
OFFECCT
Soundwave

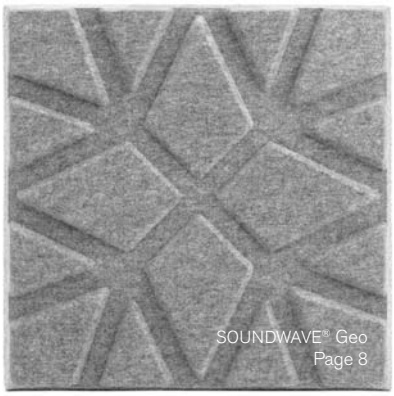
SOUNDWAVE®
Collection

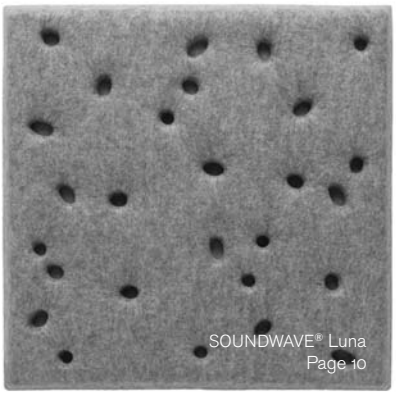
SOUNDWAVE® combines functionality and aesthetics, specifically designed to enhance the acoustic properties of any interior used for communication and social interaction.

The way we perceive sound depends on the physical nature of our surroundings and the acoustics are an aspect of interior design that often is neglected. As public spaces, open plan interiors and many contemporary environments are characterized by hard surfaces, the need of acoustic elements increases.

The human mind is influenced by all our senses. Disturbing noises affect our health and decrease the creativity and efficiency.

By using SOUNDWAVE®, a series of designed acoustic panels, it is possible to minimize factors that disturb meetings and work environments. The subject acoustic is an essential element in making our surroundings enjoyable.





Additional information:

SOUNDWAVE® Bella by Ida Linea Danielsson / 3XN

Bella is designed to be used as a lightweight sound absorber in the upper frequence range (500 Hz and above). These panels help reduce disturbing reflections of environmental noise such as voices, telephones etc.

In the process of designing the Bella Sky Hotel in Copenhagen, Danish 3XN asked Offecct to develop a completely new acoustic panel consistent with the architectural project in its entirety. Bella Sky´s two towers stand close to each other like a dancing couple in movement, adding an urban atmosphere to the neighbourhood. “The inspiration for SOUNDWAVE® Bella came from the very sharp character of the building itself with its absence of right angles”, says 3XN.

Material: Recyclable moulded polyester fibre
Colors: Offwhite, grey, anthracite, green and with upholstery in Gabriel Europost. Bella is certified in accordance with the Nordic Swan ecolabel.

SOUNDWAVE® Botanic by Mario Ruiz

Botanic is designed to be used as a lightweight sound absorber in the upper frequence range (500 Hz and above). These panels help reduce disturbing reflections of environmental noise such as voices, telephones etc.

“I appreciate how the forest is everywhere in Scandinavia. The forest’s presence is so significant, that when I was commissioned to design a sound absorber that would be a part of the SOUNDWAVE® collection, I was inspired by tree branches. This is what lies behind the final form; abstract and structural movements inspired by the natural vegetation”, says Mario Ruiz.

The structures can be experienced different depending on whether the panels are placed vertically or horizontally.

Material: Recyclable moulded polyester fibre
Colors: Offwhite, grey, anthracite, green and with upholstery in Gabriel Europost. Botanic is certified in accordance with the Nordic Swan ecolabel.

SOUNDWAVE® Flo by Karim Rashid

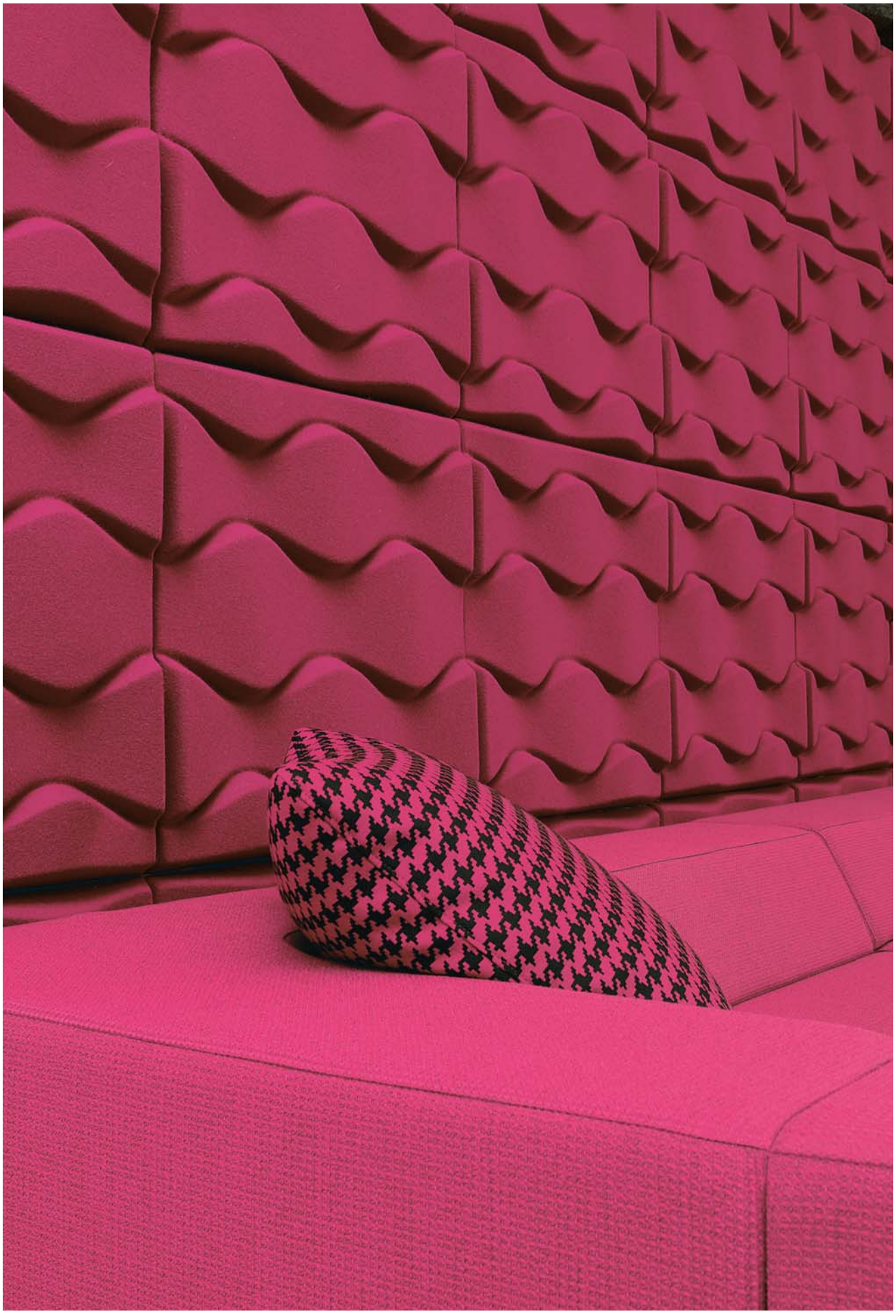
Flo is designed to be used as a lightweight sound absorber in the upper frequency range (500 Hz and above). These panels help reduce disturbing reflections of environmental noise such as voices, telephones etc.

