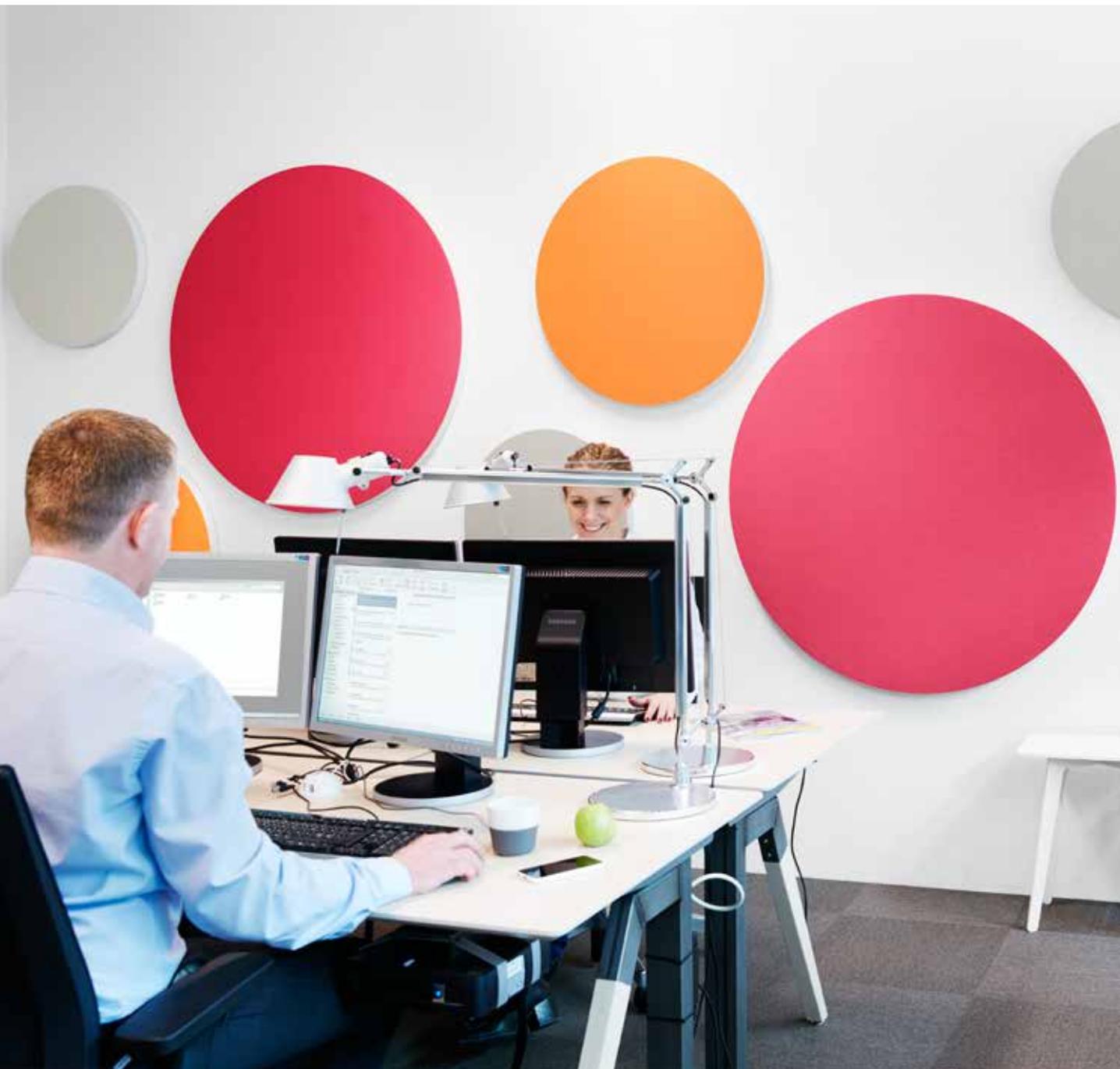


Ecophon Akusto™

Explore the variety of the vertical



Ecophon[®]
SAINT-GOBAIN

A SOUND EFFECT ON PEOPLE

Bring the outdoors in

to enhance wellbeing and performance



Over thousands of years, the human sense of hearing evolved for an outdoor, natural environment. Today we spend almost 90% of our time indoors, and so are exposed to many unnatural sounds.

Ecophon provides innovative sound-absorbing systems that make it possible to achieve indoor acoustic comfort, helping people to work, learn, heal and relax.

Pleasing to the eye, the ear and the mind

Ecophon focuses on pleasing the ear, but understand that to satisfy the mind, we also have to please the eye with inspiring design. We therefore offer a complete collection of acoustic ceilings, free-hanging units, wall panels and screens; giving you the opportunity to create the atmosphere you desire.

This publication shows products from Ecophon product range and those of other suppliers. The specifications are intended to provide a general guide to which products are most suitable for the preferences indicated. Technical data is based on results obtained under typical testing conditions or long experience in normal conditions. The specified functions and properties for products and systems are only valid on condition that instructions, installation diagrams, installation guides, maintenance instructions and other stated conditions and recommendations have been taken into consideration and followed. Deviation from this, such as changing specific components or products, will mean that Ecophon cannot be held responsible for the function, consequences and properties of the products. All descriptions, illustrations and dimensions contained in this brochure represent general information and shall not form part of any contract. Ecophon reserves the right to change products without prior notice. We disclaim any liability for misprints. For the latest information go to www.ecophon.com or contact your nearest Ecophon representative.

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Idea and layout: navigator. Printer: Skånetryck AB. Cover: Vasakronan AB, Sweden, Photographer: Teddy Strandqvist/Studioe.se.



The sustainable choice

We take responsibility for the whole life cycle of our products, and that they are sustainable in every aspect. Our absorbers are made with Ecophon's unique 3rd generation glass wool, in which we combine more than 70 % recycled glass with a plant-based binder. We use renewable energy in our facilities and the CO₂ emissions per absorber are possibly the lowest in the business. Our production waste is turned into drainage pellets, and our return system makes it possible for customers to return 3rd generation glass wool offcuts and used panels to Ecophon.

When it comes to the indoor environment you can rest assured that our systems are completely safe. All absorbers meet the toughest indoor standards. We are also recommended by the Swedish Asthma and Allergy Association.

Ecophon - a sound effect on people.

Design by Maria Westerberg

When developing the Akusto range, Ecophon cooperated with well-known Swedish designer Maria Westerberg. Maria contributed a new contemporary colour scheme, she designed a creative showcase wall for Akusto One and is also the installer in the launch film.





Sounds like a winning concept

Ecophon vertical acoustics

Everything starts with people meeting. Humans need to talk, to discuss and to listen to each other. This is how we move things forward; step by step. That is not made easy by all those hard walls, floors and ceilings surrounding us, bouncing sound back and forth, amplifying talk into chatter, discussions into noise.

Our ceiling systems and free-hanging units have become the basic recipe for a good acoustic environment. A natural complement is Ecophon Akusto™, a range of innovative, highly effective and visually appealing vertical absorbers. With Akusto it is easy to create workplaces where people feel good and can perform at their very best.





