efficiency and focus with ZUM!

ZUM Acoustic Booth ZUM Acoustic Booth

Unlocking Productivity

Acoustic and Privacy Factors in Open-Plan Offices

"Open-plan" has become the major trend in modern workplaces design. The concept of an open-plan office is based on the idea of creating a collaborative and flexible work environment. However, while this layout offers certain advantages, it also comes with its fair share of challenges, particularly in terms of acoustics and privacy.

The Major issue encountered in open-plan offices is the problem of noise. With multiple employees working in close proximity, noise levels can quickly escalate, leading to distractions and reduced productivity. Phone conversations, discussions between colleagues, and even the sound of typing can all contribute to a noisy and disruptive atmosphere. This constant background noise can make it difficult for employees to concentrate on their tasks and can be especially problematic for those who require a quiet environment to bustling office. By offering these options,

Another drawback of open-plan offices is the lack of privacy. In a space where there are no physical barriers between worksta-

tions, personal conversations and confidential meetings can become challenging. Employees may feel uncomfortable discussing sensitive matters or engaging in private phone calls due to the lack of privacy. This can lead to a sense of unease and hinder effective communication within the team.

To address the acoustic and privacy issues in open-plan offices, employers have several viable options. Installing sound-absorbing panels, partitions, or cubicles can effectively reduce noise levels and create designated zones for facused work. Another popular solution is the inclusion of acoustic booths, which provide employees with enclosed spaces for private conversations or concentrated tasks. These purpose-built booths are equipped with sound-absorbing materials to create a quiet environment amidst a employers can cater to different work needs and create a more harmonious and productive workspace.



The results of office sound environment survey

Not at all disturbed

■ Very much disturbed by noise

Influence of environmental requirements on concentration

Inadequate lighting Inadequate microclimate

Residual concentration

30mins

an active worker loses on average thirty minutes of work per day because of annoyance related to noise.

- JNA association

office workers are 66% less productive in an open-plan office than when left on their own.

- Julian Treasure, The Sound Agency

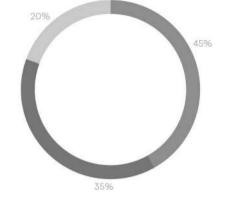
23mins

It takes an average of 23 minutes and 15 seconds, to return to the original task after an interruption

- Gloria Mark, University of California, Irvine

short-term memory recall decreases when employees are exposed to high noise levels compared to those in a quieter environment.

- Journal of Applied Psychology



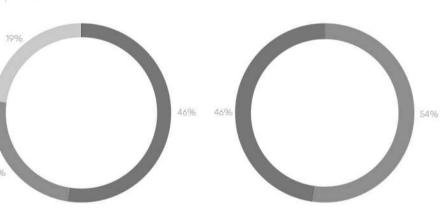


Noise sources were found to be disturbing

Conversations Office machines Telephones.

Ratio of employees that report feeling often bothered by noise

Unreported Reported



* Acoustic Satisfaction in Open-Plan Offices: Review and Recommendations by Manna Navai, Jennifer A. Veitch.

* Acoustic Issues in Open Plan Offices: A Typological Analysis by Sara Delle Macchie, Simone Secchi *ORCID and Gianfranco Cellai

Excessive noise in the office environment can have a detrimental impact on productivity, concentration, and overall well-being. Distractions from conversations, phone calls, equipment, and other sources of noise can disrupt concentration, making it difficult for employees to focus on their tasks. This not only leads to decreased productivity but also increases the likelihood of errors and mistakes. Prolonged exposure to high levels of noise can also cause stress, fatigue, and even physical health issues

such as headaches and elevated blood pressure. Additionally, noise pollution can affect communication and collaboration among team members, hindering effective teamwork and contributing to misunderstandings. Overall, the harmful effects of noise in the office underscore the importance of creating a quiet and conducive work environment for optimal performance and well-being.

