

White Paper

Work- spaces

Acoustic Treatment Guidelines

Vol.1 Open Plan Offices
and Meeting Rooms

Credits

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White Paper

Work- spaces

Acoustic Treatment Guidelines

Vol.1 Open Plan Offices
and Meeting Rooms

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Problem

Offices Types

Vol.1 Open Plan Offices and Meeting Rooms

Open Plan Offices

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Vicoustic

Problem

Over the last 10 years, several studies investigating the effects of acoustics within an office environment have determined that poor acoustic design can considerably impact on productivity.

This can have a negative effect on an organisation's efficiency and, ultimately, on its overall profit margins.

"Those of you who have worked in an environment with poor room acoustics, insufficient privacy or excess or lack of background noise will testify to the crucial role acoustics plays".*

"Good acoustics are essential to productivity and creativity in the workplace."*

Offices Types

The “standard office” no longer exists and therefore each office setting demands its own specific needs and requirements. Office designs can range from big spaces, such as open plan offices and call centres, to smaller spaces, such as meeting rooms and cellular offices.

Vicoustic has developed a new line of products that is specially tailored to help modern offices achieve good, internal acoustic conditions that both enhance creativity and productivity in the workplace. **This new line is called VicOffice.**

In this white paper, Vicoustic presents acoustic guidelines for different office types.

Indeed it can be
key to the success
of your office!

Vol. 1

Open Plan Offices and Meeting Rooms

Open Plan Offices
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Open Plan Offices

Conditions for proper acoustics

There are 3 essential steps that one should consider in order to achieve proper acoustic conditions within an open plan office:

Step 1

Definition of Activity Based Areas

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Step 2

Acoustic Treatment

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Step 3

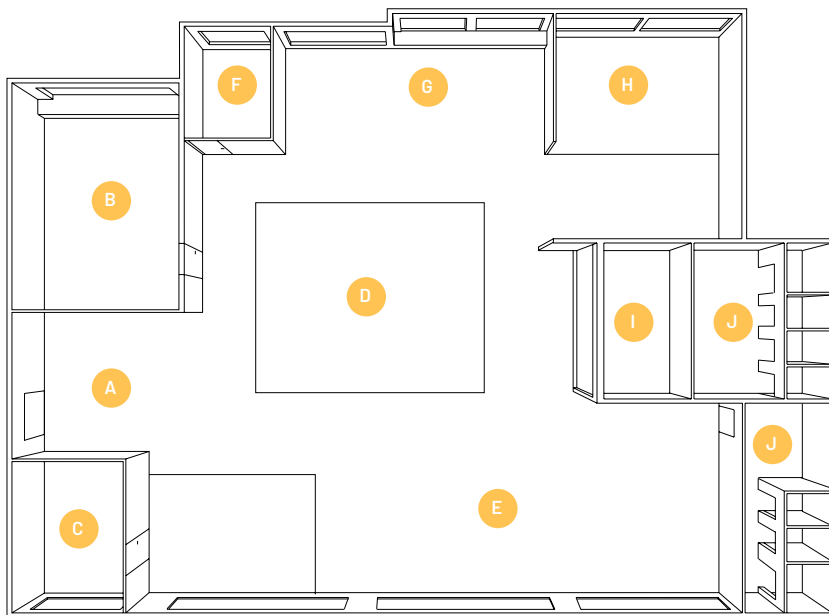
Sound Masking

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Step 1 Definition of Activity Based Areas

- A Reception
- B Meeting Room
- C Small meeting room
- D Lounge area
- E Open office
- F Private office
- G Multifunctional office
- H Kitchen and lounge
- I Storage and print
- J Restrooms





The first step to achieve proper acoustic conditions within an open plan office starts by implementing activity based design strategies

Meaning that different activities should be located in different open plan office areas. Consequently, working areas that demand 'concentration tasks' will be separated from noisier areas that are needed for informal meetings, and people who need to take and make phone calls / socialise, etc.

Separating different areas will help enhance an individual's acoustic comfort. However, this alone is not sufficient to achieve proper acoustic working conditions within the open plan office. For this, the next stage is Step 2.

Step 2

Acoustic Treatment

In an open plan office with poor acoustic conditions, it is likely that background noise generated by a room full of conversations will quickly build up.

In such an environment, people will have to raise their voices above background noise to communicate, increasing the levels of noise even further and thus compromising speech intelligibility.

As one can imagine, such an environment will have poor working conditions, compromising concentration and job satisfaction for everyone. Should a poorly constructed acoustic set-up remain, organisational efficiency may drastically decline and ultimately a company's productivity and profits can be affected

There are two key areas where acoustic treatment in an open plan office should act:





①

Control a room's reverberation in order to avoid excessive noise build up or echoes. This will increase speech intelligibility between team members.

②

Maximise spatial decay of sound pressure levels in order to increase speech privacy between different teams/ different activity areas.

1

Controlling a Room's Reverberation

Dealing with strong sound reflections from the ceiling

It can be tricky to install acoustic treatments in an open plan office walls due to existing office furniture, etc. In addition, the ceiling in an office is normally the biggest reflective surface. Therefore, the general recommendation to control a room's reverberation is to use sound absorbing elements in the ceiling area.

Best practice guidelines, such as British Council for Offices (BCO), recommend covering all open plan office ceilings with high sound absorbing material (e.g. using sound absorbing elements with absorbing coefficients of 0.8 averaged over the frequency range of 500Hz to 2000Hz).

