SCREENS®
AT WORK

screens

frem
group

> Research identified ‘noise’ as a likely cause of employee dissatisfaction with the work atmosphere in terms of low motivation to work, reduced performance and irritation.
>
> (Ooman, Knowles & Zhao 2008)

In the modern workplace, the emphasis is on teamwork, flexibility and communication. For most companies and designers, this means open plan work areas. Gone are the days of being tucked away in private offices. But while the move to open plan has many advantages, it has also meant a loss of privacy and the constant distraction of noise.

Screens at Work has the solution. We can help you manage acoustics with a high degree of accuracy, ensuring that productivity and privacy needs are met.

Contents

We need to be productive at work but it is not always easy. There are distractions all around us that can affect our levels of concentration.

Screens at Work has developed a range of solutions that can increase privacy, improve acoustics and simply make your office a better environment to work in. Our range of products offers everything from single screens to meeting hubs with sound absorbent walls.

We invite you to browse through this brochure to see the exciting and wide range available.

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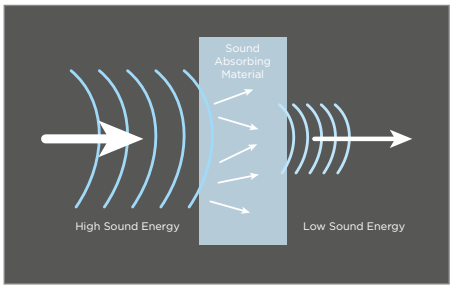
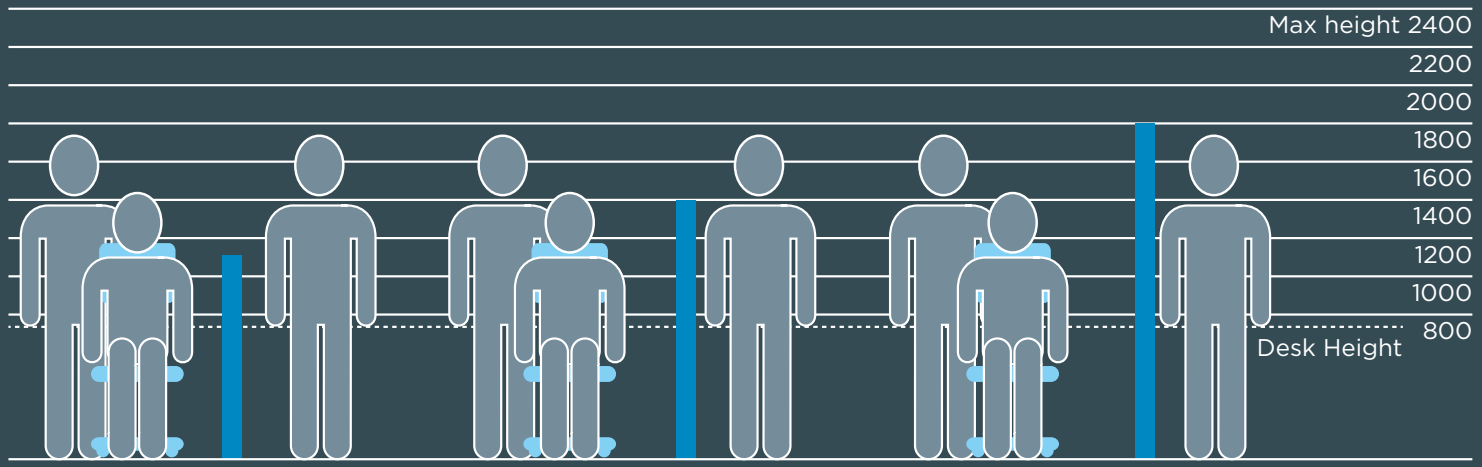


Acoustics 58 - 63

BS EN 1023-1 – European standard heights for office screens



Height 1100mm
Eye contact in
the sitting position

Height 1400mm
No eye contact in
the sitting position

Height 1800mm
No eye contact in
the standing position

Range Guide

Feature	Screen 5.2	Screen 4.2	Screen 3.6	Screen 3.5	Screen 3.3	Screen 3.2	Screen 2.4	Screen 2.3	Screen 2.2	Screen 2.1	Screen 1.5	Screen 1.4	Screen 1.3	Screen 1.2	Screen 1.1
Floor Standing	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗
Desk Mounted	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	✓	✓
Nominal Thickness	70mm	45mm	35mm	12/24mm	35mm	25mm	40mm	40mm	42mm	30mm	40mm	18mm	12/5mm	5mm	28mm
Linking	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗
Pinboard Facility	●	●	✗	✓	✓	●	✓	✓	✓	✗	✗	✗	●	✗	●
Acoustic Absorption	●	●	●	✓	●	●	✗	✗	✗	✗	✓	✗	✗	✗	✗
Acoustic Blocking	✓	✓	✓	✓	✓	●	✓	✗	✗	✗	✓	✗	✗	✗	✗
Stabilising Feet	✓	✓	✓	✓	✓	●	✓	✓	●	●	✗	✗	✗	✗	✗
Curved	✗	✓	✗	✗	✓	✗	✗	✗	✓	✓	✗	✗	✗	✗	✗
Sloped/Wave top	✗	✗	✗	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	✓	✓
Glazing	✓	✓	✗	✗	✓	✓	✓	✗	✓	✗	✗	✗	✓	✓	✗
Wire Trunking	✓	✗	✗	✗	✗	●	✗	✗	●	●	✗	✗	✗	✗	✗
Wire Management	●	●	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Screen Hung Storage	✓	✓	✗	✗	●	●	✗	✗	●	●	✗	✗	✗	✗	✗
Accessory Rails	✓	●	✗	✗	●	●	✗	✗	✗	✗	✗	✗	✗	✗	✗

