Ecophon Wall Panels™

Exploring the art of wall acoustics









Ecophon Wall Panels™

- acoustic treatment for the eye and the ear

A good acoustic environment provides the best possible conditions for work, recreation, learning and healing. With our Wall Panel System, we offer a solution to add an effective acoustic treatment to walls.

As the first choice in creating a good acoustic environment, we always recommend a wall-to-wall ceiling; however we also recognize this is not always possible, or sufficient to create the sound environment required. To complement our ceiling systems, we offer acoustic wall panels that reduce noise, increase speech clarity, and minimize sound propagation.

Aesthetics play an important role

It is not just noise and environment that affect our well-being. Aesthetics and design also play an important role. To bring excitement and ambience to a room, our wide selection of colors and patterns on our wall panels are not only functional, they are beautiful as well.

A sound environment indoors and outdoors

Ecophon Wall Panels meet the requirements of several eco-labels and marks of quality. Some of them are shown below.





A good sound environment

with Ecophon Wall Panels

A wall-to-wall ceiling is by far the most effective acoustic treatment for a room. In many cases this is also an adequate solution to create good room acoustics; but there are situations where this is not sufficient or possible. The reasons for this can be anything from technical to aesthetic. One way to improve the acoustic environment in such cases is to install acoustic wall panels.

Ecophon Wall Panels provide Class A sound absorption in flexible formats and colors. The range gives you the possibility to design the sound environment according to your taste and preference.

Four rooms - four solutions

Depending on the particular activity in a room we recommend varying amounts of sound absorption.

In a classroom setting learning is based on both independent and group work. Acoustically this poses a challenge to the room's design. By fitting wall panels to two adjacent walls, speech remains only in the vicinity of the people for whom it is intended, and can be heard more clearly.

In gymnasiums/recreational halls there is often a high sound level, therefore it is recommended that wall panels are placed on as much available surface area as possible, to reduce sound levels.

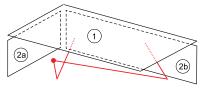
In open-plan offices the acoustic challenge is often related to distant voices and conversations. By installing wall panels alongside desk areas one can shorten the distance that noise travels.

In hospitals sound affects the quality of the healing process. Therefore it is important to minimize the sound of various activities. By installing wall panels one can improve both speech clarity and confidentiality between doctor and patient.

Rule of thumb – placement and quantity of wall panels

- A distance of about 3 feet is recommended between the wall panel and a person's head.
- Place wall panels at the height of the ear and mouth of people within a space.
- For educational rooms the most effective wall panel coverage is in the range of 10-25% of the floor area.
- To increase speech clarity and reduce reverberation time in smaller rooms (such as dining rooms or meeting rooms), wall panel coverage should make up 8-13% of the floor area (plus a ceiling).

By fitting wall panels to two adjacent walls, speech clarity is enhanced for those close by.



1) Ceiling 2a) Short wall 2b) Long wall



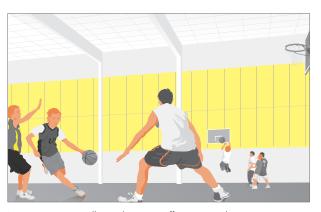
In traditional office environments wall panels can remove unwanted echo and allow speech to be heard more clearly.



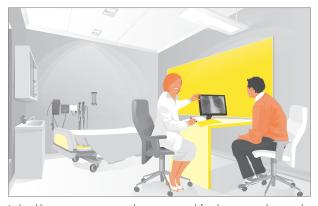
In open-plan offices, wall panels installed along work stations at a height of a sitting person, will contribute to preventing sound from propagating over long distances, and help to create a calm environment. Conversations and other sounds stay close to their sources rather than spreading around the room.



Higher acoustic demands are needed when more noise is generated. In group-oriented settings an ideal amount of wall panels is in the range of 10 to 25% of the floor area depending on whether the acoustic demands require one or two walls to be treated with wall panels.



In gymnasiums, wall panels are an efficient complement to a suspended, absorbent ceiling. Wall panels should preferably be located as close to sound sources as possible, however these should be installed 3' above the floor to avoid potential impact damage. Ecophon recommends Super G for this type of environment.





In healthcare environments, there is a need for the area to be a calm and stress free atmosphere contributing to patient recovery and optimizing staff performance. Acoustic conditions are an essential factor. Installing wall panels in corridors, reception areas and in patient areas can prevent sound from spreading and increase patient confidentiality.





Color and texture

according to your wishes and needs

Depending on your wall panel needs, we offer different solutions. Do you need a durable solution for acoustic walls, are your requirements more decorative, or both? Ecophon offers two different surface materials, with many visual options.

Super G

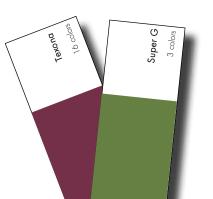
Super G has an impact resistant surface that is suitable in environments where the panels need to be more robust. For example: If installing wall panels in a gymnasium, Super G is the natural choice. Super G is available in three colors.

