

# ORCHESTRA



atena lux®



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## A NEW WAY OF SHEDDING LIGHT

ATENA LUX has been producing lighting systems for the TECHNICAL and MEDICAL sector since 1994. Thanks to its flexibility, creativity, and technical know-how, it has developed **lighting and acoustic solutions** that respond effectively to the problem of reverberation, without neglecting the importance of correct and healthy light in everyday environments.

The specific technical solutions to improve **lighting and acoustic comfort** are the result of the constant research and drive towards innovation that has always animated the production activity of ATENA LUX.

In line with the principles of quality and sustainability, ATENA LUX wants to continue to offer **excellent solutions** that combine sartorial know-how and technology, so that they are synonymous with reliability, durability and efficiency.

The creations of the ORCHESTRA line are totally removable and recoverable and prefer the use of **recyclable and eco-friendly materials**.

100% MADE  in ITALY





## IN SEARCH OF SILENCE...

We love to live and work in environments with **a modern and sophisticated design**, but often these environments do not guarantee a correct and homogeneous distribution of the sound, which turns into annoying reverberation, putting the functionality of the spaces themselves at risk. Creating more places and **occasions of quiet** in everyday life can help you regain **concentration and fight stress**.

To counteract noise pollution and to improve the sound performance of indoor environments, ATENA LUX has developed **ORCHESTRA** line: a composition that becomes a furnishing solution making the environment unique, bringing acoustic and light comfort wherever it is needed.

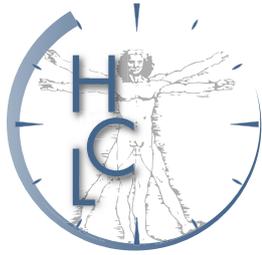
Working in a quiet, calm and pleasant environment **increases productivity and peace of mind**: to obtain this result it is necessary to install sound-absorbing panels, but the correct function depends on the right choice of shape, size and type of application... For this ATENA LUX realizes tailor-made projects that integrate **ACOUSTICS, LIGHT AND DESIGN**.

### Acoustics

The sound-absorbing core is the result of collaboration with industry experts and arises from a careful evaluation of each particular customer need in the design phase.

The acoustics of the rooms depend on the construction materials and furnishings present in these spaces. In order to solve the problem of reverberation, which often occurs only at the end of construction works, it is necessary to evaluate architecture and furnishings: our technicians calculate the sound-absorbing material necessary to bring the acoustics back to a sustainable and pleasant level.

The sound-absorbing materials used are able to absorb and correct sounds mainly at medium and high frequencies (between 250Hz and 4000Hz), improving acoustic performance indoors, reducing reverberation and improving speech intelligibility.



## HUMAN CENTRIC LIGHT

### Light

Good lighting combined with good acoustic comfort guarantees an improvement in the quality of life within the environments in which we spend most of the day, with a significant impact on the psycho-physical well-being of individuals. ATENA LUX solutions combine lighting and acoustics in a flexible and functional way in a single system.

For almost 30 years, ATENA LUX has been offering lighting solutions for work, meeting, wellness and care environments. Very attentive to the humanization of technical and medical environments, the line of lighting fixtures dedicated to sound absorption is offered with HCL LED sources, to contribute to a healthy biorhythm and promote the concentration and satisfaction of those who work within these environments.

### Design

Conceiving, designing and shaping are part of the process of creating a sound-absorbing system.

**ORCHESTRA** is a line of products, totally customizable, made up of two souls, the luminous one and the sound-absorbing one, which come together in a single body, the result of particular attention to detail and craftsmanship. A tailored approach for this project, which involves direct interaction with the customer and the designer, adapting each time in a personalized way to the environment.

The sound-absorbing core is the result of collaboration with industry experts and arises from a careful evaluation of each particular customer need in the design phase.

Dimensions, materials and shapes can be shaped according to needs and become real furnishing accessories that combine intelligent lighting and reverb control.



