

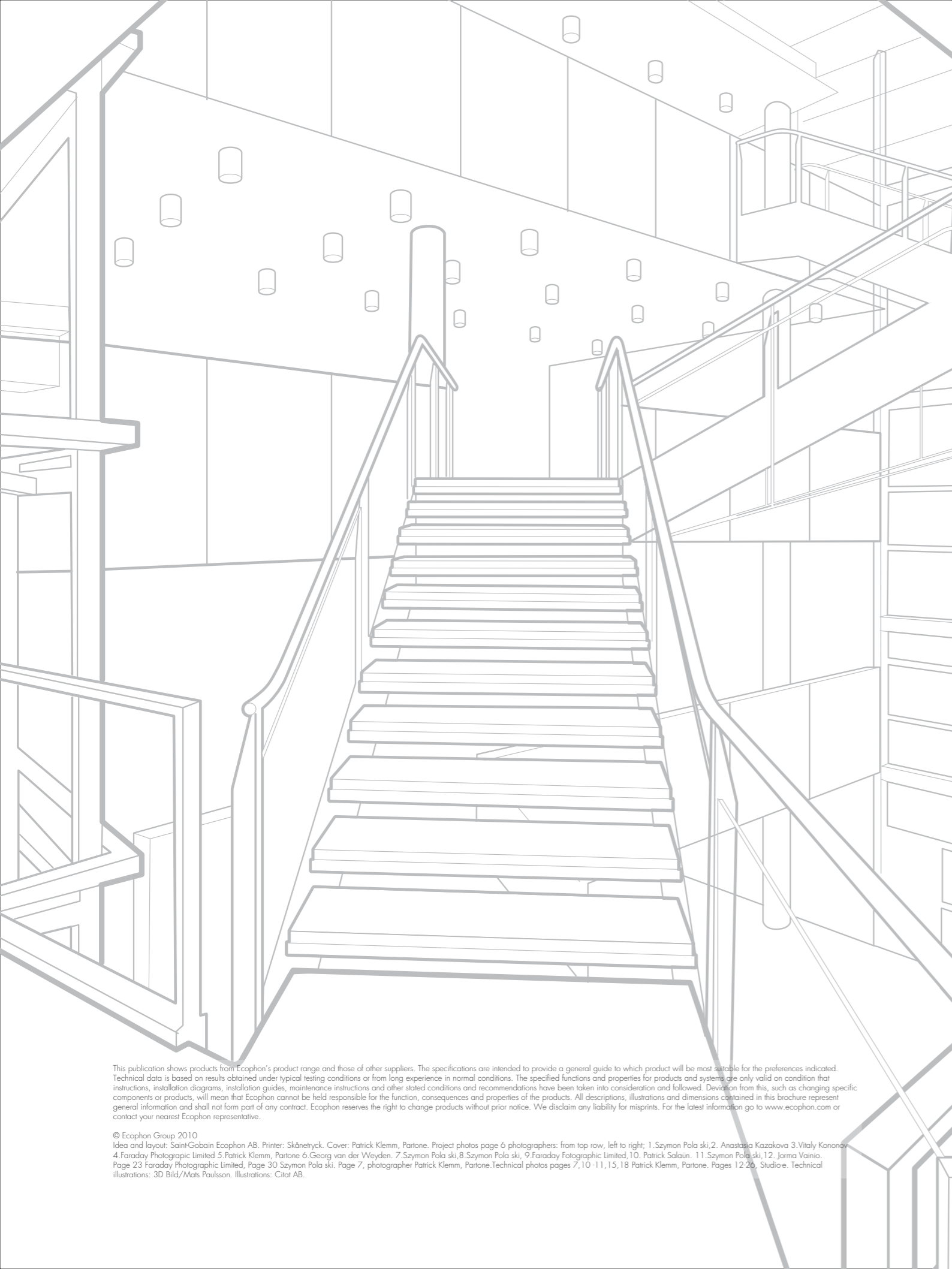
Ecophon's level changes

allow creative solutions for acoustic ceilings



Ecophon[®]

A SOUND EFFECT ON PEOPLE



Buildings feature many changes in levels

There are level changes everywhere you look in buildings nowadays. They arise for many different reasons. It may be a purely practical means of hiding cables, or a desire to preserve the architectural proportions of a room.

To fulfil such desires and needs Ecophon offers a series of ceiling systems in which the vertical surfaces also contribute to a better acoustic environment. Level changes may be sharp or they may be curved to create a smooth transition between ceiling and vertical surface.

Varying the ceiling height in a room is an effective way of changing the whole feel of a room. Higher ceilings create an impression of openness and space, while lower ceilings can create a sense of intimacy.

Ecophon's range of level changes makes it possible to achieve such transitions using the same material, which is often difficult to do today.

Taking ease of installation to a new level

Over a period of many years Ecophon has been developing solutions for level changes in standardised

combinations with a variety of ceiling systems. These systems permit greater freedom of expression in the design of ceilings. The latest in a string of innovations is the patent pending Ecophon Focus™ Fixiform. This system takes ease of installation to a new level and makes it possible to create sharp level changes quickly and simply – from construction drawing to reality!

Acoustic room design – for people

Thanks to its good acoustic properties, Ecophon Focus™ Fixiform makes it possible to create sharp level changes while also improving the acoustic environment in line with Ecophon's Room Acoustic Comfort™ concept.

Level changes are often used in ceilings to meet practical or aesthetic needs. By using one of Ecophon's level change solutions you increase the area of sound absorbing material in the ceiling. This also has the added advantage of eliminating undesirable sound that would otherwise be reflected from the surfaces in the room. As a result, people who spend time in the building will find that speech perception is improved and the background noise level is lower.



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 product will be most suitable for the preferences indicated. Technical data is based on results obtained under typical testing conditions or from 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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Idea and layout: Saint-Gobain Ecophon AB. Printer: Skånetryck. Cover: Patrick Klemm, Partone. Project photos page 6 photographers: from top row, left to right; 1. Szymon Pola ski, 2. Anastasia Kazakova 3. Vitaly Kononov 4. Faraday Photographic Limited 5. Patrick Klemm, Partone 6. Georg van der Weyden. 7. Szymon Pola ski, 8. Szymon Pola ski, 9. Faraday Photographic Limited, 10. Patrick Saluin. 11. Szymon Pola ski, 12. Jorma Vainio. Page 23 Faraday Photographic Limited, Page 30 Szymon Pola ski. Page 7, photographer Patrick Klemm, Partone. Technical photos pages 7, 10-11, 15, 18 Patrick Klemm, Partone. Pages 12-26, Studioe. Technical illustrations: 3D Bild/Mats Paulsson. Illustrations: Citat AB.

Photographer: Michel Kievits

The sketch below shows Ecophon Focus™ Fixiform XL.



Architectural identity

preserved with level changes

Preserving the character of a building without compromising on the acoustic environment can be a difficult balancing act. As is often the case when attempting to combine practicality and aesthetics, one aspect often loses out. However, with the right system it is possible to achieve both.

Ecophon's range of level changes provide a variety of solutions to the problems that can arise in a building where the ceiling space has to accommodate a wide variety of piping and wiring

Create space

In stairways, foyers and entrances it is usually desirable to convey an open, airy and welcoming impression. Vertical ceiling surfaces ensure that the feeling of openness and space is preserved.

Lighting

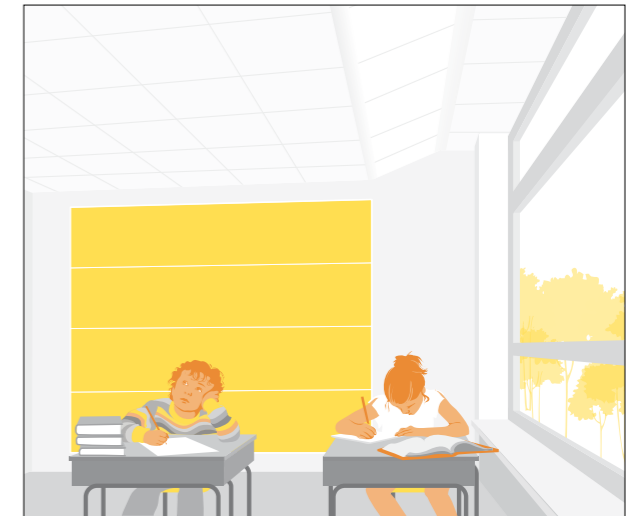
The use of level changes that are also illuminated can create a ceiling with strong visual impact. Transitions in the ceiling level can also conceal light fittings and create an illusion of light radiating from the ceiling.



Sketch showing Ecophon illuminated level changes.

Preserve the original window height

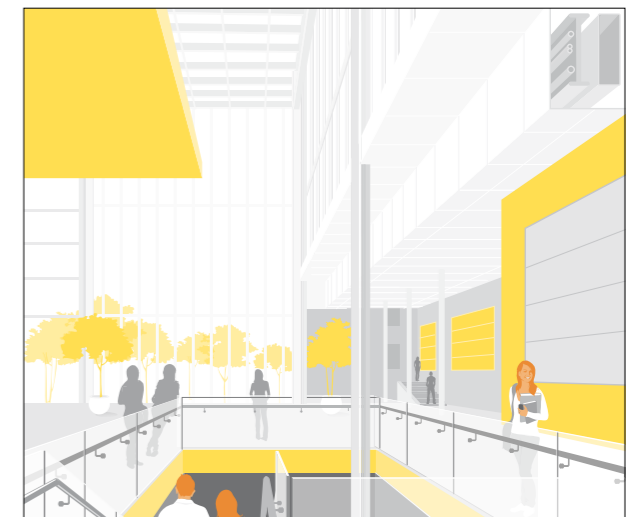
When older buildings are renovated it is often necessary to lower the ceilings to make space for ventilation and other utilities. By using one of Ecophon's vertical solutions it is possible to preserve the original tall windows and admit plenty of light into the building, thus reducing energy consumption.



Sketch showing Ecophon Connect™ Etage 45.

Hide installations

In modern buildings the ceiling space is used to conceal various types of utility supplies, often in runs that reduce the ceiling height of the room. With the aid of one of our level change solutions the height reduction can be minimised in large areas of the room and the sense of space can be preserved.



Sketch showing Ecophon Focus™ Fixiform.

Ecophon Focus™ Fixiform

for sharp level changes

For a long time the only way to create sharp level changes was to use materials such as sheet metal and plasterboard. Solutions of this type were not easy to install.

But now Ecophon Focus™ Fixiform makes it possible to create 90° level transitions in ceilings using the same attractive material!

Focus Fixiform is yet another innovation from Ecophon. This quick and easy system is supplied in a flat package and can then be folded on site to create a neat vertical transition.

Focus Fixiform at different levels

Focus Fixiform is available in two versions to suit different level changes in the ceiling surface. The standard size can accommodate level changes of up to 530 mm, while the XL variant can be used to create level changes of up to 1930 mm. The height of the level change can be adjusted on site by cutting the tile.

Because Focus Fixiform is manufactured from the same material as the rest of the acoustic ceiling it results in a very clean and harmonious appearance. Sound absorbers are supplied with the Akutex™ FT surface, which distributes the light in a gentle way.

Focus Fixiform is primarily intended for use in combination with Ecophon Focus™ Ds. This enables vertical surfaces to be created without the use of visible profiles, screws or rivets, thus contributing to the sleek finish of the system. Focus Fixiform is also available with edge E, which means it can also be combined with Ecophon Focus™ E.

Aesthetic and efficient

Focus Fixiform is available in 600 module, like the rest of the ceiling. The Focus Fixiform system also includes internal and external corners for vertical surfaces up to 530 mm. These can be used to create square or rectangular areas in the ceiling.

Because level changes made with Focus Fixiform are integrated with the rest of the ceiling system, the entire installation can be carried out by the same contractor. This ensures simple and very efficient installation. Installations in the ceiling void are accessible via the flat ceiling.

Because joints between the horizontal Focus ceiling and Focus Fixiform are standardised, you get a reliable solution with a high standard of aesthetic finish.