ZUM Acquistic Booth 2024 ZUM Acquistic Booth

05

Why an

office needs ZUM?

Our primary objective in developing the ZUM Acoustic Booth is to offer organizations a complete and all-encompassing solution that not only effectively tackles the prevalent acoustic challenges and privacy concerns faced in modern office spaces but also prioritizes user-friendliness and environmental sustainability. We understand the crucial role that a harmonious and conducive work environment plays in promoting employee productivity, overall wellbeing, and successful collaboration. With this in mind, our meticulously designed acoustic booths are thoughtfully crafted to create a sanctuary that facilitates focus.

minimizes distractions, and provides individuals with a sense of privacy when needed. Moreover, we are committed to environmentally conscious practices, ensuring that our boaths are constructed using eco-friendly materials and incorporating energy-efficient features. By choosing the ZUM Office Acoustic Booth, organizations can embrace a holistic approach to workspace design that not only enhances performance and collaboration but also contributes to a greener future.

03

Improve Concentration

The soundproofing properties of the booth effectively block out external noises, allowing employees to concentrate without interruptions. The enhanced concentration fostered by acoustic booths ultimately leads to noreased productivity and quality of work.





Enhance Privacy

The soundproofing enclosures provide individuals with a dedicated space to have confidential conversations. This is particularly important in industries such as finance, healthcare, and legal services, where sensitive data must be protected.

04

Versatility

The acoustic booth is available in multiple sizes that are thoughtfully planned to fit most of the office situation. The modular design makes it easy to customize, build, and extend. Moreover, the castor wheel enables easy relocation, providing flexibility to adapt to changing needs.

06

Being an asset

All features of the acoustic booth makes it an compliant asset rather than an expense to a company. The rebuildable property allows businesses to adapt their workspace at minimum costs or resell the booth for liquidity, providing long-term value and contributing to a dynamic and efficient office environment.



Boost communication

The materials used in acoustic booth construction effectively insulate ambient noise, reducing echoes and reverberations that can interfere with audio quality. This improves sound quality and ensures that phone calls and video conferences are more intelligible and efficient, enabling effective communication and collaboration even in a busy office environment.

05

Sustainability

Not just for using certificated material, the booth was modular designed and manufactured to avoid the disadvantage of the conventional way to build a room such as "wet work" which creates waste and stains, and the heavy power tool that produces loud noise. That makes it the best way to upgrade an in-use office.





ZUM Acoustic Booth 2024 ZUM Acoustic Booth

Why an

office needs ZUM?

equipment within arm's reach, allowing for your workday. seamless and efficient daily work. With

ZUM, a thoughtfully designed space that adjustable lighting, ventilation, and power takes into consideration the diverse work supply, our booth enhances productivity, patterns and activities that employees fosters collaboration, and promotes perengage in throughout the day. Not only sonal well-being. Experience the difference does it provide excellent sound isolation, with ZUM Acoustic Booth and discover a but it also offers a range of amenities and new level of productivity and comfort in



- 1 Air Ventilation
- 2 Lamintaed Glass
- 3 Environment Control
- 4 Aluminum Frame

- (5) LED Ceiling Lights
- PET Acoustic Felt Interior
- Power Supply
- ® Compact Laminate Furniture



The modular design allows an office to have a new room within several hours

09

Environment Control

Tailor your experience

We implanted a self-developed environment control system. With the dimmer panel, users have full control over the ventilation speed, light strength, and light temperature, allowing them to create a personalized and ideal working environment that promotes productivity and well-being.

The ability to adjust the ventilation speed ensures that users can maintain a comfortable airflow within the booth, preventing stuffiness or discomfort. Whether you prefer a gentle breeze or a more powerful air circulation, the choice is yours. This feature not only contributes to a pleasant atmosphere but also helps in maintaining focus and alertness throughout the workday.