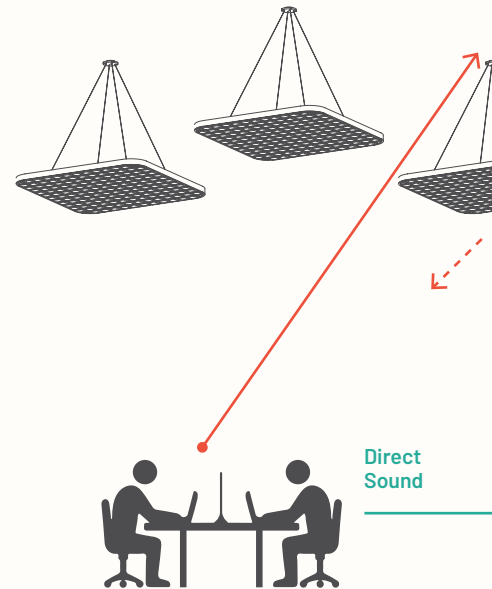
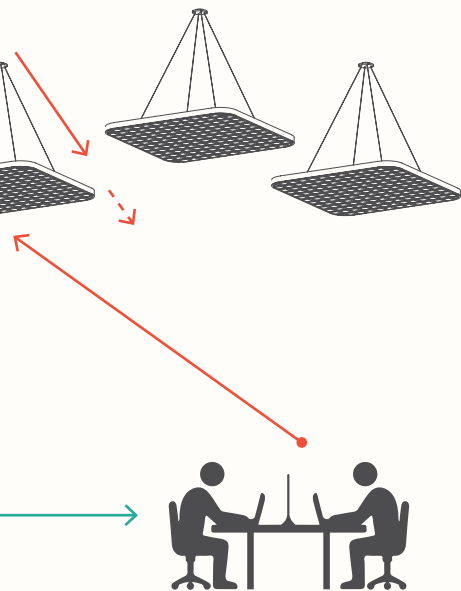


Figure 1 - VicOffice Cloud - Controlling a room's reverberation and enhancing spatial decay of sound pressure levels.

This will help in:

- **Controlling reverberation** in open plan offices and prevent excessive noise build up or echoes and in this way maximise speech intelligibility between team members;
- **Increasing spatial decay of sound pressure levels**, since direct sound will not be enhanced by strong ceiling reflections. This will help increasing speech privacy between different teams / different activity areas.



VicOffice Clouds

For big, open plan offices we recommend the use of **VicOffice Clouds** to control a room's reverberation and any strong sound reflections from the ceiling.

VicOffice Clouds are a simple and lightweight, suspended acoustic solution that is ideal for open plan offices where there is a great concentration of people and where background noise, created by a room full of conversations, can quickly build up.

As the VicOffice Clouds are suspended, this acoustic element has twice the area of absorbing material exposed to sound than other common acoustic panels, making them an extremely effective solution (as shown in Figure 1).

In terms of sound absorbing performance, each VicOffice Cloud has an 'Equivalent Absorbing Area' averaged over the frequency range 500Hz to 2000Hz of 1,32 m².

It should be noted that by controlling the strong reflections from the ceiling, spatial sound pressure levels and their decay will also be enhanced, since direct sound will not be strengthened by ceiling reflections (as shown in Figure 1).

VicOffice Cloud uses Euro Class B fire rate raw materials. Made from VicPetWool - a material produced through environmentally conscious manufacturing up to 65% of its production comes from recycled PET bottles, and it generates very low emissions. Therefore, this can help you develop an office space and building that is mindful in its use of sustainable and quality materials.

Flat Panel VMT

If, due to a project's particular constraints or design options, suspended elements are not the best option to treat ceiling reflections, **Flat Panel VMT** may just be the ideal solution for your office.

Flat Panel VMT is a sound absorbing panel with Virtual Material Technology developed exclusively by Vicoustic. It can simulate concrete, marble, wood and other materials, achieving an amazing and realistic look in any setting.

Flat Panel VMT is compatible with a T-Bar system or it can simply be glued or used with Velcro to install it to the office ceiling. In terms of sound absorbing performance, when attached to a T-Bar System with an air gap of 200 mm, the Flat Panel VMT has a 'Sound Absorbing Coefficient' averaged over the frequency range 500Hz to 2000Hz of 0,65.



Open Plan Office Area

- VicOffice Cloud 1
- VicOffice Desk 2



Dealing with large, reflective, glazed facades / Elements

Modern offices usually have large areas of reflective, glazed facades. This can compromise the acoustic conditions within office spaces.

To control these strong reflections from large glazed areas, Vicoustic has developed **VicOffice Wall**.

Small Meeting Room

- VicOffice Wall 1
- VicOffice Cloud 2





VicOffice Wall

VicOffice Wall is a thin acoustic panel that can be easily mounted and dismounted to any glazed element, which, importantly, does not compromise any cleaning processes for the glazing. As this is a thin panel, and therefore has low performance on medium frequencies, Vicoustic has developed an installation mechanism that creates an air-gap between the glaze and VicOffice Wall, and in this way, increase its performance on the medium / high frequencies - exactly where speech frequencies are usually found. By having this extra air gap, the absorbing coefficient averaged, over the frequency range of 500Hz, 1kHz and 2kHz, is 0,38. This is an extremely good performance for such a thin element. VicOffice Wall can therefore help an office space with various elements. It not only controls strong reflections from large, glazed elements and improve speech intelligibility and privacy within an office.

But it can also help control light entering an office space. VicOffice Wall uses Euro Class B fire rate raw materials. Made from VicPetWool - a material produced through environmentally conscious manufacturing as up to 65% of its production comes from recycled PET bottles, and it generates very low emissions. Therefore, this can help you develop an office space and building that is mindful in its use of sustainable and quality materials.



