

Ecophon Solo™

Experiencing freedom of expression



Ecophon®
SAINT-GOBAIN

A SOUND EFFECT ON PEOPLE

Bring the outdoors in

to enhance wellbeing and performance

Over hundreds of thousands of years, our ears have evolved for us to hear perfectly outdoors, in nature. But today most of us spend up to 90 per cent of our time indoors. For more than 50 years Ecophon has been on a mission to spread awareness of the importance of creating indoor environments that resemble what we experience in nature.

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

Pleasing to the eye, the ear and the mind

Ecophon offers acoustic solutions for all types of indoor environments. We focus on pleasing the ear, but understand that to please 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; all to give you the opportunity to create the atmosphere you desire.

The sustainable choice

We take responsibility for the whole life cycle of our products, and they are sustainable in every respect. All our absorbers are made with the unique 3rd generation glass wool, in which we combine more than 70 per cent recycled glass with a plant-based binder. We use renewable energy in our facilities and the CO₂ emissions per absorber are most probably the lowest in the business. Our production waste is turned into pellets that are used for drainage, and our recycling programme guarantees that once the 3rd generation glass wool absorbers have done their job, we will take them back and turn them into new products.

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

Ecophon – a sound effect on people.

This publication shows products from Ecophon's 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, 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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Simply the best

free-hanging sound absorber

Unlimited design and shape possibilities, supreme sound-absorbing qualities, superior surface on both sides, painted edges, lightweight, easy installation with patented accessories, multilevel opportunities, easy lighting integration, and a core made of the unique 3rd generation glass wool - which combines 70 per cent recycled glass with a plant-based binder. A true innovation that has revolutionised the market for sound absorbers.

Let your mind go free.



Grand designs

in great spaces

In some large spaces a wall-to-wall ceiling is not possible or practical. Sometimes you want to achieve a very special appearance. And sometimes you want to make a statement. Whatever the reason, Solo can help you create both acoustic comfort and a design that makes people stop and take a second look.



The freedom to be

absolutely unique

Let's be honest. It's fun and very satisfying to create something that has never been done before. The exceptional properties of Solo give you the opportunity to design panels with your own shapes. And since both sides have the same attractive surface, you can tilt the panels any way you want, further enhancing the atmosphere you want to achieve.



Getting down to business

A lot of buildings are not acoustically optimised for their intended purpose. Here, a wall-to-wall ceiling is always the best start. But in some cases this is not practically achievable due to ductwork and other installations in the ceiling. And in others a wall-to-wall ceiling may not be enough. The versatility of Solo makes it the first choice for solving both problems.

If you cannot install a wall-to-wall ceiling, our tests show that 60 per cent coverage with Solo can achieve a good sound environment. The reason is that a free-hanging panel also absorbs sound that has bounced off the soffit and is on its way back down. However, a free-hanging solution doesn't absorb low-frequency sound as effectively as a full ceiling. You can solve this by combining Solo panels with Akusto Wall absorbers and Akusto Screen.

In areas where a lot of people are speaking at the same time, such as a call centre or in a restaurant, a wall-to-wall ceiling may not be enough to stop sound from spreading throughout the space, disturbing everybody in the vicinity. For these activities it is crucial to stop the sound as close to the source as possible. When you combine a wall-to-wall ceiling with lowered Solo panels directly above tables or desks, you dramatically reduce the overall sound level and sound propagation.

Activity Based Acoustic Design

Want to know more about how to design good acoustic environments? At ecophon.com/acoustic-solutions you can find recommendations for activities and spaces in many types of settings, such as offices, schools, healthcare facilities and TABS buildings.

Release your creativity

with shapes, colours and lighting

Ecophon Solo™ offers practically endless possibilities for creating your very own unique design. You can choose your own shape and colour, and emphasise your choice with integrated lighting.

Solo Regular, Solo Baffle and Solo Freedom

In our standard selection you will find ten shapes that satisfy almost all situations. And if you really want to make a statement, Solo Freedom lets you create your own unique shape, for those very special situations.

Colours

Akutex™ FT surface colours are inspired by nature and range from light, powdery nuances to darker accent colours. Combining them allows the creation of distinct and diverse impressions.

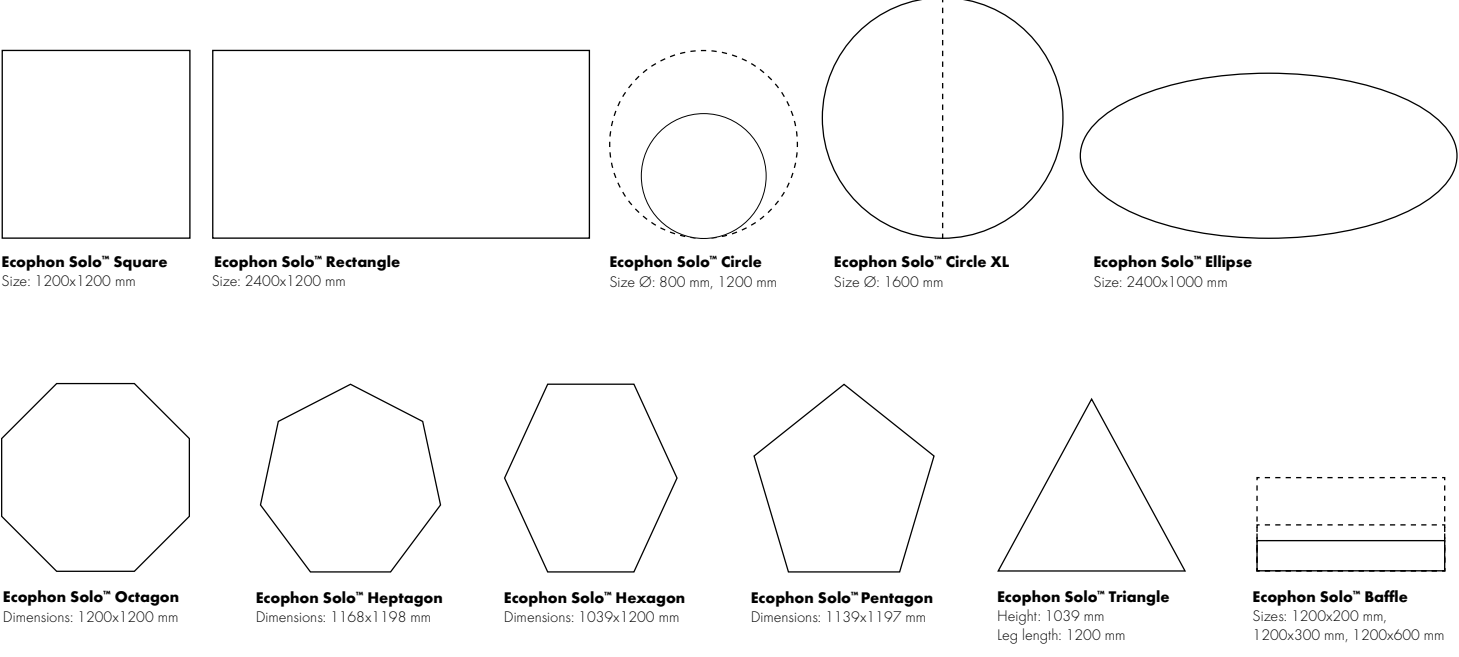
If you fancy stronger colours, then the choice to go for is Akutex™ T surface colours.

