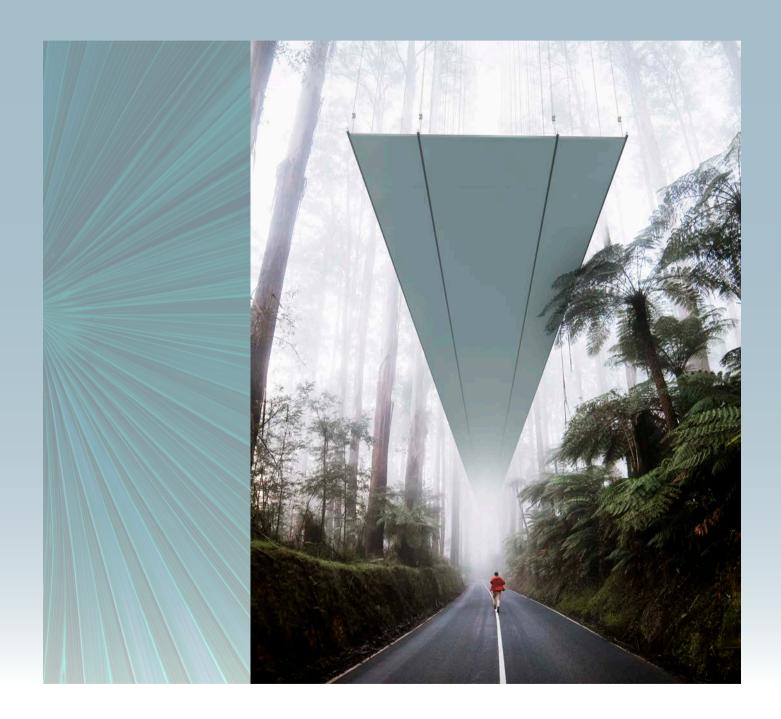
A UNIVERSE Of Design FLEXIBILITY

### ECOPHON FOCUS<sup>TM</sup>





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Acoustics, technical properties and installation diagrams

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



Having a sound effect on people, in every way we can, is what we do proudly. That promise makes every one of us a passionate advocate for the importance of room acoustics to people's wellbeing – whatever the space, activity or need.

# JOOOL STICS

The importance of acoustics is underappreciated. Sound impacts us in daily life, and the scientific support for improving our indoor sound environments is well-documented.

And what exactly is an ideal indoor sound environment for people?

One based on how we experience sound outside. The human auditory sense is naturally adapted to an outdoor environment where there is not any sound reflections from ceilings and walls.

That's why most of what we do at Ecophon is about replicating the acoustic qualities found in nature for indoor environments. We want to optimise indoor spaces to our natural way of hearing, so that speech and sound is easy to hear and understand, when needed, improving performance and wellbeing.

Usually that starts with the ceiling. A wall-to-wall acoustic ceiling is the easiest way to get a large sound-absorbing surface area into a space, and is usually the best way to reduce sound strength, shorten reverberation times, and increase speech clarity and overall hearing comfort.

But for a truly optimal sound environment, you'll also likely need different kinds of sound absorbers placed strategically throughout the space-wall-mounted panels and free-standing dividers are just two examples. In other words, a holistic approach is the best way to reduce the overall sound level and sound propagation in a room. Ecophon is here to help.





## AS A GUIDING LIGHT

At Ecophon, sustainability is at the core of who we are and how we work. It's a promise to do better every day, in every way, for our co-workers, customers and partners in all walks of life. It's an approach to innovation that always sides with nature, and that takes its cue from the needs and environments of the people who will ultimately benefit from it. And it's a commitment to take as little as possible to do more than expected, so that future generations get to experience this planet at its life-sustaining best.

We are proud that all our products are united by their sustainability-driven origins. That applies to the materials we choose, but also to everything from the clean energy we use in our production facilities to the transparency, traceability and accountability embedded in every stage of product and service development, from idea to innovation. This is what makes us reach an industry-low carbon footprint. Because credible sustainability demands a holistic effort that leaves no challenge unaddressed, no opportunity unexplored. And fulfills the promise that ultimately drives all of us at Ecophon – to have a sound effect on people.



# A UNIVERSE OF DESIGN FLEXIBILITY

Ecophon Focus<sup>™</sup> is our most comprehensive system family and supports a range of opportunities through different edge designs, forms, levels and installation options.

- Absorption class A
- 10 different edge options in addition to 6 unique solutions
- Premium surface with superior quality and a matte look

Focus is a great choice for cellular offices, corridors, receptions, entrance halls, waiting rooms, team work spaces and other public areas where visual appeal and sound quality are equally important.

The Focus family includes panels that can be fixed directly to soffit. That gives you options for spaces that might seem challenging or impossible to improve acoustically, such as stairwells, basements and spaces with low ceiling height.



## Industry-low CO2 emissions with exceptional raw materials and wide use of renewable energies

### **ECOPHON FOCUS™ PRODUCT RANGE**

Focus is suspended wall-to-wall ceilings with excellent acoustic properties, appealing looks and the flexibility to suit every need make the Focus family the perfect toolbox.

The Focus family includes six unique complementary solutions for level changes, wall endings and free-hanging ceilings. They are designed to give the

ceiling an integrated appearance that enhances the overall aesthetic appeal.

Focus Levels gives you still more design options. With Levels, you combine a variety of panel thicknesses and sizes to give a ceiling or wall its own uniquely staggered look and feel.