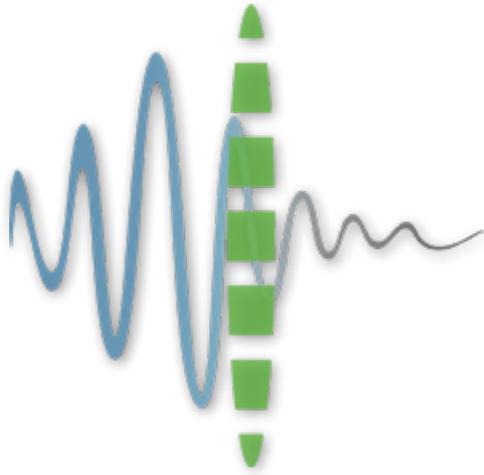
## ORCHESTRA WALL

Like a painting, this solution consists of a lighting body with a sound-absorbing frontal panel and a panel with the acoustic function only.

The acoustic wall panel is easy to install as it is equipped with a magnetic fixing system consisting of metal plates and magnets.

Numerous colour variants are available on request.





## Technical features

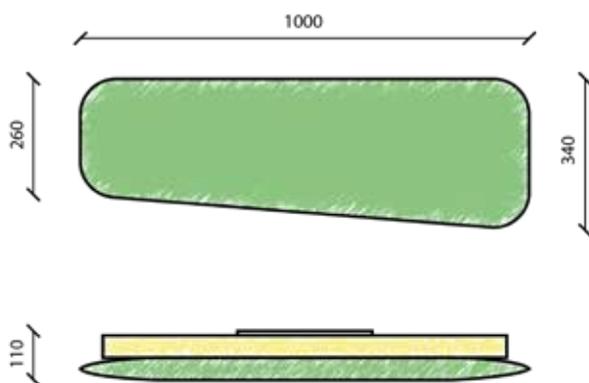
**Application:** hotels, restaurants, shops, spas.

**Installation:** wall.

**Lighting body HEGO:** extruded aluminum profile with direct and indirect light emission with opal **optic for diffused light**, LED sources optionally 3000K, 4000K, 6500K, or Tunable White. White Dry or Black Dry finish.

Length of the lighting body 900 mm, power 20W+20W, light output 1820lm+1820lm, colour temperature 4000K, CRI>90.

**Acoustic panel:** 5 cm thick, available in different colours. Panels are covered with fabric with interior in polyester fiber with percentages of **recycled material** from 63% to 90%, it meets the REACH and LEED requirements. The upholstery fabrics are **eco-friendly** and made with 100% recycled and recyclable materials.



## ORCHESTRA PURE

This device, created to make a **well-lit, safe and low-noise** work environment consists of a direct and indirect lighting body with specific optics for the office environment, which integrates a **bipolar ion sanitization device** inside. The sound-absorbing panel helps to counteract reverberation and improve the acoustic well-being within the room.

### Natural light

To improve the quality of life of people in indoor environments and promote natural biorhythm, the lighting body is equipped with Tunable White LED sources, and it is managed according to the Human Centric Lighting (HCL) principle. It is therefore possible to adjust the intensity and colour temperature of the light (2700K-6500K) according to the lighting scene that is needed inside the room.



### Clean air

The device, designed to make work environments healthier by improving air quality, is equipped with a **bipolar ion generator** inside.

The generation of positive and negative ions triggers natural chemical reactions by destroying the protein structure of viruses and bacteria, effectively rendering them harmless and oxidizing volatile organic compounds in the air (VOC). In this way, both the growth of viruses, microbes and bacteria in the specific area and the VOC content in the air are monitored.

The sanitization device can always remain in **operation even** in the presence of people, without any danger to people's health.

A sanitizing device is sufficient to sanitize an **area of 25 m<sup>2</sup>**.



## Acoustics

The sound-absorbing panel, with its peculiar **trapezoidal** shape, is made of polyester fiber with a thickness of 5 cm. The adjustable cables that fix it to the ceiling offer the possibility of lowering the panel from the ceiling at different heights and inclinations depending on the acoustic result to be obtained.