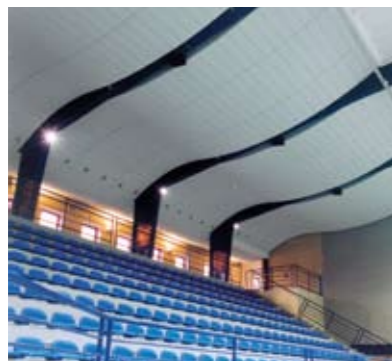
Before: When renovating premises and making improvements to the acoustic environment at the same time, considerations often have to be made for ventilation and other utilities. This means that some form of level change is required.



After: Svenska Finans AB solved the problem by using Ecophon Focus™ Fixiform thus achieving a solution that has the same material and absorption class on vertical surfaces.



Akutex™ label guarantees that the product you have chosen has a superior surface. Ecophon sound absorbers meet the requirements of several ecolabels and marks of quality.



Classics with unique and clear advantages

In addition to Focus™ Fixiform we have a variety of different solutions for level changes. These range from moulded products to simple profiles. The one thing they all have in common is that they provide a reliable and repeatable solution for creating vertical transitions.

Ecophon Focus™ Flexiform

If you want to create smooth, rounded level changes, Focus Flexiform is the ideal choice. It offers great flexibility and makes it possible to create a very varied ceiling that contributes to good room acoustics.

Focus Flexiform is flexible enough to bend into convex or concave shapes with a radius of 200 millimetres to 10 metres by shaping the special Connect Flexiform profiles, which the Flexiform tile follows.

It is also possible to order factory-shaped profiles or bend profiles on site. Flexible profiles are also available for creating internal and external corners.

Focus Flexiform sound absorbers are held in place on the profiles using standard Ecophon Connect™ Flexiform clips. This means that the product cannot be easily demounted. Focus Flexiform is a product made from glass wool, with the Akutex™ FT surface in the colour White Frost. Flexiform A edges are uncoated. The product is supplied flat and is ideally used in combination with Ecophon Focus™ A or Ecophon Master™ A.

Ecophon Focus™ Quadro

By using Focus Quadro it is easy to create rounded level transitions with level changes of 300 mm or 450 mm, either concave or convex.

Focus Quadro is a stiff, moulded product made from glass wool. It is well suited to applications where there is a need to create lowered or raised areas in the ceiling.

The system includes both concave and convex internal and external corners. The profiles in the system are supplied ready-shaped from the factory and can be fitted with connectors that allow them to be joined to the rest of the Connect grid. This creates a robust system that preserves the aesthetic appeal of the ceiling. Focus Quadro is also sound-absorbing and helps to create a healthy acoustic environment.

Ecophon level changes with lighting

This is a system that combines level changes with general lighting. It is ideal for use in corridors or aisles in offices or shopping centres.

The extruded aluminium profile conceals light fittings that provide gentle indirect lighting when reflected from the exceptionally matt Akutex™ FT surface. The profile is finished in white with a matt texture that matches that of the acoustic ceiling. Together with the arc-shaped ceiling elements it creates a flowing, harmonious whole that makes a space feel very welcoming. The system can be combined with Ecophon Focus™ Ds, Ecophon Focus™ Dg or Ecophon Focus™ E.

Ecophon Connect™ Etage 45

The junction between the flat ceiling surfaces and vertical level changes can often be difficult from an aesthetic viewpoint. Connect Etage 45 is a profile that creates a smooth, elegant transition that solves this problem. The profile is easily combined with the rest of the Connect grid.

Connect Etage 45 creates a 45° level transition and has a matt textured finish that matches the Akutex™ FT surface.

Ecophon Connect™ F-trim

Connect F-trim is a series of profiles that are designed to provide a convenient solution at the junction between a horizontal ceiling and vertical surface. These profiles are tailored for different types of level changes depending on the thickness of the sound absorber. Connect F-trim can be combined with the rest of the Connect grid in a well-documented way.



Ecophon Focus Flexiform
Photographer: Faraday Fotografic Limited



Ecophon Focus Quadro
Photographer: Faraday Fotografic Limited



Ecophon illuminated level changes
Photographer: Szymon Pola ski



Connect Etage 45



Connect F-trim
Photographer: Ole Jais

Simple installation

where one contractor does the whole job



Reinforcing the fold
A concealed aluminium rod reinforces the fold. This provides a solution with good resistance to impact and knocks.



Accurate angles
The Connect Hook ensures an accurate 90° angle.



Reinforcing plug
A plastic reinforcing plug is installed at the joint to give the vertical surface a clean appearance.



A neat finish
To ensure a neat finished result the plug is carefully aligned with the edge of the sound absorber.

Ecophon Focus™ Fixiform is an efficient product for use when creating sharp vertical transitions in ceilings. It is a solution that enables the ceiling contractor to carry out every stage of installation and provides a finished result that perfectly matches the rest of the ceiling.

Focus Fixiform has several benefits, making it a great solution to work with. We've listed some of these benefits below.

Easy to transport

Focus Fixiform is supplied in a flat package and can then be folded on site to create a neat vertical transition. This minimises freight costs and the risk of damage during transport, as well as simplifying handling on the building site.

Easy to plan

Because the ceiling and level changes are installed as part of the same system by the same contractor it simplifies planning on the building site. Everything can be installed at a late stage in the building process, which makes it easier for other trades to complete their installation work.

Easy to install

Focus Fixiform is supplied with a range of fitting accessories as standard, which makes it easy to install. The low weight also simplifies the installation process.

Neat end result

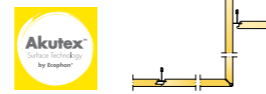
The finished appearance of the ceiling is also excellent, since Focus Fixiform has the same coating as other Focus products. Profiles and other fitting components that make up the Connect™ grid system ensure durable and attractive results.



Choose level changes to suit your needs and aesthetic preferences

System		Width	Height	Radius	Absorp. class	Edge	Thickness	Installation diagram	System pages
Focus Fixiform		c 600 mm	530-1930 mm	90°	A	Ds, E	20 mm	M274 M275 M276 M277	12-18
Focus Flexiform		c 600 mm		min:200 mm max: 10 m	A	A	30 mm	M31	20-21
Illuminated level change		Depending on panel	150 mm		B	E/B	20 mm	M148	22-23
Focus Quadro		c 1200	300 or 450 mm	r=300 r=450	B	E	20 mm	M27 M28 M41 M42	24-29
Profiles									
Connect Etage		Depending on panel	Depending on panel	45°	Depending on panel				30
Connect F-trim		Depending on panel	Depending on panel	90°	Depending on panel		15 mm panel		31

ECOPHON FOCUS™ FIXIFORM Ds



Ecophon Focus Fixiform Ds is used to create distinct transitions between different levels of ceiling either to accommodate various service installations in the ceiling void or to add shape and structure to the room. There is an eight mm aluminium profile in the fold which reinforces the folded tile.

SYSTEM AND PRODUCT DESCRIPTION

The difference in level can be adjusted between 150 and 530 mm for the standard tile and up to 1930 mm using the XL system. The Fixiform tiles are not directly demountable. The system consists of Fixiform tiles and Connect accessories and the visible surface has an Akutex FT coating. The edges are painted with edge detail C where the Fixiform tiles meet. The system is patent pended. For best performance and system quality, use Ecophon Connect grid and accessories.

SYSTEM RANGE

Size, mm	Concave	Concave	Convex	Convex
	1200 x 300	1200 x 450	1200 x 300	1200 x 450
T24	•	•	•	•
Thickness	20	20	20	20
Inst. diag.	M27/M27ic/ M27ec	M27/M27ic/ M27ec	M28/M28ic/ M28ec	M28/M28ic/ M28ec

ACOUSTICS:
SOUND ABSORPTION: Test results according to EN ISO 354.
o.d.s = overall depth of system
 α_p Practical sound absorption coefficient

Frequency, Hz

— Ecophon Quadro 200 mm o.d.s.

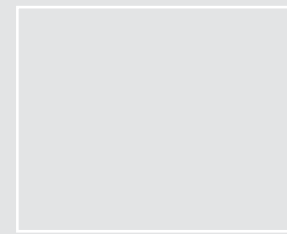
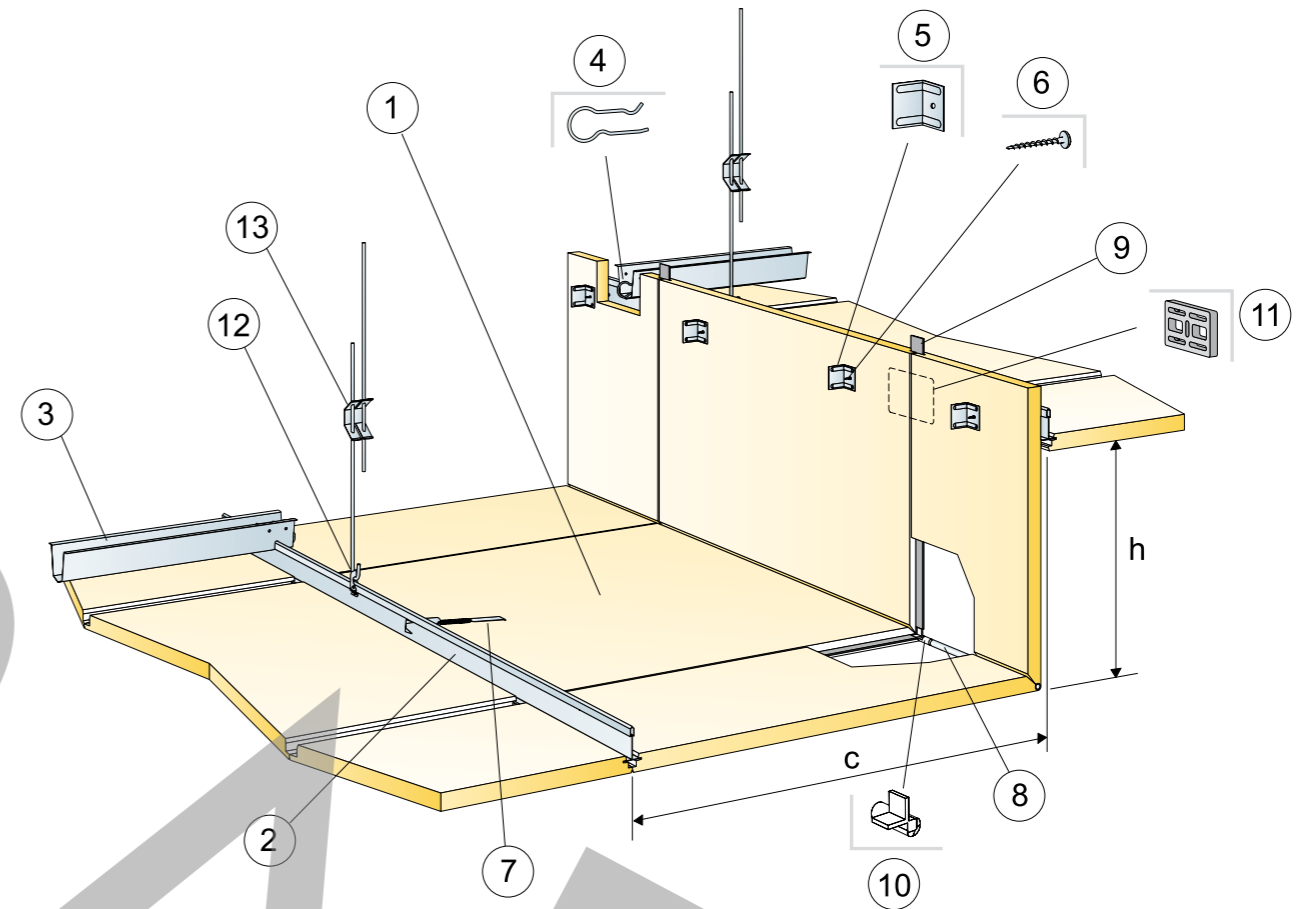
Classification according to EN ISO 11654.

Product	Focus Quadro E
O.d.s. mm	200
Absorption class	B
NRC	0,8
SAA	0,82

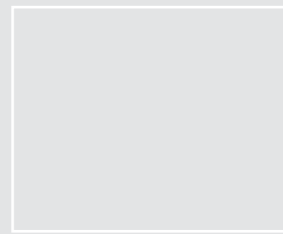
SOUND INSULATION: $D_{n,c,w} = 24$ dB according to ISO 140-9 and evaluation according to EN ISO 717-1. CAC="25" dB according to ASTM E 1414 and evaluation according to ASTM E 413.