Sounds like a plan

for success

In open-plan offices it's important to stop speech and sound from spreading, and to minimize the disturbance of co-workers. In schools students need a good learning environment to hear the teacher and each other, and to be able to think and reflect. In healthcare care patients need peace to rest and recover, at the same time as the staff must be able to communicate.

To meet these varying needs, Ecophon has developed Activity Based Acoustic Design. By defining an indoor environment from three perspectives, the activity, the space and the people, you will find the best solution. This is then implemented using a combination of high-quality acoustic elements: sound-absorbing ceilings to reduce sound levels and sound propagation, and vertical absorbers to reduce echoes and enhance speech clarity.

1 Activity

What will people do in the space? Be on the phone? Teach? Learn? Rest and recover? Will it be noisy? How much time is spent communicating?

2 People

Who are the people performing the activities? How many are they? Are they young or old? Do they have any special needs?

3 Space

Is it big or small? Where is it situated in the building? Does it have bare concrete walls, ceilings and floors? Are there fans, alarms or other frequent sounds?





Activity Based Acoustic Design

Do you want to know more about designing good indoor acoustics? Visit ecophon.com/acoustic-solutions to find tools and recommendations for many types of environments.



A solution for every application

Office

In open-plan offices Akusto absorbers are ideal for reducing echo and enhancing speech clarity. Place them close to the sound and centred at the height of the sound. For instance, at 1.2 metres where people sit, and at 1.6 metres where most people stand. To achieve optimum conditions, absorbers should be placed on two adjacent walls, not opposite each other.

Education

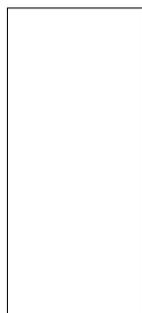
In a classroom you need to create conditions that can handle both teacher-led classes and group work. To optimise for this place Akusto on two adjacent walls so they can absorb sound moving in all directions.

Healthcare

Akusto can be used to keep sound from spreading, minimize echo and to enhance speech clarity in healthcare environments. Place them close to noisy sounds, close to areas where communication takes place, on adjacent walls.

Sounds like a work of art

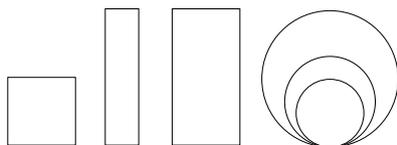
in many shapes and colours



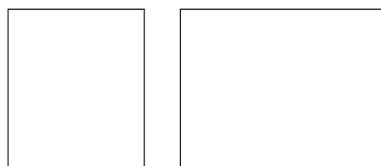
Akusto Wall A
Size: 2700x1200 mm



Akusto Wall C
Size: 2700x600 mm



Akusto One
Size: 600x600 mm, 1200x300 mm, 1200x600 mm
Ø: 600 mm, 800 mm, 1200 mm
Dimensions include 4 mm space surrounding each panel.



Akusto Screen
Size: 1420x1200 mm, 1420x1800 mm

The Ecophon Akusto™ range comprises three different models of vertical sound absorbers, all of them with great acoustic properties. Characteristic of Akusto is the focus on both design and flexibility. It's easy to combine the different sizes, shapes and colours to create the right atmosphere.

Akusto Wall

Akusto Wall is ideal when you need to cover larger areas. These wall panels are 40 mm in depth and available in two different edges, widths and three mounting options. Panels are mounted in a profile frame.

Akusto Wall A has a natural edge. When you mount panels next to each other, you place profiles between the panels to hide the edges.

Akusto Wall C has edges covered with the front surface. This creates a stylish connection when you mount several next to each other.

Akusto One

Akusto One is a series of flexible absorbers in smaller dimensions, all 40 mm in depth. Akusto One helps you to create innovative designs and patterns on the wall, and vary with white or grey painted edges.

Akusto Screen

Akusto Screen is a free-standing screen, 88 mm in depth for outstanding sound absorption. It has an aluminium frame with robust and stable feet. An optional glass pane (400 mm in height) can be mounted on top.



Akutex™ FT

A smooth, easily cleaned surface, with colours inspired by nature. Available for Akusto Wall and Akusto One.

Texona

A textured, surface in a range of colours for expressive wall or screen solutions. Available for all Akusto products.

Super G

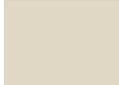
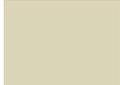
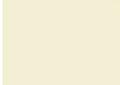
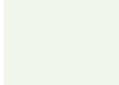
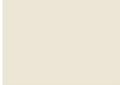
A strong glass fibre surface, created to withstand mechanical impact in demanding environments. Available for Akusto Wall.

Printing on Akusto

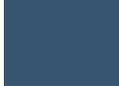
It is possible to print on Akusto products. However, to maintain optimum acoustic properties we recommend you contact a knowledgeable local printer for advice.



Akutex™ FT colours

		
Silent Sand S 2005-Y30R	Pure Olive S 2010-Y	Vanilla Dream S 1505-Y
		
Pale Garden S 1005-G10Y	White Frost S 0500-N	Volcanic Dust S 2002-Y
		
Misty Rose S 1010-Y60R	Soft Slate S 7000-N	Silver Shadow S 4502-Y

Texona colours

		
Sea salt S 0500-N	Garlic S 2502-Y	Oyster S 4005-Y20R
		
Ginger S 2005-Y30R	Pepper S 6502-Y	Licorice S 9000-N
		
Acai S 6020-R90B	Menthol S 4040-B30G	Poppy seed S 3020-B10G
		
Thyme S 2010-B90G	Cranberry S 2060-R20B	Tangerine S 2060-Y50R
		
Mustard S 2050-Y		

Super G

		
White 085 S 1002-Y	Grey 984 S 3502-G	Blue 481 S 1050-R90B

Sounds like a dream

to install

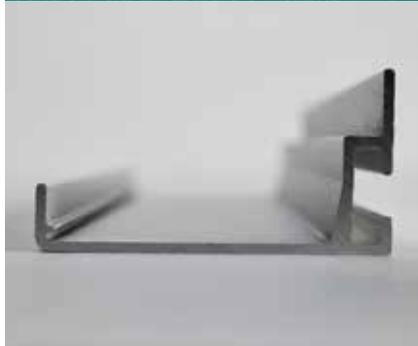
The Akusto range is made from 3rd generation glass wool. This material is both lightweight and very robust, making installation easy and effortless. The innovative Connect accessories help you mount Akusto with a perfect fit. As Akusto is designed for flexible placement, the creative opportunities to arrange them are almost endless.

Akusto Wall



Connect Thinline profile

Connect Thinline profile is an elegant solution made from aluminium. It is primarily used with Akusto Wall C, but can also be used with single mounted Akusto Wall A.



White 02
textured
S 0500-N



Grey 03
textured
S 1500-N



Grey 04
textured
S 4500-N



Connect Structure profile

Connect Structure profile can be used in combination with Connect Thinline profile. This allows you to create fields of colours and patterns, both vertically and horizontally.



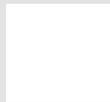
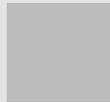
Grey 03
textured
S 1500-N





Connect WP profile

Connect WP profile is a strong profile made of extruded aluminium. It is primarily used with Akusto Wall C, and is also the recommended profile for use with the Super G surface.