With Akutex T you can also choose your own colour. If you would like to do so, please contact us and our Technical Support Team.

Lighting

As you can see in the images, there are lots of ways you can integrate lighting in your Solo design. The light-reflecting qualities of the Akutex™ surface will also help to distribute the light uniformly throughout the space.

Solo standard shapes



Akutex™ FT colours



Akutex™ T colours



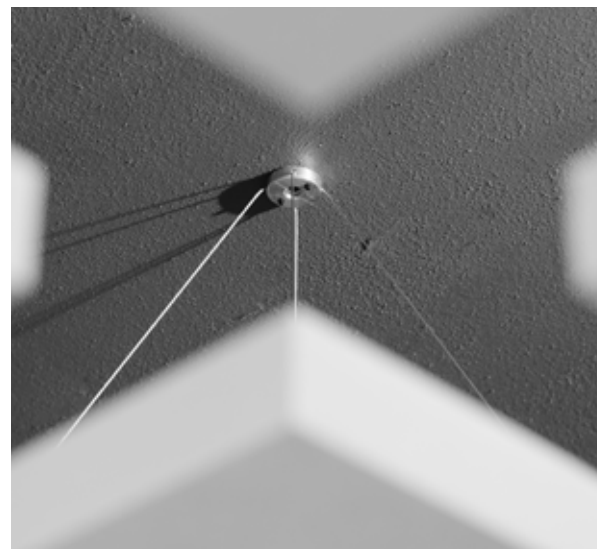
Inspiration for you

Want to see how others have used Solo? At ecophon.com/inspiration you can find lots of images of projects where Solo has helped to create a good acoustic environment.

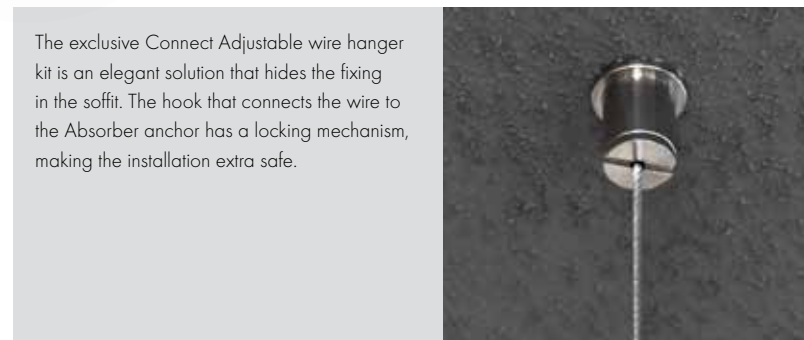
Find out more

More information about all the possibilities with Solo can be found in the installation guide for each Solo shape and in the “Ecophon Solo™ Creation Guide”. Installation guides are available to download on the product pages at ecophon.com and the creation guide can be ordered through your local Ecophon branch.





Connect One-point fixing is the latest innovation when it comes to installing Solo. This solution only requires one hole in the soffit and two wires. It is unique, patent-pending, saves time and gives your installation a distinctive look.



The exclusive Connect Adjustable wire hanger kit is an elegant solution that hides the fixing in the soffit. The hook that connects the wire to the Absorber anchor has a locking mechanism, making the installation extra safe.



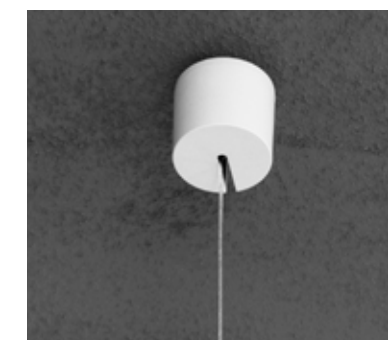
Connect Absorber anchor is the patented screw that enables the smooth installation of Solo. It is easy to screw into the panel and the flat-top design makes it more or less stop by itself when it has reached the right depth. The panel is then easily hung by coupling it with a Connect Adjustable hook.



If you want a more rigid, direct fixing, Connect Adjustable bracket is the choice. Together with Connect Panel fixing plate and Connect Spiral anchor you get a solid, secure and easy installation for depths of 121 – 192 mm.



The unique Connect Absorber anchor has a hollow centre. This gives you the opportunity to easily create multilevel installations, adding extra absorption in spaces with high soffits. Just pass the wire through the Absorber anchor and fasten it in the panel below, using a Connect Adjustable hook.



Connect Covering cup is a neat accessory that covers the fixing in the soffit. It is used with Connect Adjustable wire hanger, and the slot in the cup lets you use it even when you install Solo in a sloping ceiling.

Luminaires can be installed directly in Solo panels, without the risk of sagging or the need for extra support. The maximum load capacity is 2.5 kg, but since this weight varies somewhat between the different Solo shapes, be sure to check the installation guide for your shape before deciding on final integration. All installation guides are available at ecophon.com.



If you know the size of the luminaire you want to use, we can deliver the panels with the hole already cut out, with painted edges.



We recommend choosing a luminaire that doesn't leak light through openings on the top of the luminaire.

Fast and easy installation

lightweight panels and ingenious accessories

The advantages of Ecophon 3rd generation glass wool are plenty. Among them is the fact that it is a very lightweight material, making installation easy and effortless. The light and resilient material is at the same time very robust, which enables it to be used in large panels, without any risk of sagging or the need for extra support. Its rigidity means you can also cut holes in glass wool panels without the risk of cracking or breaking. This allows the installation of luminaires in Solo panels. Basically it's just a matter of cutting a hole and attaching the luminaire.

Using Solo means that suspension fittings will be visible for everybody to see. It is therefore important that all the accessories not only do what they are supposed to, they also have to look good. Solo offers many stylish installation possibilities with the use of patented and patent-pending Connect accessories. The choice is all yours.



Want to see how easy it is?
Watch all the installation
examples on youtube.com/ecophontv or ecophon.com.

The sustainable choice

Green, durable and recyclable

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 handling of waste.

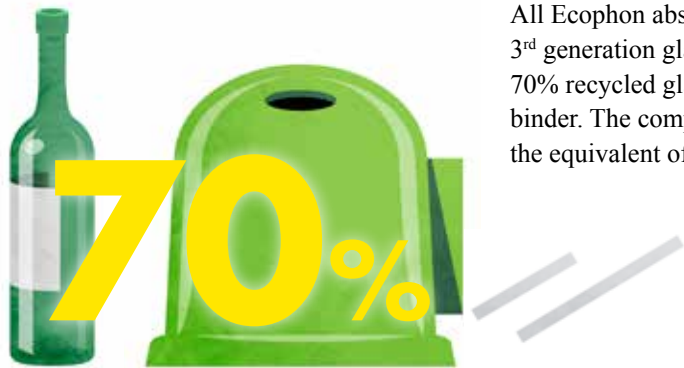
Follow our journey at ecophon.com/sustainability



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



All Ecophon absorbers are made with our revolutionary 3rd generation glass wool, which combines more than 70% 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 most probably have the lowest CO₂ emissions in the business, per produced square metre. The main reasons for this are:

- The use of our renewable plant-based binder in all absorbers
- 70% 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

CO₂ emissions for specific products can be found at ecophon.com and in the product EPD.