SOUND PRIVACY: Not applicable.

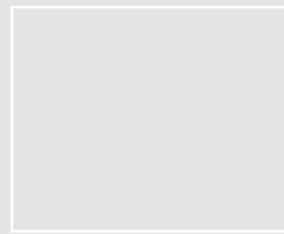
INSTALLATION DIAGRAM (M274) FOR FOCUS FIXIFORM Ds



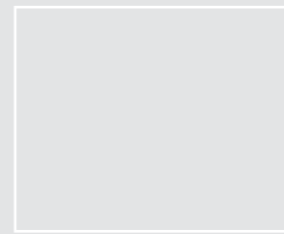
Focus Fixiform Ds Panel



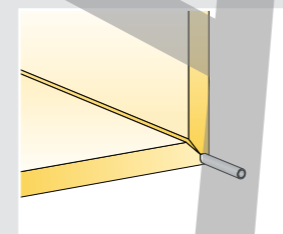
Section of Focus Ds system



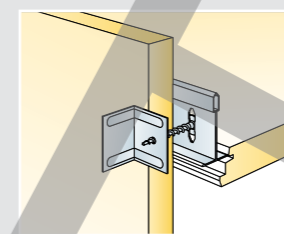
Focus Fixiform Ds system



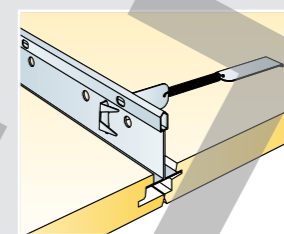
Detail of Focus Ds system fold



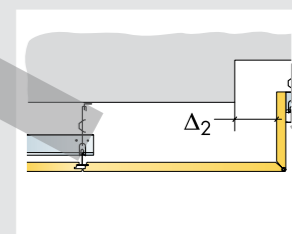
The fold is reinforced by an aluminium profile



Upper level connection with Main runner



Lower level connection to Main runner



Vertical measurements

ACCESSIBILITY:

CLEANABILITY:

LIGHT EFFICIENCY:

INFLUENCE OF CLIMATE:

INDOOR CLIMATE:

ENVIRONMENTAL INFLUENCE:

FIRE SAFETY: Reaction-to-fire classifications.

Country	Standard	Class
UK	BS 476 Parts 6&7	Class 0
Europe	EN 13501-1	B-s1,d0

MECHANICAL PROPERTIES:

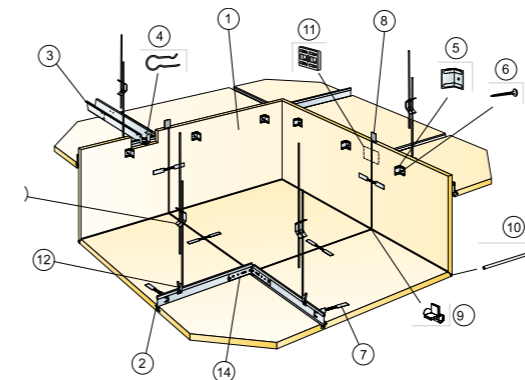
INSTALLATION:

CORNER ARRANGEMENTS:

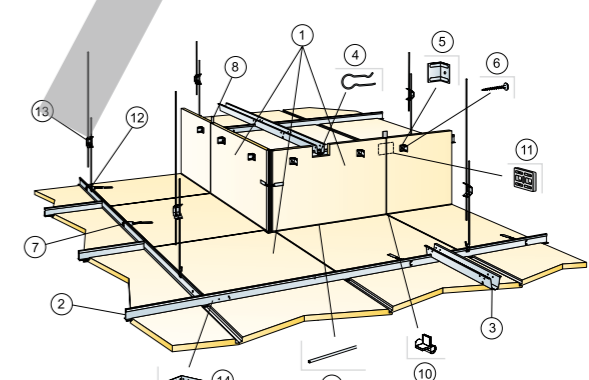
www.ecophon.co.uk, CADsupport, Product selector, Specification, Maintenance manual

www.ecophon.co.uk/ukce

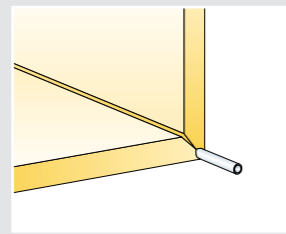
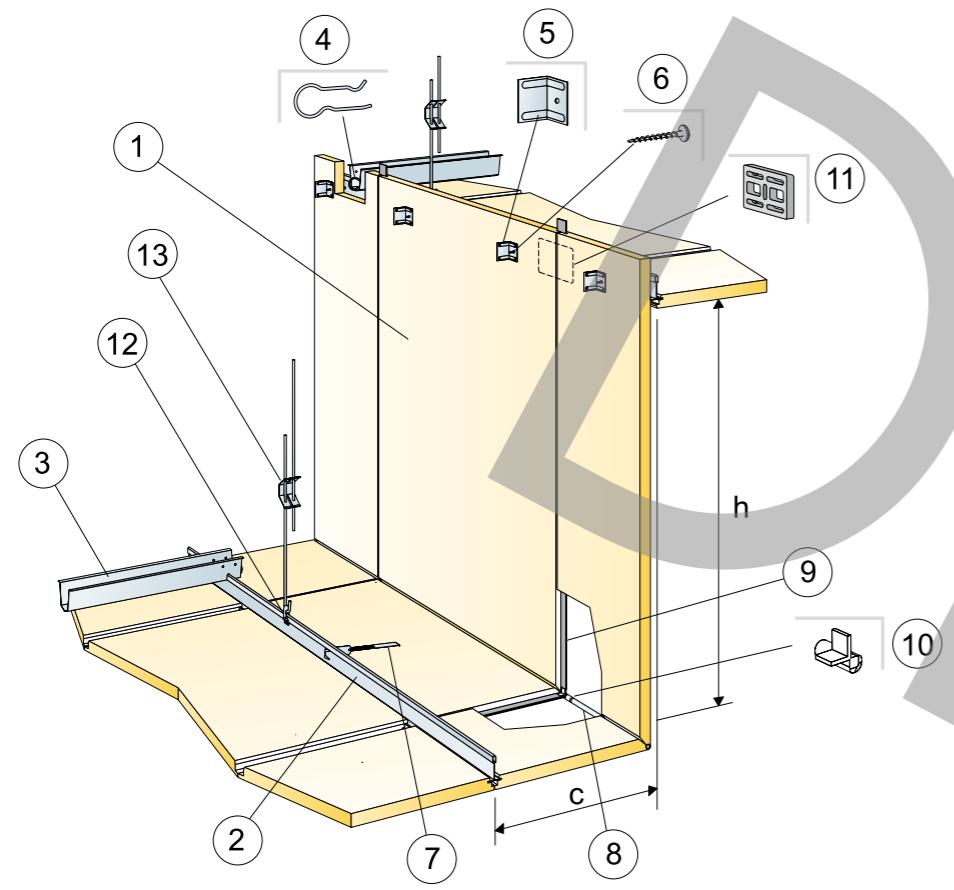
EXTERNAL CORNER (M274EC) FOR FOCUS FIXIFORM Ds



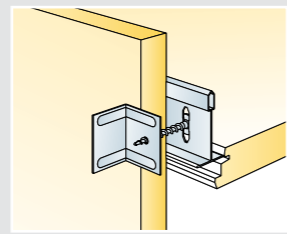
INTERNAL CORNER (M274IC) FOR FOCUS FIXIFORM Ds



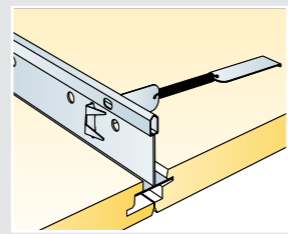
INSTALLATION DIAGRAM (M275) FOR FOCUS FIXIFORM Ds XL



The fold is reinforced by an aluminium profile



Upper level connection with Main runner

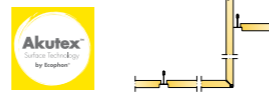


Lower level connection to Main runner

Focus Fixiform Ds XL system



ECOPHON FOCUS™ FIXIFORM E



Ecophon Focus Fixiform E is used to create distinct transitions between different levels of ceiling either to accommodate various service installations in the ceiling void or to add shape and structure to the room. The tiles are delivered flat and folded to 90 degrees on site before installation.

SYSTEM AND PRODUCT DESCRIPTION

There is an eight mm aluminium profile in the fold which reinforces the folded tile. The difference in level can be adjusted between 150 and 530 mm for the standard tile and up to 1930 mm using the XL system. The Fixiform tiles are not directly demountable. The system consists of Fixiform tiles and Connect accessories and the visible surface has an Akutex FT coating. The edges are painted with edge detail C where the Fixiform tiles meet. The system is patent pended. For best performance and system quality, use Ecophon Connect grid and accessories.

SYSTEM RANGE

Size, mm	Concave	Concave	Convex	Convex
	1200 x 300	1200 x 450	1200 x 300	1200 x 450
T24	•	•	•	•
Thickness	20	20	20	20
Inst. diag.	M27/M27ic/ M27ec	M27/M27ic/ M27ec	M28/M28ic/ M28ec	M28/M28ic/ M28ec

ACOUSTICS:
SOUND ABSORPTION: Test results according to EN ISO 354.
o.d.s = overall depth of system
 α_p Practical sound absorption coefficient

Frequency, Hz

— Ecophon Quadro 200 mm o.d.s.

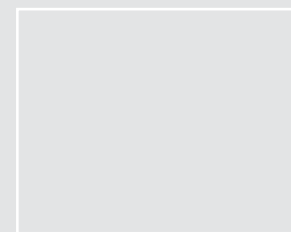
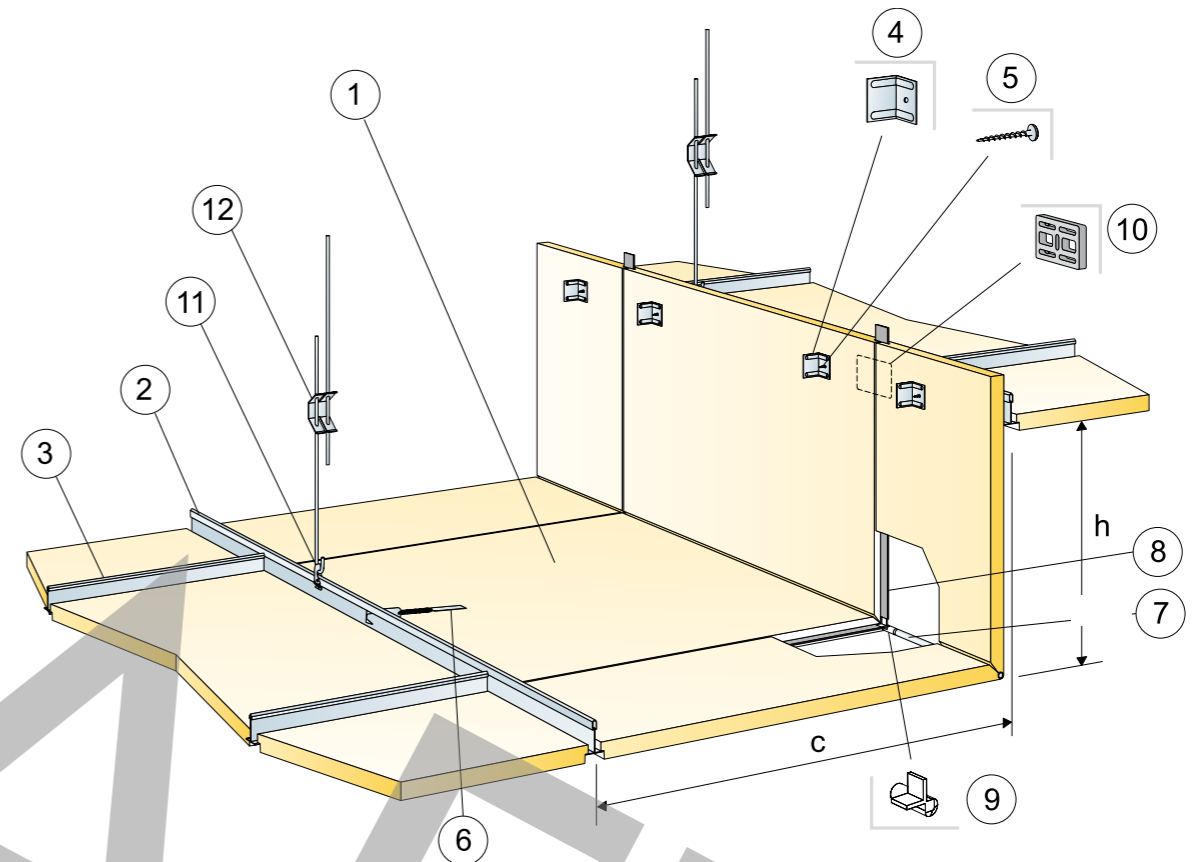
Classification according to EN ISO 11654.