		
White 03 textured S 0502-Y	Natural anodized S 1000-N	Black 01 textured S 9000-N

Connect Channel trim

Connect Channel trim is an easy and functional solution for Akusto Wall A. Use Connect T24 Main runners or Connect Recessed profiles between the panels. Using the recessed profile also gives you the opportunity to add shelves and use the installation as a bookcase.

		
White 01 S 0500-N	Grey 01 metallic S 2502-B	Black 01 matt S 9000-N



Akusto One



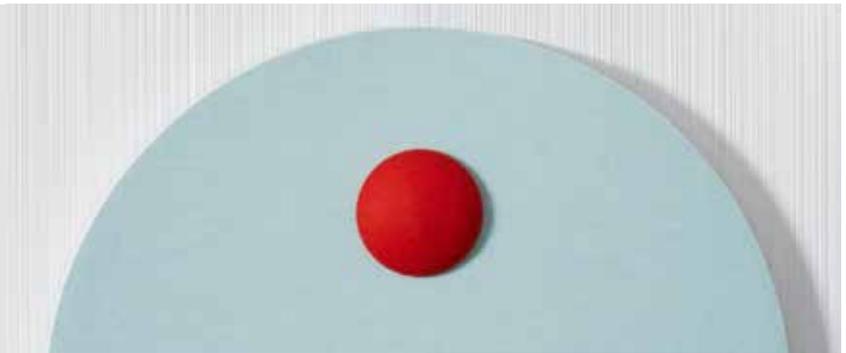
Connect One trim

Connect One trim is a metal trim that you screw to the wall. The ends have a cut-out V-form. They act as holders for two Connect Absorber anchor one, which are screwed into the back of the panel.



Connect One fixing

Connect One fixing is an easy way of mounting Akusto One panels. Screw the holder to the wall, cut or drill a hole in the panel and thread it onto the holder. Secure the panel with the designed textured button, available in several colours.



Connect One hook fixing

Connect One hook fixing is a metal plate with two hooks. Screw the plate to the wall and then press the panel onto the hooks. For larger panels, squares and rectangles we recommend you use two hooks per panel.

Akusto Screen



The sustainable choice

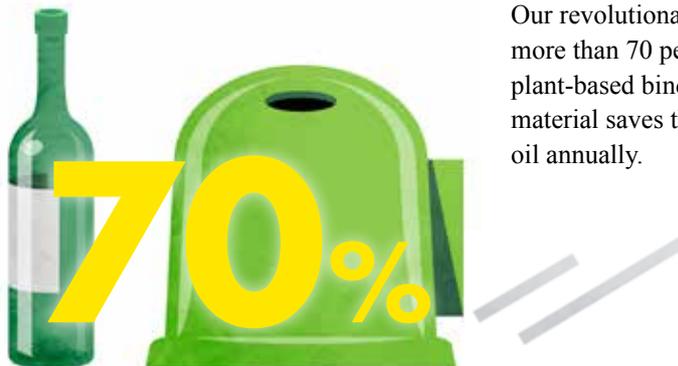
Green and durable



You hold us responsible. We owe you full transparency regarding our products' environmental impact and the efforts we are making to reduce this impact. This is why we do in-depth life cycle analyses to uncover every aspect of our products' life cycle. Armed with that knowledge, we push ourselves to improve every phase, from sourcing raw materials and production to transportation and waste management.

Follow our journey at ecophon.com/sustainability.

Over the past few years, our efforts to improve the impact of our products at every stage have helped us to reduce emissions, find new eco-friendly materials, create healthier indoor environments and implement the return system for offcuts and used panels. These efforts have earned our whole product range some of the toughest certificates and classifications in the world. These include the Californian Emission Regulation standard and the French VOC A+.



Our revolutionary 3rd generation glass wool combines more than 70 per cent recycled glass with a renewable plant-based binder. The complete lack of fossil raw material saves the equivalent of 24,000 barrels of crude oil annually.



We are very proud that we possibly have the lowest CO₂ emissions in the business, per produced square metre of absorber. The main reasons for this are:

- The use of our renewable plant-based binder in all absorbers
- 70 per cent of our glass raw material is already recycled
- Our factories are largely powered by hydroelectric power and biogas
- Our absorbers are very lightweight, reducing the emissions from transportation

Choosing the most sustainable products for a building is often very hard. To help you succeed we have reported all information about our ceiling products in EPDs (Environmental Product Declarations). When it comes to wall applications there are no standards or requirements for EPDs. However, since we want to give you all the facts, Ecophon is currently developing an EPD for the vertical absorbers in our Akusto range. Until this is in place you can still rest assured that the Akusto absorbers are produced exactly the same way as our ceilings, with the same sustainable benefits.

All Ecophon EPDs are third-party verified by independent organisations. Ecophon EPDs are available at ecophon.com.



Return system

We do not ride off into the sunset when installation is complete. We take responsibility for the whole life cycle of our products. This is the reason we have developed a return system for all our products made with 3rd generation glass wool. Learn more at ecophon.com/sustainability.



We are not done. There is always a new leaf waiting to unfold. That's why Ecophon will never stop inventing new and even more sustainable solutions – for the planet and for those of us who live here.

Naturally safe

Ecophon never uses unnecessary chemicals in its products; we simply do not believe in it. Instead we develop products and surfaces that are naturally safe and do not provide breeding grounds for bacteria. Many experts in public health agree with our course of action, including the UK Department of Health, which concluded, regarding the use of anti-microbial chemicals:

“Whilst antimicrobial-impregnated products (such as surface coatings, paints and curtains) and antimicrobial materials are available, there are, at present, no definitive data to support their efficacy in reducing healthcare-associated infection.” (Health Building Note 00-10.)

Our products meet the highest requirements of NF S90-351, zone 4 and the American Society for Testing and Materials (ASTM) G21-96, grade 0.

1.2m

It is always important to stop sound as close to the source as possible. The placement of vertical absorbers is therefore very important. For instance, when you sit at a regular desk your head is approximately at a height of 1.2 metres. Wall absorbers should consequently be centred at 1.2 metres. For spaces where most people stand, they should be centred at 1.6 metres. Ecophon also recommends that absorbers placed between desks are 1.4 metres high, and absorbers between work groups 1.8 metres high.

When using vertical absorbers, Ecophon recommends that you cover the walls to the equivalent of 20 per cent of the floor area. To avoid echoes from sound bouncing between opposite walls, and to achieve optimum benefits, the absorbers should be placed on two adjacent walls.

20%

Tips and Tricks

When you are considering the details of an installation of Ecophon systems and products, for instance transitions at walls or the use of suspended or integrated elements such as luminaires and ventilation, you are free to explore our extensive archive of recommendations for dealing with such solutions. The archive can be found in the e-tool Drawing Aid, where drawings of recommended solutions are grouped by product. Check it out at ecophon.com/drawing-aid.

BIM objects

All our systems and products are available to download as BIM objects. All you need to do is go to *ecophon.com*, choose your preferred product in the top menu and then click »Installation«.

The BIM objects are designed for use with Revit modelling software, an application that allows the user to design multi-dimensional models of building projects. Along with the download you will receive information on how you can integrate our BIM objects in Revit. We are currently exploring the possibilities of offering BIM objects for other modelling software as well.



Even green building organisations choose Ecophon. When Green Building Council South Africa built their new offices they designed them with our acoustic solutions. We think they made a good choice, because if you are going green, why not use the most sustainable sound absorbers on the market?