Choosing the most sustainable products for a building is often very hard. To help you succeed we have reported all the information about our products' life cycle in EPDs (Environmental Product Declarations). And to make sure we give you the whole truth, all our EPDs are third-party verified by independent organisations. Ecophon EPDs are available at ecophon.com.



Guaranteed

We don't 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 recycling programme for all our products made with 3rd generation glass wool. Starting on 1 January 2016, we open our gates for the return of your old panels.



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.

Watch the film showing our evolution so far at ecophon.com/evolution.

Naturally safe

Ecophon never uses unnecessary chemicals in our products; we simply don't believe in it. Instead we develop products and surfaces that are naturally completely 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.

Ecophon has two ceiling systems that are ideal for TABS buildings (Thermally Activated Building Systems): Ecophon Master™ Matrix and Ecophon Solo™. Based on extensive studies and tests, Ecophon recommends 60 per cent coverage in TABS buildings. This will maintain thermal performance and at the same time provide a good acoustic environment. And if you combine the ceiling coverage with Ecophon Akusto™ Wall and Ecophon Akusto™ Screen you can achieve an atmosphere that is very pleasing to both the ear and the eye.

60%



Retroreflection is a way to describe how light will spread more evenly in a room, giving it a very pleasant atmosphere. Retroreflection capacity is one of the properties that make Akutex™ FT a unique surface. To give you an example, if you paint a wall red, the Akutex FT surface will not reflect the red colour and spread it throughout the room. The colour will, so to speak, stay on the wall. Or, as one architect described it, “It’s almost as if the Akutex FT surface has integrity; it doesn’t let the surroundings affect it”.

Tips and Tricks

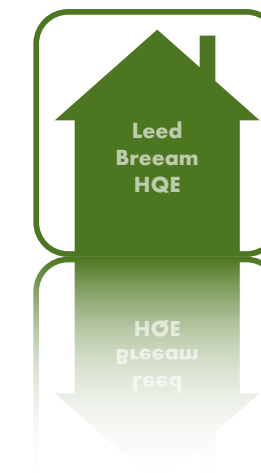
When you are considering transitions at walls and suspended or integrated elements, such as luminaires and ventilation, you are free to explore our extensive archive of recommendations for dealing with such situations. The archive can be found in the e-tool Drawing Aid, where drawings of recommended 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 for 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](https://twitter.com/ecophon)), Facebook (facebook.com/Ecophon) and LinkedIn (linkedin.com/company/ecophon).

Ecophon Solo™ Square

Ecophon Solo Square is an acoustic solution, primarily when it is not possible to install a wall-to-wall ceiling. Solo Square is suitable in buildings where the room volume could be maintained or as an option when TABS (Thermally Activated Building System) is selected as cooling system.

Solo Square is an unframed free hanging unit offering a high degree of design possibilities both regarding colours and suspension systems. The three different suspension systems using Adjustable wire hangers, One-point fixing or Adjust brackets in combination with the engineered Connect Absorber anchor (patent) give opportunities to create several layers and angles.

The Solo Square panel is available in size 1200x1200x40 mm with a weight of 6 kg. The panel is manufactured from high density, 3rd generation glass wool, with Akutex™ FT surface on both sides. The edges are straight cut and painted.



Microsoft, Warsaw, Poland

SYSTEM RANGE	
Size, mm	1200x1200
Special Fixing	•
Thickness (THK)	40
Inst. Diag.	M362



Solo panel



Suspension with Connect Adjustable wire hanger and Connect Absorber



Suspension with One-point fixing



Suspension with Connect Adjust bracket



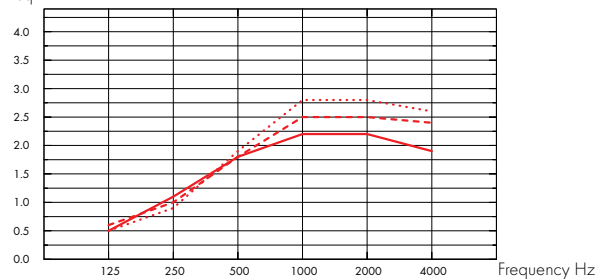
Acoustic

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.

Aeq, Equivalent absorption area per unit (m² sabin)



— Solo Square 1200x1200, 200 mm o.d.s.
--- Solo Square 1200x1200, 400 mm o.d.s.
... Solo Square 1200x1200, 1000 mm o.d.s.
o.d.s = overall depth of system

THK mm	o.d.s. mm	Aeq, Equivalent absorption area per unit (m² sabin)					
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
40	200	0.50	1.10	1.80	2.20	2.20	1.90
40	400	0.60	1.00	1.80	2.50	2.50	2.40
40	1000	0.50	0.90	1.90	2.80	2.80	2.60



Accessibility

The tiles are demountable.



Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



Visual appearance

White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance (of which more than 99% is diffuse reflection). Retro reflection coefficient 63 mcd/(m²lx). Gloss < 1.



Influence of climate

The tiles withstand a permanent ambient RH up to 95% at 30°C without sagging, warping or delaminating (ISO 4611).

The units should however not be installed in areas/premises where the ambient relative humidity (RH) and the temperature exceed 70% and 30°C respectively.



Indoor Climate

Certificate / Label		
French VOC, A+		•
Swedish Asthma and Allergy Association		•
Danish Indoor Climate Label		•
California Emission Regulation, CDPH		•



Environmental influence

Certificate / Label		Fully recycable.
The Nordic Ecolabel		•



CO₂

		From EPD in conformity with ISO 14040
Kg CO ₂ equiv/m ²	8,1	



Fire safety

Country	Standard	Class	The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182.
Europe	EN 13501-1	A2-s1,d0	



Mechanical properties

The tile can take both point loads and distributed loads. See Functional demands, Mechanical properties at www.ecophon.com.



Installation

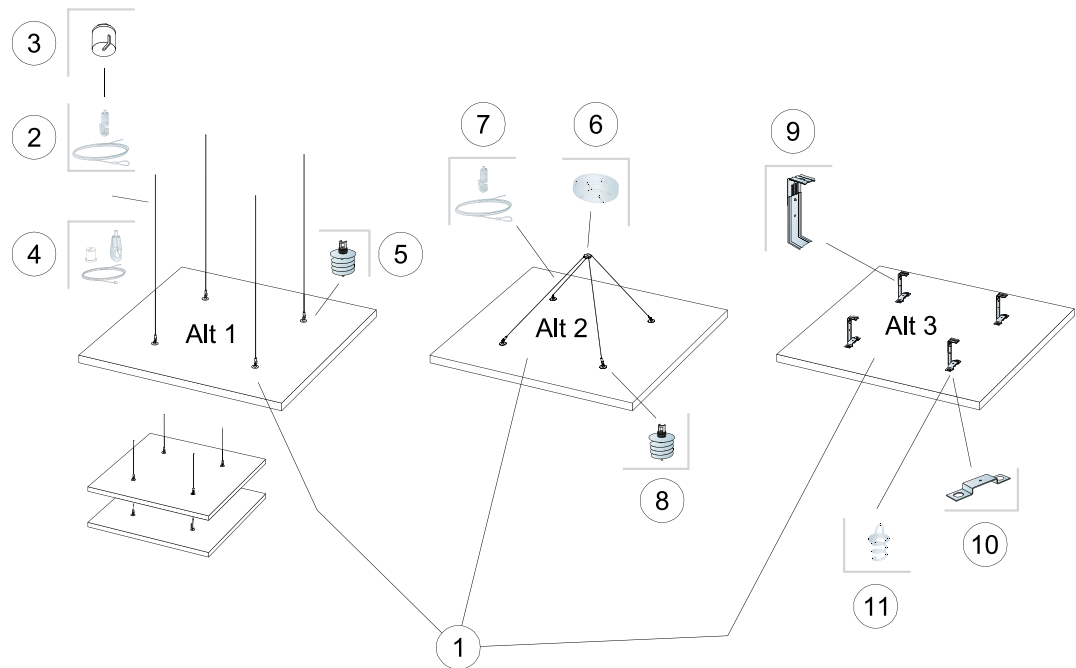
Installed according to installation diagrams, installationguides and drawing aid. For information regarding minimum overall depthof system see quantity specification.