1720x600x20 2000x600x20 2400x600x20



FOCUS E

600x600x20 1200x600x20 1200x1200x20 1600x600x20 1800x600x20 2000x600x20 2400x600x20



FOCUS Ez

600x600x40



FOCUS F

600x600x20 1200x600x20



FOCUS A

600x600x20 1200x600x20 1200x1200x20 1600x600x20 1800x600x20 2000x600x20



FOCUS B

600x600x20 1200x600x20



FOCUS Lp

600x150x20 600x300x20 600x600x20 1200x150x20 1200x300x20 1200x600x20 1800x600x20



FOCUS SQ

600x600x20 1200x600x20



FOCUS Ds

2400x600x20

600x600x20 1200x600x20 1200x1200x20 1600x600x20 1800x600x20 2000x600x20

2400x600x20



FOCUS Dg

600x600x20 1200x600x20 1200x1200x25 1600x600x20 1800x600x20 2000x600x20 2400x600x20



**FOCUS LEVELS** 

600x600x20 1200x600x20 1200x300x20 600x600x30 1200x600x30 1200x300x30 600x600x40



1200x600x40

1200x300x40

1200x600x30 1600x600x30 2000x600x30 2400x600x30

**FOCUS FLEXIFORM A** 



### FOCUS FIXIFORM E

1200x600x20



### FOCUS FIXIFORM Ds

1200x600x20 1500x600x20 1900x600x20 2300x600x20



### FOCUS FRIEZE

2400x600x20



### FOCUS EDGE 500

600x600x20 1200x600x20 1200x1200x20 1200x1200x25



### FOCUS WING

14

600x200x50 1200x200x50



### SQUARE 43

Edge Ds, Dg, E: 600x600x20





### DOT

Edge Ds, Dg, E: 600x600x20

Edge Ez: 600x600x40



### LINE

Edge Lp: 1200x150x20 1200x300x20





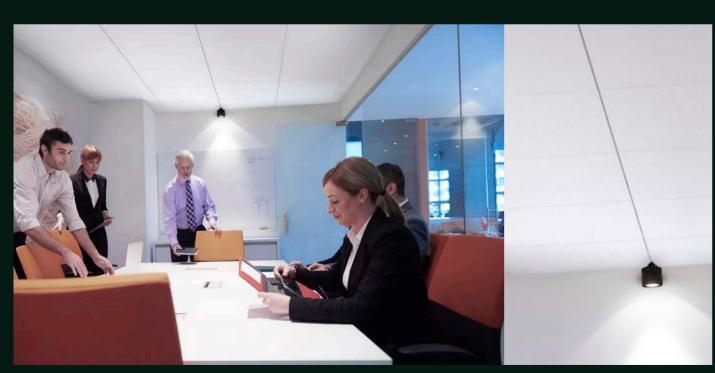






**FOCUS A**Visible grid system and easy demountable tiles. Available in many formats.



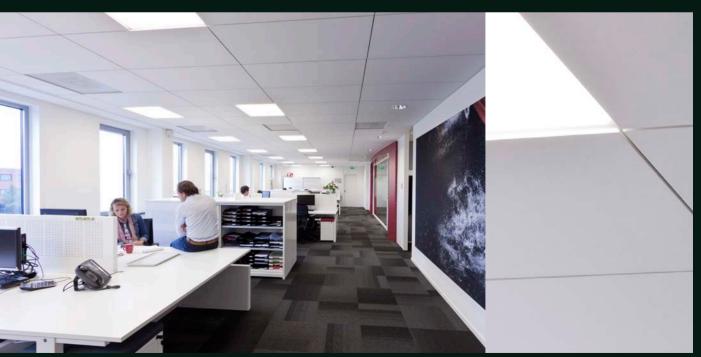


**FOCUS B**For direct fixing with glue, ideal for installations that require minimum depth of system.





Bevelled edges that generates a discreet groove between the tiles. Concealed grid system.



**FOCUS Dg**Unique edge design with concealed support edges and a floating appearance.



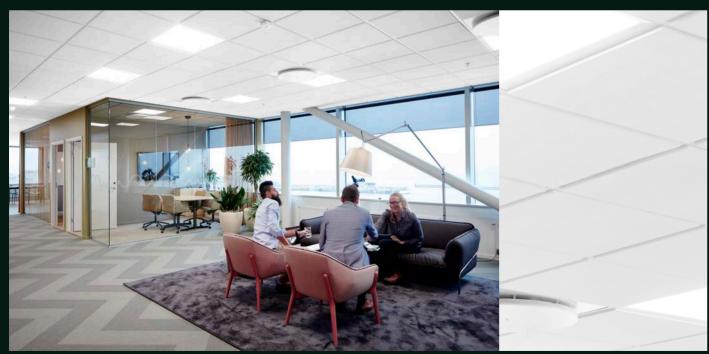




FOCUS D/A For corridors and bandraster solutions. Long panels with a concealed grid system.





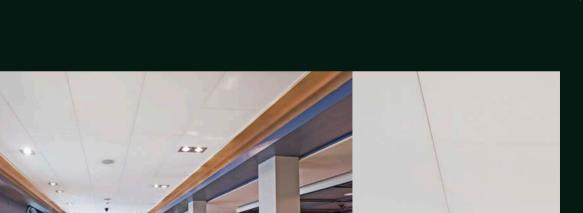


FOCUS E Recessed visible grid system creating a shadow effect on the edge. Easily demountable tiles.





FOCUS Ez With support edges in different levels enabling a tilted appearance and unique designs.



FOCUS F For direct fixing with screws, ideal for installations that require minimum depth of system.





Different panel thicknesses within the system for creating unique patterns on walls and ceilings.



A patented system designed to create long rows in the ceiling, highlighting a specific direction in the room.





**FOCUS SQ**For direct fixing with glue. Installed with a gap between each tile.



**FOCUS FLEXIFORM A**Flexible panels that can be shaped into concave or convex forms.



**FOCUS EDGE 500** 

Edge profile for island installations. Profile in extruded aluminium and corners in cast zinc.





### FOCUS FIXIFORM E

Foldable tiles for smooth transitions where there are level shiftings in the ceiling.



### FOCUS FIXIFORM Ds

Foldable tiles for smooth transitions where there are level shiftings in the ceiling.



