## THE OCEE LOOKBOOK

## APPLYING THE SCIENCE Ocee Ergonomic & Acoustic Solutions

## **UNIQUE FORMULA**

Assessments + Products + Training + Resources

 $\rightarrow$  Ocee Ergonomic Solutions



## The Acoustic Look book

The Ocee Look book has been created to ins new Acoustics collection, and is part of the O Whether you're looking for a key design piece to discreetly integrate, we have an ideal solut within these pages.

Please get in touch with us on 01604 674 674 or ergonomics@oceedesign.com

e, stimulate and provide creative ideas for Ocee's e Ergonomic Solutions initiative.

o characterise a space, or something more subtle,

The Ocee Ergonomics Team



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# UNIOUE FORMULA

Ocee Ergonomics works with a team of independent ergonomists and acousticians to offer a full ergonomic service based on workplace and acoustic assessments, endorsed products and extensive training courses. In fact, the experts created the package, chose the products and identified the areas they felt needed to be addressed. Their aim is to remove some of the myths about ergonomics and acoustics to increase wellbeing in the workplace and allow customers to make informed decisions.



## Assessments + Products + Training + Resources

## $\rightarrow$ Ocee Ergonomic Solutions

Independent, highly qualified ergonomists and acousticians offer a range of online and on-site assessment services, all coordinated by a sophisticated computerised reporting system. The independence of the experts allows them to recommend the best solution for the individual or workplace, whether that is just advice or a product suggestion; their guiding principal is to get the right solution for the client.

Independent Chartered Ergonomists offer a range of assessment packages including:

- Online workstation assessment service
- Walkthrough DSE (Display Screen Equipment) set-up
- Compliance DSE assessment
- Complex DSE assessment

Acoustic advice is provided by independent, highly qualified acousticians, who offer a full workplace assessment and recommendation service including:

- Acoustic consultation
- Initial reverberation study and feedback
- Basic open plan office assessment and feedback
- Site visit for acoustic advice and report
- Formal acoustic test (reverberation) and report
- Formal acoustic test (distraction distance) and report
- Product specification
- Pre and post installation testing

Ocee Ergonomics has compiled a comprehensive portfolio of products from acoustic panels to workplace accessories, to ensure that clients have access to the best equipment for their particular needs. Chartered ergonomists and accredited acousticians personally test all of our products.

Ocee Ergonomics provides RIBA accredited CPD courses written and presented by independent experts including:

- Ergonomics and workplace evolution
- Wellbeing and productivity at work
- Musculoskeletal symptoms in office environments
- Office acoustics: debunking the myths
- Office acoustics: good design

A series of courses are also provided on DSE assessor training, risk assessments, reducing musculoskeletal disorders, office acoustics and user centred space planning. In fact, all of Ocee Ergonomics' sales partners undergo our foundation training before they are accredited to offer our services.



Whether it's how to set up your perfect workstation, or videos on desk based exercises to improve your wellbeing, we have a library of easy-to-access instructional materials. We cater for those who want a 30-second overview, to the fully-fledged ergo enthusiast who wants a more in-depth clinical presentation.

Why not follow us on Twitter to get the latest research on ergonomic issues, as well as advice and news from our ergonomics experts.

♥ @OceeDesign

To book any of our courses please contact ergonomics@oceedesign.com or telephone 01604 674674 www.oceedesign.com

## OFFICE SPACES























































































































































# PUBLIC SPACES & MUSEUMS




























































## EDUCATION & SCHOOL





























## RETAIL & LEISURE



















## RESTAURANT CAFE & HOTEL



















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# HOME





















# AUDIO





















## ACOUSTIC PANELS & SOUND MASKING

### Solving Acoustic Problems - An Introduction

In spaces where we wish to communicate with each other and be heard clearly, such as a meeting room or brainstorming area, the degree of speech intelligibility should be high between conversational partners. In these areas, sound should travel efficiently between the speaker and the listener. However, in zones where focus is required, without interruption from others, clearly understood speech arising from nearby areas is distracting. In these zones, it is therefore desirable to have a lower level of speech intelligibility. In confidential meeting spaces, it is important to achieve the best of both worlds – an area in which conversational partners can be understood by each other, but not by passers-by.