CE

The CE marking confirms important product performance such as sound absorption, emissions, fire safety and load bearing capacity. All Ecophon ceiling products are CE marked according to European standard EN13964, and individual product performance is declared in Declaration of Performance (DoP) documents.

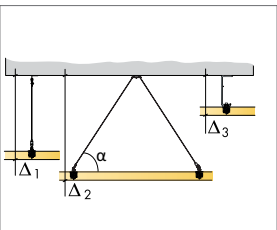
INSTALLATION DIAGRAM (M362) FOR ECOPHON SOLO SQUARE



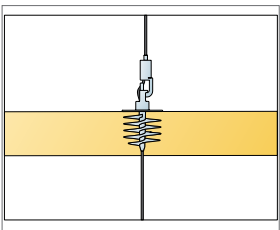
QUANTITY SPECIFICATION (EXCL. WASTAGE)

			Size, mm
			1200x1200
1	Solo Square		1,44m ² /panel
2	Connect Adjustable wire hanger (Alt 1)		4/panel
3	Connect Covering cup (Alt 1, Optional)		4/panel
4	Connect Adjustable wire kit (Alt 1, Optional)		4/panel
5	Connect Absorber anchor (Alt 1)		4/panel
6	Connect One-point fixing (Alt 2)		1/panel
7	Connect Adjustable wire hanger (Alt 2)		2/panel
8	Connect Absorber anchor (Alt 2)		4/panel
9	Connect Adjust bracket (Alt 3)		4/panel
10	Connect Panel fixing plate (Alt 3)		4/panel
11	Connect Spiral anchor (Alt 3)		8pcs/panel

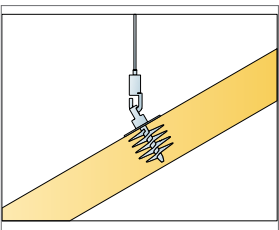
Δ Min. overall depth of system: Δ1 140 mm / Δ2 500 mm / Δ3 121 mm



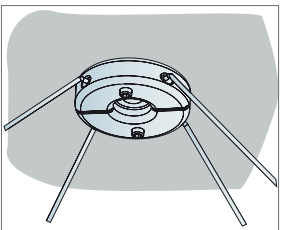
See Quantity specification



Panels can be suspended underneath each other



Panels can be installed in angles up to 60°



Detail of One-point fixing

Ecophon Solo™ Rectangle


Ecophon Solo Rectangle is an acoustic solution, primarily when it is not possible to install a wall-to-wall ceiling. Solo Rectangle is suitable in buildings where the room volume could be maintained or as an option when TABS (Thermally Activated Building System) is selected as cooling system.

Solo Rectangle is an unframed free hanging unit offering a high degree of design possibilities both regarding colours and suspension systems. The three different suspension systems using Adjustable wire hangers, One-point fixing or Adjust brackets in combination with the engineered Connect Absorber anchor (patent) give opportunities to create several layers and angles.

The Solo Rectangle panel is available in size 2400x1200x40 mm with a weight of 11,5 kg. The panel is manufactured from high density, 3rd generation glass wool, with Akutex™ FT surface on both sides. The edges are straight cut and painted.



Astratum Hamburger Lloyd, Hamburg, Germany

SYSTEM RANGE		
	Size, mm	2400x1200
	Special Fixing	•
	Thickness (THK)	40
	Inst. Diag.	M363



Solo panel



Suspension with Connect Adjustable wire hanger and Connect Absorber



Suspension with One-point fixing



Suspension with Connect Adjust bracket

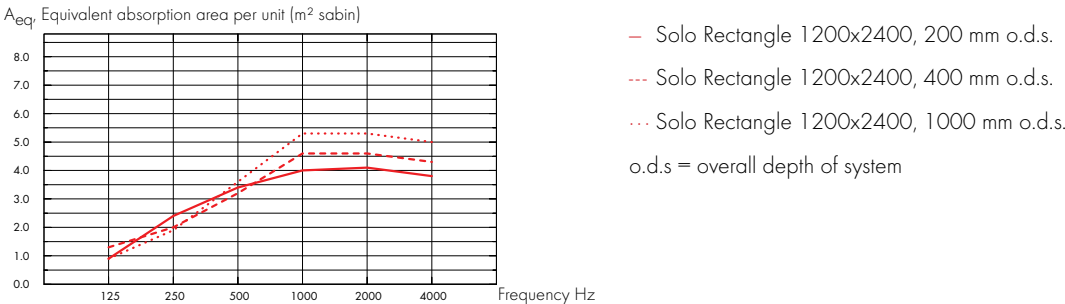


Acoustic

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.



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
40	200	0.90	2.40	3.40	4.00	4.10	3.80
40	400	1.30	2.00	3.20	4.60	4.60	4.30
40	1000	0.90	1.90	3.60	5.30	5.30	5.00



Accessibility

The tiles are demountable.



Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



Visual appearance

White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance (of which more than 99% is diffuse reflection). Retro reflection coefficient 63 mcd/(m²lx). Gloss < 1.