## Technical features

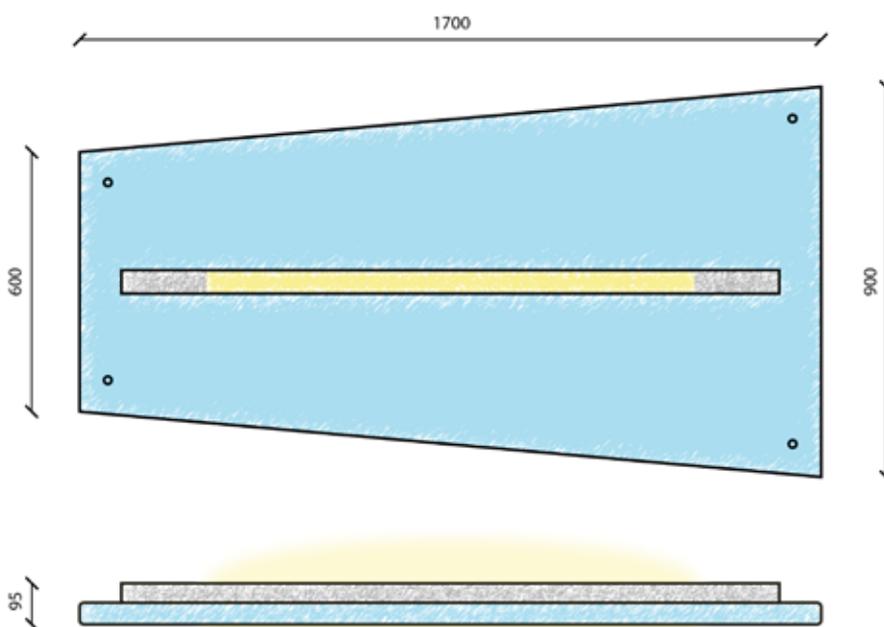
**Application:** offices, meeting rooms.

**Installation:** suspension.

**Lighting body WAY SAFE:** extruded aluminum profile with direct and indirect light emission with **OFC lenticular optics** for glare control, **Tunable White LED** sources (2700k-6500k). White Dry or Black Dry finish.

Length of the lighting body 1509 mm, power 32W + 20W, light output 4768lm + 2860lm, colour temperature 4000K, CRI>90.

**Acoustic panel:** 5 cm thick, available in different colours. Panels are covered with fabric with interior in polyester fiber with percentages of **recycled material** from 63% to 90%, it meets the REACH and LEED requirements. The upholstery fabrics are **eco-friendly** and made with 100% recycled and recyclable materials.



## Modularity

ORCHESTRA PURE can be integrated into modular solutions for large rooms.

Some panels will have the lighting function only or the sound absorption function only.

The creation of a **modular composition** depends on several factors: during the design phase, the number of sound-absorbing panels required and the type of lighting suitable for the specific environment must be defined.

Thanks to the use of software that allows you to perform all the calculations to obtain an **acoustic evaluation** for each type of environment, it is possible to have an estimate of the quantity of sound-absorbing material needed to lower the reverberation time.

Based on the result obtained from the **calculation of acoustic absorption** and from the **lighting planning calculation**, we can create customized projects for every need.

# ORCHESTRA TWINS

With a simple and minimal design, the **ORCHESTRA TWINS** is presented as a combination of acoustic panel, finished in a tailor-made way, which can be suspended into environments that require suitable light, sound absorption and a high aesthetic quality standard.

Positioned vertically, the panels are all double-sided and can be produced with two different colours to differentiate the two sides.

This composition, coloured and finished with perimeter stitching, is completed with the lighting bodies that can include **optics for the office environment or for diffused light**.

Thanks to the double face with sound absorbing power, this composition, of considerable size, has a **high acoustic power**.