Texona

Do you want to create expressive wall solutions with fashionable colors? Then Texona should be the preferred choice. Texona has a smooth textured surface and is available in 16 colors with the practicality of a tackable surface.



Combine different colors of Texona to enhance the room.



Give life to the walls

with patterns and colors

Texona

Texona is available in 16 colors, from neutral shades to bold colors. Contact your local sales representative for color samples.



Super G

Super G is available in three colors chosen to work well in impact areas. Contact your local sales representative for color samples.







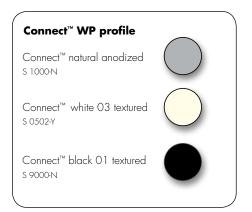
A wide profile assortment

provides many possibilities

Ecophon Wall Panels can be installed in many ways. They can be divided into smaller fields to create different patterns, they may be mounted from ceiling to floor to create a uniform wall, both vertically and horizontally, or you can choose to use them as single point installation.

A well defined frame

Ecophon Wall Panels offer several options for mounting, thanks to the WP Profile Connect System, a robust profile solution that creates a clear frame around the wall panel. The perimeter system includes both inside and outside modular corners which can be combined with a matte painted profile available in white, black and natural aluminum. This system offers the freedom to create interesting geometric designs with superior acoustic performance.





Work with color fields and patterns in a solution influenced by traditional Japanese architecture.



Connect WP profile allows you to create space, for example, for a flatscreen or a whiteboard in your wall panel installation.







Ecophon Wall Panels™

Use Ecophon Wall Panels as wall absorbers with, or instead of, a sound absorbing ceiling, to achieve excellent acoustic performance in the room. Ecophon Wall Panels have a concealed grid and beveled edges that create a narrow groove between each panel. The system provides extensive design possibilities.

The system consists of Ecophon Wall Panels and Ecophon Connect WP Profiles. The panels are manufactured from high density fiberglass. The visible surface offers a lightly textured glass fiber fabric (Texona in colors) or an impact resistant glass fiber fabric (Super G). The back of the panel is covered with glass tissue. The edges are painted, with the finished fabric partially wrapping around the long edges.

For best performance, system quality and extensive design possibilities, use Ecophon Connect WP Profiles and accessories. The profiles are manufactured from extruded aluminum.



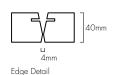
Wall Panel



Section of Wall Panel System



Wall Panel system with Connect WP



profile and external corner

SYSTEM RANGE

Size, mm	2700 x 600
WP Profile	•
Thickness	40

TECHNICAL PROPERTIES

Sound Absorption: Test results available according to EN ISO 354 and ASTM C423. Classification according to EN ISO 11654.

Product	Super G	Texona
o.d.s mm	40	40
absorption class	A	Α
NIDC	0.05	0.05

Sound Insulation: Not applicable

Sound Privacy: AC=240 according to E1110

ACCESSIBILITY The panels are not demountable except in select installation diagrams. See quantity specification for more information.

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

VISUAL APPEARANCE For light reflectance and nearest NCS color sample for all color options: See Ecophon submittal sheet.

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

INDOOR CLIMATE Certified by the Indoor Climate Labelling, emission class M1 for building materials and recommended by the Swedish Asthma and Allergy Association.

ENVIRONMENTAL INFLUENCE Glass wool core utilizing 3RD Technology. Granted the Nordic Swan eco-label. Fully recyclable.

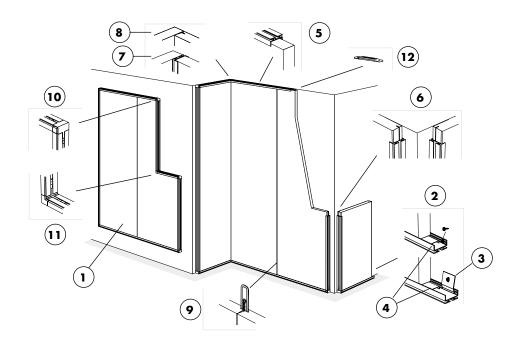
FIRE PERFORMANCE Panels have been tested according to ASTM E84 and ASTM E1264.

Reaction-to-fire classification

Standard	Class
ASTM E84	Flame spread ≤ 25
ASTM E1264	Smoke Development < 50

MECHANICAL PROPERTIES The Texona surface has moderate impact resistance. The Super G surface has high impact resistance. Please note: Where the panels are subjected to frequent blows and impacts, protection is required. No additional live load is allowed.