The adjustable light strength and temperature further enhance the customization options available to users. Adequate lighting is crucial for reducing eye strain and promoting concentration. With the ability to control the light intensity, users can create the perfect balance between brightness and ambiance that suits their specific tasks and preferences. Additionally, being able to adjust the light tem-

perature allows users to set the mood according to their needs, whether it's a warm and cozy atmosphere or a cooler, more invigorating environment.

Incorporating an infrared (IR) sensor into the booth design adds convenience and energy efficiency. As soon as a user steps into the booth, the IR sensor detects their presence and automatically activates the ventilation system and lighting, eliminating the need for manual adjustment. This seamless experience ensures that users can quickly settle into their workspace without any interruptions or delays. When the user leaves the booth, the IR sensor is smart enough to detect their absence and automatically shuts off the lighting and reduces ventilation to conserve energy within certain time.

Users can also switch to manual mode through the power button to keep the lights and ventilation on and off for longer. These energy-saving features not only contributes to a more sustainable work-place but also saves costs on electricity bills.



ZUM Acoustic Booth Air ventilation Feel just like in the office Centrifugal fan The fan noise becomes apparent when it is quiet in the booth. We use centrifugal fans for air intaking to achieve smoother airflow at lower Balanced air pressure speeds, creating less noise. Most insulated booth products vent air by positive air pressure which leads to ear uncomfort. In ZUM, fans are used for both air intaking and outtaking to keep the air pressure users away from the "Airplane ear" (ear barotrauma) Acoustic air duct Inspired by the acoustic plenum ZUM Acoustic Booth ZUM Acoustic Booth

Essential Eye-caring

glare-reducing prismatic lenses, the light delivers a CRI (color rendering index) of and provides a comfortable and soothing 92, ensuring true-to-life colors that lighting experience, promoting focus and enhance visual accuracy in booth spaces. keeping eye health.

With the OSRAM LED module and The flicker-free emitting feature minimizes eye fatigue during extended work hours



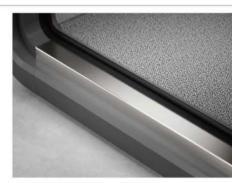
Details

More than just acoustic



Magnetic door lock

Lever handle lock with magnetic deadbolt.



Stainless steel door thread

Stainless steel made that you could customize your label on.



Concealed door closer

Concealed cam-action door closer.



15W wireless charger

Optional 15W wireless charger embedded into table top



Modular power outlet

socket and keystone module available.



Compact laminate table

With USB type A/C, Optional multitype Compact laminate, scratch and chemical resistant, optional MDF board available.

We understand that a well-designed detail, we carefully designed every aspect booth not only attracts attention but also of our booths to ensure optimal usability. encourages engagement and interaction, Our goal is to create a seamless and so we place great importance on creating enjoyable experience for all users, allowbooth products that not only catch the ing them to effortlessly enjoy this acoustic eye but also provide an exceptional user experience. With meticulous attention to

sanctuary.



Easy to assemble, move and extend

Born for the changing office need

Within merely one hour, a new booth will appear in your office with the work of minimal 2 people. The modular design enables a swift Installation process. This efficient setup requires no trimming, bolt-

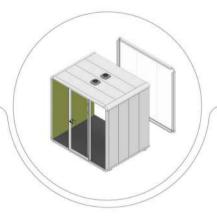
ing, or gluing, no waste generated during Installation process, all packaging materials can be recycled, allowing immedi-



requirements. 2 or more booths could be combined into a bigger one for temporary use by using special connect parts, like

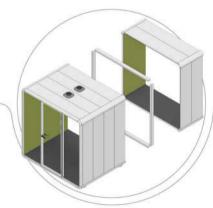
Additionally, ZUM can easily be extended hosting large-scale events. You could also to a larger size to cater to various client order new body parts to change permanently. Regardless of the challenges, ZUM can always swiftly adapt to meet new tasks with optimal performance.