Acoustics is a part of all leading certification schemes, such as Leed, Breeam and HQE.

Maintenance

Ecophon offers a web-based tool to generate maintenance instructions that are tailored to your specific project. When you enter the Ecophon products you have used, a unique document will be created. It will include information to ensure the correct treatment of your products during their lifetime. Create your guide at *ecophon.com/maintenance-guide*.



For the latest news on Ecophon, our solutions, design inspiration and the world of acoustics, follow us on: Twitter (*@ecophon*), Facebook (*facebook.com/Ecophon*) and LinkedIn (*linkedin.com/company/ecophon*).

Ecophon Akusto™ Wall A

For use as wall absorbers together with a sound absorbing ceiling, to achieve excellent acoustic properties in the room. Ecophon Akusto™ Wall A has an exposed profile system.

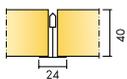
The system consists of Ecophon Akusto™ Wall A panels and Ecophon Connect profile systems, with an approximate weight of 4 kg/m². The panels are manufactured from high density, 3rd generation glass wool. The visible surface has a glass fibre fabric (Texona) or an impact resistant glass fibre fabric (Super G), and is also available with a painted surface (Akutex™ FT). The back of the panel is covered with glass tissue. The edges are natural. The Texona gamma version offers a reflecting surface, see absorption diagram.

For best performance and system quality, use Ecophon Connect grid and accessories. The profiles are manufactured from galvanized steel (Connect Channel trim) or aluminum (Connect Thinline).



Lielāhikskolas, Tampere, Finland

SYSTEM RANGE



Size, mm	2700x1200
Thinline Profile	•
WP Profile	•
Thickness	40
Inst. Diag.	M353, M304



Akusto Wall A



Akusto Wall A system with Connect Channel trim and Connect T24 Main



Akusto Wall A system with Connect Channel trim and Connect Recessed



Akusto Wall system with Connect Thinline profiles

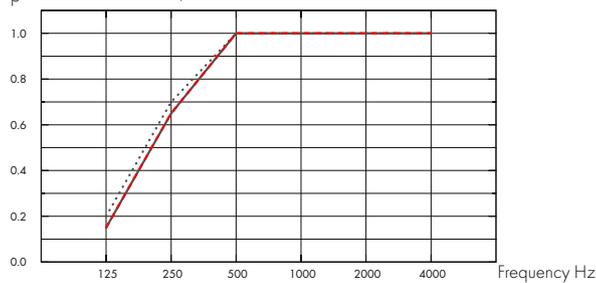


Acoustic

Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.

α_p Practical sound absorption coefficient



... Akusto Wall A Akutex FT 40 mm, 43 mm o.d.s.

– Akusto Wall A Texona 40 mm, 43 mm o.d.s.

--- Akusto Wall A Super G 40 mm, 43 mm o.d.s.

o.d.s = overall depth of system

	THK mm	o.d.s. mm	α_p Practical sound absorption coefficient						α_w	Sound absorption class
			125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
Akutex FT	40	43	0.20	0.70	1.00	1.00	1.00	1.00	1.00	A
Texona	40	43	0.15	0.65	1.00	1.00	1.00	1.00	1.00	A
Super G	40	43	0.15	0.65	1.00	1.00	1.00	1.00	0.95	A

THK mm	AC(1.5) Articulation Class, ASTM E1111, ASTM E1110
40	230



Accessibility

The tiles are not demountable except in selected installation diagrams. See quantity specification for more information.



Cleanability

Daily dusting, vacuum cleaning and weekly wet wiping (Super G and Akutex FT surfaces). Weekly dusting and vacuum cleaning (Texona surface) as required.



Visual appearance

Akusto Wall in white has high light reflectance. Light reflectance and nearest NCS colour sample for all the different colours: See Ecophon Colours and surfaces.



Influence of climate

The panels withstand a permanent ambient RH up to 95% at 30°C (Super G and Akutex FT surfaces) and RH up to 75% at 30°C (Texona surface) without sagging, warping or delaminating (EN 13964). Thermal resistance for the panels, $R_p=1,0 \text{ m}^2\text{C}/\text{W}$. Since a wall absorber mounted on an external wall serves as additional insulation, the need for a vapour barrier should be investigated.



Indoor Climate

Certificate / Label

Europe

EN
13501-1



Environmental influence

Fully recyclable



Fire safety

Country

Standard

Class

Europe

EN 13501-1

A2-s1,d0

The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182.



Mechanical properties

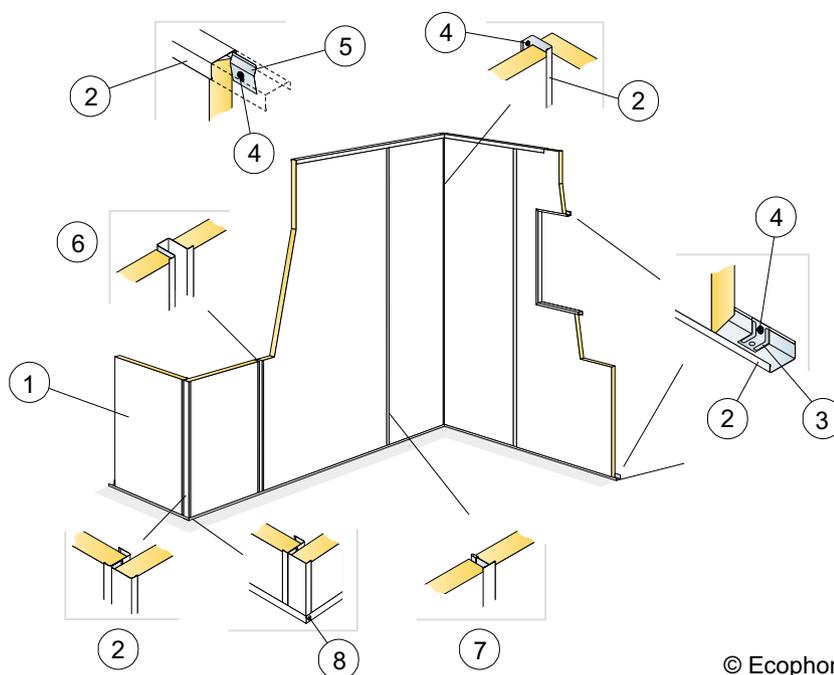
Super G is a stronger glass fibre fabric with high impact resistance. M353 with Super G surface is tested according to EN 13964 annex D and DIN 18032 part 3 and fulfils the demands corresponding to class 1A. Please note: Where the panels are subjected to frequent blows and impacts e.g. behind goal mouths, protection in form of e.g. restraining nets or wooden slats is required. No additional live load is allowed.



Installation

Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification. The systems should not be placed behind goals or similar areas where they are likely to be hit regularly. In such cases a protective net in front of the system is recommended.