In these areas, it is essential to understand that speech privacy is not the same as inaudibility, but rather that the intelligibility of speech is reduced to a level at which it can no longer be understood.

The different working styles of individuals must also be taken into account, as well as the tasks they are carrying out. Repetitive tasks such as stapling and filing may be best performed in a livelier area of the office, whereas tasks requiring complex calculation and memory would typically best be performed in a space with fewer distractions, both visual and auditory. It would seem, therefore, that good acoustic design for workspaces is not a case of 'one size fits all', nor is it as simple as 'caves-andcommons' but rather the inclusion of a range of areas with appropriate acoustics to their function, that is, varying levels of background noise and speech intelligibility.

### Products

Our range of products has been selected with this in mind. It includes solutions for the control of reverberation, reduction of speech level, and even systems which introduce 'good' sound into a space to reduce distractions. Used in various combinations, these products will improve the quality of the acoustic environment, allowing staff to be more productive and increasing worker satisfaction and wellbeing.

### Advice and Assessments

Choosing the correct acoustic solution requires expertise; it is important to consider the complete environment. Our independent acousticians are available to offer advice or conduct on-site acoustic assessments.



Our understanding of how people function in the open plan office has evolved over the last 20 years. In particular, much research has been conducted regarding the effect of the acoustics in the workplace and how this influences productivity and wellbeing. In fact, the majority of office workers identify noise as a major concern. Studies have shown measured physical symptoms of stress and quantifiable loss of productivity when people are exposed to an uncomfortable acoustic environment. In addition, employees' own perceptions of satisfaction and wellbeing have been shown to be negatively affected. Previously when it came to solving acoustic problems and improving the environment, the focus was on lowering noise levels however, it was soon discovered that this alone was ineffective and in many cases made the situation worse. 166

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In recent years, it has become apparent that acoustic comfort in work environments is not only to do with noise levels but is also dependent on the degree to which we can clearly understand speech. The clearer or more intelligible speech is, the greater its potential to cause distraction. Conversely, the more muffled or less intelligible speech is, the less likely it is to be distracting to listeners and the more acoustic privacy is afforded to the speakers.

## SNOWSOUND® TECHNOLOGY

### Solving Acoustic Problems

Ocee Design is proud to be working with Italian acoustic product specialists Caimi Brevetti. Caimi Brevetti's tradition of experimenting with new materials and technologies, whilst concentrating on environmental issues, has resulted in the award winning Snowsound® collection. Snowsound's extensive range offers acoustic solutions for any size of project.

### Research and Patents

Snowsound<sup>®</sup> technologies and products are covered by a variety of patents, the result of intense research and development that is still in progress.

### Design and Designers

Like Ocee Design, Caimi Brevetti invest in leading designers to create beautiful products. Many shapes and colours are designed to be either a visible and distinctive part of the project or to discreetly integrate into the spaces.

### International Awards

The technological innovations of Snowsound® and the design of products realised with these special technologies have achieved world-wide recognition.





### Sound Quality and Acoustic Comfort

Sound is formed by waves that are reflected from solid surfaces with limited absorption capacity such as concrete, marble or glass. In rooms made with these types of materials, a high degree of reverberation (echo) often results, making it difficult to listen and converse in comfort. Increased reverberant noise may also cause people to raise their voices thereby increasing the problem. Sound absorbing materials improve acoustics in these environments.

As well as reducing reverberation, Snowsound® panels play an integral role in the improvement of acoustics in open plan areas. The correct placement of these panels can help to control reflection and disrupt sound paths, thus helping to reduce distraction distances.



### Absorption Performance

Our products have been tested to both UNI EN ISO 10534-2 (equivalent to BS EN ISO 10534-2) for absorption in an impedance tube as well as UNI EN ISO 354 (equivalent to BS EN ISO 354) for absorption in a reverberation room.

This provides us with a thorough understanding of the absorption characteristics of the materials which make up these products, as well as the performance of the products in their complete forms.

With good absorption performance across the speech frequency range, Snowsound<sup>®</sup> absorbers are perfect for environments where communication is important.

The frameless design as well as the lack of other potentially reflecting design features gives Snowsound® panels a completely sound absorbing surface. The panels have the same aesthetic, acoustic and functional characteristics on both sides.