✓ = Standard ● = Optional ✗ = Not applicable

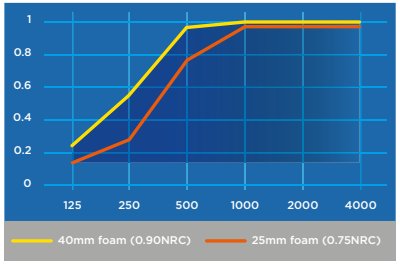
Screen 5.2

Screen 5.2 has the flexibility of creating a variety of panels of different heights and widths making the product truly versatile. At 70mm this aluminium framed screen is not only very rigid but can carry a lot of weight. The tiled system gives it a very distinctive look and allows it to carry acoustic foam on both sides of an internal frame.

Key Features

- ✓ Acoustic Blocking
- ✓ Acoustic Absorption
- ✓ Floor standing
- ✓ Desk mounted
- ✓ Linking
- ✓ Glazing
- ✓ Wire management
- ✓ Storage
- ✓ Accessory rails

Sound Transmission Class = 30dB



A screen with an NRC* of 0.75 absorbs 75% of sound that hits it. An NRC of 0.90 absorbs 90% of sound that hits it.

*Noise Reduction Coefficient

Screen 5.2

Screen 5.2

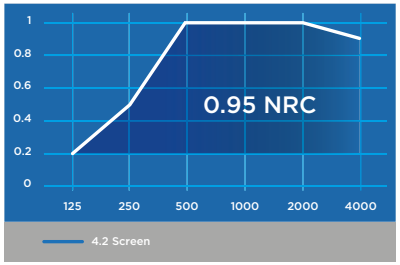
Screen 4.2

At 45 mm this aluminium framed screen has the flexibility to be both curved and straight allowing a variety of configurations to be created. The ‘golf ball’ effect gives the screen an acoustic look as well as a very high NRC* of 0.95.

Key Features

- ✓ Acoustic Blocking
- ✓ Acoustic Absorption
- ✓ Floor standing
- ✓ Desk mounted
- ✓ Curved
- ✓ Linking
- ✓ Glazing
- ✓ Accessory rails

Sound Transmission Class = 28dB



A screen with an NRC* of 0.95 absorbs 95% of sound that hits it.

*Noise Reduction Coefficient

Screen 4.2

Screen 4.2

Screen 3.2

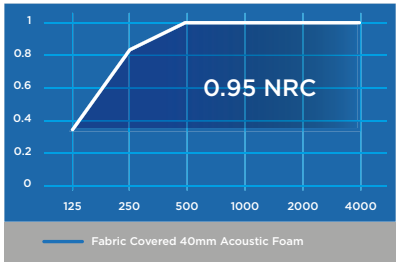
Screen 3.2 is the most versatile of our screens. This popular screen is made of a 25mm wide aluminium frame with round and square end profiles to choose from, allowing you to match them with desk frames.

Available with a 2mm thick rubber core for increased speech privacy.

Key Features

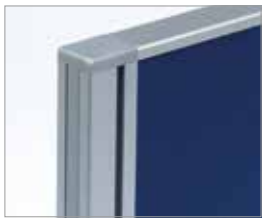
- ✓ Acoustic Absorption
- ✓ Floor standing
- ✓ Desk mounted
- ✓ Wall mounted
- ✓ Linking
- ✓ Glazing
- ✓ Accessory rails
- ✓ Pinnable

Sound Transmission Class = 25dB (with rubber core)

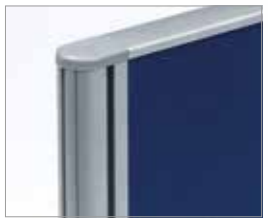


N.B. A screen with an NRC* of 0.95 absorbs 95% of sound that hits it.

*Noise Reduction Coefficient



Square



Round

Screen 3.2

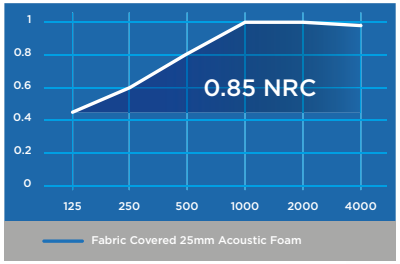
Screen 3.3

At 35mm this aluminium framed screen with its distinctive curved profile and robust rail system can carry a lot of weight. The extra load bearing capacity allows the integration of 25mm of acoustic foam either side of a blocking rubber core. When combined with the contour screen this system gives any breakout area a very welcoming feel.

Key Features

- ✓ Acoustic Blocking
- ✓ Acoustic Absorption
- ✓ Floor standing
- ✓ Desk mounted
- ✓ Curved
- ✓ Linking
- ✓ Glazing/upstands
- ✓ Accessory rails
- ✓ Pinnable

Sound Transmission Class = 25dB (with rubber core)



N.B. A screen with an NRC* of 0.85 absorbs 85% of sound that hits it.

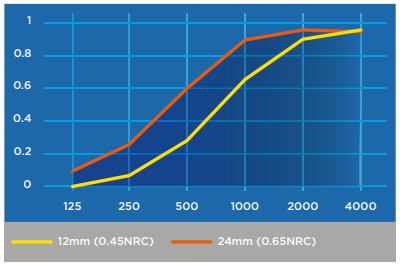
*Noise Reduction Coefficient

Screen 3.5

This easy to erect screen offers design flexibility without the need for edging or capping. This is a light weight, versatile product at 12mm and 24mm.