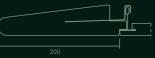


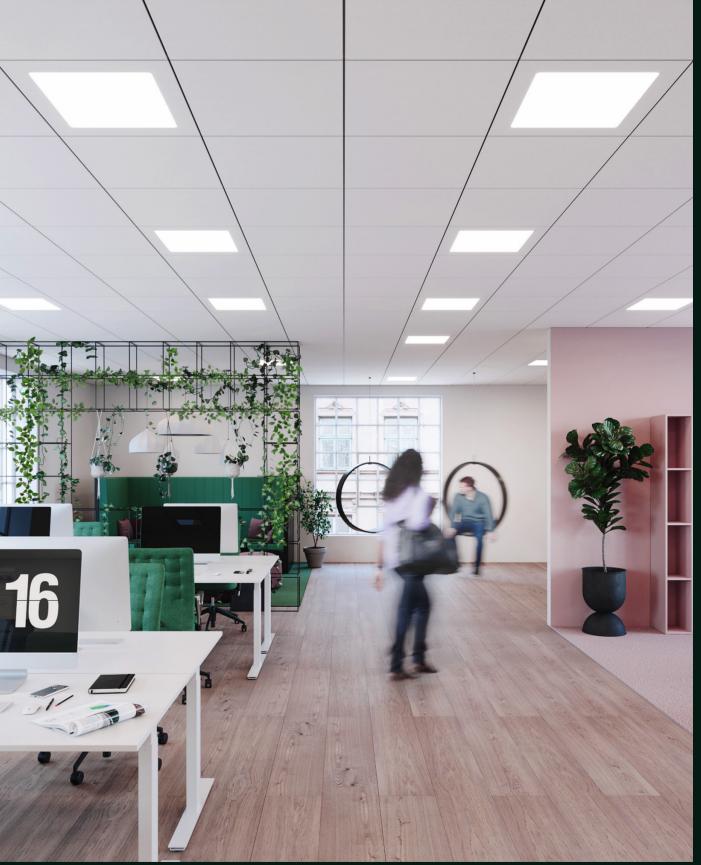
End panels for creating a smooth transition between the ceiling and the wall.





**FOCUS WING**Wing shaped absorbers for free hanging suspended ceilings.

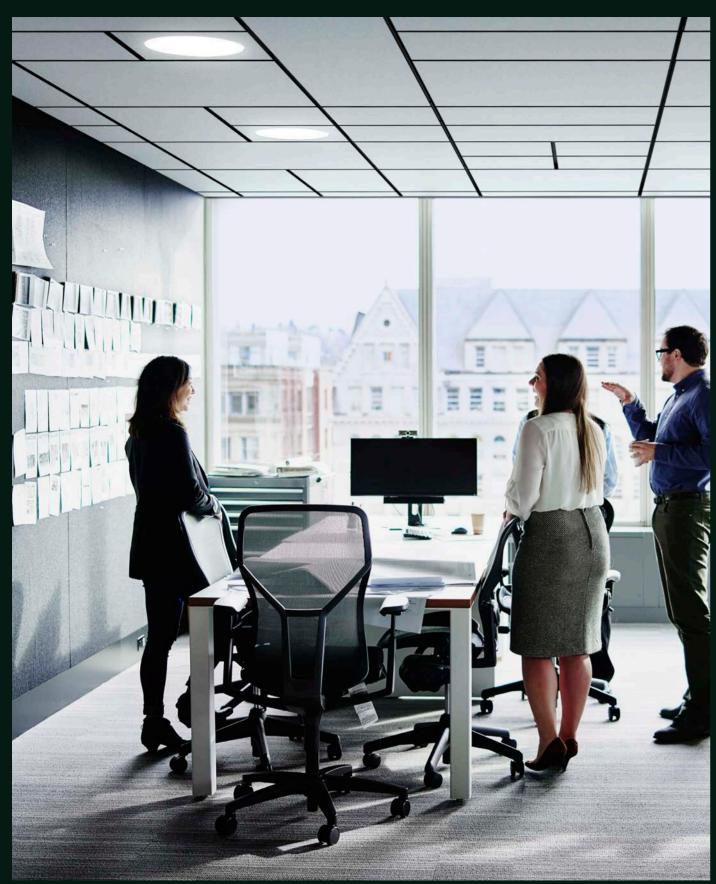




### **SQUARE 43**

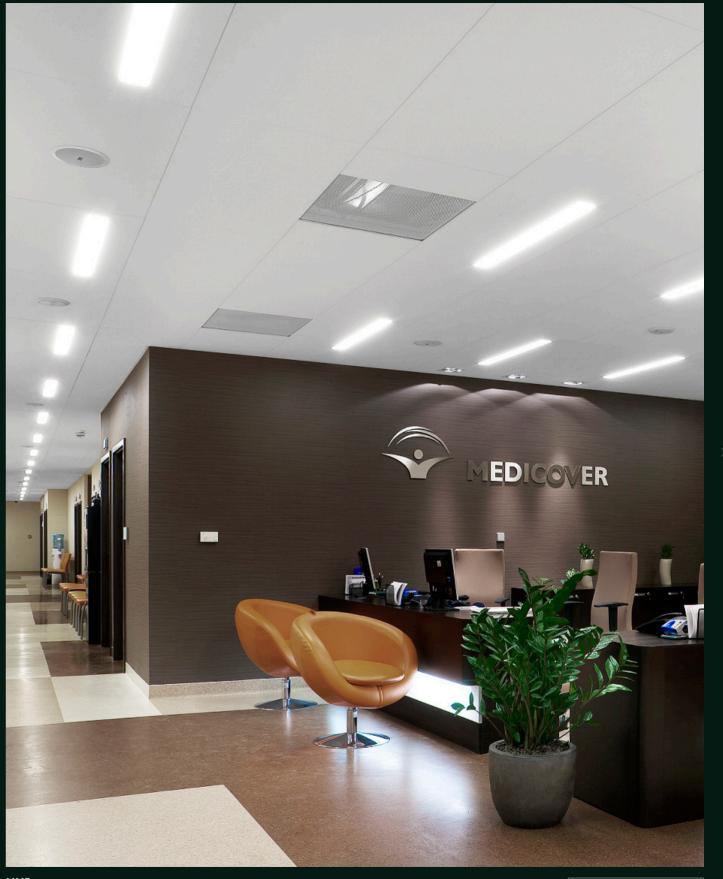
Great lighting comfort and low UGR value.





**DOT**Great lighting comfort and low UGR value.





**LINE**The luminaire has great lighting comfort and adds a distinct direction to the ceiling.



### **GRID COLOURS**

- 15 colour options for grids
- Create your own design
- Closest Akutex FT match creates subtile pattern and mixing FT colours gives more design effect

An acoustic
ceiling is often the
largest continuous surface
in a room. It will affect not only
the entire look and feel of
the interior, but also the
end-users' wellbeing.



### **COLOURS AND SURFACES**

### AKUTEX<sup>™</sup> FT

The Akutex label guarantees that the product carrying it has a superior surface technology. Our research and development will always focus on visual aspects, acoustic properties, working environment, architectural trends and environmental aspects. This ensures that Akutex is always one step ahead.





WHITE FROST | Light reflectance 85%.
Nearest NCS colour sample S 0500-N.
Grid colour NCS S 1000-N.