Creating Flo Karim Rashid was inspired by sound waves and digital data. Rashid believs that people today live in a very digital world mentally. We need to catch up with experiental design in the physical world to create a balance.

"Through dimension, material, color, code, pattern, texture, line, solid, plane composition I can manifest the digits of binary notation and sound waves to communicate a new itinerant form of super-functional decoration that is current and aesthetic with our new sensual world – let your world flo".

The Flo panels can be set continuously or broken in different ways. Placed horizontally the pattern conveys a sense of water and vertically it could be discribed as light waves.

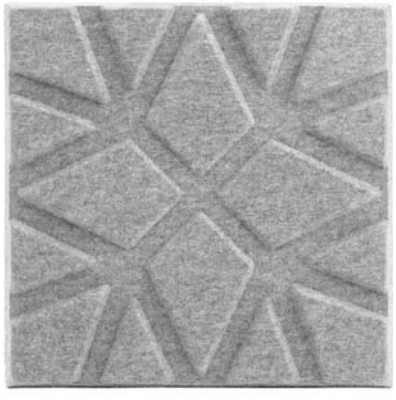
Material: Recyclable moulded polyester fibre
Colors: Offwhite, grey, anthracite, green and with upholstery in Gabriel Europost. Flo is certified in accordance with the Nordic Swan ecolabel.



SOUNDWAVE® Geo by Ineke Hans

Geo designed to be used as a lightweight sound absorber in the upper frequency range (500 Hz and above). These panels help reduce disturbing reflections of environmental noise such as voices, telephones etc.

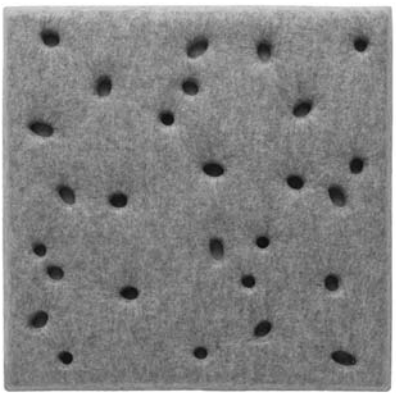
”People have always wanted to decorate their walls – everywhere and in every era”, says Ineke Hans. “But we designers have a tendency to pare away the decorative aspect. I wanted to combine Offecct’s SOUNDWAVE® panels made of felt with a geomatric pattern that is decorative but can also function on the large scale with many panels in rows without looking too cluttered. Quite simply, a combination of tradition and modern design.”



Material: Recyclable moulded polyester fibre
Colors: Offwhite, grey, anthracite, and green.
Geo is certified in accordance with the Nordic Swan ecolabel.

SOUNDWAVE® Luna by Teppo Asikainen

Luna is a heavyweight broadband absorber with extended efficiency in the low frequency range [150 Hz-500 Hz]. This panel is very efficient in reducing the reverberation time (sound ''bouncing around") in a room. This means that disturbing background noise will be reduced and voice intelligibility will be greatly improved.



Material: Recyclable moulded polyester fibre, plastic back plate
Colors: Offwhite and grey

SOUNDWAVE® Scrunch by Teppo Asikainen

Scrunch is a lightweight sound absorber in the upper frequency range (500 Hz and above). These panels help reduce disturbing reflections of environmental noise such as voices, telephones etc.

Sound and acoustics are two of the most important and most overlooked factors when it comes to creating the right atmosphere for interaction in areas where people communicate and socialize. The combination of form and function in SOUNDWAVE® does not only give the panels a great appearance, but also serves the function of absorbing and reflecting sound. The inspiration for the pattern of SOUNDWAVE® Scrunch comes from a creased paper.

Material: Recyclable moulded polyester fibre
Colors: Offwhite, grey, anthracite, green and with upholstery in Gabriel Europost. Scrunch is certified in accordance with the Nordic Swan ecolabel.

SOUNDWAVE® Skyline by Marre Moerel

Skyline is a lightweight sound absorber in the upper frequency range (500 Hz and above). These panels help reduce disturbing reflections of environmental noise such as voices, telephones etc.

SOUNDWAVE® Skyline is inspired by the cityscapes, of New York in particular. But, in contrast it can also be seen as an abstraction of nature. The panels have a schematic and rectangular form. Placed horizontal the top has a straight line which then breaks into horizontal lines with a slight angle.

The pattern as such reflects the grid of New York City's streets, or can be seen as a bird's eye view of a vast mountain range. Vertically the pattern instead takes the shape of city buildings or ancient rock formations.

"I've spent a lot of time in New York and in such a city it's all about sound and noise and how you as a person living there can emerge from all the sounds. Therefore I was very anxious to start making a personal design panel when Offecct gave me the request," says Marre Moerel.

Material: Recyclable moulded polyester fibre
Colors: Offwhite, grey, anthracite and green
Skyline is certified in accordance with the Nordic Swan ecolabel.

SOUNDWAVE® Stripes by Richard Hutten

Stripes is designed to be used as a lightweight sound absorber in the upper frequence range (500 Hz and above). These panels help reduce disturbing reflections of environmental noise such as voices, telephones etc.

When designing SOUNDWAVE® Stripes, Richard Hutten aimed to add something different to the collection. “What I did is not just a pattern which repeats itself on the wall, but actually a pattern which can create various other patterns like stripes, arrows or squares. This design is a tool for architects when they have to make a new interior design”, says Richard Hutten.

The design of SOUNDWAVE® Stripes is characterized by flexibility; a flexibility that means that the panels can be combined in many different ways. This in turn means that each interior where Stripes is used can become unique. The diversity Stripes offer thereby become an useful tool to create interesting and varied interiors.

Material: Recyclable moulded polyester fibre
Colors: Offwhite, grey, anthracite, green and brown
Stripes is certified in accordance with the Nordic Swan ecolabel.