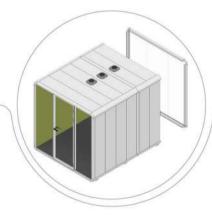
Remove the back frame and glass of the booth





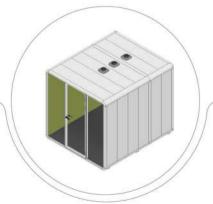
Connect the booth with the extensional parts by connect frame





Put the back frame and glass back.





Finished







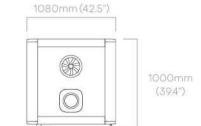
We understand that every workspace is unique, so we offers offers an extensive selection of models available in various or collaborative spaces for team discussizes, to cope a wide range of require- sions, we have the perfect solution for ments. At the same time, we offer cus- you. tomization service to tailor our booths

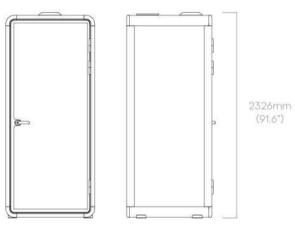
precisely to your needs. Whether you need individual booths for focused work



20







Internal Size	
W: 942mm (37.1") D: 960mm (37.8") H: 2146mm (84.5")	
Door Passage	
W: 918mm (36.1") H: 2118mm (83.4")	
Floor Space	
1m² (10.8ft²)	
Net Weight	
276 kgs (609 lbs)	
Packaging Size	
W: 2320mm (91.3") D: 580mm (22.8") H: 1265mm (49.8")	

Technical Features

Capacity	±
Power Input	85~264VAC, 47~63hz;
Ventilation	0~70m³ (91yd³) /hr adjustable,
	1.6mins/change maximum, auto-refresh;
Lighting	3000k-6000k, 0-1800lm, adjustable,
	Anti-glare index 20, CRI 92Ra, flicker-free
Maximum Power	40W;
Power Supply	5 Hole universal outlet x 2,
	USB TypeA x 1, USB TypeC x 1;



WM perch seat * WM shelf table



Pneumatic adjustable stool + WM L-shape shelf table



Square bench + C-table

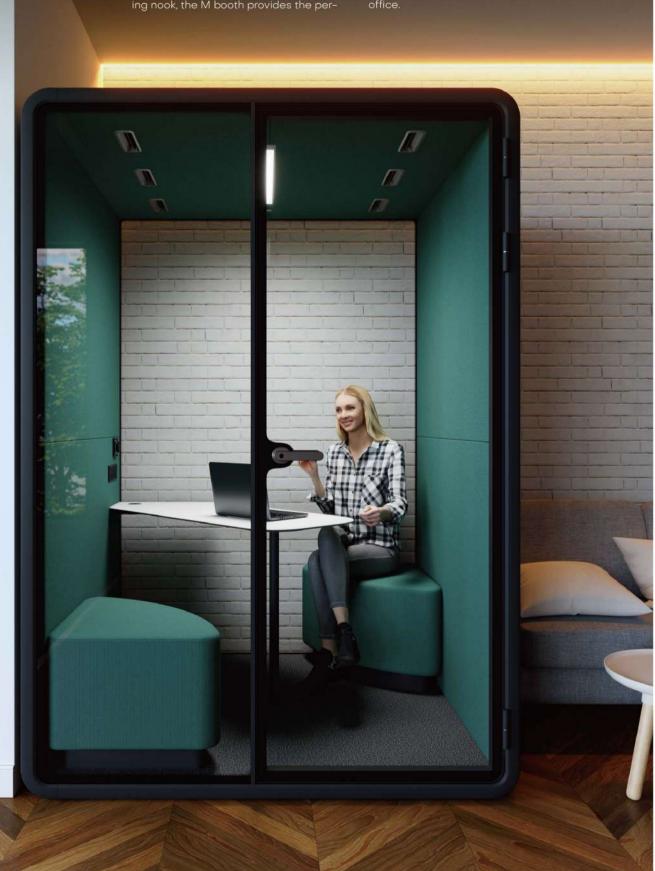


Model M

Maximizing Productivity, Privacy, and Peace

Whether you require a personal worksta-tion, a conversation room, or a quiet read-ing nook, the M booth provides the per-