Product	Focus Quadro E
O.d.s. mm	200
Absorption class	B
NRC	0,8
SAA	0,82

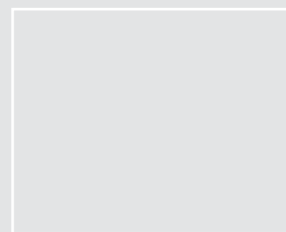
SOUND INSULATION: $D_{n,c,w} = 24$ dB according to ISO 140-9 and evaluation according to EN ISO 717-1. CAC = "25" dB according to ASTM E 1414 and evaluation according to ASTM E 413.

SOUND PRIVACY: Not applicable.

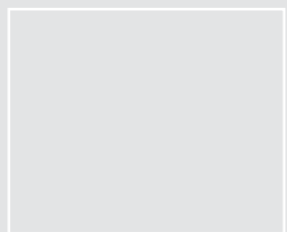
INSTALLATION DIAGRAM (M276) FOR FOCUS FIXIFORM E



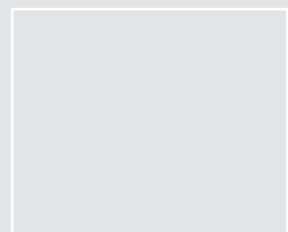
Focus Fixiform E panel



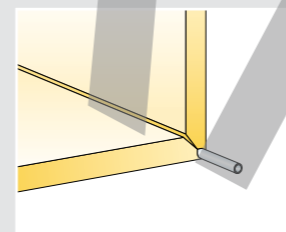
Section of Focus Fixiform E



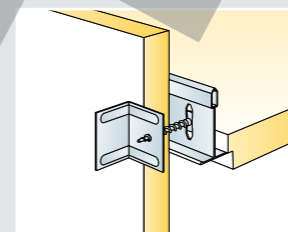
Focus Fixiform E system



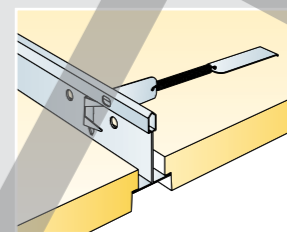
Detail of Focus Fixiform E system fold



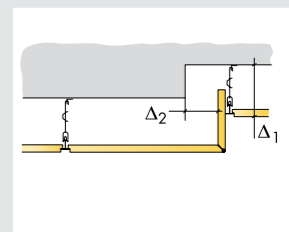
The fold is reinforced by an aluminium profile.



Upper level connection with Main runner.



Lower level connection with Main runner.



Vertical measurements

ACCESSIBILITY:

CLEANABILITY:

LIGHT EFFICIENCY:

INFLUENCE OF CLIMATE:

INDOOR CLIMATE:

ENVIRONMENTAL INFLUENCE:

FIRE SAFETY: Reaction-to-fire classifications.

Country	Standard	Class
UK	BS 476 Parts 6&7	Class 0
Europe	EN 13501-1	B-s1,d0

MECHANICAL PROPERTIES:

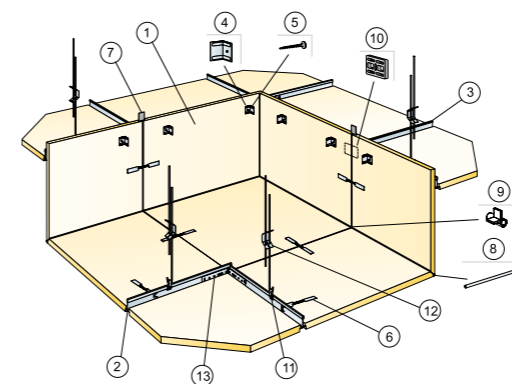
INSTALLATION:

CORNER ARRANGEMENTS:

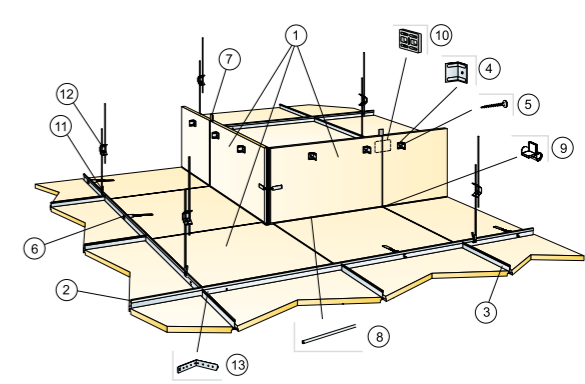
www.ecophon.co.uk, CADsupport, Product selector, Specification, Maintenance manual

www.ecophon.co.uk/ukce

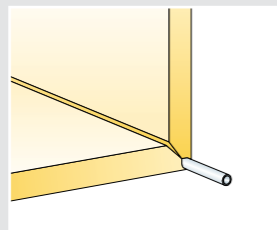
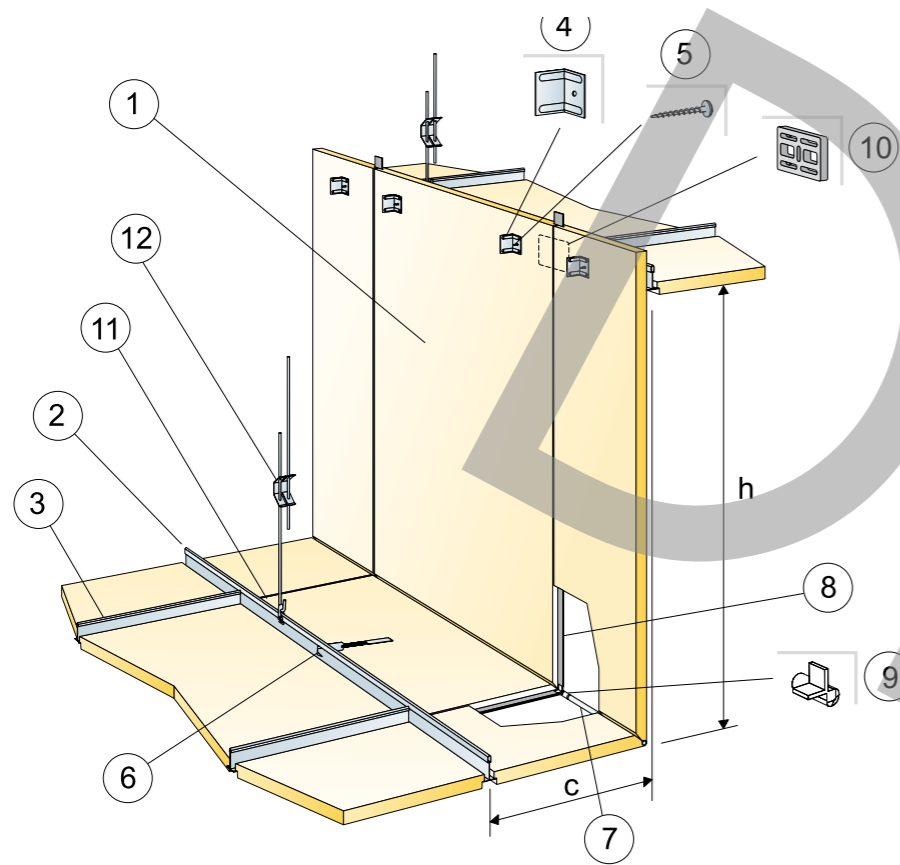
EXTERNAL CORNER (M276EC) FOR FOCUS FIXIFORM E



INTERNAL CORNER (M276IC) FOR FOCUS FIXIFORM E

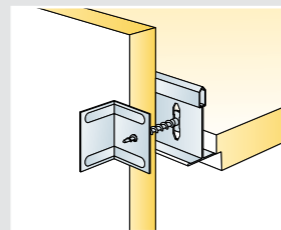


INSTALLATION DIAGRAM (M277) FOR FOCUS FIXIFORM E XL

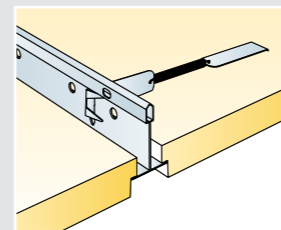


Focus Fixiform E XL system

The fold is reinforced by an aluminium profile.



Upper level connection with Main runner.



Lower level connection with Main runner.



ECOPHON FOCUS™ FLEXIFORM



INSTALLATION DIAGRAM (M31) FOR FLEXIFORM

The Ecophon Focus Flexiform panel is delivered flat and formed on site into concave or convex form (min. radius 200 mm and max. radius 10 m) by means of special profiles. It is ideal for creating surfaces with special curvatures, or if odated by using preformed ceiling elements. The panels are not demountable.

SYSTEM AND PRODUCT DESCRIPTION

The system consists of Ecophon Focus Flexiform panels and Ecophon Connect grid systems. The weight is approximately 3 kg/m², depending on the installation method.

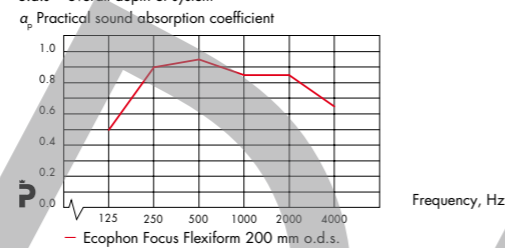
The panels have a special glass wool core which allow the product to be formed to the required shape. The visible surface has an Akutex T coating. The edges are natural.

The grid is manufactured from aluminium.

SYSTEM RANGE

Size, mm	1200 x 600	1600 x 600	2000 x 600	2400 x 600
T24	•	•	•	•
Thickness	30	30	30	30
Inst. diagr.	M31/M31ic/ M31ec	M31/M31ic/ M31ec	M31/M31ic/ M31ec	M31/M31ic/ M31ec

ACOUSTICS:
SOUND ABSORPTION: Test results according to EN ISO 354.
o.d.s = overall depth of system



Classification according to EN ISO 11654 and the single value ratings for NRC and SAA according to ASTM C 423.

Product	Focus Flexiform
O.d.s. mm	200 400
Absorption class	A
NRC	0,9
SAA	0,91

SOUND INSULATION: Not applicable.

SOUND PRIVACY: Not applicable.