INSTALLATION DIAGRAM (M353) FOR ECOPHON AKUSTO WALL A



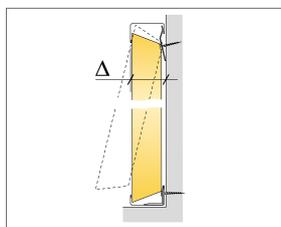
© Ecophon Group

QUANTITY SPECIFICATION (EXCL. WASTAGE)

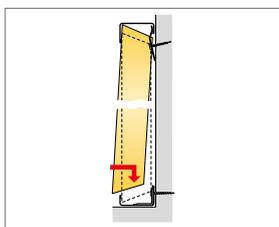
		Size, mm
		2700x1200
1	Ecophon Akusto Wall A	0,31/m ²
2	Connect Channel trim, fixed at 300 mm centres. Connect Direct fixing plate is placed inside at each fixing point if the panel is not supported by the floor.	as required
3	Connect Direct fixing plate	as required
4	Connect Installation screw MVL (for use in plasterboard or timber)	as required
5	Connect Fixing bracket, fixed at 400 mm centres.	as required
6	Alt. 1 Connect Recessed profile, (Installation: kept in position with the Channel trims)	as required
7	Alt. 2 Connect T24 Main runner, not used in a impact resistant installation, (Installation: kept in position with the Channel trims)	as required
8	Connect Installation screw BR	as required
Δ Min. overall depth of system: 44 mm		

For impact resistant installations: Use HD profiles and secure with additional Connect Installation screw BR where needed.

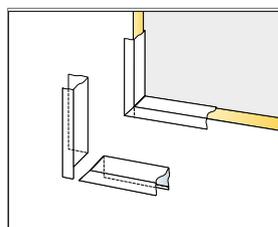
Other installation methods are available for Akusto Wall, please contact us for details or visit www.ecophon.co.uk



See Quantity specification



Detail of installation

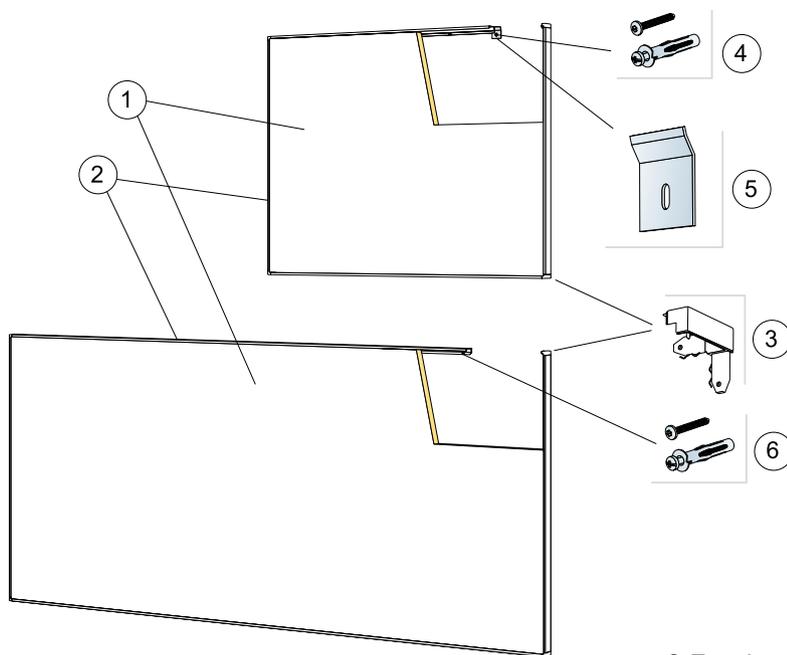


Cutting of channel trim for internal corner

Size, mm	Max live load [N]	Min load bearing capacity [N]
2700x1200	0	-

Live load/load bearing capacity

INSTALLATION DIAGRAM (M304) FOR ECOPHON AKUSTO WALL A WITH CONNECT THINLINE PROFILES.



© Ecophon Group

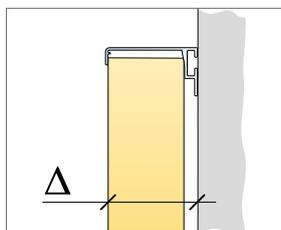
QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm
		2700x1200
1	Ecophon Akusto Wall A	0,31/m ²
2	Connect Thinline profile, L=2678 mm	as required
3	Connect Thinline corner	as required
4	Alt. 1: Installation screw, (select fastener according to wall material)	as required
5	Alt. 1: Connect Fixing bracket, fixed at 400 mm centres.	as required
6	Alt. 2: Installation screw, installed at 200 mm centres (select fastener according to wall material)	as required

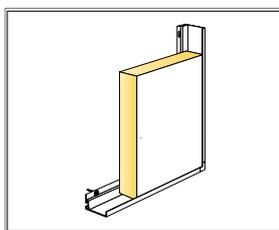
Δ Min. overall depth of system: 49 mm

Alt. 1: Max size of panel 1,45 m2.

Other installation methods are available for Akusto Wall, please contact us for details or visit www.ecophon.co.uk



See Quantity specification



Detail of panel with Thinline frame

Size, mm	Max live load [N]	Min load bearing capacity [N]
2700x1200	0	-

Live load/load bearing capacity



Ecophon Akusto™ Wall C

For use as wall absorbers together with a sound absorbing ceiling, to achieve excellent acoustic properties in the room. Ecophon Akusto™ Wall C has a concealed grid and the bevelled edges create a narrow groove between each panel. The system provides extensive design possibilities.

The system consists of Ecophon Akusto™ Wall C panels and Ecophon Connect profile systems with an approximate weight of 5 kg/m². The panels are manufactured from high density, 3rd generation glass wool. The visible surface has a glass fibre fabric (Texona) or an impact resistant glass fibre fabric (Super G), and is also available with a painted surface (Akutex™ FT). The back of the panel is covered with glass tissue. The edges are painted, and the front surface is

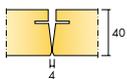
partly covering the long edges. The Texona gamma version offers a reflecting surface, see absorption diagram.

For best performance and system quality, use Ecophon Connect profiles and accessories, which gives a lot of design possibilities. The profiles are manufactured from extruded aluminium.



Kliniken Maria Hilf, Mönchengladbach, Germany

SYSTEM RANGE



Size, mm	2700x600
Thinline Profile	•
WP Profile	•
Thickness	40
Inst. Diagr.	M354, M355, M235, M303, M356



Akusto Wall C



Section of Akusto Wall C System



Akusto Wall C system with Connect WP profile and external corner



Akusto Wall system with Connect Thinline profiles

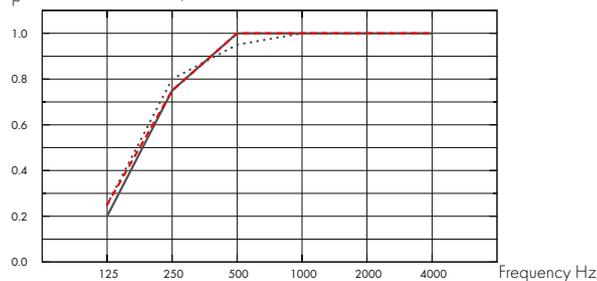


Acoustic

Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.

α_p Practical sound absorption coefficient



... Akusto Wall C Akutex FT 40 mm, 43 mm o.d.s.

– Akusto Wall C Texona 40 mm, 43 mm o.d.s.