Key Features

- ✓ Acoustic Absorption
- ✓ Floor standing
- ✓ Desk mounted
- ✓ Wall mounted



A screen with an NRC* of 0.45 absorbs 45% of sound that hits it. An NRC of 0.65 absorbs 65% of sound that hits it.

*Noise Reduction Coefficient


Shhhh....

Screen 3.6 Zip

This very distinctive quilted screen offers design flexibility without the need for edging or capping. At 35mm wide, using Camira's Second Nature fabric with zip linking, this screen provides a contemporary look and feel.

Key Features

- ✓ Acoustic blocking
- ✓ Floor standing
- ✓ Desk mounted
- ✓ Zip linking

Screen 3.6 Zip

Screen 2.1

Screen 2.1 is an entry level, 30mm thick, fabric covered screen with plastic dumbbell linking. This product is ideal for large areas which must be screened off cost effectively.

Key Features

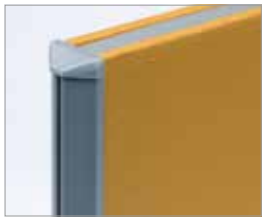
- ✓ Floor standing
- ✓ Linking
- ✓ Pinnable
- ✓ Curved
- ✓ Sloped/wave

Screen 2.2

Screen 2.2 is an entry level fabric covered screen. While similar to the 2.1 screen, the 2.2 is 42mm thick, allowing for the addition of glazing.

Key Features

- ✓ Floor standing
- ✓ Linking
- ✓ Pinnable
- ✓ Curved
- ✓ Glazing
- ✓ Sloped/wave



Screen 2.3

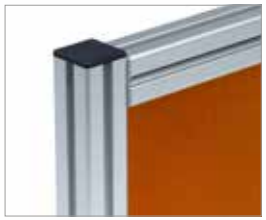
With this timber framed screen you will achieve a natural look and feel. It also gives you the design flexibility that only wood can provide.

Key Features

- ✓ Floor standing
- ✓ Linking
- ✓ Lattice inserts

Screen 2.4

A dedicated robust mobile screen that can be used at home, in the classroom or the training room. The versatile aluminium frame allows a variety of uses from whiteboard to notice board.



Key Features

- ✓ Floor standing
- ✓ Whiteboard
- ✓ Pinnable
- ✓ Mobile
- ✓ Magnetic

Screen 1.1

An entry level, 28mm thick, desk mounted fabric covered screen with the option of a plastic or fabric covered trim.

Key Features

- ✓ Desk mounted
- ✓ Arc/wave
- ✓ Pinnable

Screen 1.2

A simple desk mounted 5mm Acrylic Screen.

Key Features

- ✓ Desk mounted
- ✓ Arc/wave

Screen 1.3

A free standing desk screen primarily used on bench desking systems where no lateral screens are provided. Available in 5mm and 12mm acrylic or fabric wrapped.

Key Features

- ✓ Free standing
- ✓ Acrylic/fabric wrapped
- ✓ Arc/wave

Screen 1.4

At only 18mm thick this is the simplest and most elegant fabric wrapped screen we manufacture.

Key Features

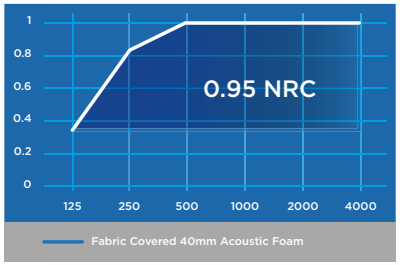
- ✓ Desk mounted
- ✓ Pinnable
- ✓ Arc/wave

Screen 1.5

An entry level acoustic screen that significantly reduces reverberation. Slide on lateral screens complete this range.

Key Features

- ✓ Acoustic Absorption
- ✓ Desk mounted
- ✓ 40mm thick
- ✓ Arc/wave



N.B. A screen with an NRC* of 0.95 absorbs 95% of sound that hits it.

*Noise Reduction Coefficient

Screen 0.1

Lightweight aluminium, timber or painted MDF frames allow a variety of shapes, styles and colours to be catered for.

Key Features

- ✓ Wall mounted
- ✓ Pinnable
- ✓ Whiteboard
- ✓ Magnetic whiteboard

Aluminium

Cream

Oak

White

Screen 0.2

This strong aluminium frame allows pin boards to be created up to 1200mm x 1800mm. The frames can be sprayed in a variety of colours and have the flexibility to create cabinets with sliding or hinged lockable doors.

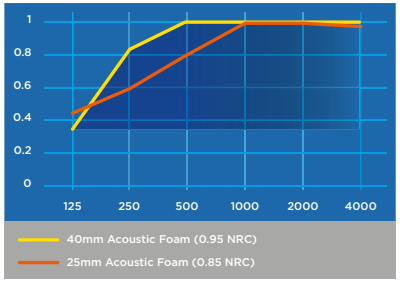
Key Features

- ✓ Wall mounted
- ✓ Pinnable
- ✓ Doors
- ✓ Lockable
- ✓ Magnetic whiteboard

Screen 0.3

Acoustic Panels.

Fabric covered acoustic wall mounted panels with simple ‘Z’ bar fixings can either be plain fabric or images can be printed onto white Lucia fabric. Available with 25mm or 40mm acoustic foam with a square or chamfered edge.



A panel with an NRC* of 0.95 absorbs 95% of sound that hits it. An NRC of 0.85 absorbs 85% of sound that hits it.

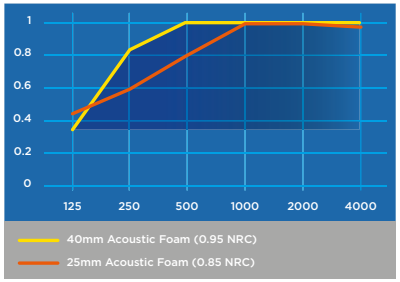
*Noise Reduction Coefficient


H I I J J K K
N N O O P P
S S T T
W S U U
X Y Z Y Z

Screen 0.4

Room divider.