Focus Flexiform panel



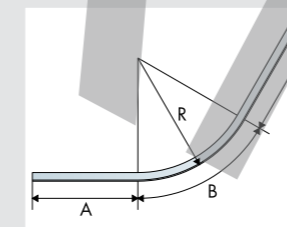
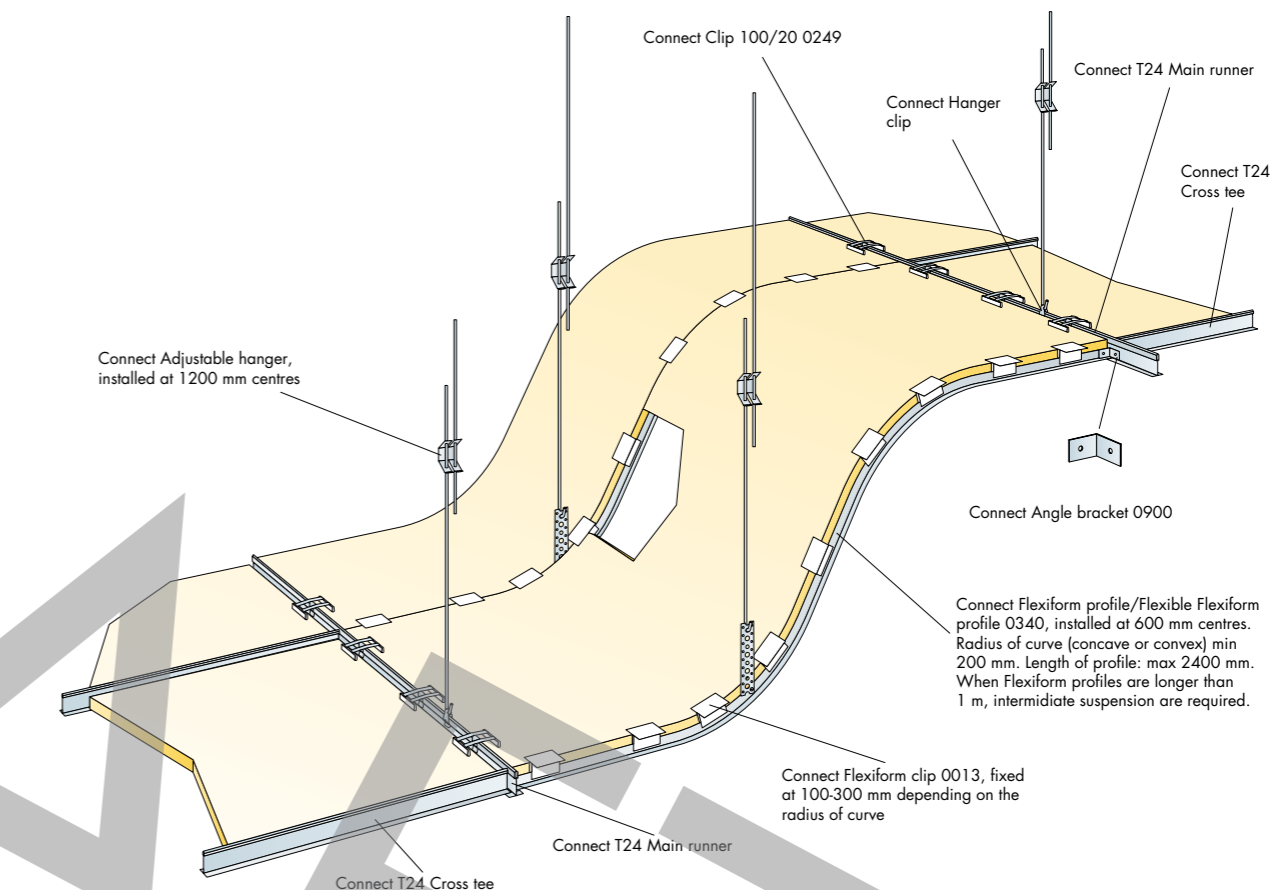
Section of Focus Flexiform system with Connect T24



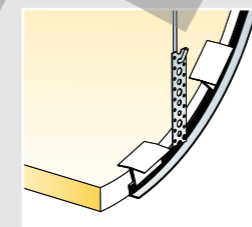
Focus Flexiform system



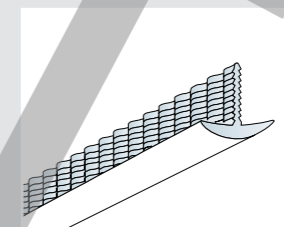
Detail of Focus Flexiform



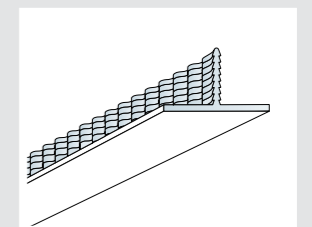
Example with dimensions of Flexiform profile



Suspension with metal strip



Profile for external corner



Profile for internal corner

ACCESSIBILITY: The panels are not demountable.

CLEANABILITY: Daily dusting and vacuum cleaning. Weekly wet cleaning.

LIGHT EFFICIENCY: White 010, nearest NCS colour sample S 0502-Y, 84% light reflectance (of which more than 99% is diffuse reflection).

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

ENVIRONMENTAL INFLUENCE: Fully recyclable.

FIRE SAFETY: Reaction-to-fire classifications.

Country	Standard	Class
UK	BS 476 Parts 6&7	Class 0
Europe	EN 13501-1	B-s1,d0

The glass wool core of the panels is tested and classified as non-combustible according to prEN ISO 1182. See Functional demands, Fire safety.

MECHANICAL PROPERTIES: Additional live load has to be secured to the soffit.

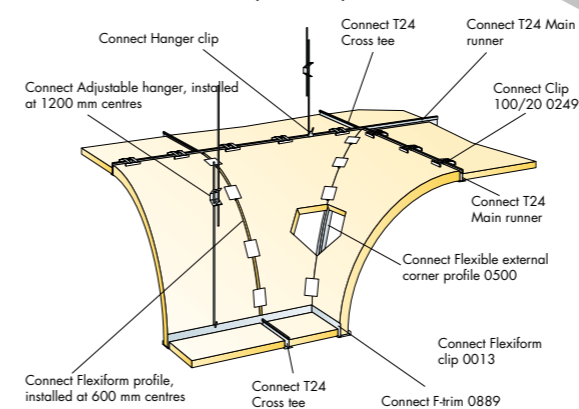
INSTALLATION: Installed according to installation diagram M31. (Please note: Extreme incident light, near windows or other light sources, can create undesired shadow effects on the structured surface on curved installations.)

CORNER ARRANGEMENTS: Internal and external corners are cut on site during installation. Special corner profiles are available.

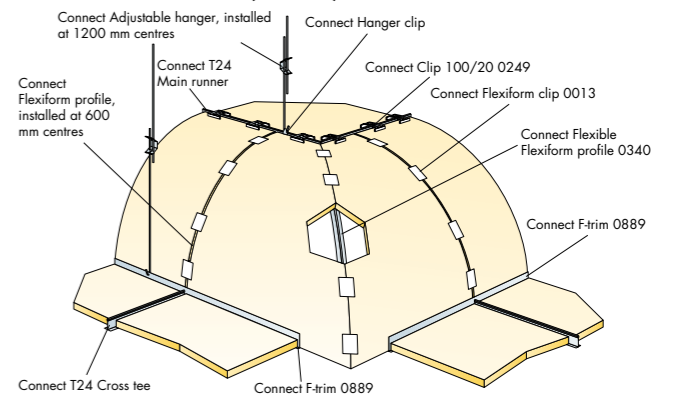
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EXTERNAL CORNER (M31EC) FOR FLEXIFORM



INTERNAL CORNER (M31IC) FOR FLEXIFORM



ECOPHON ILLUMINATED LEVEL CHANGE



INSTALLATION DIAGRAM (M148) FOR ECOPHON ILLUMINATED LEVEL CHANGE

Ecophon Illuminated Level Change is effectively an open Ecophon Light Coffer. By combining several lengths and shapes of the level change, special size Light Coffers are created. The level change can be used for allowing creative use of available height and room space, emphasising and strengthening the identity of large scale rooms or leading the way with directional walkways. The illuminated level change creates an even and harmonious illumination with its indirect lighting while controlling shadows in the room.

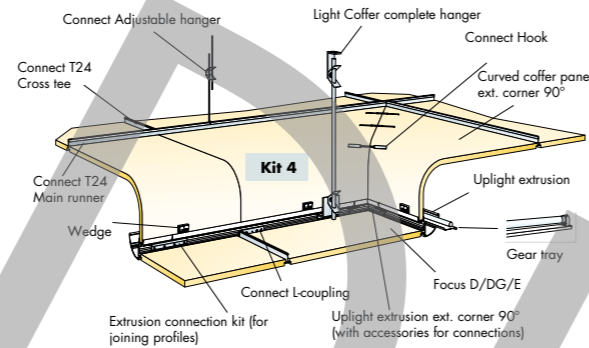
SYSTEM AND PRODUCT DESCRIPTION

Ecophon Illuminated Level Change consists of two different parts, each with different functions.

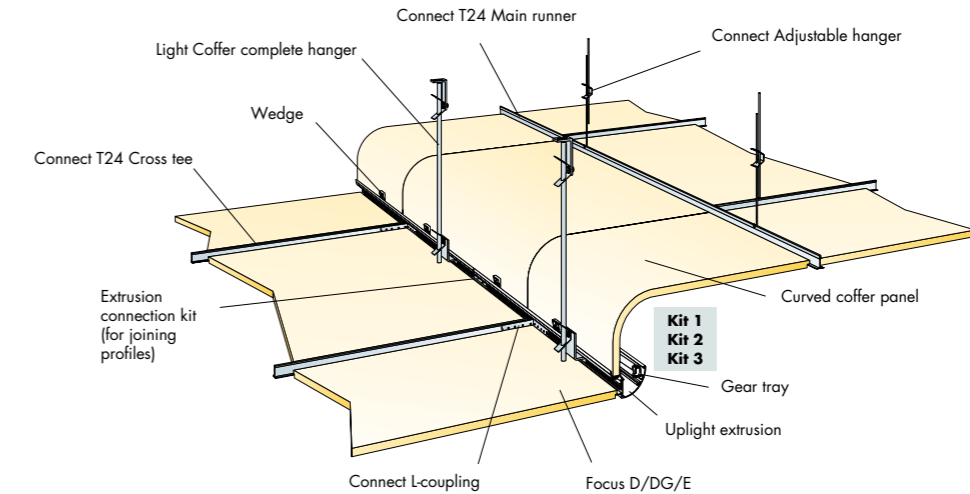
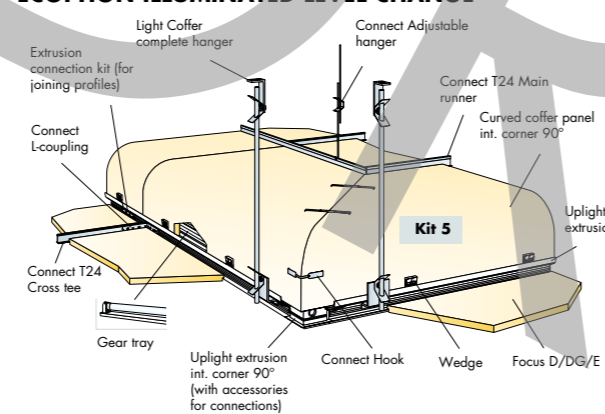
- Uplight extrusion: Matt white polyester powder coated aluminium extrusion containing the gear tray.
- Acoustic ceiling: Curved Coffer panels, that provide good acoustic properties in combination with excellent light diffusion and light reflection.

Installation components and connection details are included.

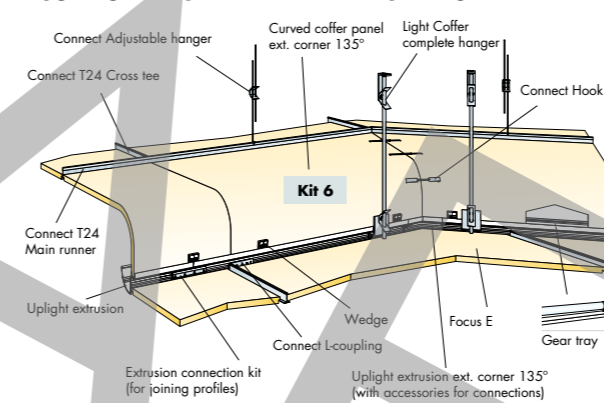
EXTERNAL CORNER 90° (M148EC_90) FOR ECOPHON ILLUMINATED LEVEL CHANGE



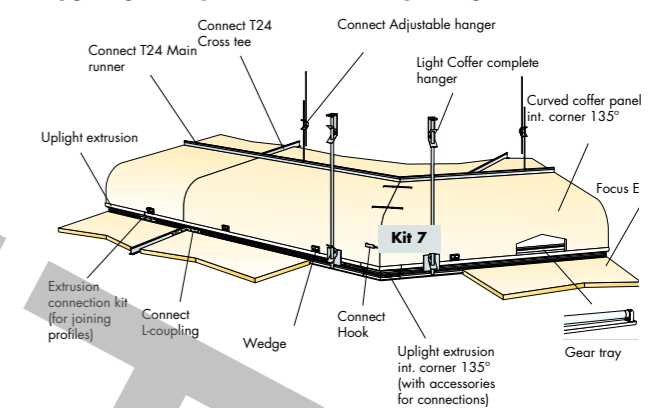
INTERNAL CORNER 90° (M148IC_90) FOR ECOPHON ILLUMINATED LEVEL CHANGE