SOUNDWAVE® Swell by Teppo Asikainen

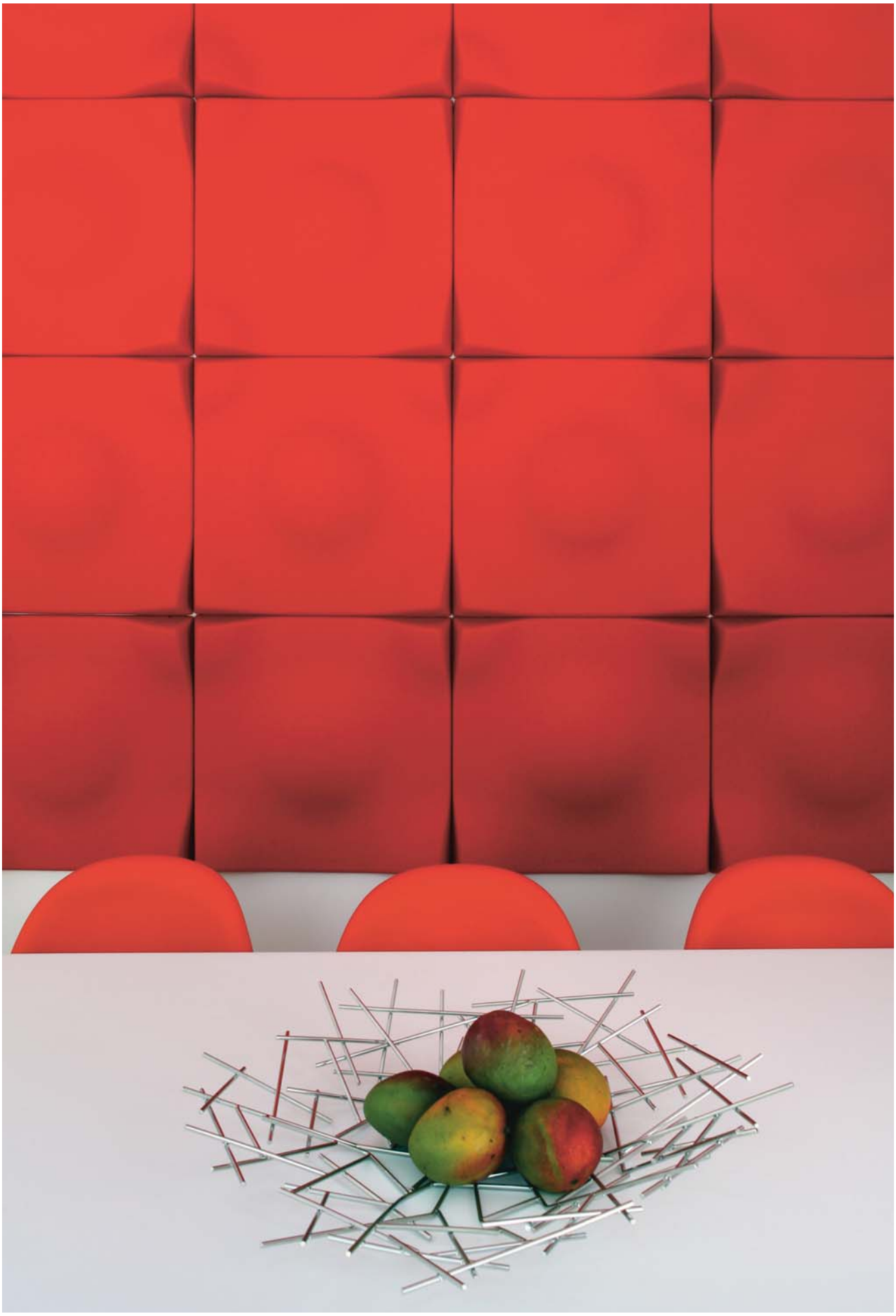
Swell is designed to be used as a lightweight sound absorber in the upper frequency range (500 Hz and above). These panels help reduce disturbing reflections of environmental noise such as voices, telephones etc.

SOUNDWAVE® Swell was one of the first panels launched by Offecct. Its core values lies in its function, and Teppo Asikainen refused to compromise with the look. The piece has a very strong personality and acts as a kind of 3D wallpaper giving the room the right aesthetic feeling and acoustic at the same time.

Material: Recyclable moulded polyester fibre
Colors: Offwhite, grey, anthracite, green and with upholstery in Gabriel Europost. Swell is certified in accordance with the Nordic Swan ecolabel.

SWELL DIFFUSER
The panel provides sound diffusion rather than absorption. Correctly positioned, the diffuser panels will improve speech intelligibility and even improve privacy in open spaces as the speaker does not need to talk loudly in order to be heard.

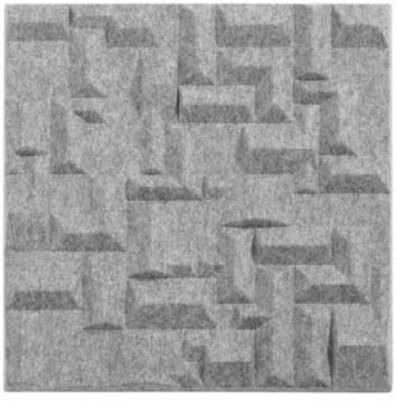
Material: 100% PET
Color: Semi-transparent white