This floor-to-ceiling post and bracket system can support plain, glazed or acoustic panels plus shelving.



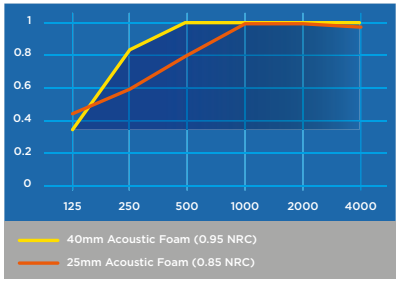
A panel with an NRC* of 0.95 absorbs 95% of sound that hits it. An NRC of 0.85 absorbs 85% of sound that hits it.

*Noise Reduction Coefficient

Screen 0.5

Acoustic Fabric Wall.

A simple track system that allows large areas of acoustic foam to be covered with single continuous sheets of fabric.

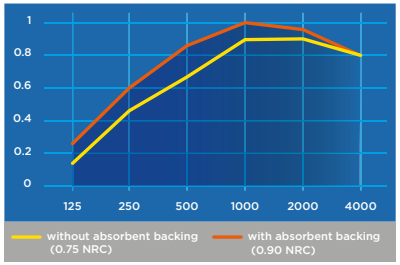


A panel with an NRC* of 0.95 absorbs 95% of sound that hits it. An NRC of 0.85 absorbs 85% of sound that hits it.

*Noise Reduction Coefficient

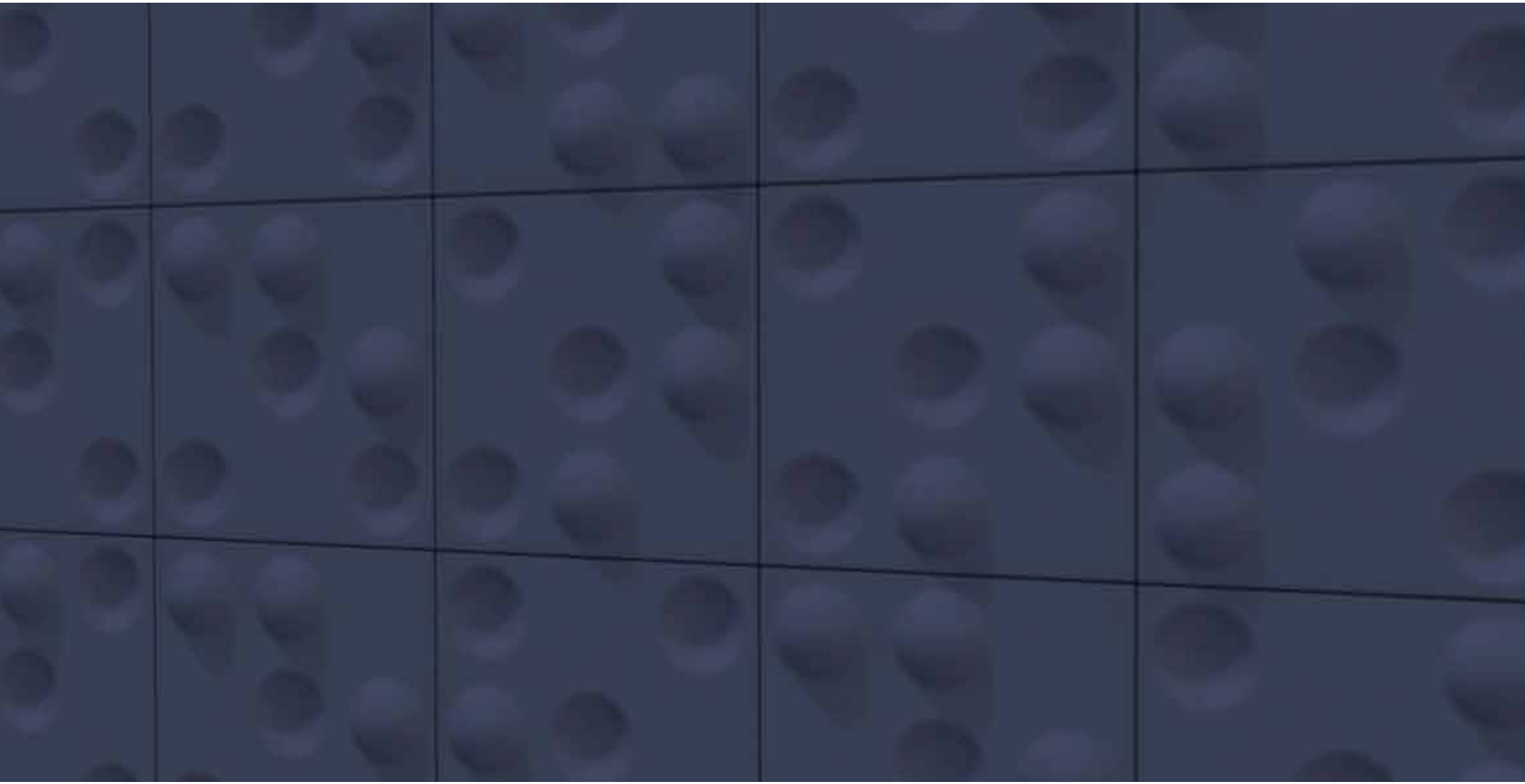
Screen 0.6

The quietspace 3D Tile is a prefinished Acoustic Wall Tile designed to create a contemporary interior and opens up the realms of design flexibility in any interior environment.