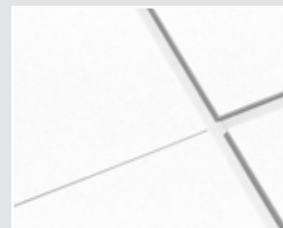
EXTERNAL CORNER 135° (M148EC_135) FOR ECOPHON ILLUMINATED LEVEL CHANGE



INTERNAL CORNER 135° (M148IC_135) FOR ECOPHON ILLUMINATED LEVEL CHANGE



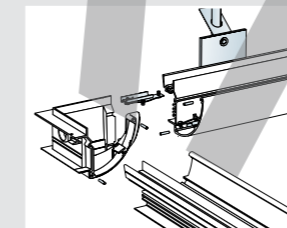
Curved Coffer panel



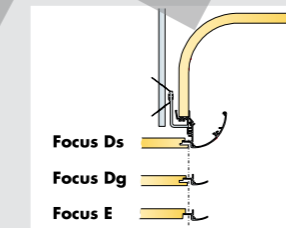
Curved Coffer panel with Focus E



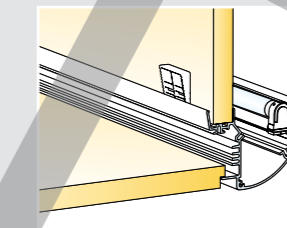
Luminaire in extrusion, with Focus E



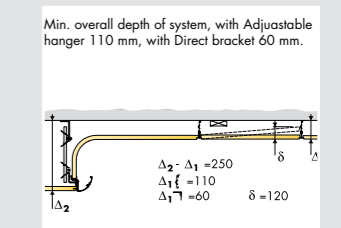
Uplight extrusion with corner and suspension



Connections to different ceiling systems



Detail showing luminaire in extrusion



Vertical measurements

ELECTRICAL DATA: 230-240V, 50 Hz, power factor $\cos \varphi > 0,9$. Electronic ballast as a standard. The system can also be supplied with a special electronic ballast for regulation. Gear tray is made for 1x28W or 1x35W T5 (light source not included).

CONNECTION: The gear trays are positioned and fixed in the upright extrusion and wired to each other via an instant connection 3x1,5 mm². The first gear tray is connected with a hard-wired connection.

APPROVALS: IP20, CE, Class 1.

ACCESSIBILITY: The panels are demountable. Minimum demounting depth according to installation diagram.

CLEANABILITY: Daily dusting and vacuum cleaning. Weekly wet cleaning.

LIGHT EFFICIENCY: Acoustic ceiling: white 010, nearest NCS colour sample S 0502-Y, 84% light reflectance (of which more than 99% is diffuse reflection). Uplight extrusion: white 010, nearest NCS colour sample S 0502-Y.

INDOOR CLIMATE: Can be used in rooms classified as ISO class 6/ M3.5 (applies for the curved coffer panels).

ENVIRONMENTAL INFLUENCE: Recyclable. (applies for the curved coffer panels)

FIRE SAFETY: Curved coffer panels: See Ecophon Focus L-line.

INSTALLATION: Installed according to installation diagram M148, which includes information regarding minimum overall depth of system.

www.ecophon.co.uk, CADsupport, Product selector, Specification, Maintenance manual

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M148

COMPONENTS

Kit 1 consists of the following components:	1 Uplight extrusion 1200 mm, 1 Curved coffer panel 1200 mm, 2 Light Coffer complete hanger, 1 Gear tray 1x28W (1180 mm), 1 Extrusion connection kit
Kit 2 consists of the following components:	1 Uplight extrusion 2400 mm, 2 Curved coffer panels 1200 mm, 2 Light Coffer complete hanger, 1 Gear tray 1x28W (1180 mm), 1 Gear tray 1x35W (1480 mm), 1 Extrusion connection kit
Kit 3 consists of the following components:	1 Uplight extrusion 2400 mm, 2 Curved coffer panels 1200 mm, 2 Light Coffer complete hanger, 2 Gear tray 1x28W (1180 mm), 1 Extrusion connection kit
Kit 4 consists of the following components:	1 Uplight extrusion ext. corner 90° (with accessories for connections), 2 Uplight extrusion 510 mm, 1 Curved coffer panel ext. corner 90°, 2 Light Coffer complete hanger, 2 Gear tray 1x28W (1180 mm), 1 Extrusion connection kit
Kit 5 consists of the following components:	1 Uplight extrusion int. corner 90° (with accessories for connections), 2 Uplight extrusion 1110 mm, 1 Curved coffer panel int. corner 90°, 2 Light Coffer complete hanger, 2 Gear tray 1x28W (1180 mm), 1 Extrusion connection kit
Kit 6 consists of the following components:	1 Uplight extrusion ext. corner 135° (with accessories for connections), 2 Uplight extrusion 510 mm, 1 Curved coffer panel ext. corner 135°, 2 Light Coffer complete hanger, 2 Gear tray 1x28W (1180 mm), 1 Extrusion connection kit
Kit 7 consists of the following components:	1 Uplight extrusion int. corner 135° (with accessories for connections), 2 Uplight extrusion 1110 mm, 1 Curved coffer panel int. corner 135°, 2 Light Coffer complete hanger, 2 Gear tray 1x28W (1180 mm), 1 Extrusion connection kit

ECOPHON FOCUS™ QUADRO E



INSTALLATION DIAGRAM (M27) FOR FOCUS QUADRO E 450

Ecophon Focus Quadro E is used to create smooth transitions between different levels of ceiling either to accommodate various service installations in the ceiling void or to achieve a special effect. The difference in level is 300 or 450 mm. The Ecophon Focus Quadro E panels are not directly demountable.

SYSTEM AND PRODUCT DESCRIPTION

The systems consist of Ecophon Focus Quadro E panels and Ecophon Connect grid systems, with an approximate weight of 4 kg/m².

The panels are manufactured from high density moulded glass wool. The visible surface has an Akutex T coating. The edges are painted with edge detail E on all sides. The corner elements are of the same design. The radius is 300 mm or 450 mm.

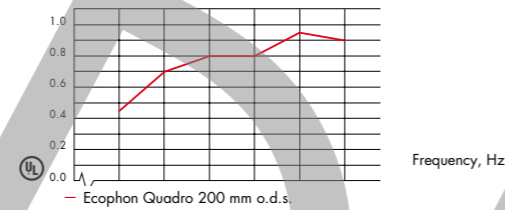
The grid is manufactured from galvanized steel.

ACOUSTICS:

SOUND ABSORPTION: Test results according to EN ISO 354.

o.d.s = overall depth of system

α_p Practical sound absorption coefficient

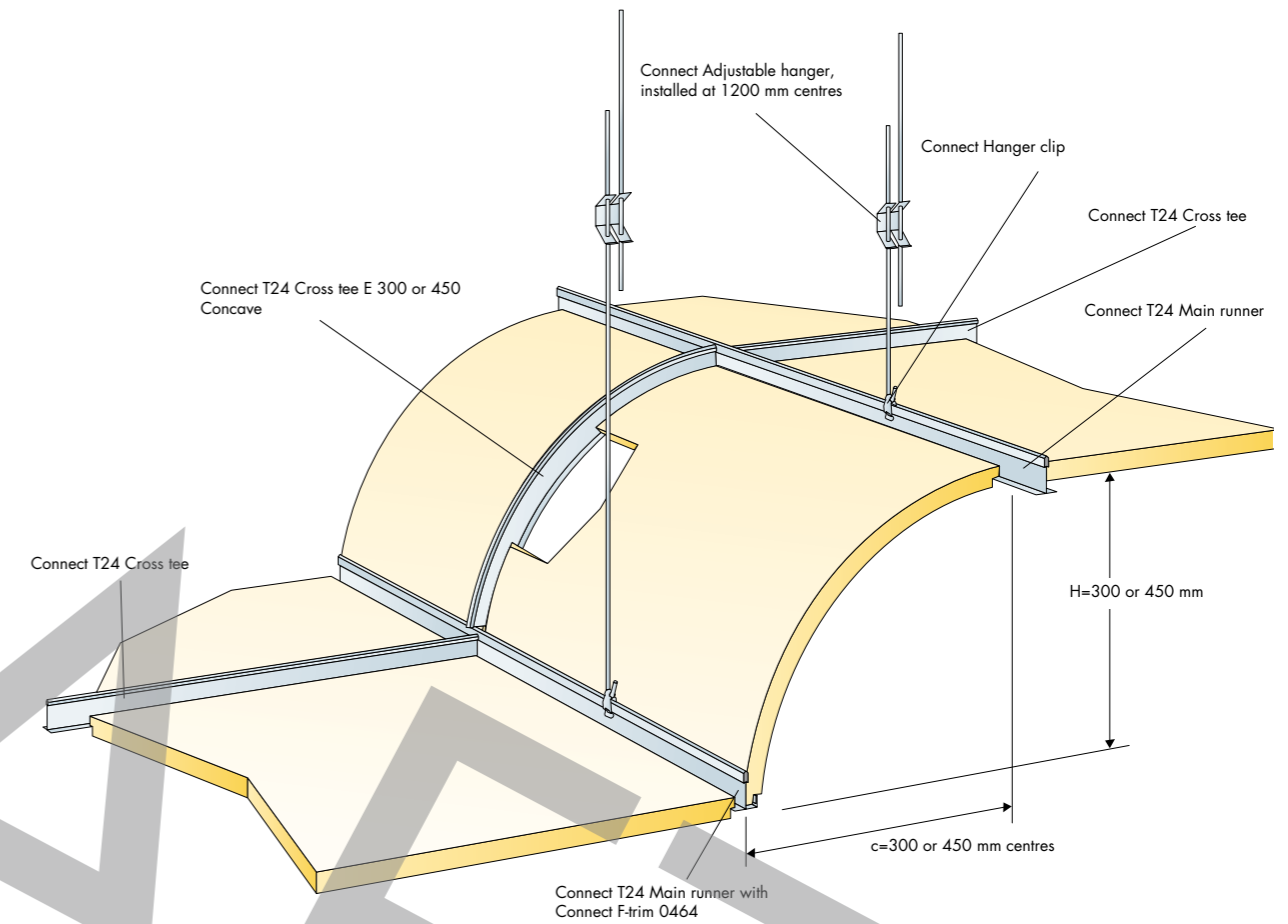


Classification according to EN ISO 11654

Product	Focus Quadro E
O.d.s. mm	200
Absorption class	B
NRC	0,8
SAA	0,82

SOUND INSULATION: $D_{n,c,w} = 24$ dB according to ISO 140-9 and evaluation according to EN ISO 717-1. CAC = 25 dB according to ASTM E 1414 and evaluation according to ASTM E 413.

SOUND PRIVACY: Not applicable.



SYSTEM RANGE

Size, mm	Concave	Concave	Convex	Convex
	1200 x 300	1200 x 450	1200 x 300	1200 x 450
T24	•	•	•	•
Thickness	20	20	20	20
Inst. diag.	M27/M27ic/ M27ec	M27/M27ic/ M27ec	M28/M28ic/ M28ec	M28/M28ic/ M28ec



Focus Quadro E panel



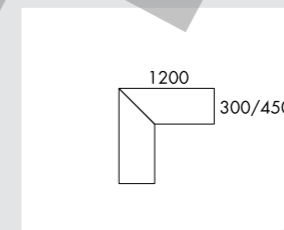
Section of Focus Quadro E system with Connect T24



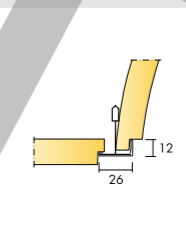
Focus Quadro E system



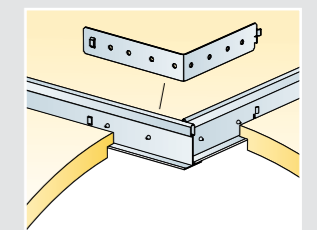
Detail of Focus Quadro E



Module measures of corner



Detail of lower part with F-trim



Internal corner, upper connection between profiles

ACCESSIBILITY: The panels are demountable via adjacent flat ceiling tiles.

CLEANABILITY: Daily dusting and vacuum cleaning. Weekly wet cleaning.

LIGHT EFFICIENCY: White 010, nearest NCS colour sample S 0502-Y, 84% light reflectance (of which more than 99% is diffuse reflection).

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

INDOOR CLIMATE: Can be used in rooms classified as ISO class 6/M3.5.