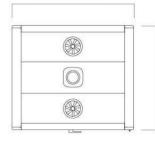
With its spacious dimensions of $2.2~\text{m}^2$, fect environment for focused work, private Model M offers a flexible and adaptable meetings, or relaxation. It is an ideal



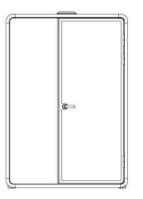
Parameter

External size

1600mm (63")



1375mm (54.1°)





Internal Size W: 1462mm (57.6") D: 1335mm (52.6") H: 2146mm (84.5") Door Passage W: 741mm (29.2") H: 2118mm (83.4") Floor Space 2.2m² (23,7ft²)

409kgs (902lbs) Packaging Size

Net Weight

W: 2320mm (91.3") D: 900mm (35.4") H: 1265mm (49.8")

Technical features

Capacity	11
Power Input	85~264VAC, 47~63hz;
Ventilation	0~110m³ (143yd³) /hr. adjustable,
	2.3mins/change, auto-refresh;
Lighting	3000k-6000k, 0-1800lm, adjustable,
	Anti-glare index 20, CRI 92Ra, flicker-free;
Maximum Power	52W;
Power Supply	5 Hole universal outlet x 2,
	USB TypeA x 1, USB TypeC x 1;



Swivel armchair WM working table



Pneumatic adjustable stool x 2 WM bar table



Corner bench x 2 WM F2F table



Privacy couch C-shaped end table

Elevate Communication, Inspire Collaboration

Model SL is specifically designed to fit in narrow areas such as corridors, optimiz— ble areas for face-to-face conversations. Whether it's a quick catch-up or a confi-

ing the use of available space. Its slim dential meeting, the SL booth offers a body of 2.3m*1.0m makes it incredibly seamless and hassle-free solution for fos-

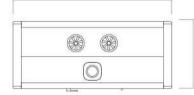
convenient to set up in any office setting tering effective communication in the for a comfortable acoustic chat room, providing employees with easily accessi-

Model SL

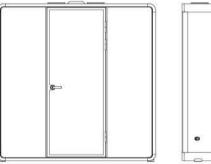
Parameter

External Size

2300mm (90.6")



966mm (38")





Internal Size W; 2162mm (85.1") D: 926mm (36.5") H: 2146mm (84.5") Door Passage

W: 741mm (29.2") H: 2118mm (83.4")

Floor Space 2.2m² (23.7ft²)

Net Weight 471kgs (1038lbs)

Packaging Size

W: 2320mm (91.3") D: 760mm (29.9") H: 1265mm (49.8")



24

82 couch x 2 + Trapezoidal coffee Table



82 couch x 2+ Back pilaster Trapezoidal coffee Table

Technical features

Capacity	11
Power Input	85~264VAC, 47~63hz;
Ventilation	O~110m³ (143yd³) /hr adjustable,
	≈2.3mins/change, auto-refresh;
Lighting	3000k-6000k, 0-1800lm, adjustable,
	Anti-glare index 20, CRI 92Ra, flicker-free,
Maximum Power	60W;
Power Supply	5 Hole universal outlet x 2,
	USB TypeA x 1, USB TypeC x 1;





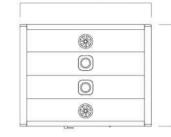


•

Parameter

External Size

2300mm (90,6")



1785mm (70.3")





(1.77.51.1.1.51) (F1.77.7)	
W: 2162mm (85.1") D: 1745mm (36.5") H: 2146mm (84.5")	
Door Passage	
W; 741mm (29.2") H: 2118mm (83.4")	
Floor Space	
≈4.1m³ (44ft²)	
Net Weight	



606kgs (1336 lbs)

Internal Size

Technical features

1111
85~264VAC, 47~63hz;
0-218m³ (283yd³)/hr adjustable,
≈2.2mins/change, auto-refresh;
3000k-6000k, 0-1800lm, adjustable,
Anti-glare index 20, CRI 92Ra, flicker-free
100W;
5 Hole universal outlet x 2.
USB TypeA x 1, USB TypeC x 1.