A screen with an NRC* of 0.75 absorbs 75% of sound that hits it. An NRC of 0.90 absorbs 90% of sound that hits it.

*Noise Reduction Coefficient



Receptions

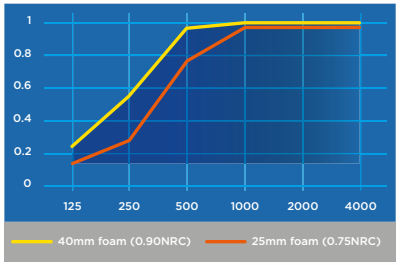
Using our 5.2 aluminium frame, this system gives you the flexibility of a screen solution with the finished look and feel of a bespoke reception. Available in a range of laminates, acrylics and veneers.

Receptions

Using our 4.2 aluminium frame, this system gives you the flexibility of a screen solution with the finished look and feel of a bespoke reception. Available in a range of laminates, acrylics, vinyls and veneers.

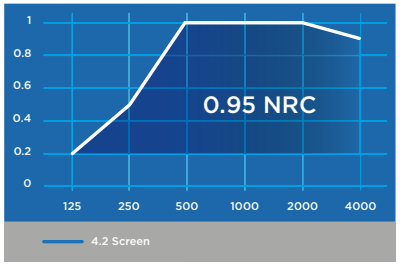
Workwalls

All 3 major systems, 5.2, 4.2 and 3.2, can be used to create workwalls of varying degrees of sophistication. With the option to make the facing surface acoustic, areas for focused working can be created.



A screen with an NRC* of 0.75 absorbs 75% of sound that hits it. An NRC of 0.90 absorbs 90% of sound that hits it.

*Noise Reduction Coefficient

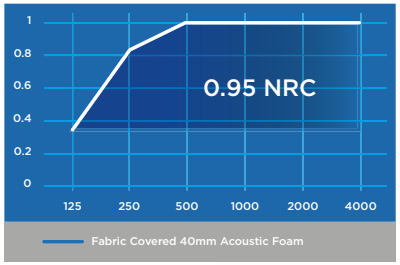


A screen with an NRC* of 0.95 absorbs 95% of all sound that hits it.

*Noise Reduction Coefficient

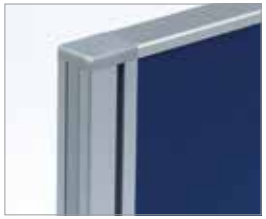
Workwalls

All 3 major systems, 5.2, 4.2 and 3.2, can be used to create workwalls of varying degrees of sophistication. With the option to make the facing surface acoustic, areas for focused working can be created.

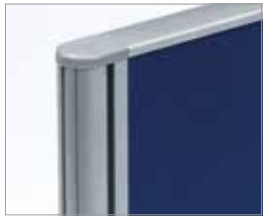


N.B. A screen with an NRC* of 0.95 absorbs 95% of sound that hits it.

*Noise Reduction Coefficient



Square



Round

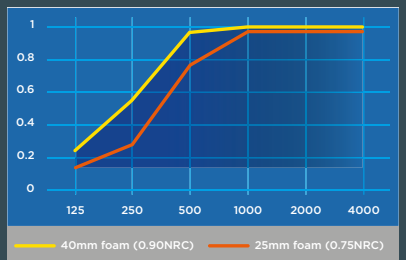
Solutions for noise in the workplace

Methods for controlling acoustics can be summarised by the acronym ABC:

A – Absorb

Acoustic absorbers are normally used to correct the reverberation or unwanted reflections in a room. They work by dissipating sound energy as heat so that less sound energy is reflected back into the room. The amount of sound energy absorbed and the frequencies that are affected are dependent on the type of absorber.

The most commonly used absorbers in office environments and many environments where speech is the main sound source are 'porous' absorbers. They are formed from porous materials such as melamine foam, glass fibre and rockwool. Generally, the thicker the absorbers are, the greater the frequency range that they absorb well. However, for office environments they need not be thicker than 50 mm but should not be less than 20 mm.