## Technical features

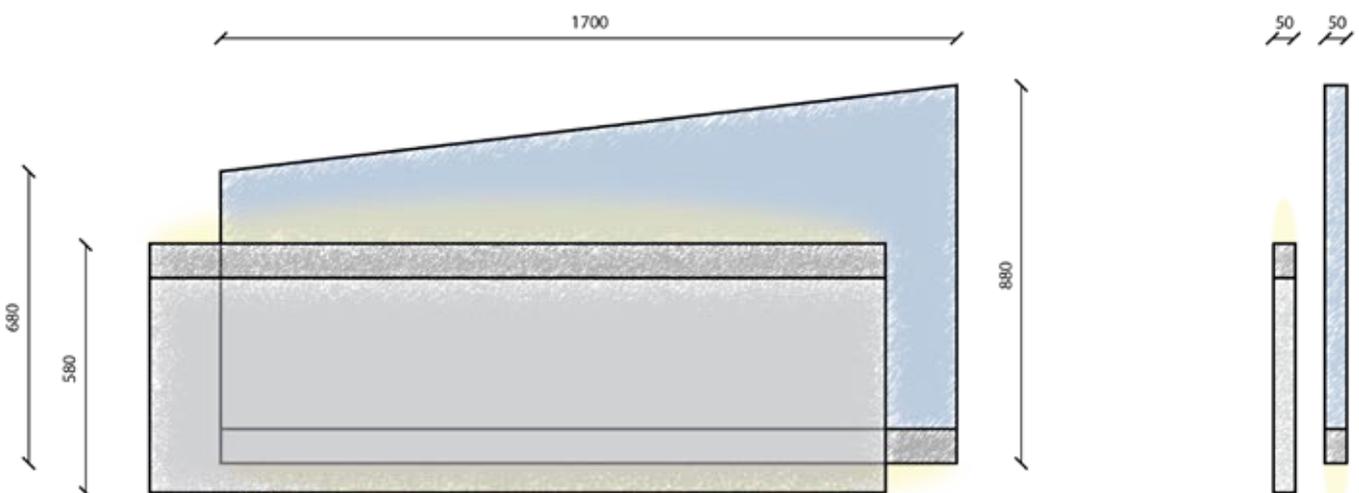
**Application:** offices, meeting rooms.

**Installation:** suspension.

**Lighting body WAY:** No.2 extruded aluminum profiles for direct and indirect light emission with **micro prismatic diffuser for glare control (URG<19)**, LED sources 3000K or 4000K, CRI>90. White Dry or Black Dry finish.

Length of the lighting bodies 1700 mm, power 39W+39W, light output 2808lm + 2808lm, colour temperature 4000K, CRI>90.

**Acoustic panel:** 5 cm thick, available in different colours. Panels are covered with fabric with interior in polyester fiber with percentages of **recycled material** from 63% to 90%, it meets the REACH and LEED requirements. The upholstery fabrics are **eco-friendly** and made with 100% recycled and recyclable materials.