### 'Class A' Absorption Performance



Frequency (Hz)

UNIEN ISO 354 measures sound-absorbing power in a reverberation room (Mitesco/Snowsound@ panels installed side by side and with a 200mm rear air space)

### Blocking Performance

Snowsound<sup>®</sup> panels have been tested at the University of Ferrara to measure the sound attenuation of different configurations according to the ISO 10053 standard. The results demonstrate the blocking capacity of these panels which allows designers to predict their effect on the acoustic environment more accurately.







## FEATURES

### The highest quality testing

## CE

#### CE

When hung from the ceiling, Snowsound® and Snowsound® Fiber panels all bear the CE mark in accordance with BS EN 13964 for use as a suspended ceiling. The technical data sheets and performance declaration provided with these types of products allow customers to assess and choose the best technical solution, depending on the installation needs.

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### Greenguard Gold

Snowsound® and Snowsound® Fiber products have received Greenguard Gold certification, indicating that they are low emitting products and do contribute to the improvement of indoor air quality. Representative samples of products bearing the Greenguard certification mark have been independently tested and certified so that they meet UL's rigorous third-party Greenguard certification standards, which are among the most stringent in the world. To help reduce indoor air pollution specifiers should choose products which release the fewest possible pollutants (also known as low-emitting products).

This can be achieved by choosing products that are Greenguard certified, which means they have been screened for over 10,000 chemicals and do not emit high levels of chemical pollutants. Greenguard Gold certified products offer stricter certification criteria for sensitive individuals, such as children and the elderly, and are ideal for use in schools and healthcare facilities. Greenguard certified products contribute toward credits within the indoor environmental quality section of the leadership in energy and environmental design (LEED) building rating system.



Warranty

Snowsound<sup>®</sup> Technology products have a 5 year warranty.



### Fire

Snowsound's external fabric and sound absorbing interior material has Euroclass B-s2, d0 classification for reaction to fire. The tests were completed on finished panels, composed of sound absorbing materials upholstered on both sides.



### No formaldehyde

The panels have no detectable formaldehyde content, tested according to the UNI EN 717-2 (equivalent to BS EN ISO 12460-3).



### 0070 Eco-friendly

In the designing of the panel the objective was to obtain recyclability of the entire product at the end of its useful life, in a manner both simple and rapid. For this reason, the panels have been made entirely of polyester; therefore they are a single material and 100% recyclable without the need to separate the outer fabric from the sound absorbing inner material. All components are also made of single materials, plastic or metal, and can be easily disassembled, thus permitting 100% recycling.

The use of high quality materials and processing make it possible to obtain longer product life, resulting in reduced consumption of materials and energy.

The internal sound absorbing material is produced with up to 30% recycled material. The panels do not contain felt or other organic materials which are difficult to recycle.



### Hygiene and maintenance

The absence of an airspace or cavity between the fabric and the sound absorbing material significantly decreases the accumulation of dust, pollen or insect infestation. The seamless surface of the panel is easy to clean with the appropriate detergents.



### Extreme Conditions

To simulate the influence of the seasons on indoor environments, Snowsound® panels are subjected to a cycle of extreme weather conditions, according to ISO 9142 (equivalent to BS EN ISO 9142) standards, in a climate chamber at -20°C (-4°F) to +70°C (+158°F) and humidity up to 90%.

## $\bigcirc$

### Strong, light and thin

Snowsound® Technology produces durable yet extremely thin, lightweight and easy to handle panels, averaging 3.4 kg per square metre. The variable density of Snowsound® not only optimises the acoustic performance of the panels, but also creates a superficial protective shell which makes the panel more robust and less subject to damage, scratching, tearing or other damage typical of porous or fibrous materials.



## THE DESIGNERS

The many shapes and colours of the Snowsound® panels are designed to be either a visible and distinctive part of the project or to discreetly integrate into the spaces. Snowsound® resolves acoustic problems, from the simplest to the most complex, with a complete range of products based on a totally innovative approach.















Marc Sadler





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### **CONTACT US**

If you would like to book an assessement or benefit from our unique Ergonomic Solution please contact us at: ergonomics@oceedesign.com

By telephone 01604 674 674