--- Akusto Wall C Super G 40 mm, 43 mm o.d.s.

o.d.s = overall depth of system

	THK mm	o.d.s. mm	α_p Practical sound absorption coefficient						α_w	Sound absorption class
			125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
Akutex FT	40	43	0.25	0.80	0.95	1.00	1.00	1.00	1.00	A
Texona	40	43	0.20	0.75	1.00	1.00	1.00	1.00	1.00	A
Super G	40	43	0.25	0.75	1.00	1.00	1.00	1.00	1.00	A

THK mm	AC(1.5) Articulation Class, ASTM E1111, ASTM E1110
40	240



Accessibility

The tiles are not demountable except in selected installation diagrams. See quantity specification for more information.



Cleanability

Daily dusting, vacuum cleaning and weekly wet wiping (Super G and Akutex FT surface). Weekly dusting and vacuum cleaning (Texona) as required.



Visual appearance

Akusto Wall in white has high light reflectance. Light reflectance and nearest NCS colour sample for all the different colours: See Ecophon Colours and surfaces.



Influence of climate

The panels withstand a permanent ambient RH up to 95% at 30°C (Super G and Akutex FT surfaces) and RH up to 75% at 30°C (Texona) without sagging, warping or delaminating (EN 13964). Thermal resistance for the panels, $R_p=1,0 \text{ m}^2\text{C}/\text{W}$. Since a wall absorber mounted on an external wall serves as additional insulation, the need for a vapour barrier should be investigated.

The tiles are also available for especially demanding hot and humid conditions. Please contact Ecophon for specifying your project.



Indoor Climate

Certificate / Label

Europe

EN
13501-1



Environmental influence

Fully recyclable



Fire safety

Country

Standard

Class

Europe

EN 13501-1

A2-s1,d0

The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182.



Mechanical properties

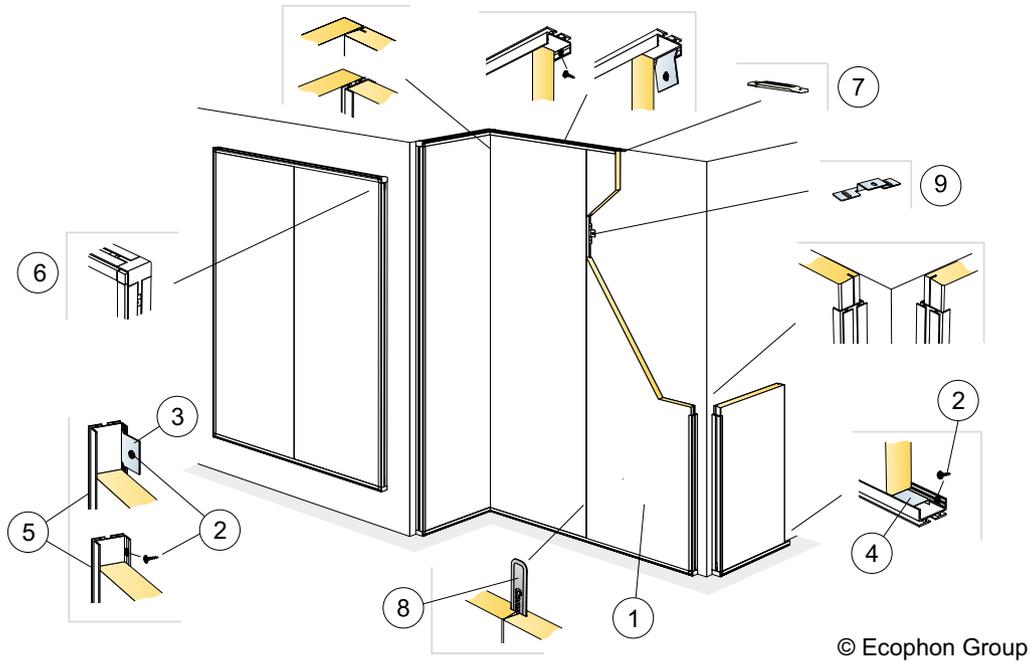
M354 and M355 with Super G surface are tested according to EN 13964 annex D and DIN 18032 part 3 and fulfils the demands corresponding to class 1A. Please note: Where the panels are subjected to frequent blows and impacts e.g. behind goal mouths, protection in form of e.g. restraining nets or wooden slats is required. No additional live load is allowed.



Installation

Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification. The systems should not be placed behind goals or similar areas where they are likely to be hit regularly. In such cases a protective net in front of the system is recommended.

INSTALLATION DIAGRAM (M354) FOR ECOPHON AKUSTO WALL C VERTICAL INSTALLATION



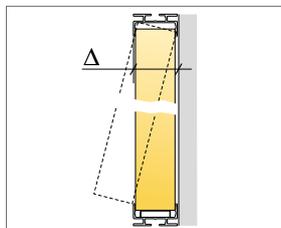
© Ecophon Group

QUANTITY SPECIFICATION (EXCL. WASTAGE)

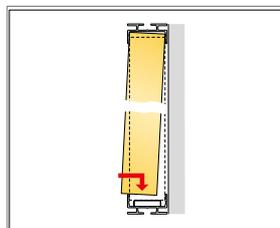
		Size, mm
		2700x600
1	Akusto Wall C	0,62/m ²
2	Connect Installation screw MVL (for use in plasterboard or timber)	as required
3	Alt. Connect Fixing bracket, fixed at 400 mm centres.	as required
4	Connect WP Space bar, L=2400 mm	as required
5	Connect WP Profile, L=2687 mm, fixed at 400 mm centres	as required
6	Connect WP External corner mounted in Connect WP Profile	as required
7	Connect WP Profile splice. used to extend WP profiles where needed.	as required
8	Connect Spline	as required
9	Connect Fixing plate, installed at 500 mm centres	as required

Δ Min. overall depth of system: 44 mm

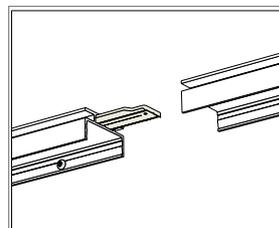
Other installation methods are available for Akusto Wall, please contact us for details or visit www.ecophon.co.uk



See Quantity specification



Detail of installation



Detail of WP Profile splice

Size, mm	Max live load [N]	Min load bearing capacity [N]
2700x600	0	-

Live load/load bearing capacity

Ecophon Akusto™ One SQ

To increase the sound absorption in the room this system gives you the possibility to install Ecophon Akusto One SQ on the wall. The systems give design possibilities, working with different formats and colours to create various patterns.

Three possibilities exist to fix Akusto One SQ, Connect™ One trim, Connect™ One hook fixing or Connect™ One fixing. Akusto One SQ is available in various sizes with a weight of 2,0-4,5 kg. The panel is manufactured from high density, 3rd generation glass wool. The visible surface has a glass fibre fabric Texona in colours and is also available with a painted surface (Akutex™ FT). The back of the panel is covered with glass tissue. The edges are straight cut and painted in white or grey.