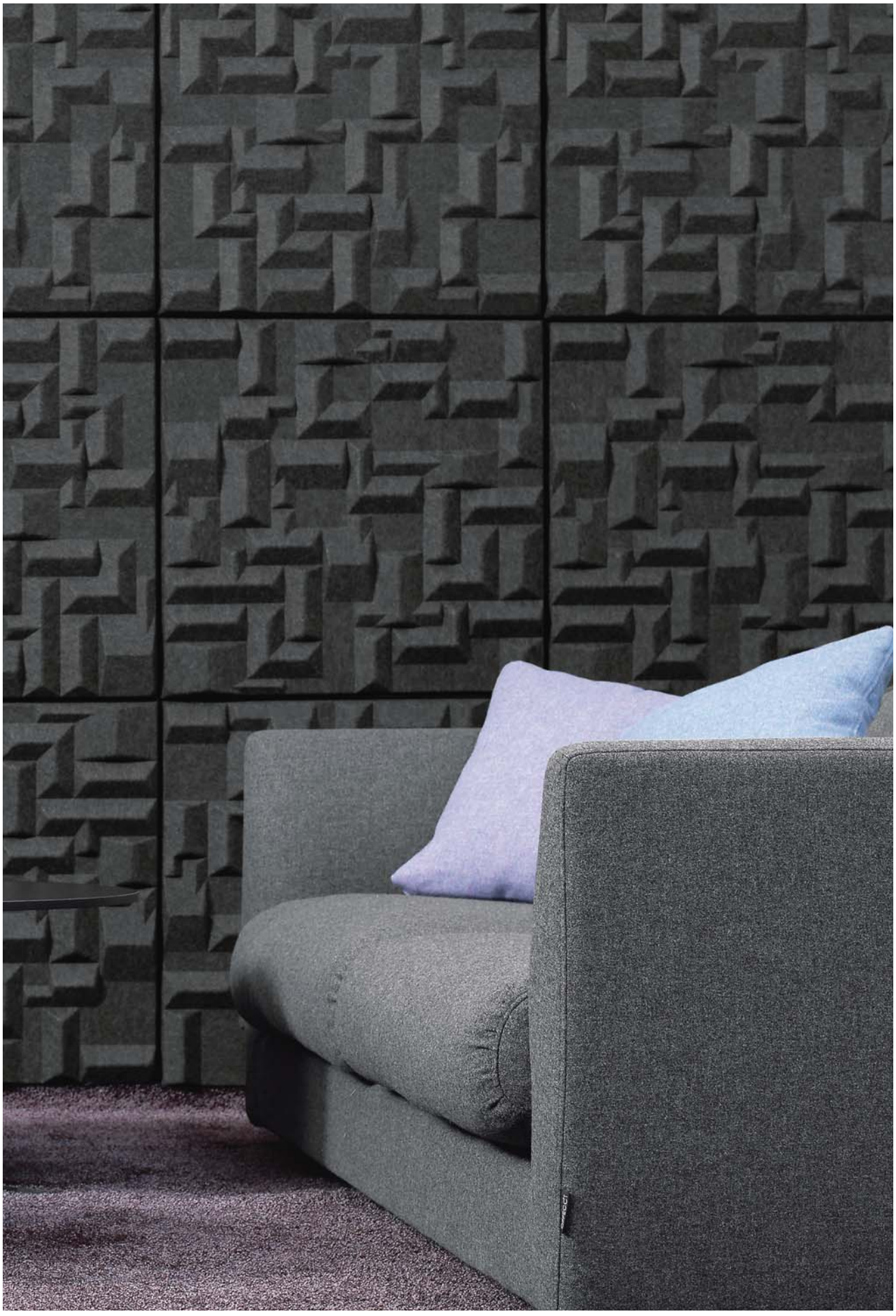
SOUNDWAVE® Village by Claesson Koivisto Rune

Village is designed to be used as a lightweight sound absorber in the upper frequency range (500 Hz and above). These panels help reduce disturbing reflections of environmental noise such as voices, telephones etc.

SOUNDWAVE® Village has a complicated geometry, in which the sound-absorbent properties have determined the pattern. Claesson Koivisto Rune applied acoustic principles to tweak and twist the intricate pattern to achieve the optimal sound absorbency.
"The facets and trapezoid shapes make the sound rebound at a 45-degree angle", says Eero Koivisto. "After we had worked on the pattern for a while, we realized it looked like the roofs on a lot of small buildings. To get the right feeling, we looked at aerial photographs of very dense urban areas where the spaces between buildings can be extremely narrow. If you combine several panels on a wall, you will end up with an entire little village!"



Material: Recyclable moulded polyester fibre
Colors: Offwhite, grey, anthracite and green
Village is certified in accordance with the Nordic Swan ecolabel.