**VOLCANIC ASH** | Light reflectance 56%. Nearest NCS colour sample 2002-Y.



**SILVER STONE** | Light reflectance 29%. Nearest NCS colour sample S 4502-Y.



SILK SLATE | Light reflectance 13%. Nearest NCS colour sample \$ 7000-N. Grid colour NCS \$ 6500-N.



GOJI BERRY | Light reflectance 27%. Nearest NCS colour sample S 3030-Y80R. Grid colour NCS S 3030-Y80R.



SILENT STEAM | Light reflectance 45%. Nearest NCS colour sample \$ 2010-B. Grid colour NCS \$ 2005-R90B.



SCALLOP SHELLS | Light reflectance 76%. Nearest NCS colour sample S 0804-Y50R. Grid colour NCS S 0603-Y60R.



WET SAND | Light reflectance 35%.
Nearest NCS colour sample S 3020-Y30R.
Grid colour NCS S 3020-Y40R.



OCEAN STORM | Light reflectance 24%. Nearest NCS colour sample S 4020-R90B. Grid colour NCS S 4010-R90B.



MOONLIGHT SKY | Light reflectance 7%. Nearest NCS colour sample S 7020-R90B. Grid colour NCS S 7010-R90B.



GOLDEN FIELD | Light reflectance 61%. Nearest NCS colour sample S 1040-G90Y.



**SUNSET HEAT** | Light reflectance 20%. Nearest NCS colour sample S 2070-Y60R.



**RUBY ROCK** | Light reflectance 7%. Nearest NCS colour sample S 4050-R10B.



**EUCALYPTUS LEAF** | Light reflectance 23%. Nearest NCS colour sample \$ 5010-B30G. Grid colour NCS \$ 5010-B30G.



SUMMER FOREST | Light reflectance 10%.
Nearest NCS colour sample \$ 6030-G10Y.
Grid colour NCS \$ 6030-G10Y.



DARK DIAMOND | Light reflectance 4%. Nearest NCS colour sample \$ 9000-N. Grid colour NCS \$ 8000-N.



MORNING DRIZZLE | Light reflectance 69%. Nearest NCS colour sample \$ 1002-B.



CLOUDY DAY | Light reflectance 62%. Nearest NCS colour sample \$ 1500-N.



**PEACH ROSE** | Light reflectance 55%. Nearest NCS colour sample S 1515-Y80R. Grid colour NCS S 1510-Y80R.



**HIGHLAND FOG** | Light reflectance 55%. Nearest NCS colour sample \$ 2005-G. Grid colour NCS \$ 2005-G20Y.



**SAGE GARDEN** | Light reflectance 40%. Nearest NCS colour sample \$ 3010-B30G. Grid colour NCS \$ 3010-B30G.



FRESH CLOVER | Light reflectance 35%. Nearest NCS colour sample S 3020-G40Y. Grid colour NCS S 3020-G40Y.

### NOTE

Colours may vary slightly between different production batches.

Reproduction of colours vary between print and reality.







Ecophon Focus panels contribute to a healthy indoor environment with superior acoustic absorption, low VOC emissions in line with the strictest requirements, and a full chemical transparency with verified Health Product Declarations. The low environmental footprint of our Focus panels is third-party verified in Environmental Product Declarations.

The products do not contribute to fire and the glass wool core of the Focus tiles is tested and classified as non-combustible according to EN ISO 1182. Fire classification according to EN 13501-1, see Technical Properties on respectively product.

### NOTE

More product and system information such as installation help and sustainability documentation can be found at www.ecophon.com

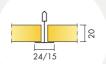


# Sten enties

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- 44 Focus D/A
- 46 Focus E
- 48 Focus Ez
- 50 Focus F
- 52 Focus Lp
- 54 Focus SQ 56 Focus Levels
- 58 Focus Flexiform A
- 60 Focus Edge 500
- 62 Focus Fixiform E
- 64 Focus Fixiform Ds 66 Focus Frieze
- 68 Focus Wing
- 69 Square 43
- 70 Dot
- 71 Line



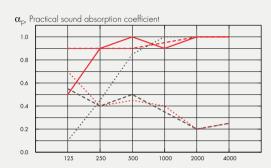


### Ecophon Focus<sup>™</sup> A

### Acoustic

### Sound Absorption:

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



- ···· Focus A 20 mm, 50 mm o.d.s.
- Focus A 20 mm, 200 mm o.d.s.
- --- Focus A 20 mm + Extra Bass 50 mm, 200 mm o.d.s.
- --- Focus A gamma 20 mm, 200 mm o.d.s.
- ···· Focus A gamma 20 mm + Extra Bass 50 mm, 200 mm o.d.s. o.d.s = overall depth of system

quency Hz

TH		o.d.s. mm	$lpha_{ m p}$ , Practical sound absorption coefficient							Sound absorption class
	mm	O.G.3. IIIIII	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	$\alpha^{\wedge}$	Sound absorption class
-	20	50	0.10	0.45	0.85	1.00	1.00	1.00	0.75	С
-	20	200	0.50	0.90	1.00	0.90	1.00	1.00	1.00	А
+ Extra Bass,	<i>7</i> 0	200	0.90	0.90	0.90	0.95	1.00	1.00	0.95	А
gamma	20	200	0.55	0.40	0.50	0.35	0.20	0.25	0.30	D
gamma+ Extra Bass	70	200	0.70	0.40	0.45	0.40	0.20	0.25	0.30	D

	THK mm	o.d.s. mm	NRC	SAA
-	20	50	0.85	0.83
+ Extra Bass,	70	200	0.93	0.93
gamma	20	200	0.35	0.36
gamma+ Extra Bass	70	200	0.35	0.37
-	20	400	0.85	0.88

THK		D <sub>nfw</sub>	CAC dB
mm	Articulation Class, ASTM E1111, ASTM E1110	Weighted normalized flanking level difference, ISO 10848-2	Ceiling Attenuation Class, ASTM 1414, ASTM E413
20	190	20	21

### **Indoor Air Quality:**

Certificate / Label	Standard	Plant
Eurofins Indoor Air Comfort®	IAC	IAC Gold
French VOC	Α	A+
Finnish M1	•	•

**Environmental Footprint:** Focus A: 3,13 (Focus family EPD in conformity with ISO 14025 / EN 15804), Focus A/Plant: 1,81 (Focus A/Plant EPD in conformity with ISO 14025 / EN 15804),