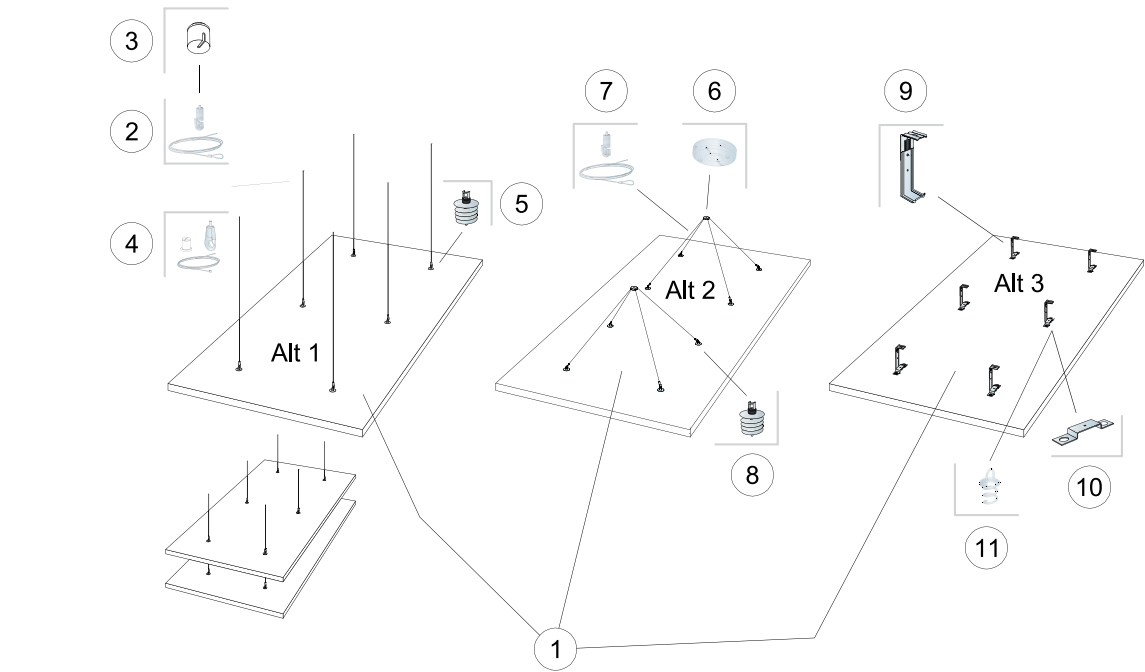


Influence of climate

The tiles withstand a permanent ambient RH up to 95% at 30°C without sagging, warping or delaminating (ISO 4611).

The units should however not be installed in areas/premises where the ambient relative humidity (RH) and the temperature exceed 70% and 30°C respectively.

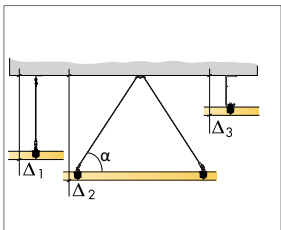
INSTALLATION DIAGRAM (M363) FOR ECOPHON SOLO RECTANGLE



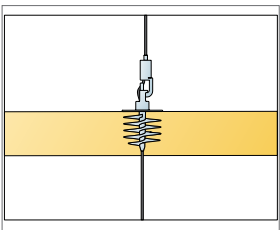
QUANTITY SPECIFICATION (EXCL. WASTAGE)

			Size, mm
			2400x1200
1	Solo Rectangle		2,88m²/panel
2	Connect Adjustable wire hanger (Alt 1)		6/panel
3	Connect Covering cup (Alt 1, Optional)		6/panel
4	Connect Adjustable wire kit (Alt 1, Optional)		6/panel
5	Connect Absorber anchor (Alt 1)		6/panel
6	Connect One-point fixing (Alt 2)		2/panel
7	Connect Adjustable wire hanger (Alt 2)		4/panel
8	Connect Absorber anchor (Alt 2)		8/panel
9	Connect Adjust bracket (Alt 3)		6/panel
10	Connect Panel fixing plate (Alt 3)		6/panel
11	Connect Spiral anchor (Alt 3)		12pcs/panel

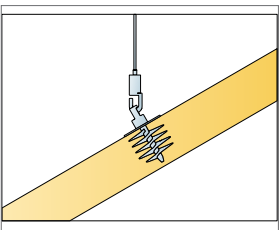
Δ Min. overall depth of system: Δ1 140 mm / Δ2 500 mm / Δ3 121 mm



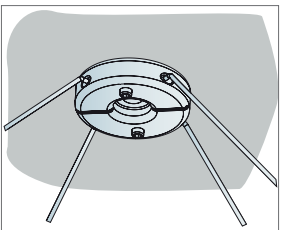
See Quantity specification



Panels can be suspended underneath each other



Panels can be installed in angles up to 45°



Detail of One-point fixing

Indoor Climate

Certificate / Label	
French VOC, A+	•
Swedish Asthma and Allergy Association	•
Danish Indoor Climate Label	•
California Emission Regulation, CDPH	•

Environmental influence

Certificate / Label	
The Nordic Ecolabel	•

Fully recycable.

CO₂

Kg CO ₂ equiv/m²	8,1
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From EPD in conformity with ISO 14040

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

The tile can take both point loads and distributed loads. See Functional demands, Mechanical properties at www.ecophon.com.

Installation

Installed according to installation diagrams, installationguides and drawing aid. For information regarding minimum overall depthof system see quantity specification.

CE

The CE marking confirms important product performance such as sound absorption, emissions, fire safety and load bearing capacity. All Ecophon ceiling products are CE marked according to European standard EN13964, and individual product performance is declared in Declaration of Performance (DoP) documents.

Ecophon Solo™ Circle


Ecophon Solo Circle is an acoustic solution, primarily when it is not possible to install a wall-to-wall ceiling. Solo Circle is suitable in buildings where the room volume could be maintained or as an option when TABS (Thermally Activated Building System) is selected as cooling system.

Solo Circle is an unframed free hanging unit offering a high degree of design possibilities both regarding colours and suspension systems. The three different suspension systems using Adjustable wire hangers, One-point fixing or Adjust brackets in combination with the engineered Connect Absorber anchor (patent) give opportunities to create several layers and angles.

The Ecophon Solo Circle tile is available in size Ø1200x40 mm with a weight of 4,5 kg or Ø800x40 mm with a weight of 2kg. The panel is manufactured from high density, 3rd generation glass wool, with Akutex™ FT surface on both sides. The edges are straight cut and painted.



Bosch, Warsaw, Poland

SYSTEM RANGE			
	Size, mm	800x800	1200x1200
	Special Fixing	•	•
	Thickness (THK)	40	40
	Inst. Diagr.	M370	M364



Solo panel



Suspension with Connect Adjustable wire hanger and Connect Absorber



Suspension with One-point fixing



Suspension with Connect Adjust bracket



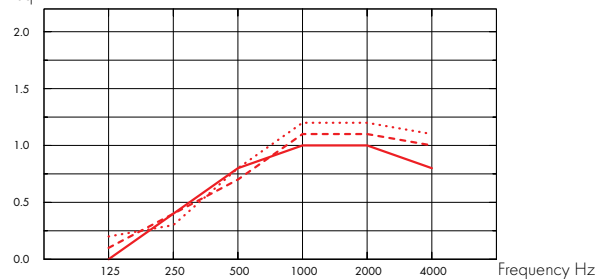
Acoustic

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:

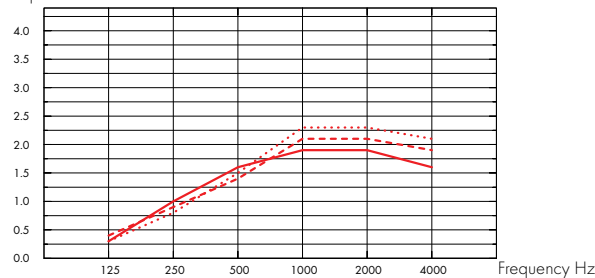
Test results according to EN ISO 354.