Helsingborg, Sweden

SYSTEM RANGE



Size, mm	600x	600x600	800x	1200x	1200x300	1200x600
Special Fixing	•	•	•	•	•	•
Thickness (THK)	40	40	40	40	40	40
Inst. Diag.	M372	M371	M372	M372	M371	M371



Akusto One SQ panel



Installation with Connect™ One trim and Connect™ Absorber anchor one



Installation with Connect™ One hook fixing



Installation with Connect™ One fixing



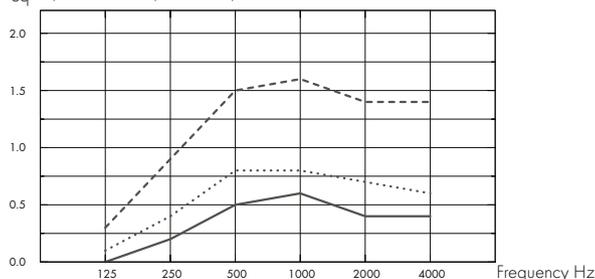
Acoustic

The values in the diagram refer to a single unit. If the units are arranged in a cluster with distances between units less than 0,5 meters, the Aeq per unit will be slightly reduced.

Sound Absorption:

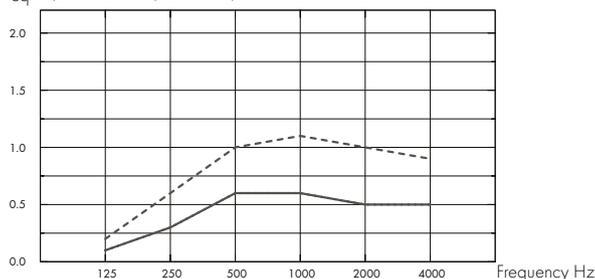
Test results according to EN ISO 354.

A_{eq}, Equivalent absorption area per unit (m² sabin)



- Akusto One SQ Ø600, 48 mm o.d.s.
 - ... Akusto One SQ Ø800, 48 mm o.d.s.
 - Akusto One SQ Ø1200, 48 mm o.d.s.
- o.d.s = overall depth of system

A_{eq}, Equivalent absorption area per unit (m² sabin)



- Akusto One SQ 600x600, 48 mm o.d.s.
 - ... Akusto One SQ 1200x300, 48 mm o.d.s.
 - Akusto One SQ 1200x600, 48 mm o.d.s.
- o.d.s = overall depth of system

	THK mm	o.d.s. mm	A _{eq} , Equivalent absorption area per unit (m ² sabin)					
			125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
Ø600	40	48	0.00	0.20	0.50	0.60	0.40	0.40
Ø800	40	48	0.10	0.40	0.80	0.80	0.70	0.60
Ø1200	40	48	0.30	0.90	1.50	1.60	1.40	1.40
600x600	40	48	0.10	0.30	0.60	0.60	0.50	0.50
1200x300	40	48	0.10	0.30	0.60	0.60	0.50	0.50
1200x600	40	48	0.20	0.60	1.00	1.10	1.00	0.90



Accessibility

The tiles are easily demountable.



Cleanability

Daily dusting, vacuum cleaning and weekly wet wiping (Akutex FT surfaces). Weekly dusting and vacuum cleaning (Texona surface).



Visual appearance

Akusto Wall in white has high light reflectance. Light reflectance and nearest NCS colour sample for all the different colours: See Ecophon Colours and surfaces.



Influence of climate

The panels withstand a permanent ambient RH up to 95% at 30°C (Akutex FT surface) and RH up to 75% at 30°C (Texona surface) without sagging, warping or delaminating (EN 13964).



Indoor Climate

Certificate / Label

Europe

EN
13501-1



Environmental influence

Fully recyclable



Fire safety

Country	Standard	Class
Europe	EN 13501-1	A2-s1,d0

The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182.



Mechanical properties

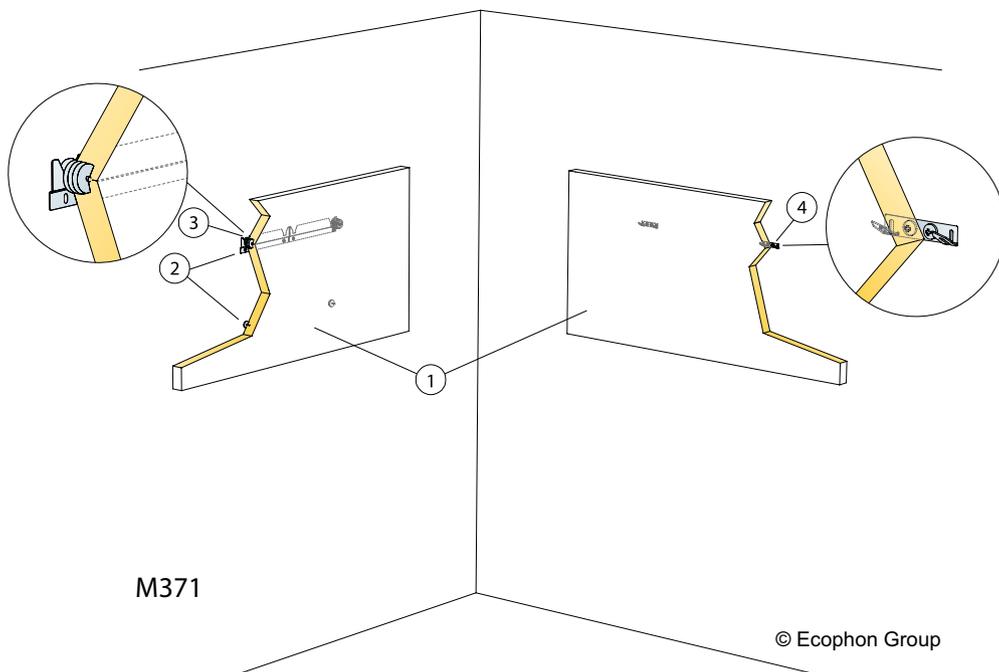
No additional live load is allowed.



Installation

Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification.

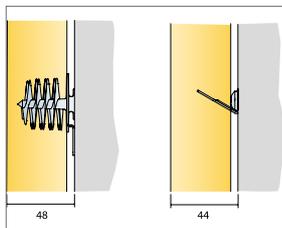
INSTALLATION DIAGRAM (M371) FOR ECOPHON AKUSTO ONE SQ



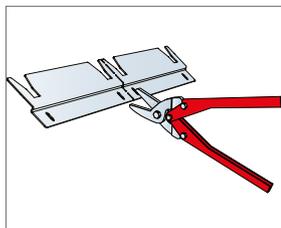
QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm		
		600x600	1200x300	1200x600
1	Akusto One SQ	2,8m ² /panel	2,8m ² /panel	1,4m ² /panel
2	Alt. 1 Connect One trim (wall distance included)	1/panel	1/panel	1/panel
3	Alt. 1 Connect Absorber anchor one	2/panel	2/panel	2/panel
4	Alt. 2 Connect One hook fixing	2/panel	2/panel	2/panel
Δ Min. overall depth of system: Δ1 48 mm / Δ2 44 mm		-	-	-
* Panel Module size 600x600 (592x592), 1200x300 (1192x292), 1200x600 (1192x592)		-	-	-

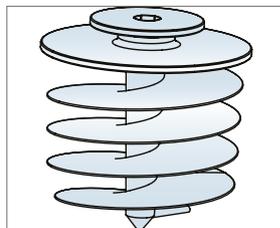
Other installation methods are available for Akusto Wall, please contact us for details or visit www.ecophon.co.uk