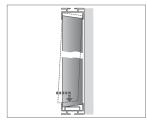
INSTALLATION Install according to installation diagrams, installation guides and drawing aids. For information regarding minimum overall depth of system see quantity specification. The systems should not be placed behind goals or similar areas where they are likely to be hit regularly. In such cases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



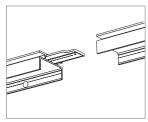
QUANTITY SPECIFICATIONS (EXCL. WASTAGE)

		Size, mm
		2700×600
1	Wall Panel C	0.62/m²
2	Connect WP Profile, L=2687 mm, fixed (alt. with Connect Fixing bracket), at 400 mm centers, with Connect WP Space bar, L=2400 mm	as required
3	Alt. Connect Fixing bracket, fixed at 400 mm centers	as required
4	Connect WP Space bar, L=2400 mm	as required
5	Connect WP Profile, L=2687 mm, fixed at 400 mm centers	as required
6	External wall corner: Connect WP Profile, L=2687 mm, fixed at 400 mm centers	as required
7	Internal wall corner: Cut panel and Connect WP Profile, L=2687 mm alt. full size panel without profile	as required
8	Alt. Full size panel without profile	as required
9	Joint between panels (Connect Spline can be used to secure the panels)	as required
10	Connect WP External corner mounted in Connect WP Profile	as required
11	Connect WP Internal corner mounted in Connect WP Profile	as required
12	Connect WP Profile splice, used to extend WP profiles where needed	as required

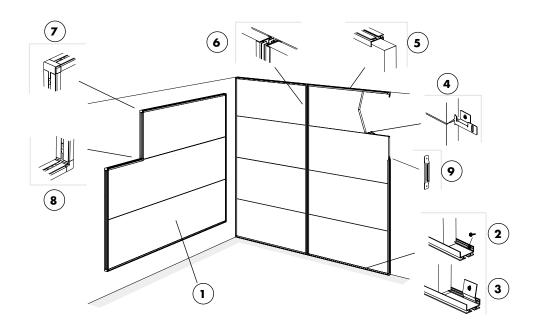
 Δ Min. overall depth of system: 44 mm







Detail of WP Profile splice



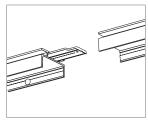
QUANTITY SPECIFICATIONS (EXCL. WASTAGE)

		Size, mm
		2700×600
1	Wall Panel C	0.62/m²
2	Connect WP Profile, L=2687 mm, fixed (alt. with Connect Fixing bracket) at 400 mm centers	as required
3	Alt. Connect Fixing bracket, fixed at 400 mm centers	as required
4	Horizontal joint between panels: Connect Fixing plate is mounted at 500 mm centers	as required
5	Connect WP Profile, L=2687 mm, fixed at 400 mm centers	as required
5	Vertical joint between panels: Connect WP Profile, L=2687 mm, fixed at 400 mm centers	as required
7	Connect WP External corner mounted in Connect WP Profile	as required
8	Connect WP Internal corner mounted in Connect WP Profile	as required
7	Connect WP Profile splice, used to extend WP profiles where needed	as required

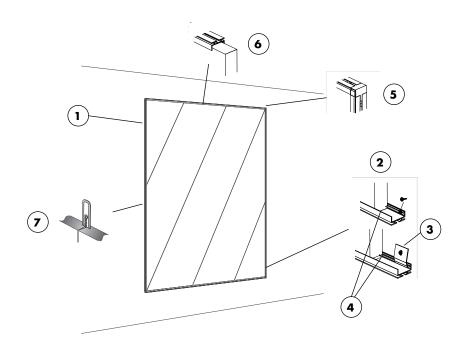
 Δ Min. overall depth of system: 44 mm



Detail of installation



Detail of WP Profile splice



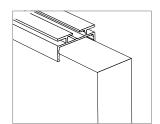
QUANTITY SPECIFICATIONS (EXCL. WASTAGE)

		Size, mm
		2700×600
1	Wall Panel C	$0.62/m^2$
2	Connect WP Profile, L=2687 mm, fixed (alt. with Connect Fixing bracket), at 400 mm centers, with Connect WP Space bar, L=2400 mm	as required
3	Alt. 1: Connect Fixing bracket, fixed at 400 mm centers	as required
4	Connect WP Space bar, L=2400 mm	as required
5	Connect WP External corner mounted in Connect WP Profile	as required
5	Connect WP Profile, L=2687 mm, fixed at 400 mm centers	as required
7	Joint between panels (Connect Spline can be used to secure the panels)	as required

 Δ Min. overall depth of system: 44 mm



Detail of installation



Detail of upper connection



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's efforts are guided by a vision of earning global leadership in acoustic ceiling and wall absorber systems by providing superior end user value. Ecophon maintains an ongoing dialogue with government agencies, working environment organizations 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.co.ul

ASK ABOUT ALL OF OUR OTHER CERTAINTEED® PRODUCTS AND SYSTEMS:

ROOFING • SIDING • TRIM • DECKING • RAILING • FENCE • FOUNDATIONS GYPSUM • CEILINGS • INSULATION • PIPE

www.certainteed.com htt

http://blog.certainteed.com

CertainTeed Corporation P.O. Box 860 Valley Forge, PA 19482

Professional: 800-233-8990 Consumer: 800-782-8777

© 12/12 CertainTeed Corporation, Printed in the U.S.A.
Code No. CTC-02-102