2

Maximising spatial decay of sound pressure levels

In order to maximise speech privacy between different team members/ different activity areas, one should both control office acoustics and maximize spatial decay of sound pressure levels.

To do this, Vicoustic has developed **VicOffice Desk Divider** and **VicOffice Suspended Divider**.

Improving privacy between working stations

Visually dividing working stations may enhance the sense of privacy and help people feel more comfortable to perform their tasks in the office.



Open Plan Office Area

- VicOffice Desk Divider 1
- VicOffice Cloud 2
- VicOffice Suspended Divider 3



VicOffice Desk Divider

VicOffice Desk Divider was developed to help manage privacy between working stations. It will help to visually divide working stations and at the same time, since it has great sound absorption characteristics, it will help control the acoustics of an office, including maximizing spatial decay of sound pressure levels by providing a barrier into the speech path. VicOffice Desk Divider comes in different sizes and therefore compatible with different desk dimensions. The divider also is produced in two different heights, so it can also work as a visual barrier. It has an Equivalent Absorbing Area averaged over the frequency range 500Hz to 2000Hz of 0,28 for the smaller dividers to 0,64 for the biggest dividers. This will help to improve speech intelligibility and privacy within an office and at the same time create a sense of privacy for everyone in the office.





Optimising space use in your Open Plan Office

Sometimes you need to temporarily divide your office to accommodate new spaces or to make better use of existing ones. To do this, Vicoustic has developed **VicOffice Suspended Divider**.

Separating Socializing Area

- VicOffice Suspended Divider 1
- VicOffice Cloud 2



VicOffice Suspended Divider

As the name suggests, **VicOffice Suspended Divider** is a suspended divider that will help to visually divide an office and, at the same time, control its acoustics owing to its great sound absorbing characteristics.

VicOffice Suspended Divider will also help maximising spatial decay of sound pressure levels by including a barrier into the speech path.

VicOffice Suspended Divider has an Equivalent Absorbing Area averaged over the frequency range 500Hz to 2000Hz of 0,67. This will help to improve speech intelligibility and privacy within an office.



Step 3

Sound Masking

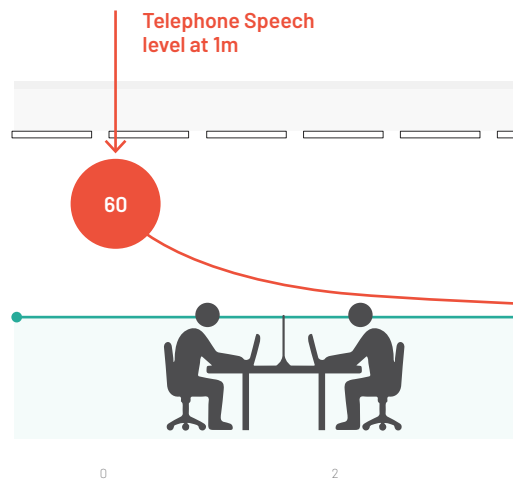
Speech privacy between different team members / activity areas is a combination of source level, spatial sound decay and background noise levels.

In an open plan office, the most frequent source of noise is most likely to be a person speaking. We know that normal speech, at a 1m distance is around 60 dB(A).

Whilst fluctuating noise, such as phones ringing, people speaking, etc. may disrupt an individual's concentration; the lack of background noise may affect speech privacy between different teams / activities.

It is proven that steady levels of background noise can be good to mask detrimental noise in open plan offices and, in this way, help people to be able to perform tasks that require specific levels of concentration.

For open plan offices, Best Practice Guidelines state that steady background noise should be around NR40. This can be achieved by designing building services and office environments to provide this type of steady, background noise levels or by implementing a speech masking system.



Enhancing spatial, sound decay, by using the previously discussed acoustic treatment solutions, will make the sound levels from the source quickly decay when one moves away from the source, until a point where it is below / of the same magnitude as the background noise levels.

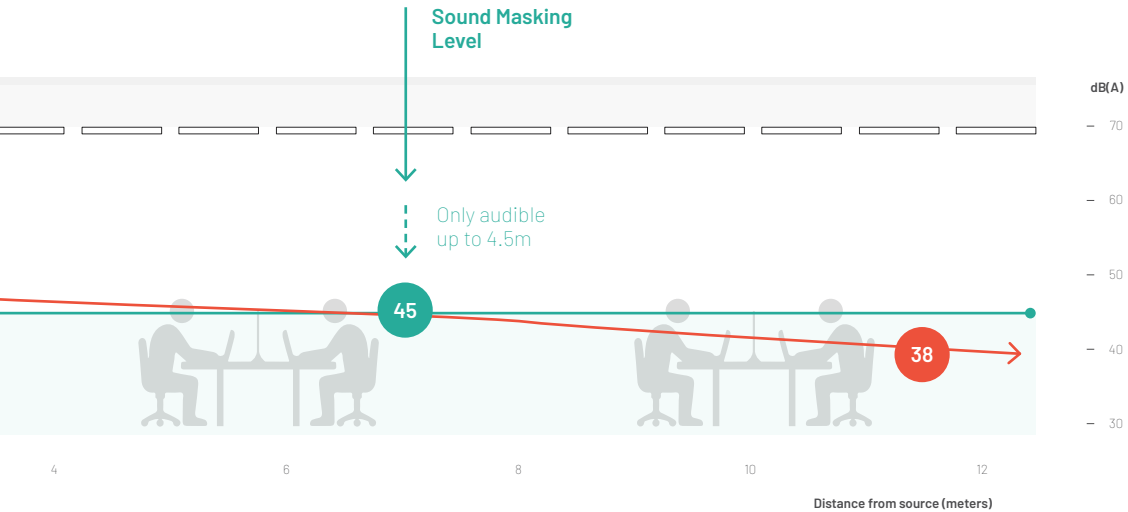


Figure 2 presents speech privacy as a function of distance from the source. Figure 2 takes into account:

- 7dB spatial decay of sound pressure levels when doubling the distance from the source – this is the minimum target that an open plan office with good acoustic should achieve (ref. ISO3382-3) and;
- NR40 for background noise stated on BCO (note: NR40 is around 45 L_{Aeq} – ref. BS8233).