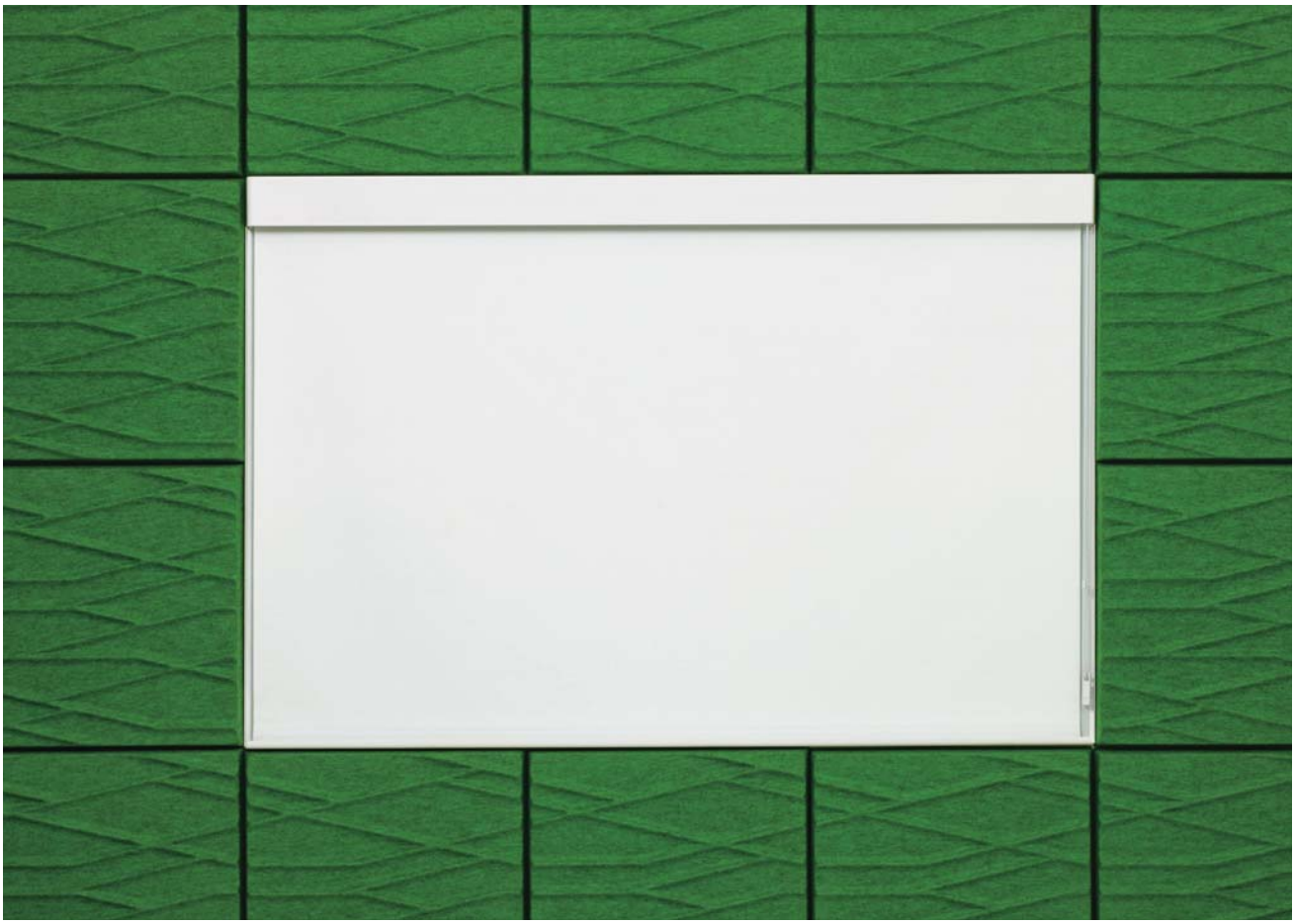
SOUNDWAVE®
Complementary

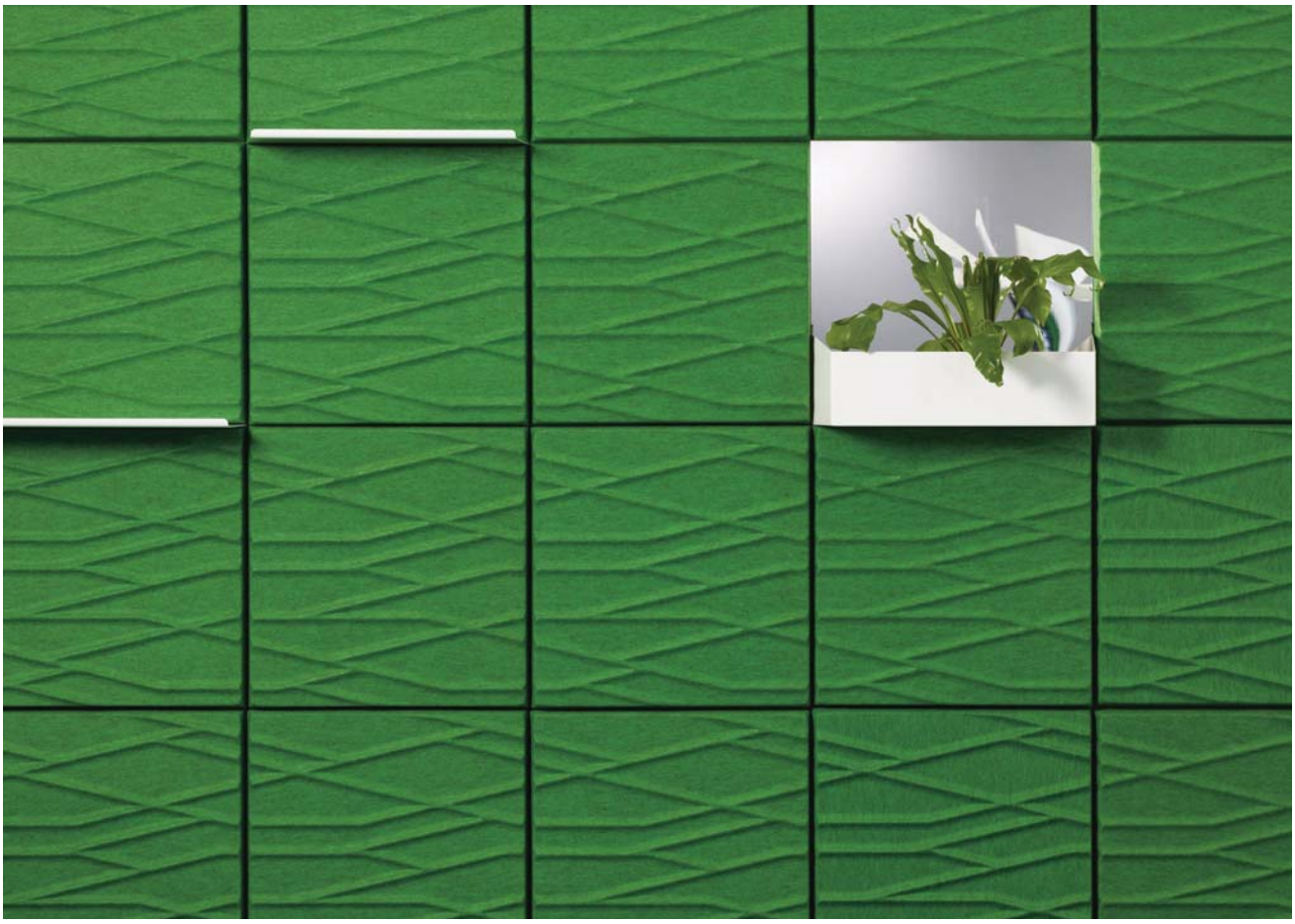
To increase the possibility to use SOUNDWAVE® in many different interiors, complementary products are available for integration with the SOUNDWAVE® system. These products in addition with SOUNDWAVE® creates more functional environments.

SOUNDWAVE® SHELF
SOUNDWAVE® Shelf is a shelf that fits perfectly with the selection of acoustic panels, and creates storage for books or other objects.

SOUNDWAVE® PLANTER
SOUNDWAVE® Planter is a product of the O_2ASIS collection, an inspired flower box that provides opportunity to add greenery to public and private environments.

SOUNDWAVE® SCREEN
SOUNDWAVE® Screen, a white magnetic glass board which also includes a manual projection screen. By integrating Screen in the SOUNDWAVE® system the usefulness in contemporary interiors is increased.



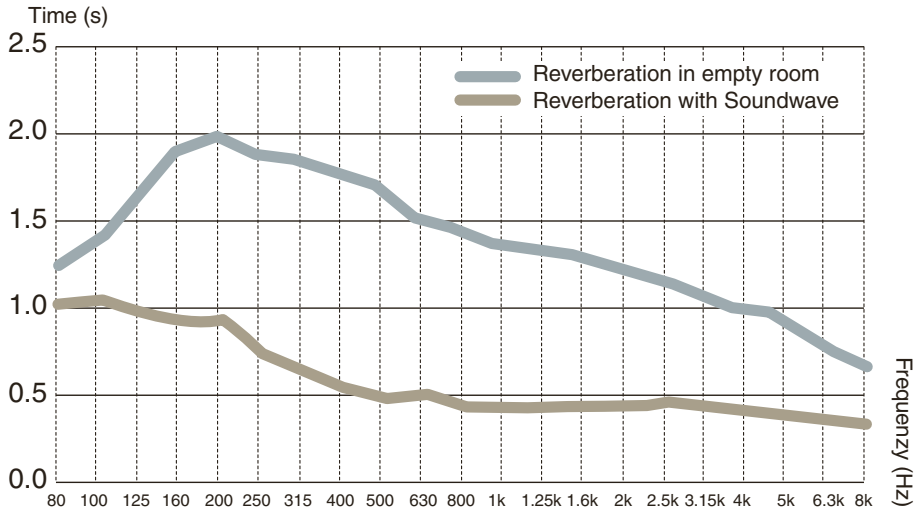


Acoustic demonstration

This case study was designed to demonstrate how SOUNDWAVE® can be used to improve the acoustics in a conference room.

For the demonstration we used a fairly typical modern meeting room: approx 30 sq metres, the hard surfaces (floor, white board, conference table etc) and lack of soft furnishings contributed to the poor acoustics.

The room was tested in its original state and then retested with 41 Swell panels and 40 Luna panels grouped on the walls.
The SOUNDWAVE® panels helped to considerably reduce the reverberation time, a major factor in eliminating fatigue related to high background noises in meeting rooms and workspaces.