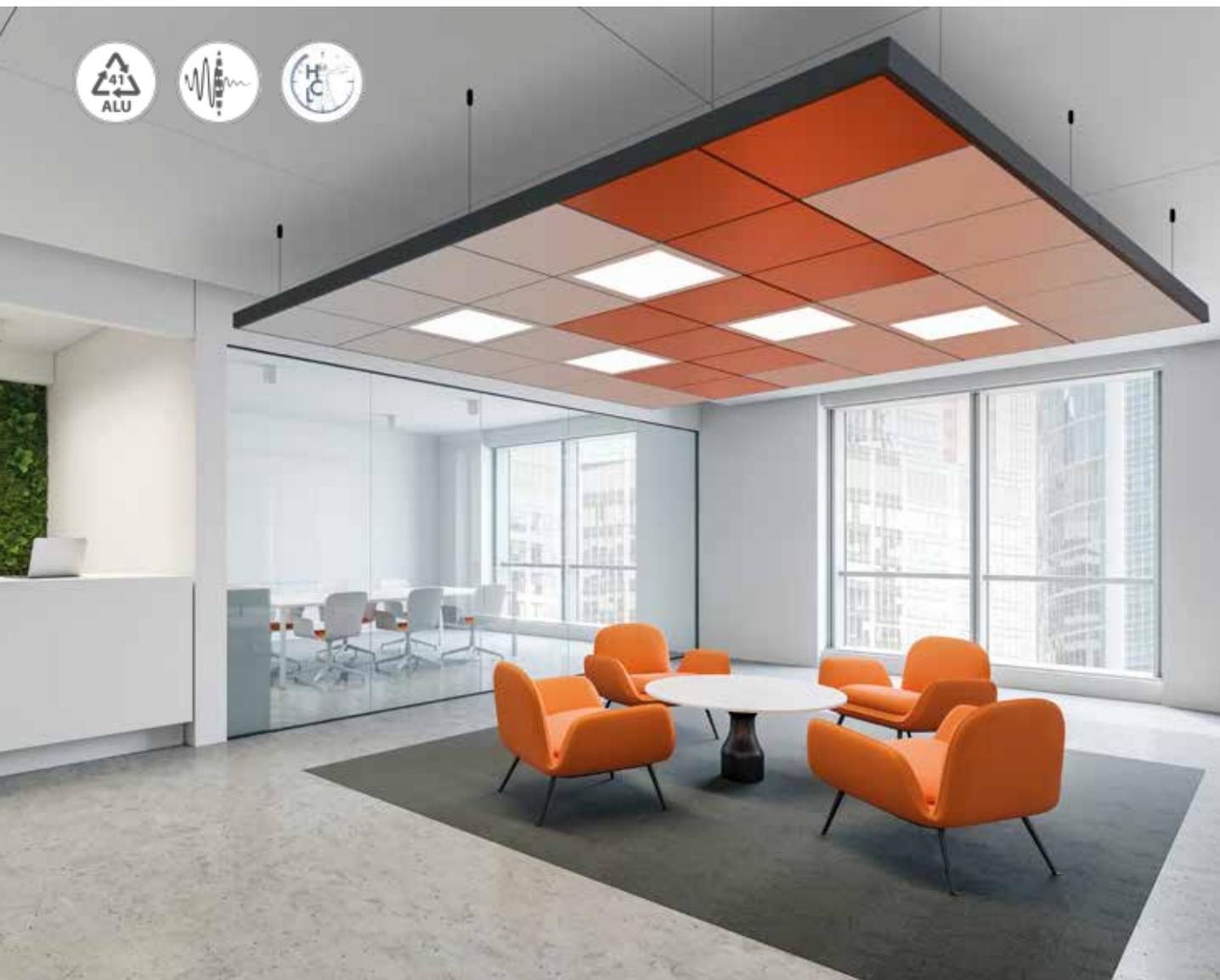
## ORCHESTRA METAL

Thanks to the technical know-how, the craftsmanship and innovative vision of Atena Lux gives life to effective technical solutions for dividing spaces and characterizing the acoustics and aesthetics of the rooms.

Of great scenographic effect, the acoustic and luminous islands are autonomously suspended single bodies, made of steel, aluminium or composite materials, and coupled to lighting bodies and insulating materials. ORCHESTRA METAL becomes a multifunctional architectural element, which from the acoustic point of view allows to improve acoustic comfort and facilitate speech intelligibility.

The systems created in collaboration with the sister company ATENA SpA are characterized by the elegance of the visible profiles and the perfect coplanarity of the modules. The structures make it possible to create modular islands with panels of 600x600 and 600x1200 mm, smooth, perforated or expanded metal panels.

The perimeter frame in post-painted extruded aluminum with a height of 10 cm perfectly frames the system by simply fixing the T-profiles to the perimeter and the use of four interlocking corner brackets. Some models of ceiling lights for false ceilings can be adapted to this type of island.





## Technical features

**Application:** offices, meeting rooms.

**Installation:** recessed.

**Lighting body:** sheet steel body powder coated with white (RAL9003 opaque) with high transmittance **MOT opal optic** or **PSU micro prismatic optic** suitable for video terminals (UGR <19).

**High efficiency LED sources:** colour rendering IRC > 80 or IRC > 90, colour temperature 3000K and 4000K, selected LED diode 3 MacAdam ellipses to guarantee uniform chromaticity.

Tunable White LED versions (2700-6500K) available on request.

## Plan



**Dimensions:**

597x597 x h.108,

available versions:  
26W-32W-38W-  
44W-50W.

## 4Side



**Dimensions:**

595x595 x h.76,

available versions:  
32W-52W.