Figure 2 - As presented in Figure 2, a speech signal at 5m distance from the source will be of the same magnitude of the background noise level. The background noise will mask the speech signals and, in this way, improve speech privacy between different teams / activity areas.

Meeting Rooms

Separating Socializing Area

- VicOffice Wall 1
- VicOffice Cloud 2
- Flat Panel VMT 3

A major aspect to consider when designing the acoustics of a meeting room is to develop solutions to achieve proper reverberation time (RT) within the space. Excessive reverberation may be detrimental to good speech intelligibility that is paramount in any meeting room.



Ceiling Treatment

A combination of central area reflective and perimeter absorptive ceiling is recommended to, at the same time, aid the transmission and intelligibility of speech and control reverberation time.

For this we recommend the use of **VicOffice Clouds** or **VMT Panels**.

Walls Treatment

In addition, wall treatments should also be used to control the effects of flutter echoes in the meeting room.

Flutter echoes are repeated sound reflections caused by sound waves travelling between parallel, reflective surfaces such as walls. This compromises speech intelligibility and therefore should be considered when trying to achieve a good acoustic conditions in an office space.

For common plasterboard, concrete, block-work walls, we recommend the use of **VMT panels**.

For glazing walls, you can both use **VicOffice Wall**, or **VMT panels**. These utilise the new fixation system with suction cups or magnets for windows, which may be an ideal solution for you.

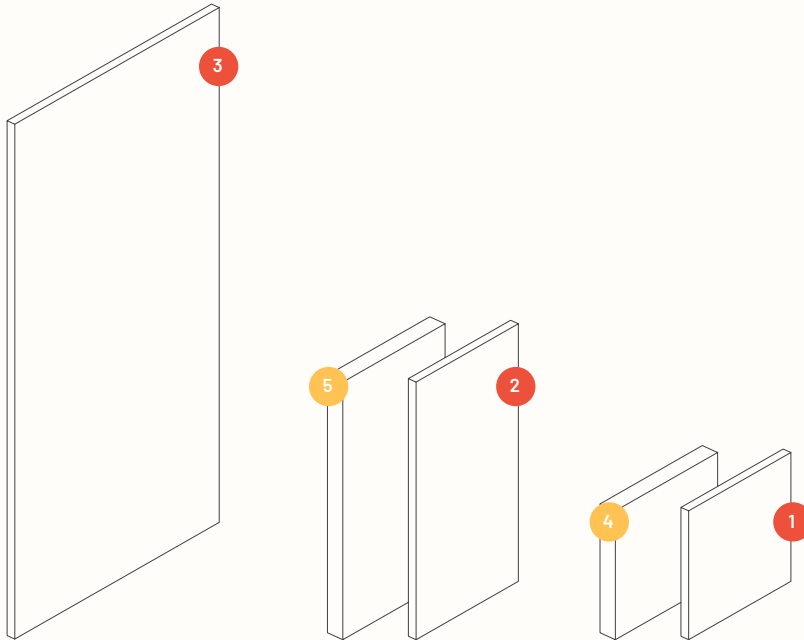
Reducing the size of large meeting rooms when not fully occupied

To be able to reduce the size of a meeting room and, consequently, control the reverberation time in the space when it is not fully occupied is a really effective way to control its acoustics. **VicOffice Suspended Dividers** can be provided to these rooms.

List of Materials needed



Flat Panel VMT



Dimensions*

- 1 595 x 595 x 20 mm / 23.4" x 23.4" x 0.8"
- 2 1190 x 595 x 20 mm / 46.8" x 23.4" x 0.8"
- 3 2380 x 1190 x 20 mm / 93.7" x 46.8" x 0.8"
- 4 595 x 595 x 40 mm / 23.4" x 23.4" x 1.6"
- 5 1190 x 595 x 40 mm / 46.8" x 23.4" x 1.6"

Package Information

- 1 2 3 8 units/box
- 4 5 8 units/box

Box Dimensions

- 1 665 x 675 x 195 mm / 26.2" x 26.6" x 7.8"
- 2 1260 x 675 x 190 mm / 49.6" x 26.6" x 7.5"
- 3 2470 x 1275 x 170 mm / 97.2" x 50.2" x 6.7"
- 4 665 x 675 x 355 mm / 26.2" x 26.6" x 14"
- 5 1260 x 675 x 355 mm / 49.6" x 26.6" x 14"

* Please notice that the dimensions of these panels have a tolerance of +/- 2 mm

** Flat Panel VMT 20 mm

Features

- Light weight
- Easy to Install
- Easy to clean and maintain
- High Performance in medium and high frequencies

Technical Information

Raw Material

VicPET Wool

Fire Rate**

Europe: Euroclass B -s2, d0
 USA: Class A (ASTM-E84)
 Canada: CAN/ULC S102, Flame Spread Rating: 5, Smoke Developed Classification: 115