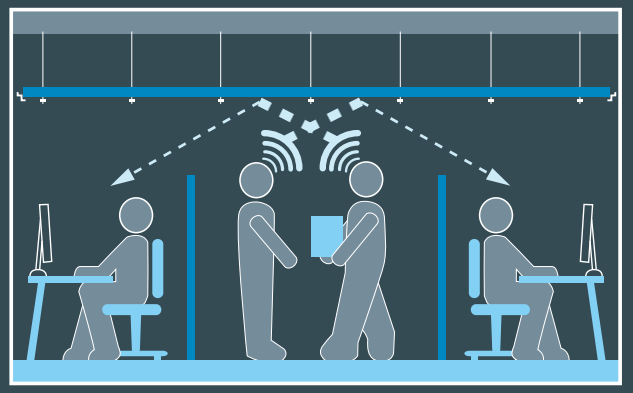


Porous absorber absorption coefficients

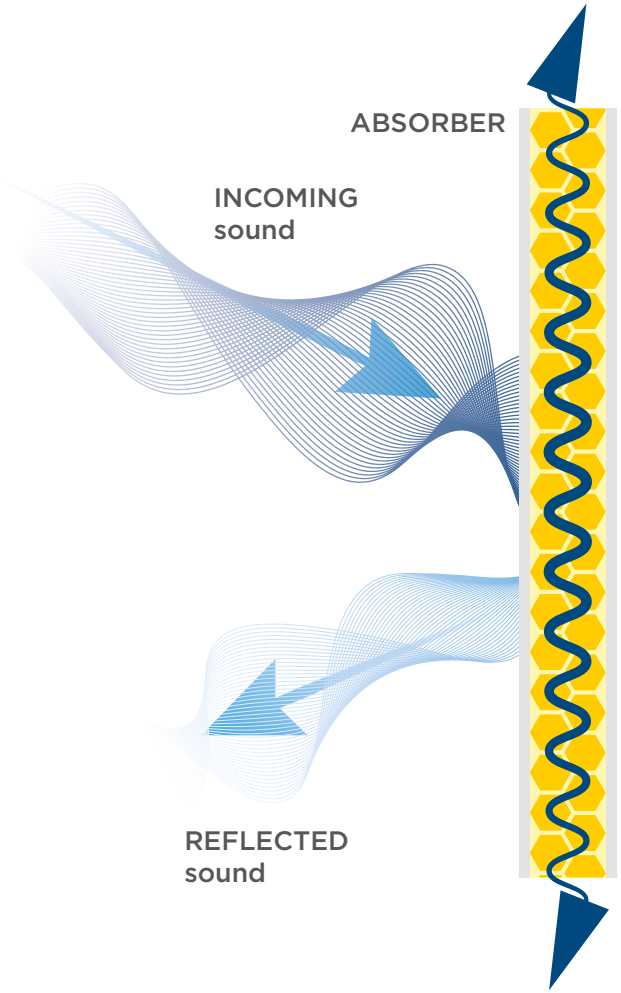
In offices, acoustic absorption may be provided by a number of different products, including acoustic ceilings, wall absorbers, absorbing acoustic screens, floor coverings and by chairs and other furniture. Absorptive materials absorb much of the sound that is incident upon them, minimizing the amount of reflection, reducing the amount of reverberation in the space and hence reducing the ambient noise level and improving speech intelligibility. In addition, these lowered ambient noise levels will cause employees to speak at a lower sound level, thereby preventing the occurrence of the build-up of noise levels.

The most important surfaces for absorption placement in open plan offices are the ceiling, walls close to work stations and desk screens. Creating private areas using screens will be rendered much less effective if there is a strong reflection path above the screens. In this case, sound from one work area will simply be reflected off the ceiling and into adjacent work areas. It is therefore important for the ceiling to be highly absorbent. Absorption should also be applied to walls where desks are located close to them for the same reason. Installation of screens that have acoustic absorption to the outside surface has also been shown to improve the speech privacy between work stations. Less reflected sound energy off the screen will mean less sound energy in the work space.

Where closed offices and meeting rooms are concerned, the aim is to reduce reverberation time to within acceptable limits. This can usually be achieved by installing acoustic ceiling panels or tiles. However, if a meeting room is particularly long, a reflective ceiling can help to project the voice across the room. Absorption should therefore be applied to the walls.

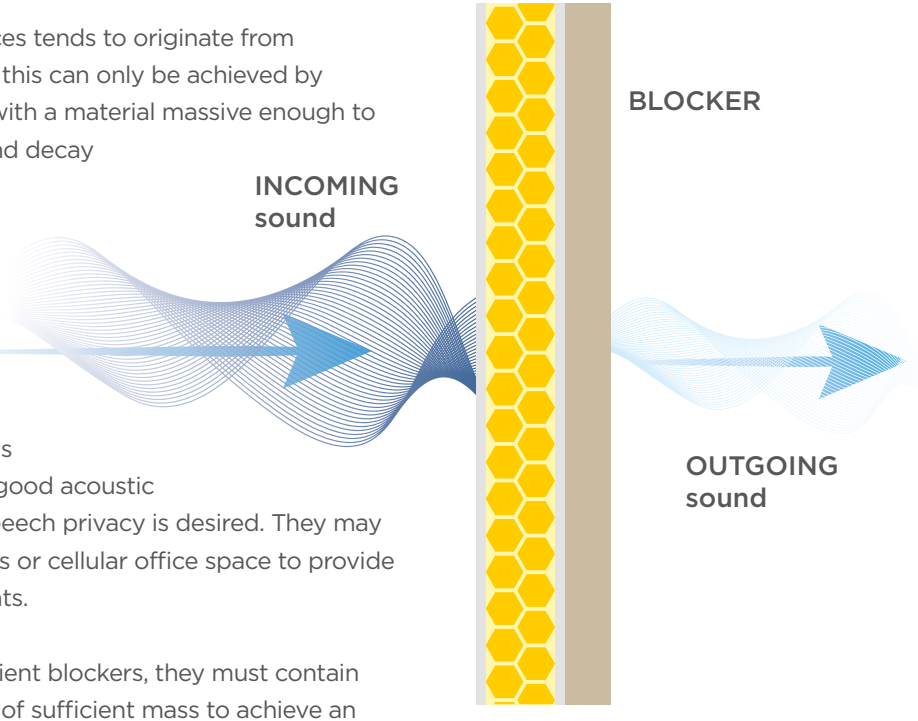


The acoustic problem is mainly dissatisfaction with speech privacy and intermittent noise. (Jensen, Arens, & Zagreus, 2005)



B – Block

The most distracting speech in offices tends to originate from the nearest workstations. Reducing this can only be achieved by interrupting the direct sound path with a material massive enough to block it. In addition, the rate of sound decay as sound travels across the office should be as high as possible to minimise both distraction and privacy distances. Acoustic screens are commonly installed between workstations and can act as sound barriers as well as providing sound absorption. Screens play a significant part in creating a good acoustic space in open plan offices where speech privacy is desired. They may also be used as temporary partitions or cellular office space to provide a degree of privacy for the occupants.