Circularity: Minimum post-consumer recycled content: 52%, Recyclability: Fully recyclable,

**Fire safety:** 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,

**Humidity Resistance:** According to EN 13964:2014 Standard: Class C, RH 95% and 30°C, Plant: Class A, RH 70% and 25°C.

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

**Accessibility:** The tiles are easily demountable. Minimum demounting depth according to installation diagrams.

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

**System weight:** The weight of the system (including suspension grid) should be approximately 3 kg/m<sup>2</sup>.

**Mechanical properties:** See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at www.ecophon.com.

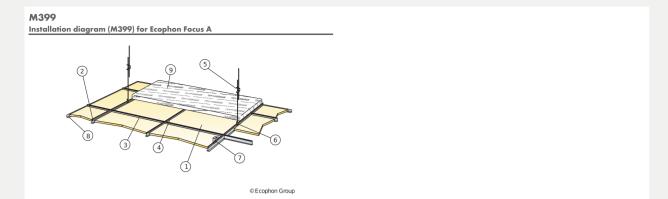
**CE:** Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

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### Installation diagram in detail www.ecophon.com



© Ecophon Group Ecophon Focus™ A, Created:2021-01-22 © Ecophon Group

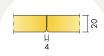


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Ecophon Focus™ A, Created:2021-01-22





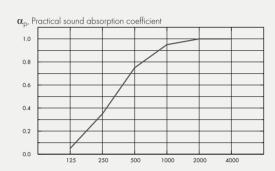
37

### Ecophon Focus™ B

### Acoustic

### Sound Absorption:

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



Focus B 20 mm, 20 mm o.d.s.o.d.s = overall depth of system

 $lpha_{_{D^{\prime}}}$  Practical sound absorption coefficient Sound absorption class 125 Hz 250 Hz 500 Hz 1000 Hz 2000 Hz 4000 Hz 20 20 0.05 0.35 0.75 0.95 1.00 1.00 0.65 С

	THK mm	o.d.s. mm	NRC	SAA
-	20	20	0.80	0.78

### **Indoor Air Quality:**

Certificate / Label	Standard	Plant
Eurofins Indoor Air Comfort®	IAC	IAC Gold
French VOC	Α	A+
Finnish M1	•	•

**Environmental Footprint:** Focus B: 3,13 (Focus family EPD in conformity with ISO 14025 / EN 15804), Focus B/Plant: 2,87 (Focus B/Plant EPD in conformity with ISO 14025 / EN 15804),

Circularity: Minimum post-consumer recycled content: 52%, Recyclability: Fully recyclable,

**Fire safety:** 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,

**Humidity Resistance:** According to EN 13964:2014 Standard: Class C, RH 95% and 30°C, Plant: Class A, RH 70% and 25°C,

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

Accessibility: The tiles are not demountable.

© Ecophon Group Ecophon Focus<sup>TM</sup> B, Created:2021-01-22

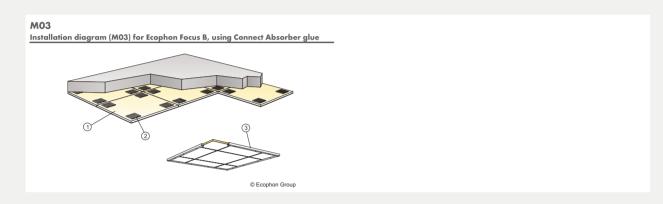
**Installation:** Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification. Rendered surfaces must have sufficient strength to be able to carry the load imposed by the tiles. If doubts, test gluing should be carried out. The surface should always be dry and clean. For best result the surface should be even.

**System weight:** The weight of the system should be approximately 2,5 kg/m<sup>2</sup>

Mechanical properties: Additional live load has to be fixed to the soffit.

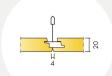
**CE:** Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

### Installation diagram in detail www.ecophon.com



© Ecophon Group Ecophon Focus™ B, Created:2021-01-22





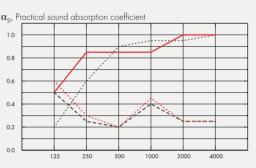
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### Ecophon Focus<sup>™</sup> Ds

### Acoustic

### Sound Absorption:

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



- ···· Focus Ds 20 mm, 65 mm o.d.s.
- Focus Ds 20 mm, 200 mm o.d.s.
- --- Focus Ds gamma 20 mm, 200 mm o.d.s.
- ···· Focus Ds gamma 20 mm + Extra Bass 50 mm, 200 mm o.d.s. o.d.s = overall depth of system

Frog	uency
1164	Uency I

THK		o.d.s. mm	$lpha_{ m p}$ , Practical sound absorption coefficient						$\alpha_{_{\!\scriptscriptstyle{ m W}}}$	Sound absorption class
	mm	0.u.s. IIIIII	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	∞ <sub>w</sub>	Sound absorption class
-	20	65	0.20	0.60	0.90	0.95	0.95	1.00	0.90	А
-	20	200	0.50	0.85	0.85	0.85	1.00	1.00	0.90	А
gamma	20	200	0.50	0.25	0.20	0.40	0.25	0.25	0.25	E
gamma+ Extra Bass	70	200	0.60	0.30	0.20	0.45	0.25	0.25	0.25	E

	THK mm	o.d.s. mm	NRC	SAA
-	20	65	0.90	0.89
gamma	20	200	0.30	0.28
gamma+ Extra Bass	70	200	0.30	0.29
-	20	400	0.80	0.82

THK	AC(1.5)	D <sub>nfw</sub>	CAC dB
mm		Weighted normalized flanking level difference, ISO 10848-2	Ceiling Attenuation Class, ASTM 1414, ASTM E413
20	180	24	25

### **Indoor Air Quality:**

Certificate / Label	Standard	Plant
Eurofins Indoor Air Comfort®	IAC	IAC Gold
French VOC	Α	A+
Finnish M1	•	•

**Environmental Footprint:** Focus Ds: 3,13 (Focus family EPD in conformity with ISO 14025 / EN 15804), Focus Ds/Plant: 2,76 (Focus Ds/Plant EPD in conformity with ISO 14025 / EN 15804),

© Ecophon Group Ecophon Focus<sup>TM</sup> Ds, Created:2021-01-22

**Fire safety:** 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,

**Humidity Resistance:** According to EN 13964:2014 Standard: Class C, RH 95% and 30°C, Plant: Class A, RH 70% and 25°C,

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

**Accessibility:** The tiles in size 600x600 and 1200x600 are easliy demountable. The tiles in size 1200x1200 and XL sizes are demountable. Minimum demounting depth according to installation diagrams.