ENVIRONMENTAL INFLUENCE: Focus Quadro E is recyclable.

FIRE SAFETY: Reaction-to-fire classifications.

Country	Standard	Class
UK	BS 476 Parts 6&7	Class 0
Europe	EN 13501-1	B-s1,d0

MECHANICAL PROPERTIES: Additional live load has to be secured to the soffit.

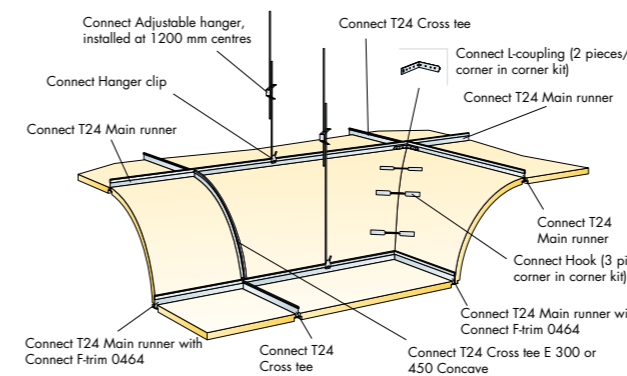
INSTALLATION: Ecophon Focus Quadro E 300 and 450 Concave are installed according to installation diagram M27, Ecophon Focus Quadro E 300 and 450 Convex according to installation diagram M28.

CORNER ARRANGEMENTS: Ecophon Focus Quadro E 300 and 450 90° internal and external corners are available in concave and convex versions. The corners are supplied in sets with all necessary installation accessories.

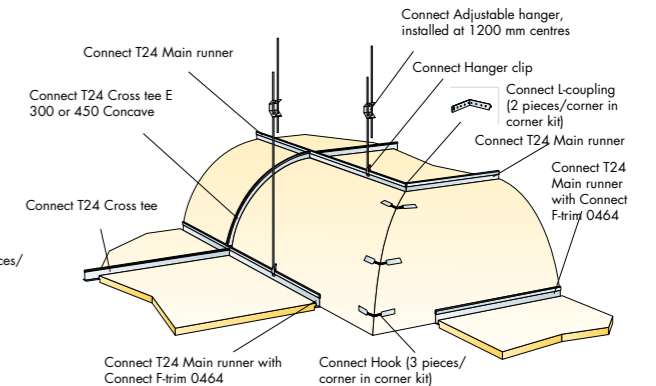
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EXTERNAL CORNER (M27EC) FOR FOCUS QUADRO E 300 AND 450 CONCAVE

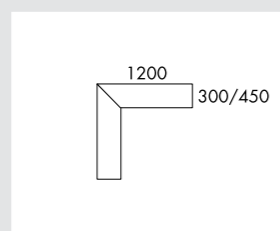
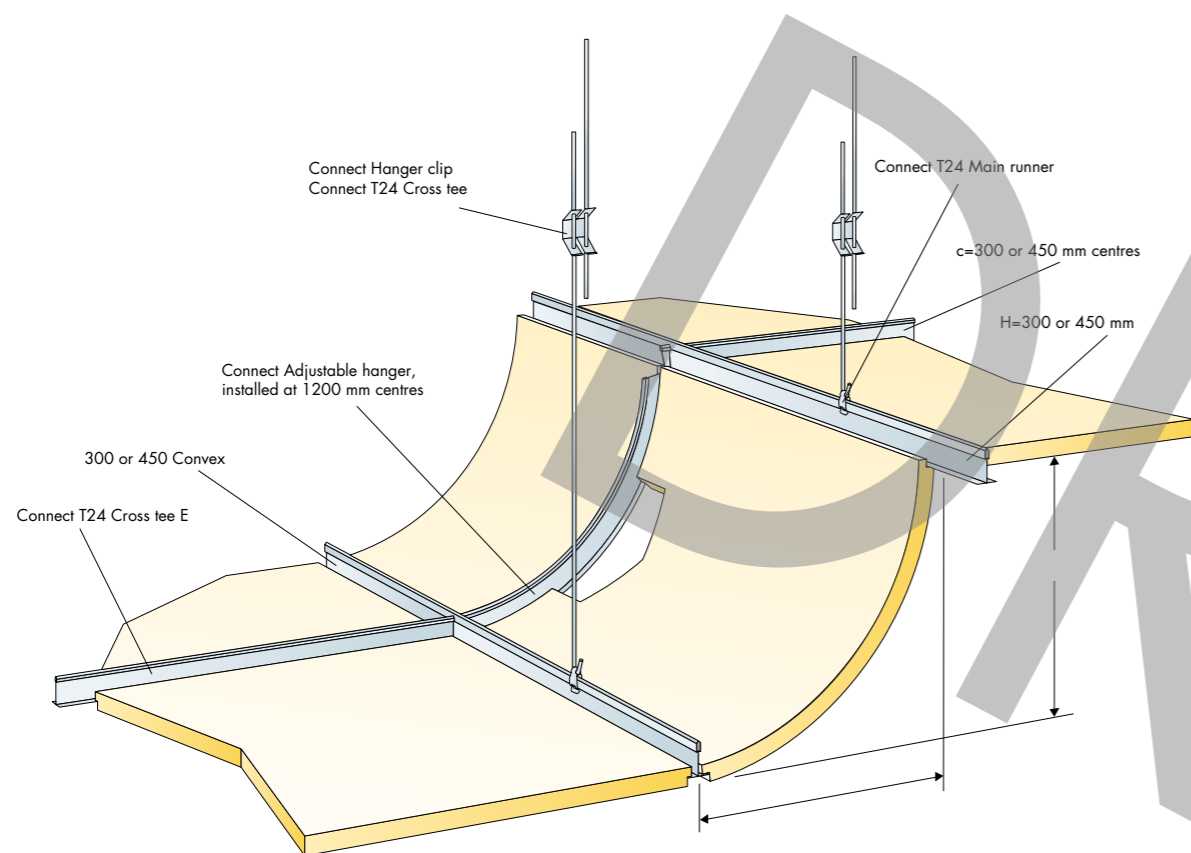


INTERNAL CORNER (M27IC) FOR FOCUS QUADRO E 300 AND 450 CONCAVE

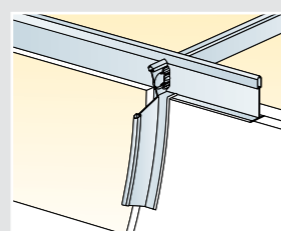


INSTALLATION DIAGRAM (M28) FOR FOCUS QUADRO 450 CONVEX

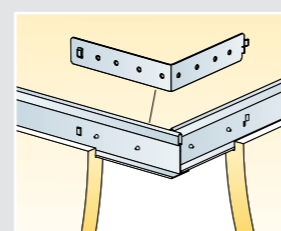
Connect T24 Cross tee
Connect T24 Main runner



Module measures of corner

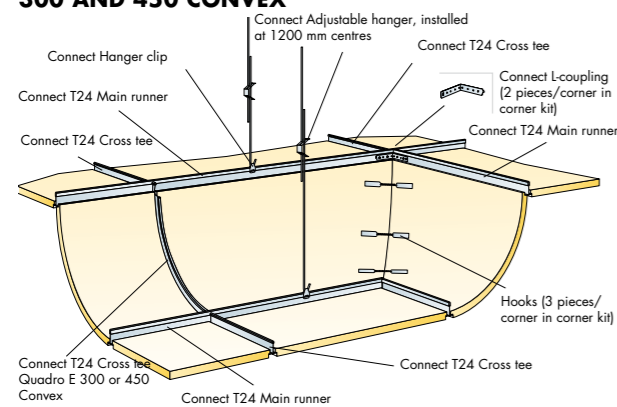


Upper cross tee connection

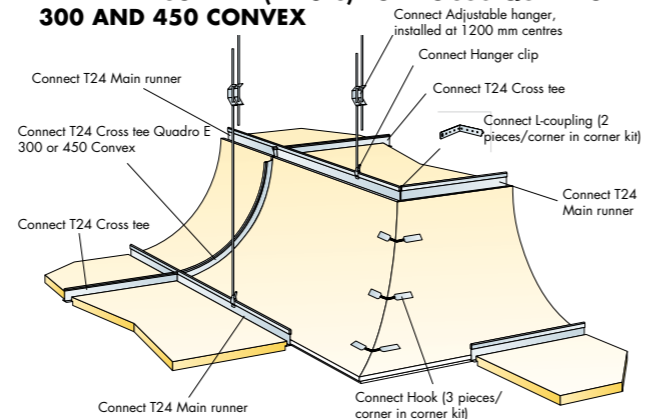


Upper connection between profiles

EXTERNAL CORNER (M28EC) FOR FOCUS QUADRO E 300 AND 450 CONVEX

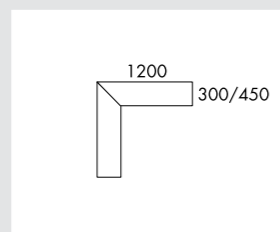
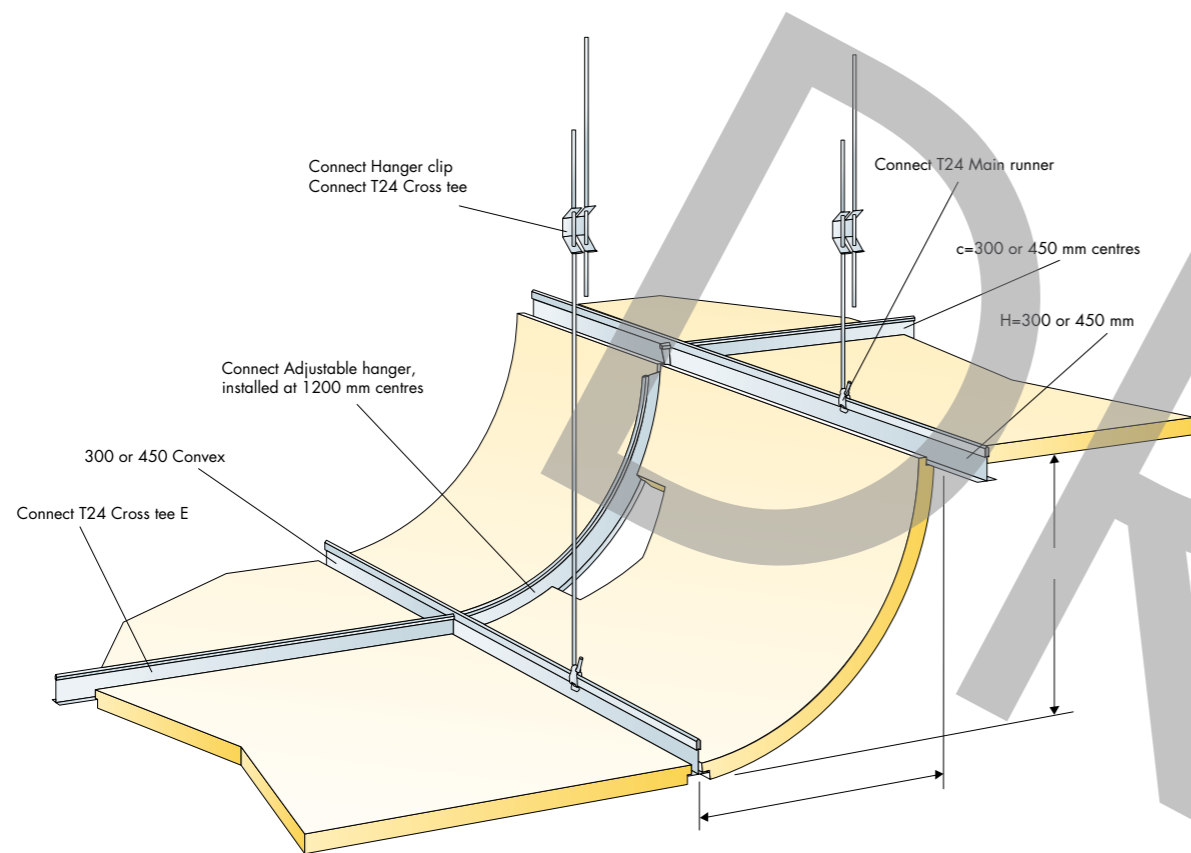