163 couch x 2 + 125 meeting table



163 couch x 2 + Back pilaster + WM 125 meeting table



Ergonomic office chair

+
Electrical adjustable desk



200 L-shape couch + C-table



Model XL

Unleash Collaborative Excellence

Model XL is a highly adaptable and spa-cious meeting room of 2.6m*2.5m, com-fortably accommodating up to six individuals. Its strategic positioning near the workstation area ensures quick and scenarios more than just in the office.

seamless communication among project teams. With the ability to customize its size, the XL booth offers flexibility to meet

Parameter

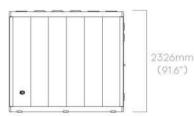
External Size

2600mm (102.4")



(102.6")





Internal Size

W: 2462mm (96.6") D: 2565mm (101") H: 2146mm (84.5°)

Door Passage

W: 741mm (29.2") H: 2118mm (83.4")

Floor Space

6.8m² (72.9ft²)

Net Weight

784kgs (1728.4lbs)

Packaging Size

W: 2320mm (91.3") W: 2620mm (103.1") D: 760mm (29.9") + D: 760mm (29.9") H: 1265mm (49.8") H: 1265mm (49.8")

Meeting chair x 6 180 meeting table



Pneumatic adjustable stool x 6 Back pilaster WM 180 bar table



Swivel armchair x 4 Rounded table

Technical features

Capacity	****
Power Input	85~264VAC, 47~63hz;
Ventilation	0-327m³ (425yd³) /hr adjustable,
	4mins/change, auto-refresh;
Light	3000k-6000k, 0-1800lm,adjustable,
	Anti-glare index 20, CRI 92Ra, flicker-free
Maximum Power	120W;
Power Supply	5 Hole universal outlet x 2,
	USB TypeA x 1, USB TypeC x 1.



230 L-shape couch + C-table





ZUM Acoustic Booth 20

Surface Materials

Exterior Cladding - Powder coating & Vinyl film

S-01 S-02 S-04 S-05

S-06 S-07 S-08
For side wall only

Interior - PET acoustic felt



Interior - Fabric



Furniture - Melamine & Powder coating



- More fabric colours available, please contact us for details.
- Customer-provide fabric accept.

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Furnitures

WM=wall mount

Tables







M | WM working table



M | WM F2F table

S | WM shelf table





S | WM L-shape shelf table

SL | Trapezoidal coffee Table





L | 125 meeting table



M | WM bar table









L | Electrical adjustable desk

XL | 180 meeting table

XL | WM 180 bar table

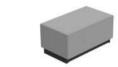
XL | Rounded table



C-table

Seats









S | WM perch seat



S | Square bench







SL | 82 couch



L | 163 couch









XL | 230 L-shape couch

Pneumatic adjustable stool

Swivel armchair

Ergonomic office chair

L | 200 L-shape couch

Meeting chair 640mm x 480mm x 840mm (Seat 450–550mm)

ZUM Acoustic Booth 2024

Add-ons



Air conditioner

PDLC privacy glass

. More cumtumization service available, please contact us for details.

Door access panel

Customer-provide add-on accept.

Electric drop bolt lock

We offer an extensive range of furniture hensive assortment allows our customoptions and add-ons to meet every ers to customize their booth according user's needs and preferences. We un- to their specific objectives and create a derstand that different organizations truly personalized space. Whether creand locations have unique requirements ating a cozy lounge area or a regarding booth setups. We have curat- well-equipped meeting room, our ed a wide selection of furniture pieces diverse range of furniture options and that fit the booth space to address this. add-ons ensures that every booth can Additionally, we provide various be tailored to individual requirements, add-ons, such as monitor brackets and enhancing the overall experience for Bluetooth music modules. This compre- both organization and users.