Installation

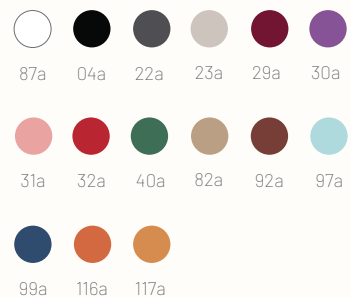
Velcro (included), Flexi Glue Ultra, VicFix Magnetic, VicFix Frame, AluFrame VMT Single, AluFrame VMT Double

Available Finishes

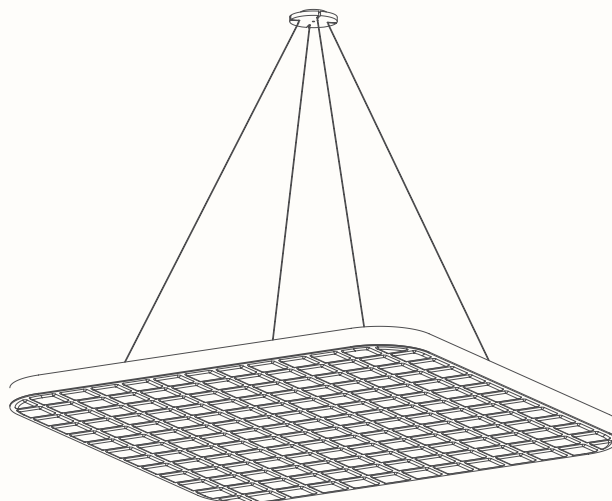
Collections

- Natural Stones NEW
- 3D
- Brick
- Concrete
- Doodle
- Floral
- Geometric
- Nature
- Tiles
- World

Solid colors



VicOffice Cloud



Dimensions*

1000 x 1000 x 45 mm / 39.4" x 39.4" x 1.8"

Package Information

1 unit/box

Box Dimensions

1155 x 1031 x 48 mm / 45.5" x 40.6" x 1.9"

**Please notice that the dimensions of this panel have a tolerance of +/- 2 mm*

Features

- Premium high density VicPET Wool
- High Performance in medium and high frequencies
- Light weight
- Easy to install
- Easy to clean and maintain

Technical Information

Raw Material

VicPET Wool

Fire Rate

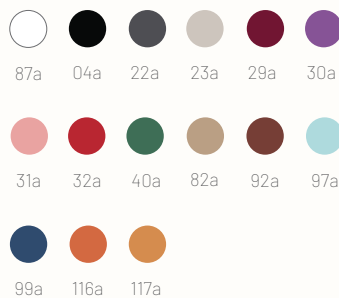
Europe: N/A

USA: N/A

Accessories

VicOffice Mechanical and Magnetic
Suspended Fixation

Solid colors



VicOffice Desk Divider

Desk Lat

Dimensions*

- 1 614 x 389 mm x 10 mm / 24.2" x 15.3" x 0.4"
- 2 614 x 539 mm x 10 mm / 24.2" x 21.2" x 0.4"
- 3 764 x 389 mm x 10 mm / 30" x 15.3" x 0.4"
- 4 764 x 539 mm x 10 mm / 30" x 21.2" x 0.4"

Package Information

1 unit/box

Box Dimensions

- 1 625 x 404 x 47 mm / 24.6" x 15.9" x 1.9"
- 2 620 x 545 x 47 mm / 24.4" x 21.5" x 1.9"
- 3 778 x 404 x 55 mm / 30.6" x 15.9" x 0.4"
- 4 778 x 554 x 55 mm / 30.6" x 21.8" x 2.2"

Desk Top

Dimensions*

- 1 914 x 389 x 10 mm / 36" x 15.3" x 0.4"
- 2 914 x 539 x 10 mm / 36" x 21.2" x 0.4"
- 3 1214 x 389 x 10 mm / 47.8" x 15.3" x 0.4"
- 4 1214 x 539 x 10 mm / 47.8" x 21.2" x 0.4"
- 5 1364 x 389 x 10 mm / 53.7" x 15.3" x 0.4"
- 6 1364 x 539 x 10 mm / 53.7" x 21.2" x 0.4"

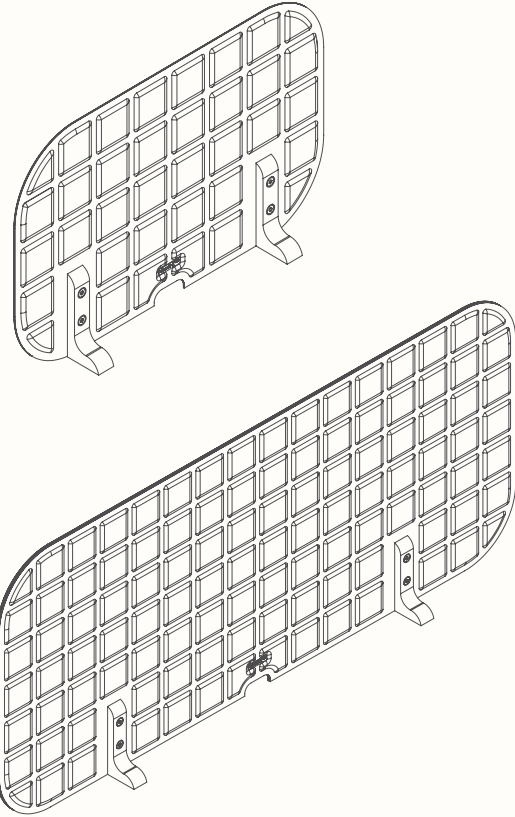
Package Information

1 unit/box

Box Dimensions

- 1 928 x 404 x 55 mm / 36.5" x 15.9" x 2.2"
- 2 928 x 554 x 55 mm / 36.5" x 21.8" x 2.2"
- 3 1228 x 404 x 55 mm / 48.3" x 15.9" x 2.2"
- 4 1228 x 554 x 55 mm / 48.3" x 21.8" x 2.2"
- 5 1375 x 404 x 47 mm / 53.7" x 15.3" x 1.9"
- 6 1375 x 554 x 55 mm / 53.7" x 21.8" x 2.2"