INTERNAL CORNER (M28IC) FOR FOCUS QUADRO E 300 AND 450 CONVEX

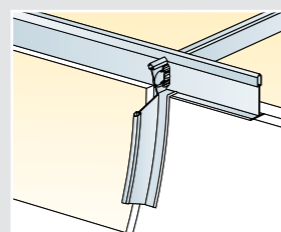


INSTALLATION DIAGRAM (M28) FOR FOCUS QUADRO E 300

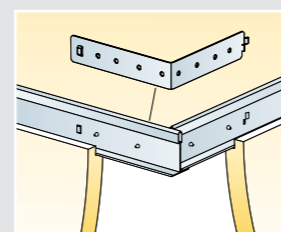
Connect T24 Cross tee
Connect T24 Main runner



Module measures of corner

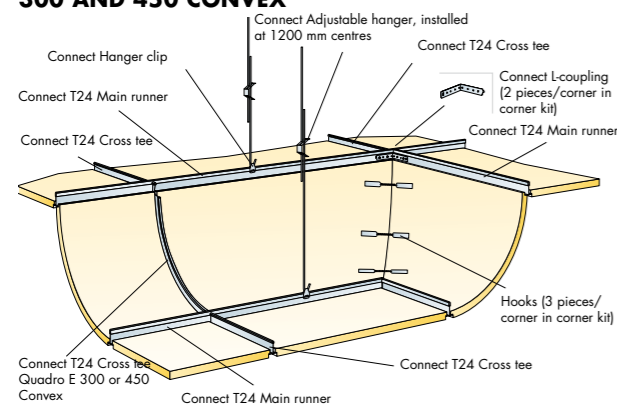


Upper cross tee connection

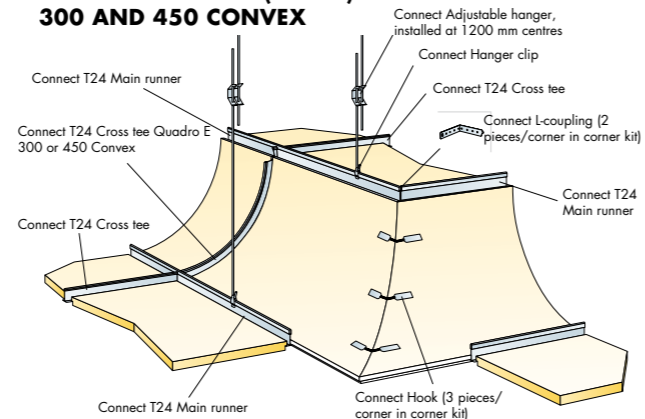


Upper connection between profiles

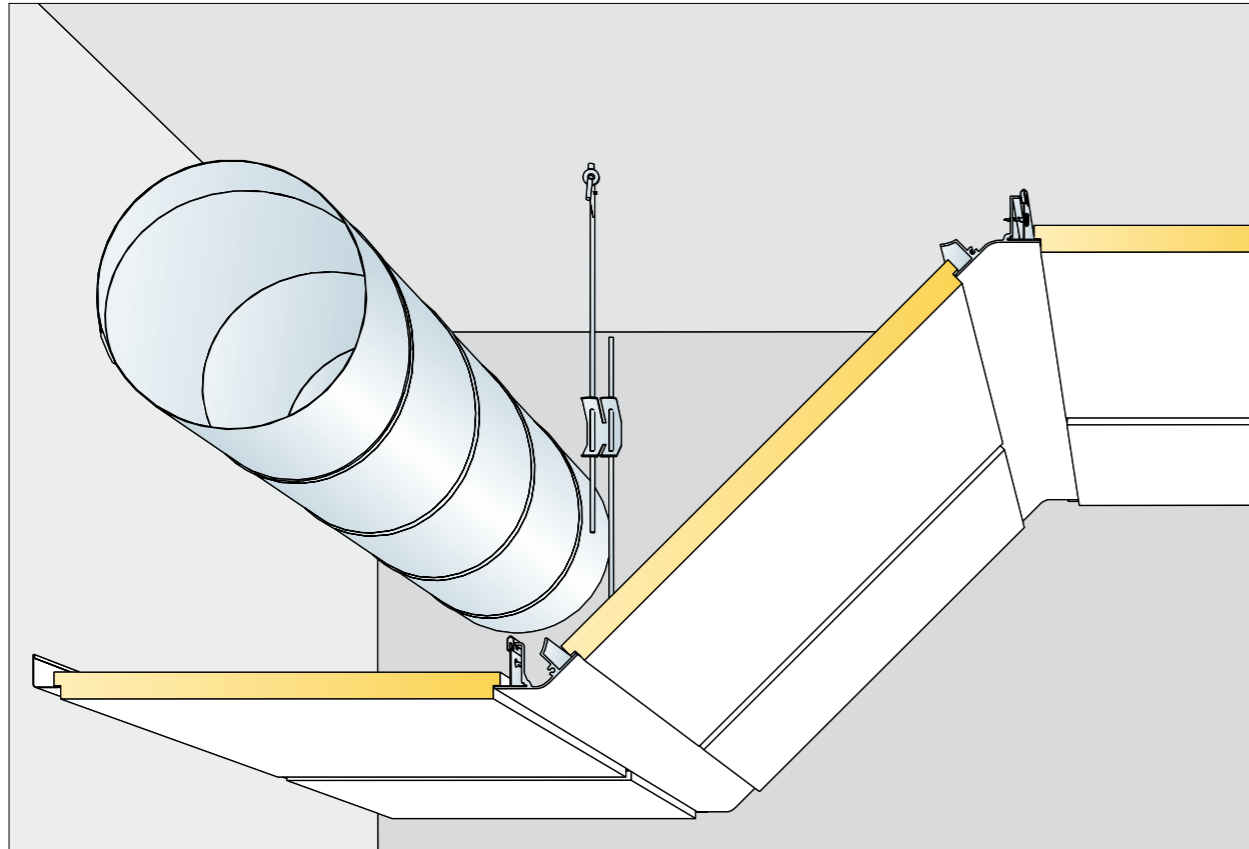
EXTERNAL CORNER (M28EC) FOR FOCUS QUADRO E 300 AND 450 CONVEX



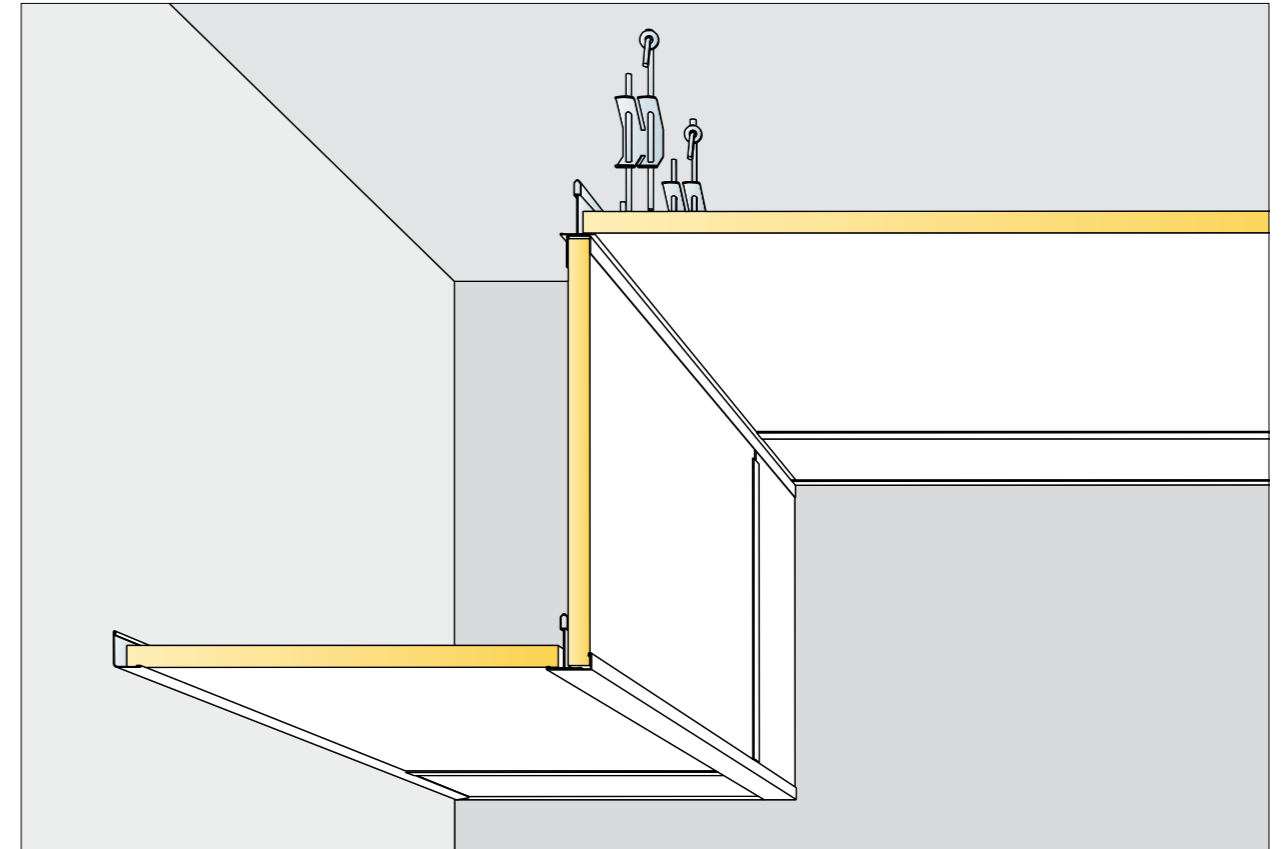
INTERNAL CORNER (M28IC) FOR FOCUS QUADRO E 300 AND 450 CONVEX



ECOPHON CONNECT™ ETAGE 45



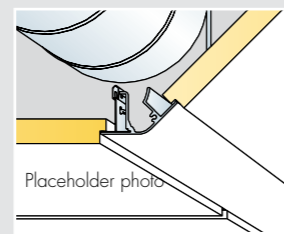
ECOPHON CONNECT™ F-TRIMS



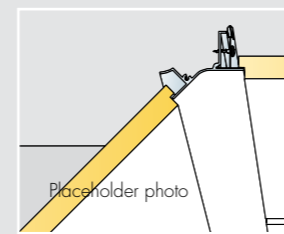
Connect Etage 45 Up



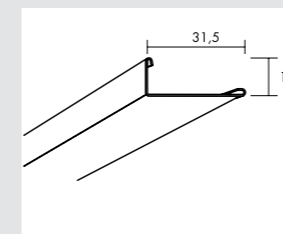
Connect Etage 45 Down



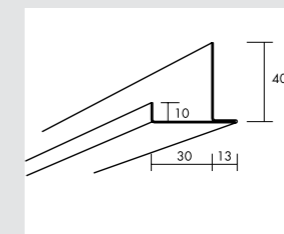
Connect main profile with Etage Up and ceiling tile



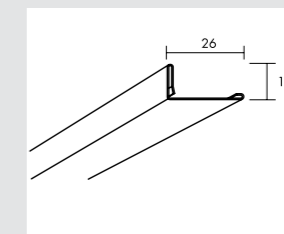
Connect main profile with Etage Down and ceiling tile



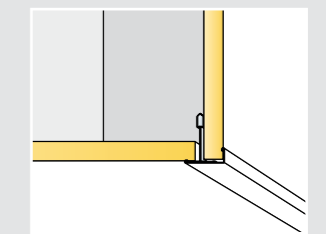
Connect F-trim 15



Connect F-trim 0889



Connect F-trim 10



Connect main profile with F-trim and ceiling tile

Ecophon Connect™ Etage is a series of profiles in extruded aluminium that give a smooth transition between the flat ceiling surface and the change in level of the ceiling. There is a Connect Etage 45 Up profile for the top part of the vertical surface and a matching Connect Etage 45 Down profile for the bottom of the vertical surface. The profiles have a finish similar in texture to Akutex™ FT.

Ecophon Connect™ F-trim is a galvanised steel profile finished in white that is designed to integrate with the rest of the Connect grid. F-trim is available in 10 mm width for use with Ecophon Focus™ Quadro E Concave. It is available in 15 mm width for Ecophon Gedina™ A and Ecophon Advantage™ A, and in 30 mm width for Ecophon Focus™.

Ecophon®

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'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 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.

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