In order for desk screens to be efficient blockers, they must contain a solid core formed from a material of sufficient mass to achieve an SRI or STC of at least 18 dB. Of course, a solid blocking core will be redundant if the screen is not high enough to provide a barrier to the direct sound from a speaker's mouth. While standards and research suggest that the screen height should be at least 1500 mm above finished floor height, 1300 mm is generally what can be practically achieved with desk mounted screens and can provide an adequate degree of speech privacy provided the "A" and the "C" are also in place and at optimal levels.

Solutions for noise in the workplace

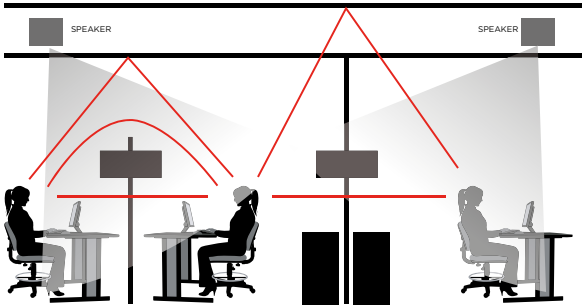
C – Cover

Ambient noise is what is commonly referred to as “background” noise. It includes many sounds in the environment but typically excludes the sound produced by building occupants (i.e. the sound of the unoccupied office with all building services running at their usual operational capacity). If you are in an office it may include the noise from traffic outside, the sound of the air-conditioning and sometimes, the buzz of the lighting. However, not all sources of noise are created equal!

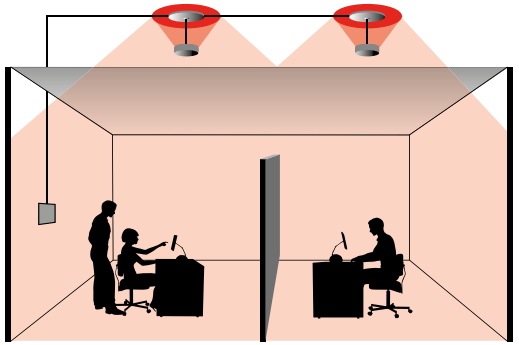
A certain degree of broadband, unobtrusive ambient noise can be useful for two reasons. The first is that it makes distracting noise less distracting by reducing the difference between the noise level of the distracting source and the background noise. The second is that it can increase speech privacy between two areas – the speech may still be audible, but as intelligible.

Sound masking systems are commonly used to artificially increase the ambient noise level in a particular area to provide a background noise ‘mask’ to aid speech privacy. They work by providing a constant, low-level, broadband background noise which aids in reducing the distraction and privacy distances in open plan offices. They are also suitable for use in areas where confidential conversations are required (such as within meeting rooms) but where the sound insulation between these noise-sensitive areas and external areas is inadequate.

Most sound masking systems are installed in the ceiling plenum with the speaker cones facing upwards. This creates a uniform field of sound in the room below. While the noise from the speakers can be heard, it is very easily ignored, much like the sound of the air-conditioning, and most people will work in a building without realising that it is there! In general, sound masking systems are fairly light on electricity usage, however, some systems may be programmed to come on during office hours and turn off again when no longer needed.



OPEN PLAN OFFICES


PRIVATE OFFICES

It is easier to habituate to constant noise than to variable noise. (Kjellberg, Landstrom, Tesarz, Soderberg, & Akerlund, 1996)

Masking Systems

Like the sound of the ocean, a correctly tuned sound masking system can easily be ignored whilst reducing distractions.

Creating zones for different work modes

Generally, time spent working in an office environment is divided between tasks requiring concentration and tasks requiring communication. One of the first steps in good acoustic design is to create zones for different types of work which can be individually designed for their acoustic requirements.

Communication

The first thing to consider in creating an area for good speech communication, such as meeting rooms, is that the distance between the speaker and the furthest listener be as short as possible. The sound that you hear when someone speaks in a room is a combination of the direct sound as well as the reflections off surfaces. We should aim to control reverberation using carefully placed absorbers, be sure that the direct sound between speaker and listener is unimpeded and, if possible, utilise ceiling reflections for sound reinforcement.

Collaboration

This is a unique situation in which speech intelligibility is an absolute necessity, but the ability to get on with independent work is also desirable. Here, reverberation time should be kept low, ceiling elements should be highly absorbent and ambient noise levels should be relatively high to allow for privacy as needed. Screens are low level except where used to separate the area of collaboration from areas of concentration and communication.

Concentration

These areas require the full application of A, B and C. The ability to concentrate is hugely important to productivity and the perception of a good working environment. Absorption is required to control reverberation times and also to reduce reflection off the high level screens that will provide the blocking. A minimum screen height of 1500 mm with a solid blocking core is recommended in conjunction with a highly absorbent ceiling of average mid-frequency absorption coefficient of 0.9. Unlike areas of communication where a high degree of speech intelligibility is desirable, in concentration areas, a low level of intelligibility is required in order to increase privacy and lessen distraction. Sound masking is therefore also an essential part of forming good areas for concentration in open plan offices.

Confidentiality

Areas of confidentiality are important in many businesses. These are usually areas where private conversations will take place regarding sensitive information. These areas also require the full implementation of A, B and C, however, these last two elements are certainly very important and the higher the levels of blocking and covering, the greater the degree of speech privacy that can be achieved. The degree of confidentiality can be estimated by looking at Dw (the level of insulation of the separating elements such as partitions) and the level of ambient noise. The higher the Dw and the higher the ambient noise level, the greater the degree of speech privacy. While blocking and covering determine how much privacy is achieved, controlling the reverberation time within the confidential space is also important in preventing a high level of reverberant noise. A high degree of absorption has a secondary benefit too in that people instinctively speak at a lower level in a ‘dead’ room than in a reverberant one.