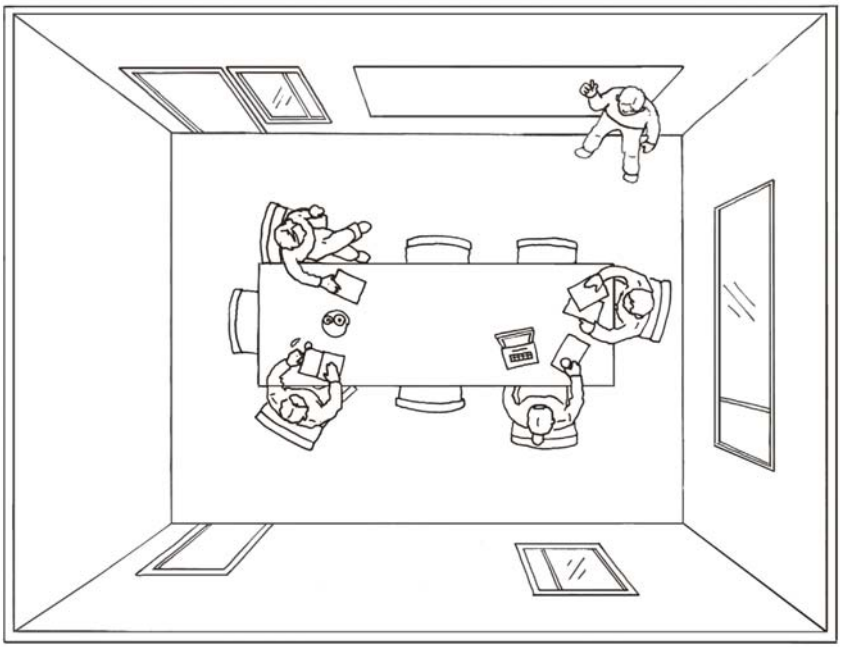
REVERBATION TIME CURVE

Reverbation time between 80 Hz-8kHz shown with and without SOUNDWAVE® panels.

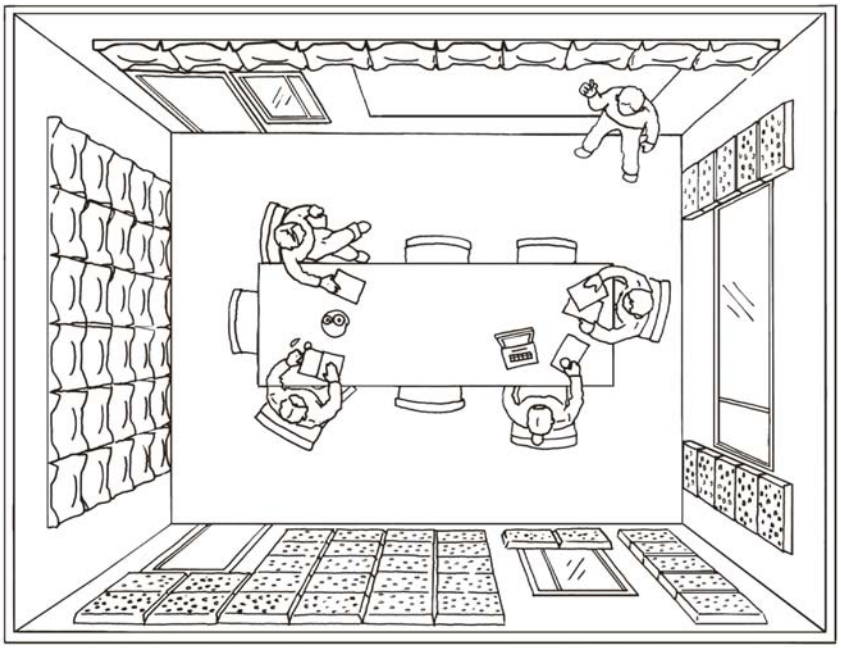
The diagram shows the reverberation time in the room with and without SOUNDWAVE® panels. The darker grey curve shows the room without panels, the lighter grey curve shows the room with all 81 panels in place.

The measurements were made according to ISO standards. This means that an omnidirectional sound source (a special speaker) was placed in the room and noise was played at a specified level. After sometime the sound was suddenly stopped. The break activates a measuring device which records the process of the sound "ringing out" in the room - the reverberation. The data for the RT (reverberation time) curves was extruded from this recording.

The horizontal axis represents the sound spectrum with low bass sounds on the left and high treble sounds on the right end. The vertical axis represents the time needed for the reverberation tail of a sound to "fade out". A curve plotted at a high position on this axis means that the time needed for a sound to fade out was quite long, in other words the reverberation time was long.



Conference room without acoustic insulation



Conference room with acoustic insulation.

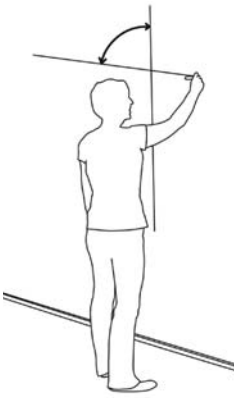
SOUNDWAVE®
in different environments

Restaurants, schools, offices and homes. The sleek design and simple installation makes SOUNDWAVE® suitable for any type of surrounding or environment; restaurants, schools, offices and home interiors.

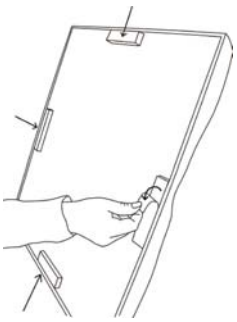
Successful acoustic design requires both a good understanding of the unique properties of each area and a correct analysis of the specific acoustic needs of an interior. The versatile SOUNDWAVE® panels are designed to be used in many different ways to improve the acoustics in different environments.

Panels mounted on a suspended screen.

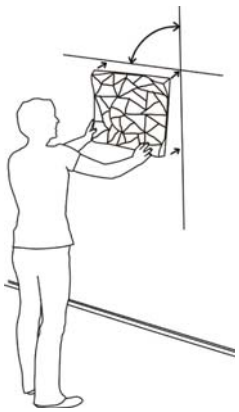
SOUNDWAVE®
installation



Before starting to attach the panels to the wall, plan the placement of the panels, to avoid having to remove the Velcro and restart - as this will damage the glue. Make sure the wall is clean and dry.