*Please notice that the dimensions of these panels have a tolerance of +/- 2 mm



Features

- Premium high density VicPET Wool
- High Performance in medium and high frequencies
- Light weight
- Easy to install
- Easy to clean and maintain

Technical Information

Raw Material
VicPET Wool

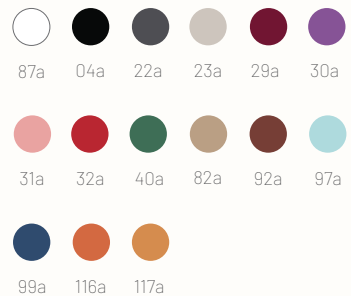
Fire Rate

Europe: N/A
USA: N/A

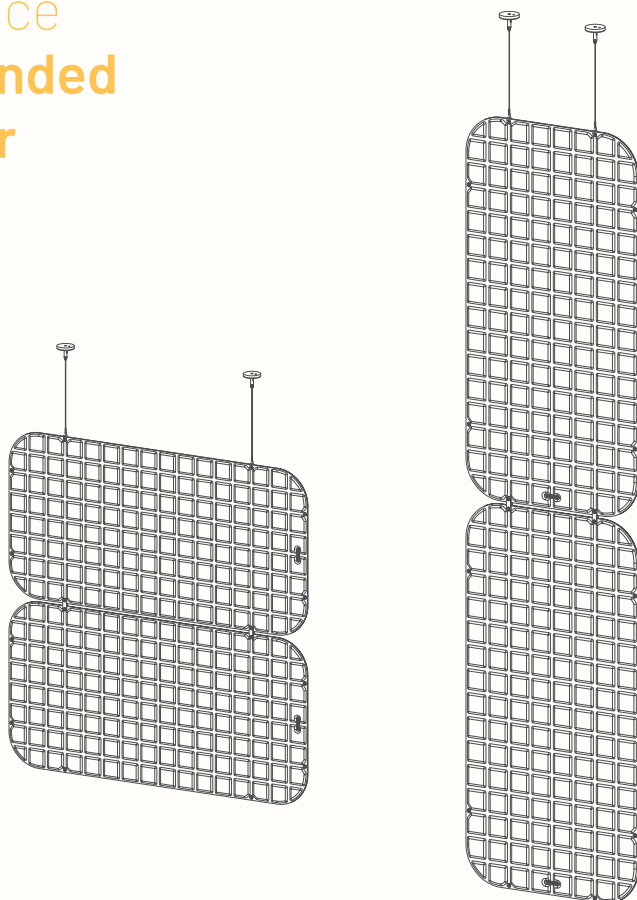
Accessories

VicOffice Feet

Solid colors



VicOffice Suspended Divider



Dimensions*

(x2) 1190 x 595 x 10 mm / 46.9" x 23.4" x 0.4"

Package Information

1 unit/box

Box Dimensions

1305 x 606 x 40 mm / 51.4" x 23.9" x 1.6"

**Please notice that the dimensions of this panel have a tolerance of +/- 2 mm*

Features

- Premium high density VicPET Wool
- High Performance in medium and high frequencies
- Light weight
- Easy to install
- Easy to clean and maintain

Technical Information

Raw Material

VicPET Wool

Fire Rate

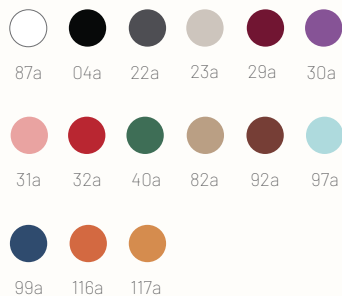
Europe: N/A

USA: N/A

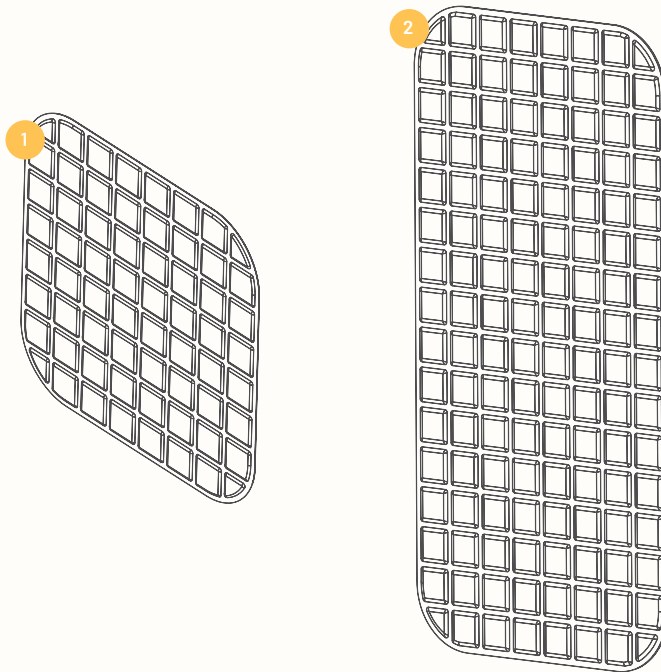
Accessories

VicOffice Suspension Cables

Solid colors



VicOffice Wall



Dimensions*

- 1 595 x 595 x 10 mm / 23.4" x 23.4" x 0.4"
- 2 1190 x 595 x 10 mm / 23.4" x 46.9" x 0.4"