Aeq, Equivalent absorption area per unit (m² sabin)



- Solo Circle Ø800, 200 mm o.d.s.
 - - - Solo Circle Ø800, 400 mm o.d.s.
 - ... Solo Circle Ø800, 1000 mm o.d.s.
- o.d.s = overall depth of system

Aeq, Equivalent absorption area per unit (m² sabin)



- Solo Circle Ø1200, 200 mm o.d.s.
 - - - Solo Circle Ø1200, 400 mm o.d.s.
 - ... Solo Circle Ø1200, 1000 mm o.d.s.
- o.d.s = overall depth of system

	THK mm	o.d.s. mm	Aeq, Equivalent absorption area per unit (m² sabin)					
			125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
Ø800	40	200	0.00	0.40	0.80	1.00	1.00	0.80
Ø800	40	400	0.10	0.40	0.70	1.10	1.10	1.00
Ø800	40	1000	0.20	0.30	0.80	1.20	1.20	1.10
Ø1200	40	200	0.30	1.00	1.60	1.90	1.90	1.60
Ø1200	40	400	0.40	0.90	1.40	2.10	2.10	1.90
Ø1200	40	1000	0.30	0.80	1.50	2.30	2.30	2.10



Accessibility

The tiles are demountable.



Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



Visual appearance

White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance (of which more than 99% is diffuse reflection). Retro reflection coefficient 63 mcd/(m²lx). Gloss < 1.



Influence of climate

The tiles withstand a permanent ambient RH up to 95% at 30°C without sagging, warping or delaminating (ISO 4611).

The units should however not be installed in areas/premises where the ambient relative humidity (RH) and the temperature exceed 70% and 30°C respectively.



Indoor Climate		
Certificate / Label		
French VOC, A+		•
Swedish Asthma and Allergy Association		•
Danish Indoor Climate Label		•
California Emission Regulation, CDPH		•



Environmental influence	
Certificate / Label	
The Nordic Ecolabel	•



Fire safety			
Country	Standard	Class	The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182.
Europe	EN 13501-1	A2-s1,d0	



Mechanical properties

The tile can take both point loads and distributed loads. See Functional demands, Mechanical properties at www.ecophon.com.



Installation

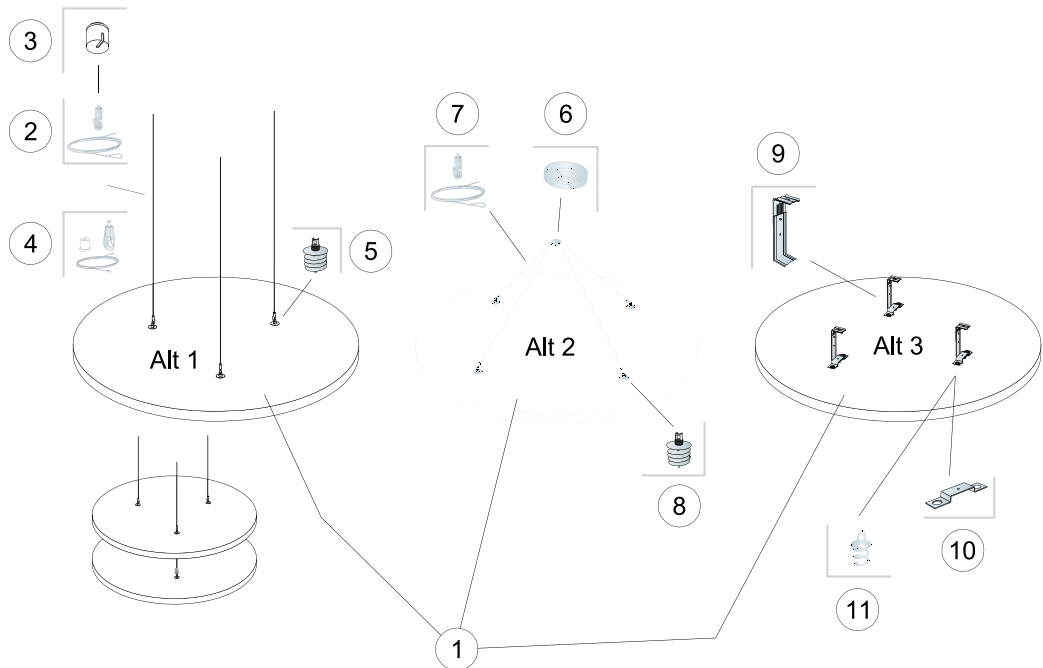
Installed according to installation diagrams, installationguides and drawing aid. For information regarding minimum overall depth of system see quantity specification.



CE

The CE marking confirms important product performance such as sound absorption, emissions, fire safety and load bearing capacity. All Ecophon ceiling products are CE marked according to European standard EN13964, and individual product performance is declared in Declaration of Performance (DoP) documents.

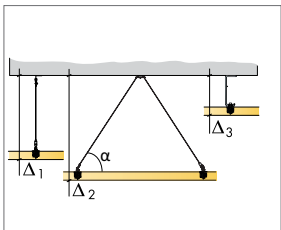
INSTALLATION DIAGRAM (M364) FOR ECOPHON SOLO CIRCLE



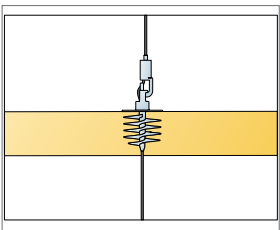
QUANTITY SPECIFICATION (EXCL. WASTAGE)

			Size, mm
			1200x1200
1	Solo Circle		1,13m²/panel
2	Connect Adjustable wire hanger (Alt 1)		3/panel
3	Connect Covering cup (Alt 1, Optional)		3/panel
4	Connect Adjustable wire Kit (Alt 1, Optional)		3/panel
5	Connect Absorber anchor (Alt 1)		3/panel
6	Connect One-point fixing (Alt 2)		1/panel
7	Connect Adjustable wire hanger (Alt 2)		2/panel
8	Connect Absorber anchor (Alt 2)		4/panel
9	Connect Adjust bracket (Alt 3)		3/panel
10	Connect Panel fixing plate (Alt 3)		3/panel
11	Connect Spiral anchor (Alt 3)		6pcs/panel

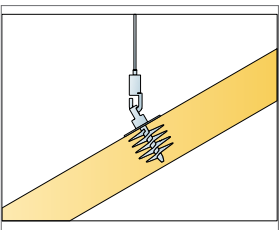
Δ Min. overall depth of system: Δ1 140 mm / Δ2 500 mm / Δ3 121 mm