**Installation:** Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification. The systems are not recommended for small rooms (approximately 2x2 m2). Ceilings with a large amount of integrations require careful planning, design and installation.

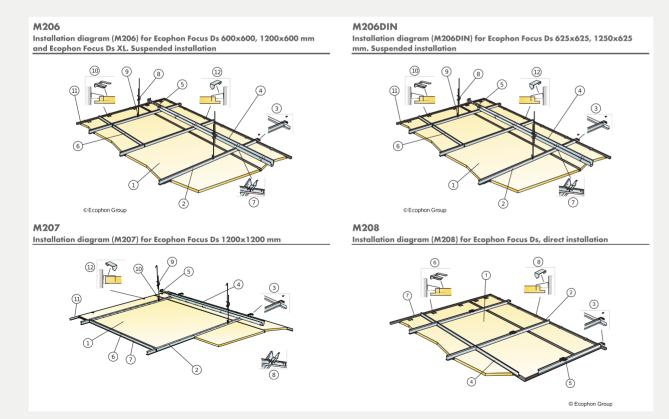
**System weight:** The weight of the system (including suspension grid) should be approximately 3-4 kg/m<sup>2</sup>.

**Mechanical properties:** See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at www.ecophon.com.

**CE:** Ecophon ceiling systems are CE marked according to the European harmonized standard EN 13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

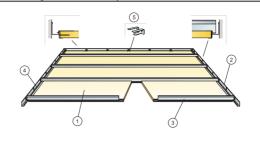
### Installation diagram in detail www.ecophon.com

40

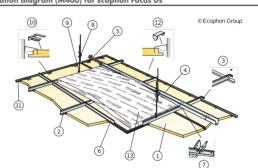


© Ecophon Group Ecophon Focus™ Ds, Created:2021-01-22

M238
Installation diagram (M238) for Ecophon Focus Ds XL in corridors

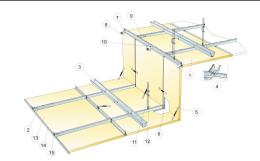


© Ecophon Gr



M394

Installation diagram (M394) for Ecophon Focus Ds Level change



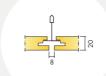
M400 Installation dia

nstallation diagram (M400) for Ecophon Focus Ds

1

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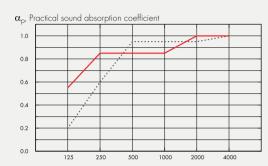


### Ecophon Focus™ Dg

### Acoustic

### Sound Absorption:

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



- .... Focus Dg 20 mm, 65 mm o.d.s.
- Focus Dg 20 mm, 200 mm o.d.s.
- o.d.s = overall depth of system

Frequency H

THK mm	o.d.s. mm		$\alpha_{p'}$	Practical soun		$\alpha_{\scriptscriptstyle \sf W}$	Sound absorption class		
	0.d.s. IIIII	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	u <sub>w</sub>	Souria absorption class
20	65	0.20	0.60	0.95	0.95	0.95	1.00	0.90	А
20	200	0.55	0.85	0.85	0.85	1.00	1.00	0.90	A

	THK mm	o.d.s. mm	NRC	SAA	
-	20	65	0.90	0.89	
-	20	400	0.80	0.82	

THK mm	AC(1.5)  Articulation Class, ASTM E1111, ASTM E1110
20	180

### **Indoor Air Quality:**

Certificate / Label	Standard	Plant	
Eurofins Indoor Air Comfort®	IAC	IAC Gold	
French VOC	Α	A+	
Finnish M 1	•	•	

**Environmental Footprint:** Focus Dg: 3,13 (Focus family EPD in conformity with ISO 14025 / EN 15804), Focus Dg/Plant: 2,76 (Focus Dg/Plant EPD in conformity with ISO 14025 / EN 15804),

Circularity: Minimum post-consumer recycled content: 52%, Recyclability: Fully recyclable,

**Fire safety:** 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,

**Humidity Resistance:** According to EN 13964:2014 Standard: Class C, RH 95% and 30°C, Plant: Class A, RH 70% and 25°C,

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

**Accessibility:** The tiles in size 600x600 and 1200x600 are easly demountable. The tiles in size 1200x1200 and XL sizes are demountable. Minimum demounting depth according to installation diagrams.

**Installation:** Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification. The systems are not recommended for small rooms (approximately 2x2 m2). Ceilings with a large amount of integrations require careful planning, design and installation.

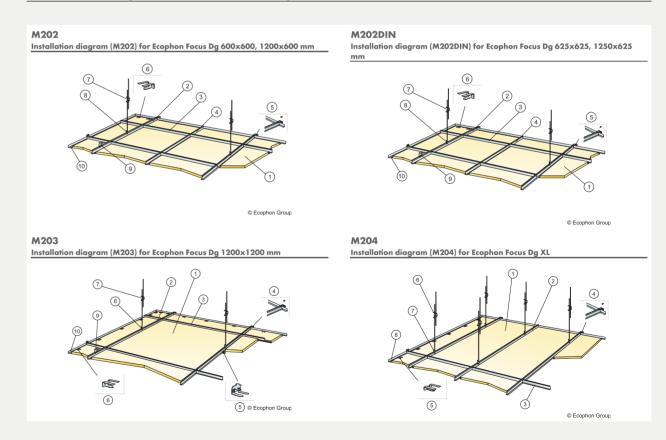
**System weight:** The weight of the system (including suspension grid) should be approximately 3-4 kg/m<sup>2</sup>.