Package Information

1 unit/box

Box Dimensions

- 1 606 x 606 x 40 mm / 23.9" x 23.9" x 1.6"
- 2 1201 x 606 x 37 mm / 47.3" x 23.9" x 1.5"

**Please notice that the dimensions of these panels have a tolerance of +/- 2 mm*

Features

- Premium high density VicPET Wool
- High Performance in medium and high frequencies
- Light weight
- Easy to install
- Easy to clean and maintain

Technical Information

Raw Material
VicPET Wool

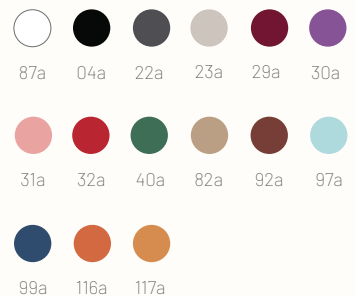
Fire Rate

Europe: N/A
USA: N/A

Accessories

VicOffice Brackets

Solid colors



Glossary

dB (decibel) – The scale on which sound pressure level is expressed. It is defined as 20 times the logarithm of the root-mean-square pressure of the sound field and reference pressure (2×10^{-5} Pa).

Direct Sound – Sound that arrives at the listener's position directly from the sound source, i.e. without being reflected from any objects or surface.

Flutter Echoes – Repeated sound reflections caused by sound waves travelling between parallel reflective surfaces such as walls.

Noise Rating Curves (NR) – NR curves are used to describe as a single value noise from mechanical sources. These curves are based in human audition and are used to target background noise targets for different room types according to their noise sensitivity.

Reverberation – An acoustical phenomenon that occurs in enclosed spaces, when sound persists in that space as a result of repeated reflection or scattering from surfaces enclosing the space or objects within it.

Reverberation Time (s) – A measure of the degree of reverberation in a space. It is equal to the time required for the level of a steady sound to decay by 60 dB after it has been turned off.

Sound Absorption – The portion of the sound energy that is absorbed and not returned when a sound wave hits a surface.

Sound Reflection – The portion of the sound energy that is returned when a sound wave hits a surface.

Sound Masking – Usually white noise that is used to originate a constant background noise within open plan areas to mask other unwanted sounds such as speech from other people – it is used in open plan offices to improve speech privacy.

Speech Privacy – It is the inability of an unintentional listener to understand another person's conversation. Lack of Speech privacy is frequently related with acoustic dissatisfaction within offices – e.g. overhearing unwanted conversations, or feeling overheard.

Vicoustic Provides innovative acoustic solutions

Vicoustic is a company in constant evolution with strong international expression, represented in more than 80 countries

Vicoustic understands sound - and we know what makes a truly exceptional acoustic and audio experience. Being at the forefront of acoustic technology, we combine engineered systems with stunning design to bring you sound that is free of compromises, but full of high quality performance.

A leading force in the industry, founded in 2007, Vicoustic is found in over 80 countries around the world. We understand the unique sound dynamics of a room or venue. So whether it's a Home Cinema, Hi-Fi room to a professional sound system for radio and television, our expertise for peak acoustic performance is second-to-none.

The products from Vicoustic deliver clever and innovative solutions to meet the demands of spaces which require a sophisticated soundscape. Taking on board the high standards of our customers, we continuously strive to manufacture products of superior functionality, adaptability, but all the while with a sustainable and environmentally conscious mind-set.

Quality at the heart of sound

Vicoustic is concerned with design, leading technology and sound solutions. And alongside this vision, our work is always underpinned by producing sound with materials and systems of the highest quality. We listen to our customers and take on board their acoustic needs, what we do is very personal. We are proud of our work and Vicoustic would never create something that we wouldn't use ourselves. Designed and manufactured in Portugal, our facilities underwent great transformation in 2015 to incorporate state of the art equipment and new production and coating systems. This ensured that Vicoustic was able to maintain the high quality standards expected of its products, increase production volumes, but also create those bespoke products for our custom projects. This is led by our own 'in-house' Quality Department, who oversee all aspects of quality from the company. The ability of Vicoustic to create individually designed items at a premium quality means that our products can meet the needs of most spaces (no matter how unusual) to ensure the best acoustics and environment to enjoy sound...we have it covered.

Vicoustic Team

From conception through to completion, we work closely with architects, engineers and designers to deliver a project successfully irrespective of complexity.

Our project team includes senior acoustic engineers and designers that are experts in taking you on your acoustic and design needs.

The pioneering hardware and software tools we have engineered have proved to be very reliable to support the integration of acoustic treatment and sound insulation solutions through a new-build or a refurbishing project.

Our Research and Development Team is also available to develop customized products to satisfy your needs.

Our customers will also be supported by our Sales, Marketing and Logistics teams to assist with transportation, communication and all information that may be required: pricing; installation guides; catalogues; etc.



Together we have proven that we can provide high levels of value to see our customers through the whole process of installing acoustic solutions.

This includes reliable and effective recommendations of products and support services throughout your whole project process from conception through to completion.