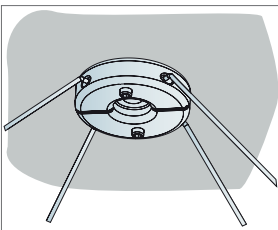
See Quantity specification



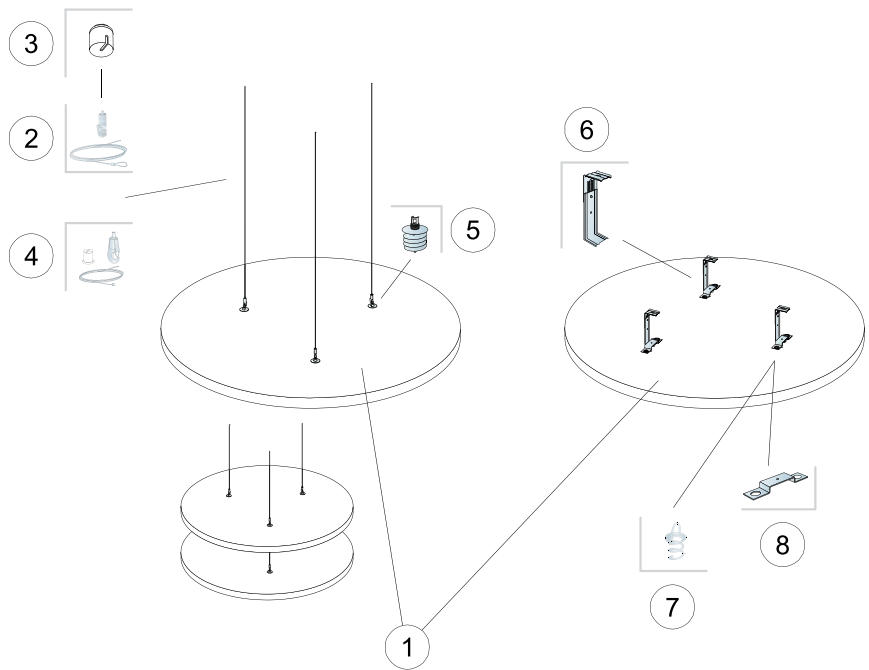
Panels can be suspended underneath each other



Panels can be installed in angles up to 60°



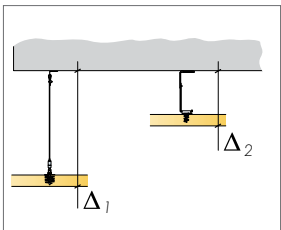
Detail of One-point fixing



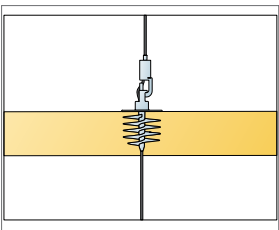
QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm
		800x800
1	Solo Circle	0,5m ² /panel
2	Connect Adjustable wire hanger (Alt 1)	3/panel
3	Connect Covering cup (Alt 1, Optional)	3/panel
4	Connect Adjustable wire kit (Alt 1, Optional)	3/panel
5	Connect Absorber anchor (Alt 1)	3/panel
6	Connect Adjust bracket (Alt 2)	3/panel
7	Connect Panel fixing plate (Alt 2)	3/panel
8	Connect Spiral anchor (Alt 2)	6pcs/panel

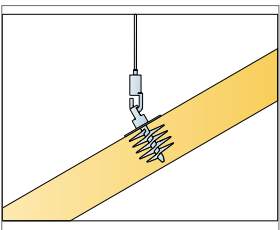
Δ Min. overall depth of system: Δ1 140 mm / Δ2 121 mm



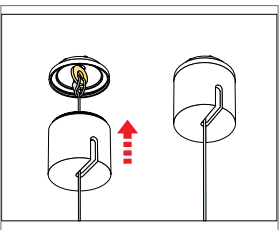
See Quantity specification



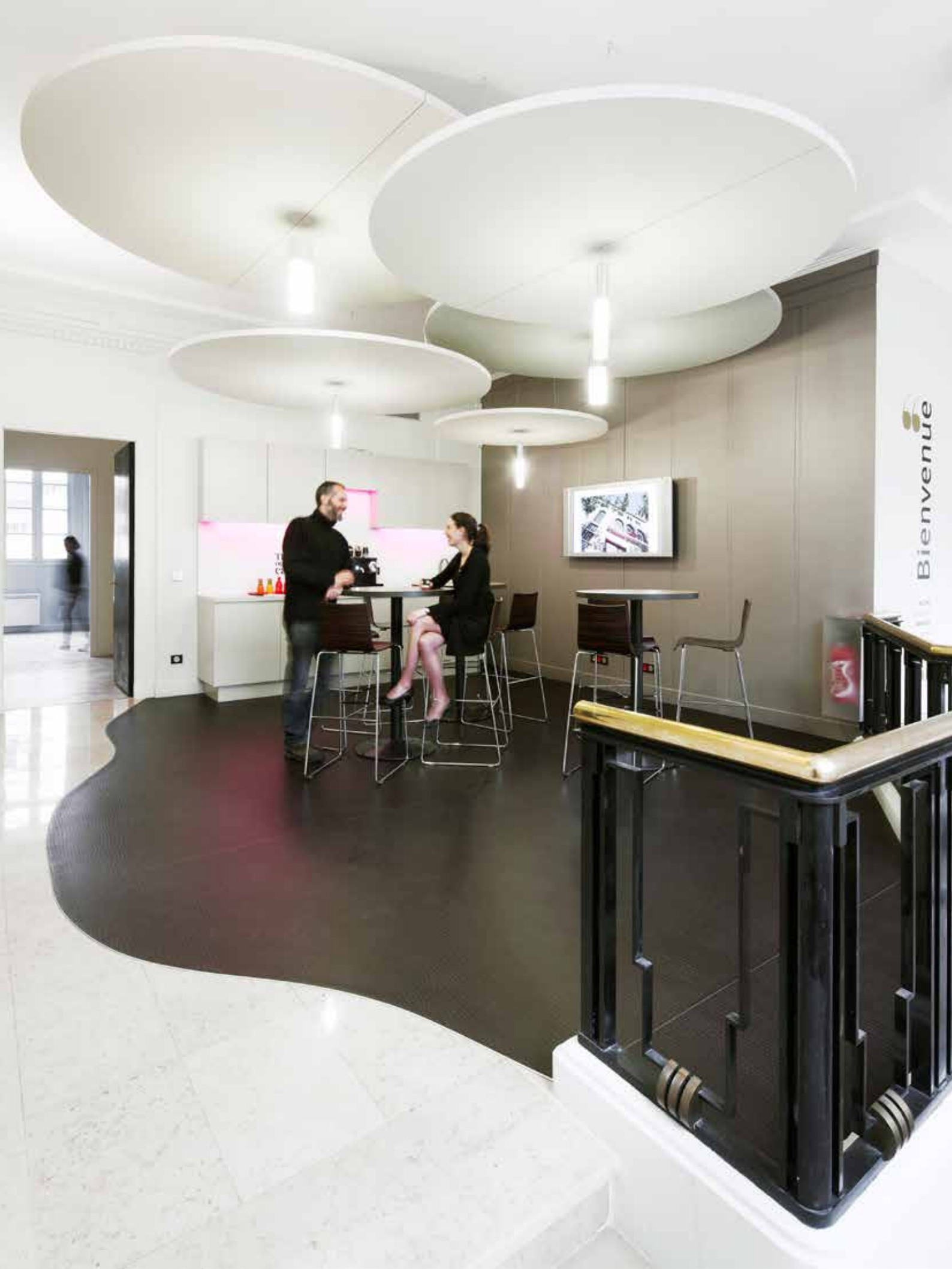
Panels can be suspended underneath each other



Panels can be installed in angles up to 60°



Installation of Connect Covering cup



Ecophon Solo™ Circle XL

Ecophon Solo Circle XL is an acoustic solution, primarily when it is not possible to install a wall-to-wall ceiling. Solo Circle XL is suitable in buildings where the room volume could be maintained or as an option when TABS (Thermally Activated Building System) is selected as cooling system.