**Mechanical properties:** See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at www.ecophon.com.

**CE:** Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

### Installation diagram in detail www.ecophon.com

© Ecophon Group



© Ecophon Group Ecophon Focus™ Da, Created:2021-01-22

Ecophon Focus™ Dg, Created:2021-01-22

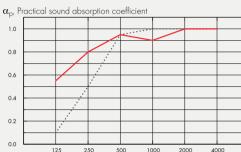


### Ecophon Focus<sup>™</sup> D/A

### Acoustic

### Sound Absorption:

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



- ···· Focus D/A 20 mm, 60 mm o.d.s.
- Focus D/A 20 mm, 200 mm o.d.s.

o.d.s = overall depth of system

125 250 500 1000 2000 4000

THK mm	o.d.s. mm	$lpha_{ m p}$ , Practical sound absorption coefficient					$\alpha_{\scriptscriptstyle \sf W}$	Sound absorption class	
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	₩.	Sound absorption class
20	60	0.10	0.50	0.95	1.00	1.00	1.00	0.80	А
20	200	0.55	0.80	0.95	0.90	1.00	1.00	0.95	A

	THK mm	o.d.s. mm	NRC	SAA	
-	20	60	0.90	0.89	
-	20	400	0.80	0.82	

THK	AC(1.5)	D <sub>nfw</sub>	CAC dB
mm		Weighted normalized flanking level difference, ISO 10848-2	Ceiling Attenuation Class, ASTM 1414, ASTM E413
20	180	24	25

### **Indoor Air Quality:**

Certificate / Label	Standard	Plant		
Eurofins Indoor Air Comfort®	IAC	IAC Gold		
French VOC	Α	A+		
Finnish M 1	•	•		

Circularity: Fully recyclable.

**Fire safety:** 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,

**Humidity Resistance:** According to EN 13964:2014 Standard: Class C, RH 95% and 30°C, Plant: Class A, RH 70% and 25°C,

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Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

**Accessibility:** The tiles are easily demountable. Minimum demounting depth according to installation diagrams.

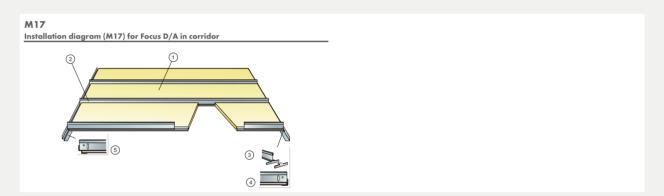
**Installation:** Installed according to installation diagram and bandraster/grid supplier recommendations.

**System weight:** The weight of the system (including suspension grid) should be approximately 2 kg/m<sup>2</sup>.

**Mechanical properties:** See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at www.ecophon.com.

**CE:** Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

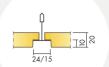
### Installation diagram in detail www.ecophon.com



1

© Ecophon Group Ecophon Focus<sup>M</sup> D/A, Created:2021-01-22



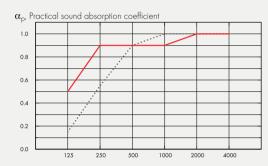


### Ecophon Focus™ E

### Acoustic

### Sound Absorption:

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



- ···· Focus E 20 mm, 60 mm o.d.s.
- Focus E 20 mm, 200 mm o.d.s.

o.d.s = overall depth of system

Frequency l

THK mm	o.d.s. mm	$lpha_{ m p}$ , Practical sound absorption coefficient						$\alpha_{\scriptscriptstyle \sf w}$	Sound absorption class
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	w.	Sound absorption class
20	60	0.15	0.55	0.90	1.00	1.00	1.00	0.85	В
20	200	0.50	0.90	0.90	0.90	1.00	1.00	0.95	А

	THK mm	o.d.s. mm	NRC	SAA
-	20	60	0.90	0.87
-	20	400	0.85	0.85

TH	IK.	AC(1.5)	D <sub>nfw</sub>	CAC dB
THK	Articulation Class, ASTM E1111, ASTM E1110	Weighted normalized flanking level difference, ISO 10848-2	Ceiling Attenuation Class, ASTM 1414, ASTM E413	
20	0	180	22	23

### **Indoor Air Quality:**

Certificate / Label	Standard	Plant
Eurofins Indoor Air Comfort®	IAC	IAC Gold
French VOC	Α	A+
Finnish M1	•	•

**Environmental Footprint:** Focus E: 3,13 (Focus family EPD in conformity with ISO 14025 / EN 15804), Focus E/Plant: 2,35 (Focus E/Plant EPD in conformity with ISO 14025 / EN 15804),

Circularity: Minimum post-consumer recycled content: 52%, Recyclability: Fully recyclable,

**Fire safety:** 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,

**Humidity Resistance:** According to EN 13964:2014 Standard: Class C, RH 95% and 30 $^{\circ}$ C, Plant: Class A, RH 70% and 25 $^{\circ}$ C,

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

**Accessibility:** The tiles are easily demountable. Minimum demounting depth according to installation diagrams.

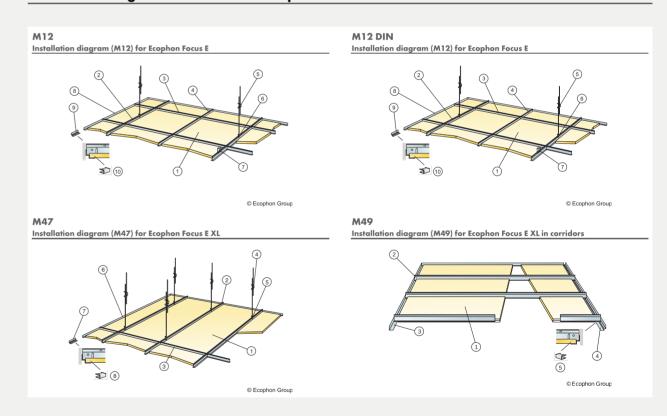
**Installation:** Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification.