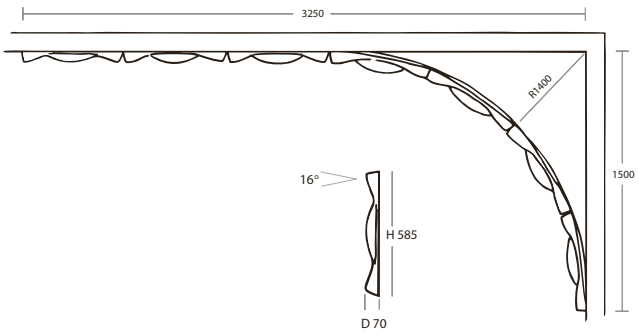


Each panel has four Velcro attachments. For optimal result, attach the Velcro separately on the wall and press each stripe for a minimum of 10 sec before attaching the panel.



Start by putting the first panel on the centre of a horizontal line (a laser level pass is recommended for the best result).

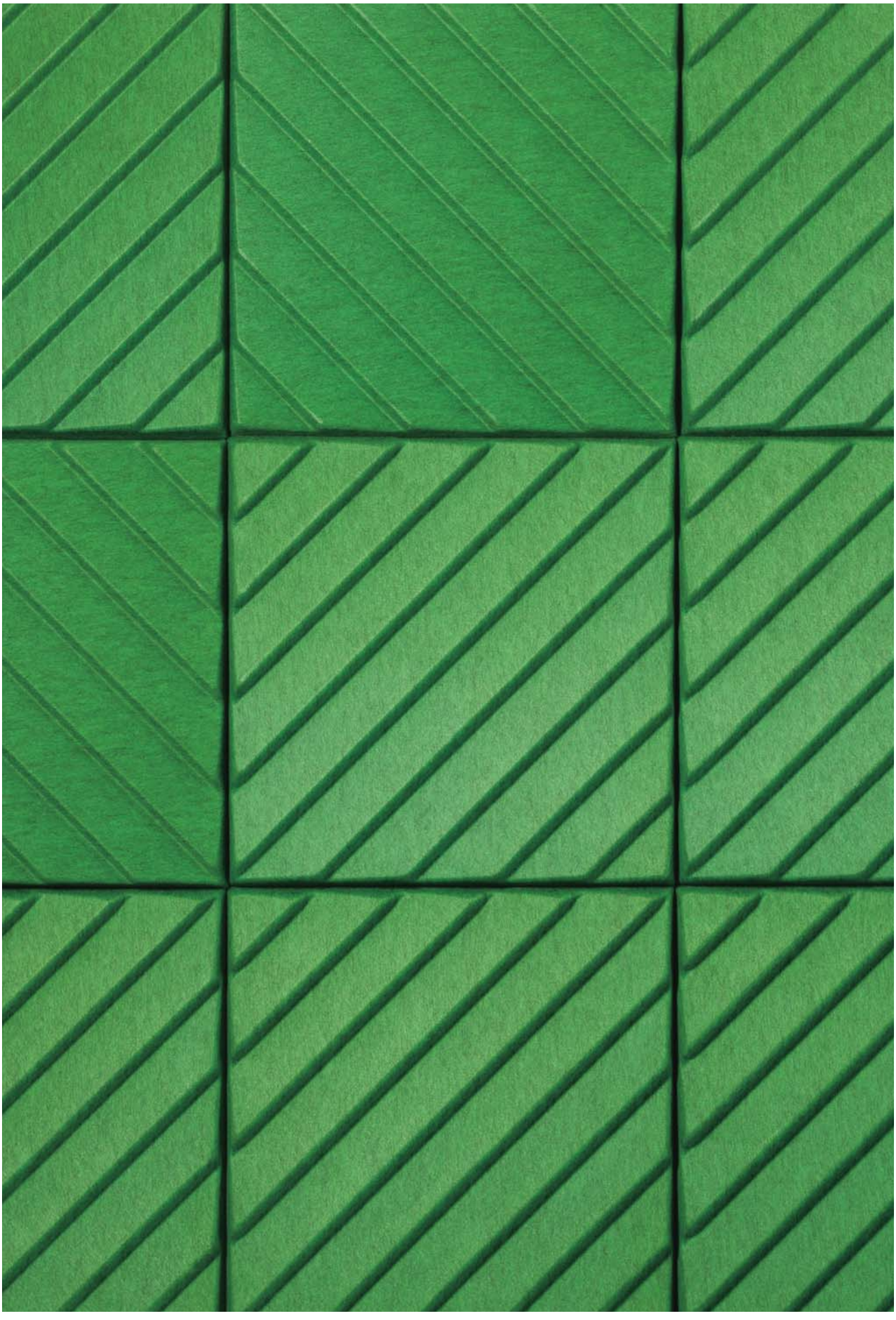
After placing all panels on the wall, make sure that all Velcro attachments sticks to the wall. If needed, press each point further.



Minimum radius is R 1400. A flat surface is required for installation. For a rounded corner we suggest you make a simple construction with stripes of 585 x 5 mm plywood.

IMPORTANT INFORMATION BEFORE INSTALLATION:

- All walls must be dry (at least 1 week after painting) and clean before attaching the Velcro.
- Walls towards outside are not recommended if wet or cold.
- Walls affected by nicotine from cigarettes have to be carefully cleaned or repainted before installation.
- The glue on the Velcro will be damaged by silicon products such as hand lotion etc. Do not touch the glue while assembling the panels.
- It helps a lot to paint the wall in the same colour as the panels. This makes the gaps between the panel joints much less visible.
- Avoid high temperatures from lights or heating system; this can cause melting of the glue.
- For brick/concrete or other uneven walls a flat surface material must be attached before assemble. If needed, a staple gun can be used. Staple the Velcro onto the wall, using two staples on each Velcro.
- Soundwave panels are not developed to be attached to ceilings.