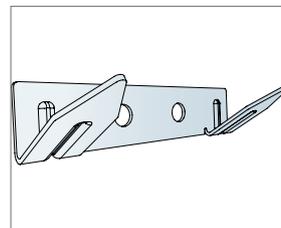
See Quantity specification



Connect One trim can be divided into two suspension trims

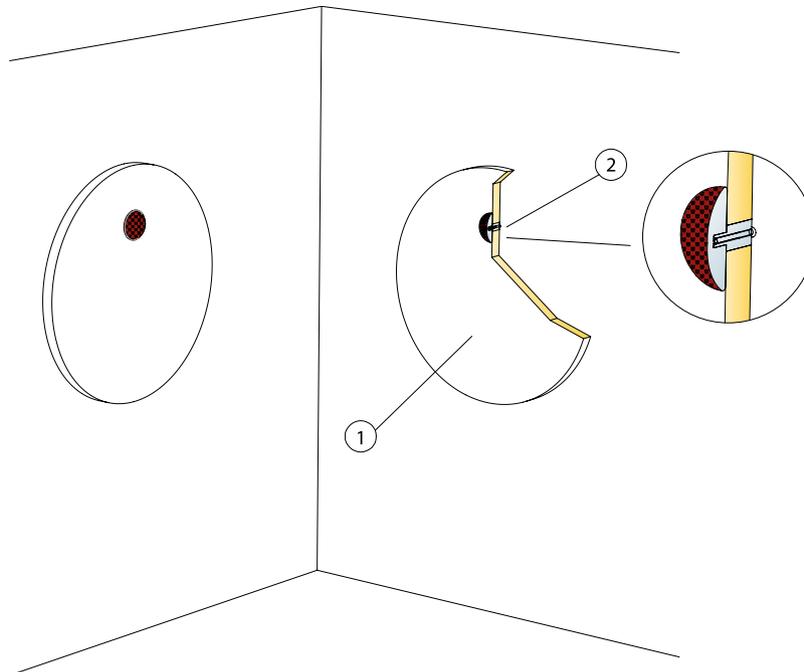


Connect Absorber anchor one used together with Connect One trim



Connect One hook fixing

INSTALLATION DIAGRAM (M372) FOR ECOPHON AKUSTO ONE SQ

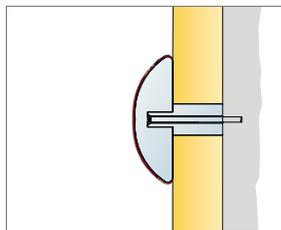


QUANTITY SPECIFICATION (EXCL. WASTAGE)

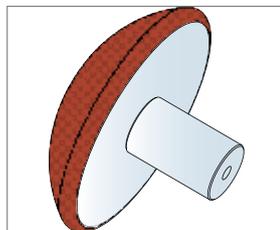
		Size, mm		
		600x	800x	1200x
1	Akusto One SQ	0,28m ² /panel	0,5m ² /panel	1,13m ² /panel
2	Connect One fixing	1/panel	1/panel	1/panel
Δ Min. overall depth of system: Δ40 mm		-	-	-

* Panel Module size 600(592), 800(792), 1200(1192)

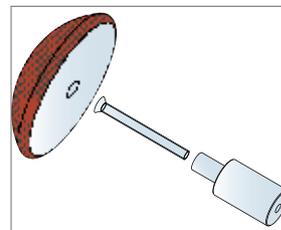
Other installation methods are available for Akusto Wall, please contact us for details or visit www.ecophon.co.uk



See Quantity specification

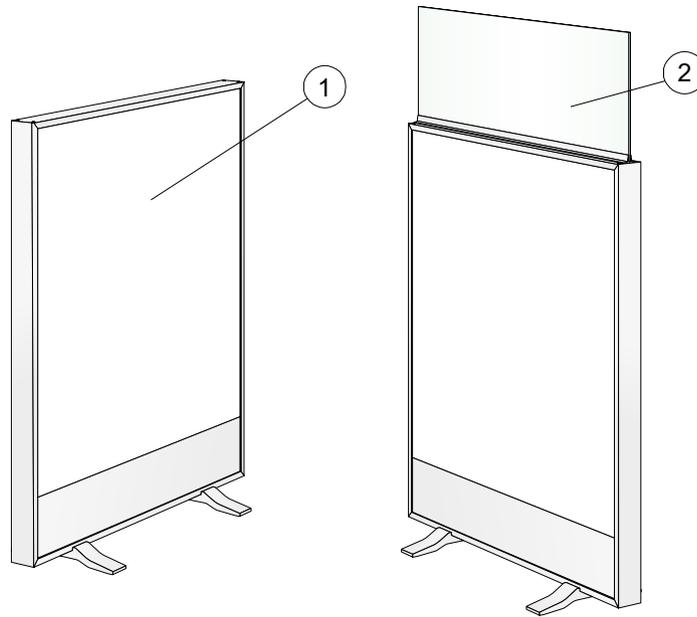


Connect One fixing available in 4 different colours



Installation with Connect One fixing

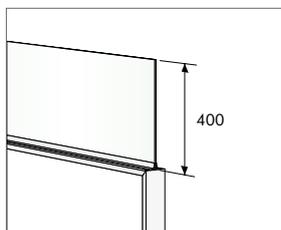
INSTALLATION DIAGRAM (M340) FOR ECOPHON AKUSTO SCREEN A



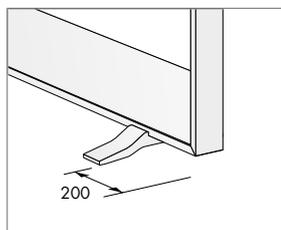
© Ecophon Group

QUANTITY SPECIFICATION (EXCL. WASTAGE)

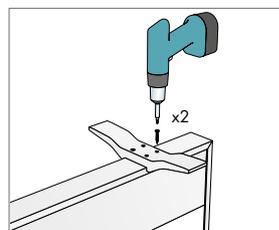
		Size, mm	
		1420x1200	1420x1800
1	Akusto Screen A	as required	as required
2	Akusto Screen A incl. glass pane (total height 1820 mm)	as required	as required



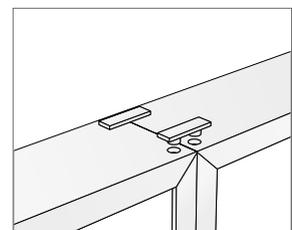
Akusto Screen incl. glass pane



Positioning of foot



Mounting of foot



Pairing of two Akusto Screens with Connect Screen connector



A SOUND EFFECT ON PEOPLE

Ecophon dates back to 1958, when the first sound absorbers manufactured from glass wool and designed to improve the acoustic working environment were produced in Sweden. Today, as part of the Saint-Gobain Group, the company is a global supplier of acoustic systems that contribute to good room acoustics and support a healthy indoor environment, with a focus on offices, education, healthcare, retail and industrial manufacturing premises.

Ecophon's efforts are guided by a vision of earning global leadership in room acoustic comfort through the design and manufacture of sound-absorbing systems that enhance end users' performance and wellbeing. Ecophon maintains an on-going dialogue with government agencies, organisations and research institutes, and is involved in formulating national standards in the field of room acoustics.

Ecophon contributes to a better working environment wherever people work and communicate.

www.ecophon.co.uk



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