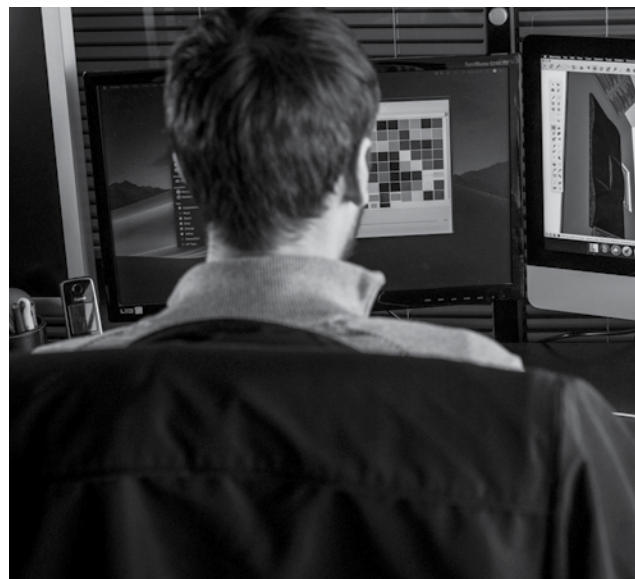
We do

- Custom Designed Products
- Room Design Recommendations
- Technical Support

Technology and rigorous in-house testing are the foundations for every Vicoustic Product

This is what makes Vicoustic a distinguished brand and leader in its sector

We believe that Vicoustic should constantly be paving the way, innovating and driving sound technologies to ensure that we are not only leading the field, but producing the best acoustics in every space we are acoustically curating. What makes us outliers in the industry is our 'Vicoustic Research Centre', inaugurated in 2012 alongside the Vicoustic HQ. We pride ourselves on developing and continuously advancing our technologies and ways of working to deliver the best product to our customers.



The Research Centre operates on a multidisciplinary platform: the 'Multifunctional Room' and the 'Innovative Acoustic Chamber'. We have a brilliant (and fun!) time using this centre to test our products and investigate and challenge the way we use audio and acoustic technologies.



The 'Multifunctional Room', lined with magnetic walls, allows us to assemble, mount and test different combinations of acoustic products quickly and efficiently. Not only does this allow us to analyse performance, quality and design, it also gives us the opportunity to share this learning with our Vicoustic partners across the world

The 'Innovative Acoustic Chamber' is a world leading testing facility. 4-ton mechanical walls allow us to adapt the size of the space to the bespoke requirements of our customer. With a specialized sound insulation system, we can develop product and test resonance, sound frequency and, best of all, curate that beautiful acoustic ambiance only made possible by emulating the space the system will eventually call home. The sound behaviour is captured using B&K microphones and each element of the acoustic can then be identified and tested so nothing is missed and everything can be fine-tuned.

Our aim is to invest in programmes to optimise acoustic performance within specific architecture and interior spaces. This means we can produce aesthetically pleasing products, whilst also upholding key safety and environmental regulations.

Vicoustic Sustainability Approach



In the past decade, Vicoustic has been developing a strong concern in terms of creating new sustainable acoustic solutions

We are committed to making products in an environmentally friendly way. This is important to Vicoustic and an integral part of our product development. Following an extensive project looking into the sustainability of our creations, a substantial part of our products are now made using recycled or recyclable materials.

Most notably, Vicoustic has increased the use of VicPET Wool. A non-woven textile with superb acoustic performance, but predominantly made from recycled plastic bottles. 2018 sees a 3rd Vicoustic factory opening, meaning we are more determined than ever to use eco-friendly products in our lines.

But sustainability is not limited to manufacturing. Our aim for a greener product is also in the quality and durability of our creations and we aim for these to have a great, long and lasting life.



Vicoustic's continuing research and innovation in acoustic solutions, in its pursuit of new materials, led to the development of VicPET Wool

Instead of using commonplace raw materials, the latest Vicoustic line of products uses new and responsible raw materials that are predominantly made of recycled PET Bottles (65%), which are recyclable and low emitting materials (low VOC emissions).

Alongside being made of sustainable materials, these products maintain all necessary fire safety regulations and are classified as Class 1 according to OEKO-TEX 100 Standard, i.e. meeting the human-ecological requirements presently established for baby articles.

We, at Vicoustic, are doing all this in an innovative way, without compromising the acoustic performance or the design and quality of our products. Installing our new line of products not only will ensure you meet your acoustic needs, but can also promote the sustainable ambitions of your company and helps you earn the credits normally available in the Green Building Certification Schemes such as LEED (USA); WELL (UK); HQE (France); etc.



VicPET Wool

Properties

- Does not irritate skin or eyes
- Recyclable (100% PET)
- Good indoor air quality - zero emission of VOC's or formaldehyde
- No chemicals used
- Humidity resistant
- No dust generation during handling
- Class I acc. to Oeko-Tex 100 Standard

Description

- Non-woven product
- 100% polyester fibres
- Thermally bonded
- Colour: White or Black

Other features

- **Flammability:** Euroclass B, s1 d0
- **Thickness (range):** 20 to 80 mm
- **Weight:** 800 to 1600 grams/m²





Production

Strategically located in the largest industrial cluster in Portugal



Packaging

Each individual panel is inspected, placed in plastic casing and boxed. Production and Logistic enhancements guarantee high quality control and fast expedition



Shipping

Vicoustic Acoustic Solutions are currently being shipped over 80 different countries worldwide



Installation

"Out of the box" solutions, easy to install

R&D and Logistics Facility

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