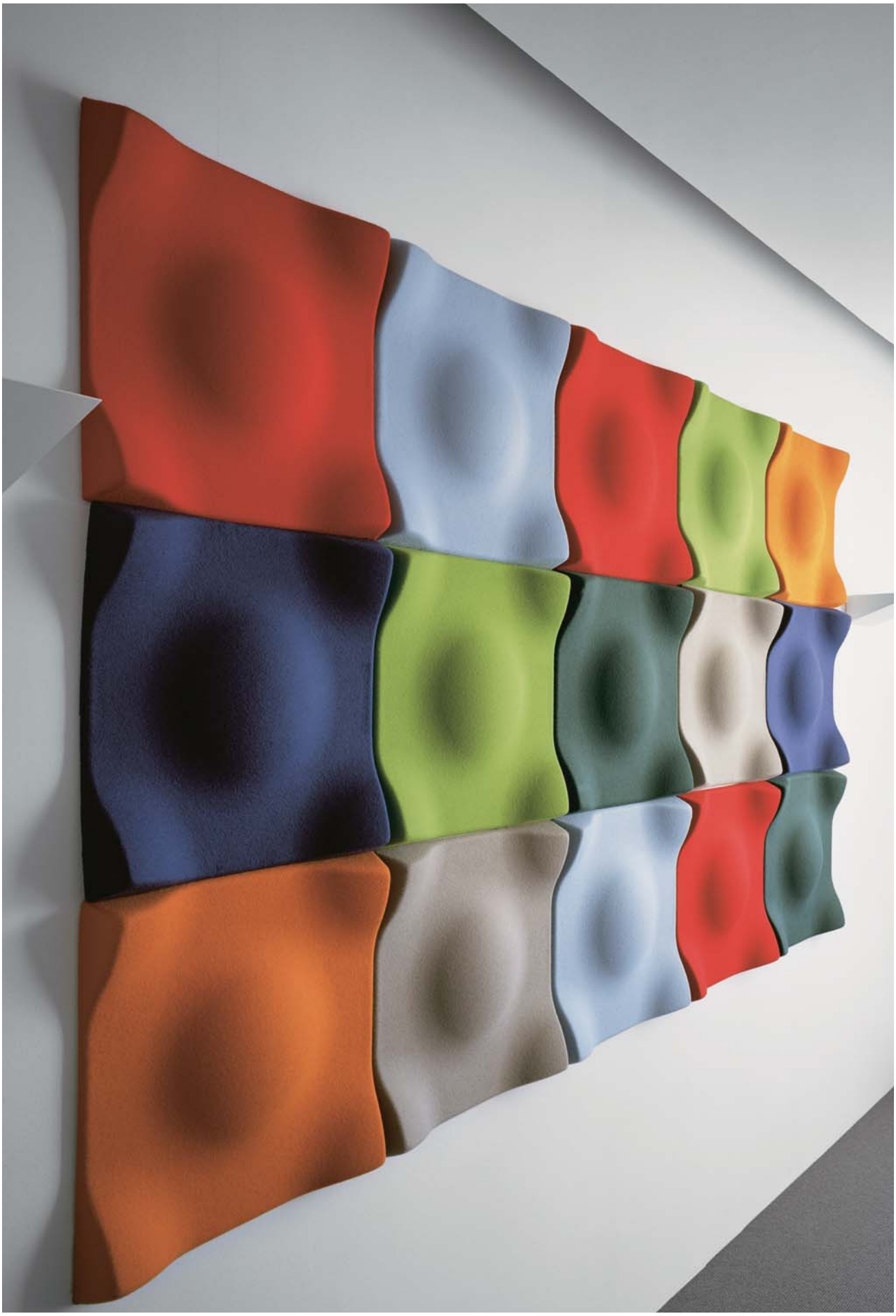


SOUNDWAVE®
Fire safety

UK Conclusions
The SOUNDWAVE® panel has achieved a BS 476 part 7 Class 2 rating. The test data should be presented to the relevant building control authorities when requested, to support the application for the material's use.

Swedish Conclusions
The SOUNDWAVE® panel meets the requirements for materials difficult to ignite according to "Boverkets riktlinjer för godkännande, Brandskydd, Allmänna råd 1993:2, utgåva 2". The Soundwave panel emits gas concentrations below what is acceptable and all gas concentrations are below limits in IMO FTP Code Resolution MSC. 61 (&/), chapter 1, Annex 1, Part 2.

French conclusions
The SOUNDWAVE® panel has achieved a M3 rating according NF P 92 501 and NF P 92 507. The panel meets the NF P 92 505 criteria for dripping.



OFFECCT *Soundwave®*

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Colors: Offwhite, grey, anthracite, green and with upholstery in Gabriel Europost

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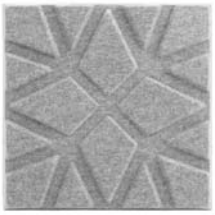
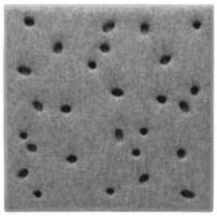


SOUNDWAVE® GEO by Ineke Hans

Geo is a lightweight sound absorber in the upper frequency range (500 Hz and above).

Colors: Offwhite, grey, anthracite and green



SOUNDWAVE® LUNA by Teppo Asikainen

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Colors: Offwhite and grey

SOUNDWAVE® SCRUNCH by Teppo Asikainen

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The panel provides sound diffusion rather than absorption.

Colors: Semi-transparent white

SOUNDWAVE® VILLAGE by Claesson Koivisto Rune

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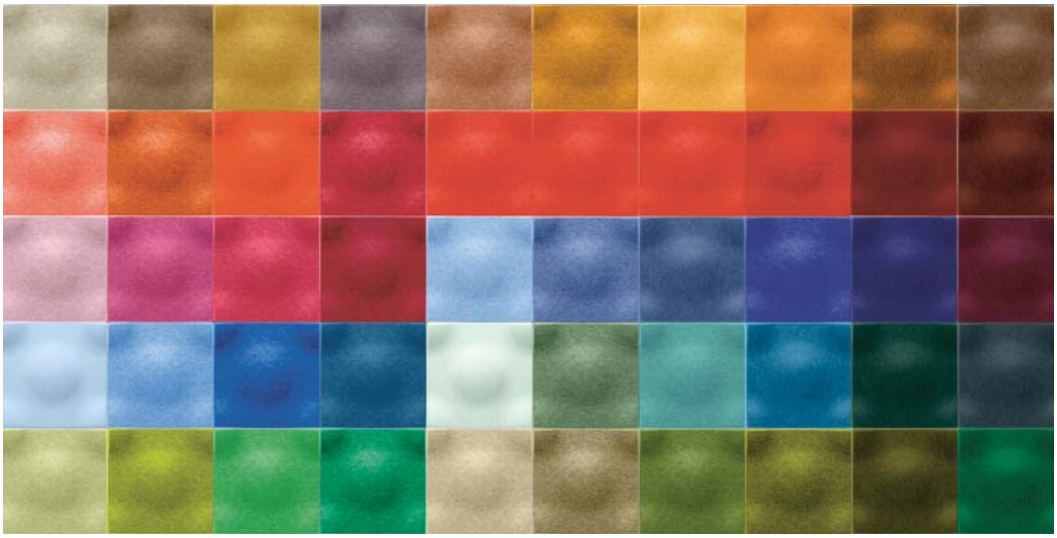
Colors: Offwhite, grey, anthracite and green



Soundwave is available in a wide variety of colors. Please see www.offecct.se for what's currently available.

All panels labelled with the Nordic Swan consists of minimum 40% recycled polyester.
The recycled polyester comes from PET bottles.

Photography:
Louise Billgert, page 17, 31
Patrik Engquist, page 1, 9
Patrik Engström, page 4-5, 38
Johan Fowelin, page 35
Jann Lipka, page 21, 27, 33
Peterfotograf, page 11, 13, 15, 19, 25
Claus Starup, page 7
Project: Apartment Zero, Washington DC, page 23

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