Communal

Absorption is key in these areas. Often staff canteens and similar areas are ignored in acoustic design but can become areas of high levels of noise if left untreated. Surfaces are often hard and reflective and easily cleanable. This usually leads to higher than desired reverberation times which in turn lead to high levels of noise and an unpleasant environment. We recommend keeping the reverberation time of these areas in the order of 1 second (depending on the volume). In addition, communal areas should be located far away from areas of concentration.

Acoustics at Work – Golden rules for open plan offices

1. Clear and separate zones for communication and privacy.

2. Highly absorptive ceiling elements of Class A or α_w of at least 0.9 directly above work stations.

3. Screens of STC or R_w of at least 18 dB and NRC or α_w of at least 0.7 to a minimum height of 500 mm above desk level (preferably floor standing screens exceeding 1500 mm) between all work stations, including side-by-side.

4. Electronic sound masking to create an unoccupied ambient sound level of 45 – 48 dBA.

Further reading

1. British Standards Institution, BS 8233:2014 Guidance on sound insulation and noise reduction for buildings, 2014.
2. International Standards Office, ISO 3382-3 Acoustics - Measurement of room acoustic parameters - Part 3: Open plan offices, Geneva, 2012.
3. American Society of Interior Designers; Armstrong World Industries, Inc.; DynaSound, Inc.; Milliken and Co.; Steelcase, Inc, "Sound Solutions: Increasing Office Productivity Through Integrated Acoustic Planning and Noise Reduction Strategies," American Society of Interior Designers, 2005.
4. Gensler, "What we've learned about focus in the workplace," 2012.
5. D. Abbot, "Calming the office cacophony," The Safety and Health Practitioner, vol. 22, no. 1, pp. 34-36, 2004.
6. S. P. Banbury and D. C. Berry, "Disruption of Office-Related Tasks by Speech and Office Noise," British Journal of Psychology, vol. 89, no. 3, pp. 499-517, 1998.
7. S. P. Banbury and D. C. Berry, "Office Noise and Employees Concentration: Identifying Causes of Disruption and Potential Improvements," Ergonomics, vol. 48, no. 1, pp. 25-37, January 2005.
8. J. S. Bradley, "Measuring and predicting speech privacy in open-plan spaces," Journal of the Canadian Acoustical Association, vol. 35, no. 3, pp. 136-137, 2007.
9. P. Chigot, "Effects of Sound in Offices: Subjective Experience vs Objective Assessment," Facilities, vol. 23, no. 3/4, pp. 152-163, 2005.
10. G. W. Evans and J. Johnson, "Stress and Open Office Noise," Journal of Applied Psychology, vol. 85, pp. 779-783, 2000.
11. Gensler, "2013 U.S. Workplace Survey - Key Findings," 2013.
12. A. Haapakangas, M. Haka, E. Keskinen and V. Hongisto, "Effect of speech intelligibility on task performance - an experimental laboratory study," in International Congress on Noise as a Public Health Problem (ICBEN), Foxwoods, Connecticut, 2008.
13. A. Hedge, "The open-plan office: a sytematic investigation of employee reactions to their work environment," Environ Behav., vol. 14, no. 5, pp. 519-542, 1982.
14. V. O. Hongisto, "Effect of sound masking on workers in an open office," in Acoustics 08, Paris, 2008.
15. V. Hongisto, J. Keranen and P. Larn, "Simple Model for the Acoustical Design of Open-Plan Offices," Acta Acustica united with Acustica, vol. 90, pp. 481-495, 2004.
16. K. L. Jensen, E. Arens and L. Zagreus, "Acoustical Quality in Office Workstations, as Assessed by Occupant Surveys," in Indoor Air, 2005.
17. F. C. Justa and M. B. Golan, "Office design: is privacy still a problem?," Archit Res., vol. 6, no. 2, pp. 5-12, 1977.
18. P. Larm, J. Keranen, H. Riikka, J. Hakala and V. Hongisto, "Acoustics in open-plan offices - A laboratory study," in Joint Baltic-Nordic Acoustics Meeting, Mariehamn, 2004.
19. S. Y. Lee and J. L. Brand, "Effects of control over office workspace on perceptions of the work environment and work outcomes," Journal of Environmental Psychology, vol. 25, no. 3, pp. 323-333, 2005.
20. R. W. Marans and K. E. Spreckelmeyer, "Evaluating open and conventional office design," Environ Behav., vol. 14, no. 3, pp. 333-351, 1982.
21. M. Navai and J. A. Veitch, "Acoustic Satisfaction in Open-Plan Offices: Review and Recommendations," National Research Council Canada, Ottawa, 2003.
22. E. Nilsson and B. Hellstrom, "Acoustic design of open-plan offices," Nordic Innovation Centre, 2010.
23. P. Ross, "Office Wars: The Birth of the Corridor Warrior," Unwired, 2003.
24. U. Sailer and M. Hassenzahl, "Assessing noise annoyance: an improvement-oriented approach," Ergonomics, vol. 43, no. 11, pp. 1920-1938, 2000.
25. E. Sandstrom, R. E. Burt and D. Kamp, "Privacy at work: architectural correlates of job satisfaction and job performance," Academy of Management, vol. 23, no. 1, pp. 101-117, 1980.
26. J. Toftum, S. Lund, J. Kristiansen and G. Clausen, "Effect of open-plan office noise on occupant comfort and performance," in 10th International Conference on Healthy Buildings, Brisbane, Australia, 2012.
27. M. D. Zakesny and R. V. Farace, "Traditional versus open office setting: a comparison of sociotechnical, social, relations and symbolic meaning perspectives," Academy of Management, vol. 30, no. 2, pp. 240-259, 1987.

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