Solo Circle XL is an unframed free hanging unit. The unit is suspended with Adjustable wire hangers which are attached to Connect Main runners. This, in combination with, the engineered Connect Absorber anchor (patent pending) give opportunities to create several layers.

The Solo Circle XL panel consists of two semicircles. The complete panel is available in size Ø1600x40 mm with a

weight of 8 kg. The panel is manufactured from high density, 3rd generation glass wool, with Akutex™ FT surface on both sides. The edges are straight cut and painted.



VJO Communications AG, St Gallen, Switzerland



SYSTEM RANGE

Size, mm	XL 1600x1600
Special Fixing	•
Thickness (THK)	40
Inst. Diag.	M290



Solo Circle XL panel



Rear side of Solo Circle XL



Solo Circle XL installation with Connect Absorber anchor



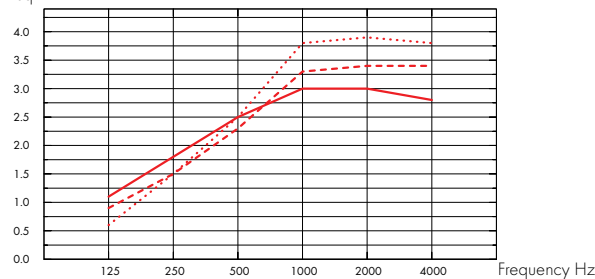
Acoustic

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.

Aeq, Equivalent absorption area per unit (m² sabin)



— Solo Circle XL, 200 mm o.d.s.
--- Solo Circle XL, 400 mm o.d.s.
... Solo Circle XL, 1000 mm o.d.s.
o.d.s = overall depth of system

THK mm	o.d.s. mm	Aeq, Equivalent absorption area per unit (m² sabin)					
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
40	200	1,10	1,80	2,50	3,00	3,00	2,80
40	400	0,90	1,50	2,30	3,30	3,40	3,40
40	1000	0,60	1,50	2,50	3,80	3,90	3,80



Accessibility

The tiles are demountable.



Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



Visual appearance

White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance (of which more than 99% is diffuse reflection). Retro reflection coefficient 63 mcd/(m²lx). Gloss < 1.



Influence of climate

The tiles withstand a permanent ambient RH up to 95% at 30°C without sagging, warping or delaminating (ISO 4611).

The units should however not be installed in areas/premises where the ambient relative humidity (RH) and the temperature exceed 70% and 30°C respectively.

Indoor Climate

Certificate / Label	
Finish M1	•
French VOC, A+	•
Swedish Asthma and Allergy Association	•
Danish Indoor Climate Label	•
California Emission Regulation, CDPH	•

Environmental influence

Certificate / Label	
The Nordic Ecolabel	•

Fully recycable.

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

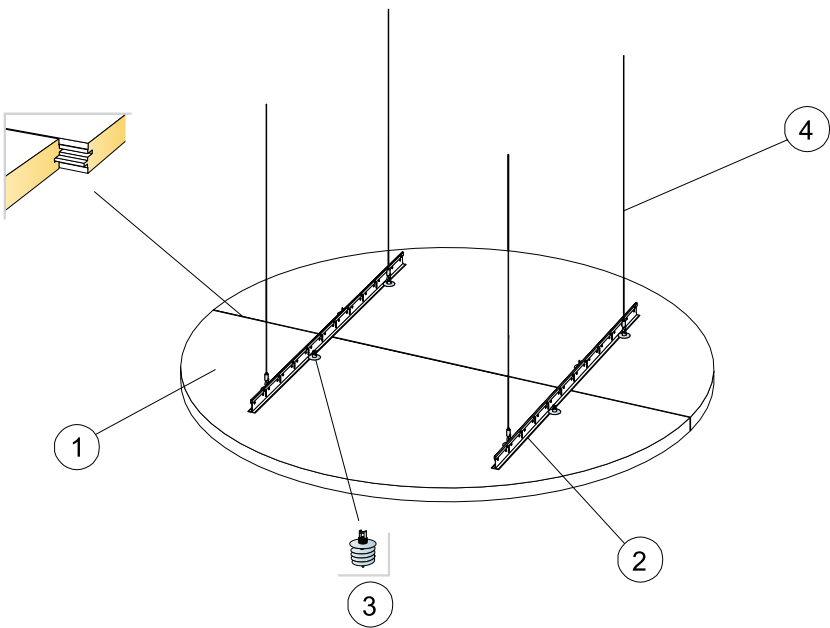
No additional live load is allowed.

Installation

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

CE

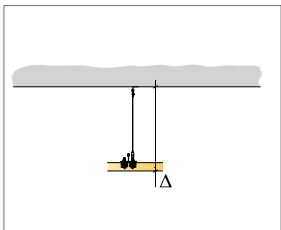
The CE marking confirms important product performance such as sound absorption, emissions, fire safety and load bearing capacity. All Ecophon ceiling products are CE marked according to European standard EN13964, and individual product performance is declared in Declaration of Performance (DoP) documents.



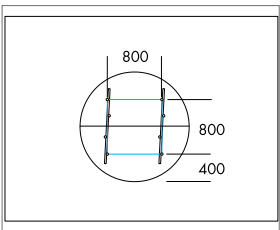
© Ecophon Group

QUANTITY SPECIFICATION (EXCL. WASTAGE)

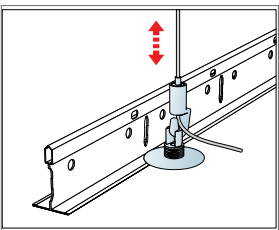
			Size, mm
			1600x1600
1	Solo Circle XL		2,01m ² /panel
2	Connect T24 Main runner		0,60/panel
3	Connect Absorber anchor		8/panel
4	Connect Adjustable wire hanger		4/panel
Δ Min. overall depth of system: Δ 190 mm			-



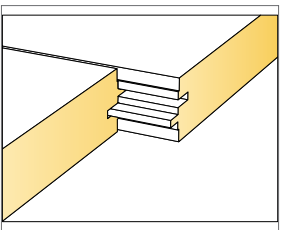
See Quantity specification



Suspension with Connect Adjustable wire hangers and Connect T24 Main runner



Easily adjustable suspension with Connect Adjustable wire hanger



Meeting between panels

For the eye,
the ear and
the mind





A SOUND EFFECT ON PEOPLE

Ecophon dates back to 1958, when the first sound absorbers from glass wool were produced in Sweden to improve the acoustic working environment. Today the company is a global supplier of acoustic systems that contribute to good room acoustics and a healthy indoor environment with the focus on offices, education, health care and industrial manufacturing premises. Ecophon is part of the Saint-Gobain Group and has sales units and distributors in many countries.

Ecophon efforts are guided by a vision of earning global leadership in room acoustic comfort through sound-absorbing systems, enhancing end-user performance and wellbeing. Ecophon maintains an ongoing dialogue with government agencies, working environment organisations and research institutes, and is involved in formulating national standards in the field of room acoustics where Ecophon contributes to a better working environment wherever people work and communicate.

www.ecophon.com