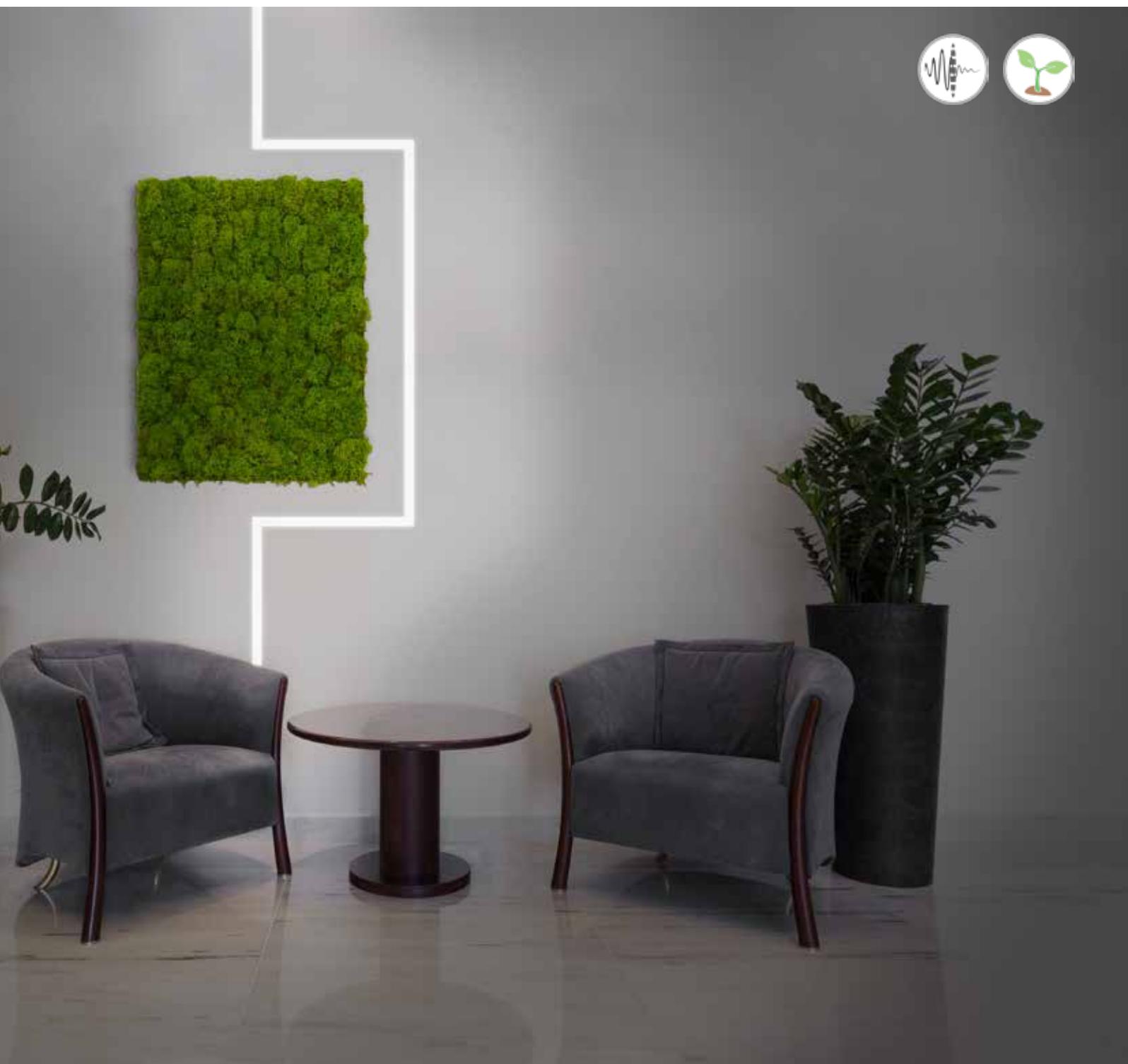
## Less noise, let's go green!

Who wouldn't want a little **more nature in the office or at home...** The presence of natural elements in a work environment promotes concentration and mental relaxation, increasing productivity.

**Moss sound-absorbing panels** are the perfect combination of acoustic and visual well-being. Perfect for offices, hotel and hotel lobbies, meeting rooms and conference rooms, **the panels with stabilized lichens** help to make the environment more welcoming.

The sound-absorbing panels with lichen do not need light or maintenance: the stabilized moss, through a **totally eco-friendly** process, remains alive but must neither be watered with water, because it feeds on the humidity of the air, nor is it adjusted in length. Lichens have no bacterial load and are completely biodegradable, non-toxic food dyes are used to reach the bright green colour.





## Technical features

**Dimension:** 60x80 cm.

**Weight:** 4 kg.

**Installation:** wall application.

**Plant part:** Lichen “Cladonia stellaris” stabilized without toxic chemicals.

**Supports:** Technical support consisting of a white painted aluminum sandwich. Reaction to fire: certified to fire according to regulations UNI EN 13501 +A1: 2013 (Class B-s2, do) and ASTM E 84-17 (Class A).

**Sound absorption coefficient:** Coefficient  $\alpha_w \sim 55$  with spacers.



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