Acoustic

information

What is ISO 23351-1:2020 ?

ISO 23351–1:2020 is a recently introduced standard that assesses the extent to which phone booths, work pods, and other furniture combinations reduce speech levels. Through a designated test, it calculates a metric known as "speech level reduction," represented as D_{s,A} (decibels/dB). This standard marks the first of its kind specifically dedicated to booths and similar partially enclosed furniture units. Based on the degree of speech level reduction they offer, office pods are categorized into classes A+, A, B, C, or D. Office pods in classes A+, A, and B ensure the highest level of speech privacy.

How to reduce sound propagation?

- Utilize high-density soundproofing materials, such as metal, concrete and glass, on primary surfaces toeffectively attenuate the transmission of sound waves.
- Optimize gap sealing through the application of waterproof adhesive, sealing strips, or other appropriate sealing materials to ensure minimal noise leakage.
- In areas where achieving complete insulation is impracticable, like ventilation ducts, maximize the distance for sound travelling and apply sound-absorbing materials along the path, such as PET acoustic felt, to dissipate sound energy.

What is STC and NIC?

STC (Sound Transmission Class) is a way to measure how well a material can block sound. It's often used to test partitions, like walls and screens. The higher the STC number, the better the partition is at stopping sound. STC is important for evaluating partitions that separate areas where people talk.

NIC (Noise Isolation Class) measures how well two rooms are insulated from sound after construction. Higher NIC values mean better sound insulation between

STC and NIC are similar, but they also have differences. NIC is a field measurement, which means it's taken in the actual space, while STC is a laboratory measurement. Since STC is not done in the actual space, it doesn't consider factors like sound absorption in the room receiving the sound. This makes NIC more comprehensive for evaluating sound insulation in both rooms, not just the partition between them. Both measurements can be helpful for checking sound insulation.

Speech intelligibility refers to the ability of a listener to understand and comprehend spoken words or messages. It measures how clear and easily understandable speech is in various contexts, such as public address systems, telecommunications, broadcast media, or live performances. Factors that affect speech intelligibility include pronunciation, articulation, volume, background noise, and the quality of the audio transmission system. High speech intelligibility is desirable to ensure effective communication and minimize misunderstandings.

What is Centrifugal fan?

Different from axial fan which is commonly encountered, centrifugal fan is normally constructed as a fixed drum shape with a number of impellers. Centrifugal fans move air radially. The airflow created passes through a system of tubes or ducts which creates a higher pressure airflow, making them ideal for aspirating, cooling, ventilating and conveying air.

PET acoustic felt is a material made of polyethylene terephthalate (PET) fibers, which are commonly used in the production of textiles and fibers. It is a type of sound-absorbing material that is commonly used in various acoustic applications, such as in the construction of sound-proof rooms, studios, and other spaces where noise control is important.

PET acoustic felt is typically made by compressing and heating PET fibers together to form a dense, porous material. The pores in the material help to absorb and dissipate sound waves, thereby reducing the amount of noise that passes through the material. The felt-like texture of the material also helps to scatter and diffuse sound waves, further enhancing its sound-absorbing properties.

What is Laminate glass?

Laminate glass, also known as safety glass, is widely used for soundproofing purposes due to its unique construction. Comprised of multiple layers of glass bonded together with a polyvinyl butyral (PVB) interlayer, laminate glass effectively reduces noise transmission by absorbing and dissipating sound waves. This design minimizes the transfer of external noise into the interior environment, creating a quieter and more peaceful atmosphere. Additionally, laminate glass offers enhanced security, protection against UV rays, and is commonly utilized in windows, doors, and partitions to achieve better soundproofing in areas exposed to high levels of noise.

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