**System weight:** The weight of the system (including suspension grid) should be approximately 3 kg/m<sup>2</sup>.

**Mechanical properties:** See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at www.ecophon.com.

**CE:** Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

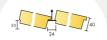
### Installation diagram in detail www.ecophon.com



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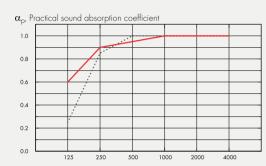


### Ecophon Focus™ Ez

### Acoustic

### Sound Absorption:

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



- ···· Focus Ez 40 mm, 60 mm o.d.s.
- Focus Ez 40 mm, 200 mm o.d.s.
- o.d.s = overall depth of system

Frequency H

THK mm	o.d.s. mm	$lpha_{ m p}$ , Practical sound absorption coefficient						$\alpha_{\scriptscriptstyle \sf W}$	Sound absorption class
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	₩.	Sound absorption class
40	60	0.25	0.85	1.00	1.00	1.00	1.00	1.00	А
40	200	0.60	0.90	0.95	1.00	1.00	1.00	1.00	А

	THK o.d.s. mm		NRC	SAA
-	40	60	1.00	0.99
-	40	200	1.00	0.97

THK	AC(1.5)	D <sub>nfw</sub>	CAC dB
mm	Articulation Class, ASTM E1111, ASTM E1110	Weighted normalized flanking level difference, ISO 10848-2	Ceiling Attenuation Class, ASTM 1414, ASTM E413
40	200	29	31

### **Indoor Air Quality:**

Certificate / Label	Standard	Plant
Eurofins Indoor Air Comfort®	IAC	IAC Gold
French VOC	Α	A+
Finnish M 1	•	•

Circularity: Minimum post-consumer recycled content: 52%, Recyclability: Fully recyclable,

**Fire safety:** 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,

**Humidity Resistance:** According to EN 13964:2014 Standard: Class C, RH 95% and 30°C, Plant: Class A, RH 70% and 25°C,

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 $\textbf{Visual appearance:} \ \ \text{White Frost, nearest NCS colour sample S 0500-N, 85\% light reflectance.} \ \ \text{Gloss} < 1.$ 

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

**Accessibility:** The tiles are easily demountable. Minimum demounting depth according to installation diagrams.

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

**System weight:** The weight of the system (including suspension grid) should be approximately 5 kg/m<sup>2</sup>

**Mechanical properties:** See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at www.ecophon.com.

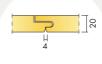
**CE:** Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

### Installation diagram in detail www.ecophon.com



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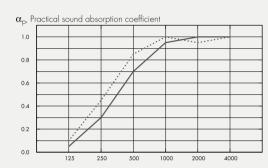


### Ecophon Focus™ F

### Acoustic

### Sound Absorption:

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



- Focus F 20 mm, 20 mm o.d.s.
- ···· Focus F 20 mm, 40 mm o.d.s.
- o.d.s = overall depth of system

Frequency H

THK	o.d.s. mm		$\alpha_{p'}$	Practical soun	d absorption co	efficient		$\alpha_{w}$	Sound absorption class
mm	0.0.3. 111111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	o. <sub>₩</sub>	Journa absorption class
20	20	0.05	0.30	0.70	0.95	1.00	1.00	0.60	С
20	40	0.10	0.45	0.85	1.00	0.95	1.00	0.75	С

	THK mm	o.d.s. mm	NRC	SAA	
-	20	20	0.75	0.77	

### **Indoor Air Quality:**

Certificate / Label	Standard	Plant
Eurofins Indoor Air Comfort®	IAC	IAC Gold
French VOC	Α	A+
Finnish M 1	•	•

**Environmental Footprint:** Focus F: 3,13 (Focus family EPD in conformity with ISO 14025 / EN 15804), Focus F/Plant: 2,76 (Focus F/Plant EPD in conformity with ISO 14025 / EN 15804),

Circularity: Minimum post-consumer recycled content: 52%, Recyclability: Fully recyclable,

**Fire safety:** 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,

**Humidity Resistance:** According to EN 13964:2014 Standard: Class C, RH 95% and 30°C, Plant: Class A, RH 70% and 25°C,

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

Accessibility: The tiles are not demountable.

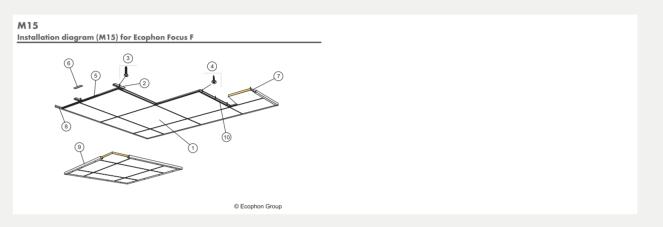
**Installation:** Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification. For best result the surface should be even, however an acceptable result could be achieved on slightly uneven surfaces. If very uneven surfaces – installation of furring (evenly spaced timber battens) as the substrate for the tiles is recommended.

**System weight:** The weight of the system should be approximately 2,5 kg/m<sup>2</sup>

Mechanical properties: Additional live load has to be fixed to the soffit.

**CE:** Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

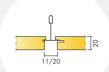
### Installation diagram in detail www.ecophon.com



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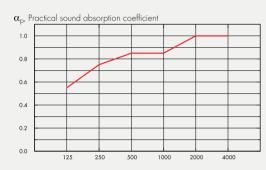


### Ecophon Focus<sup>™</sup> Lp

### Acoustic

### Sound Absorption:

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



Focus Lp 20 mm, 200 mm o.d.s.
 o.d.s = overall depth of system

 THK mm
 α<sub>p</sub>, Practical sound absorption coefficient
 α<sub>w</sub>
 Sound absorption class

 20
 200
 0.55
 0.75
 0.85
 0.85
 1.00
 1.00
 0.90
 A

	THK mm	o.d.s. mm	NRC	SAA	
-	20	400	0.80	0.82	

TUV	AC(1.5)	D <sub>nfw</sub>	CAC dB
THK	Articulation Class, ASTM E1111, ASTM E1110	Weighted normalized flanking level difference, ISO 10848-2	Ceiling Attenuation Class, ASTM 1414, ASTM E413
20	180	24	25

### **Indoor Air Quality:**

Certificate / Label	Standard	Plant
Eurofins Indoor Air Comfort®	IAC	IAC Gold
French VOC	Α	A+
Finnish M 1	•	•

**Environmental Footprint:** Focus Lp: 3,13 (Focus family EPD in conformity with ISO 14025 / EN 15804), Focus Lp/Plant: 2,76 (Focus Lp/Plant EPD in conformity with ISO 14025 / EN 15804),

Circularity: Minimum post-consumer recycled content: 52%, Recyclability: Fully recyclable,

**Fire safety:** 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,

**Humidity Resistance:** According to EN 13964:2014 Standard: Class C, RH 95% and 30°C, Plant: Class A, RH 70% and 25°C,

 $\textbf{Visual appearance:} \ \ \text{White Frost, nearest NCS colour sample S 0500-N, 85\% light reflectance.} \ \ \text{Gloss} < 1.$ 

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

**Accessibility:** The tiles are easily demountable. Minimum demounting depth according to installation diagrams.

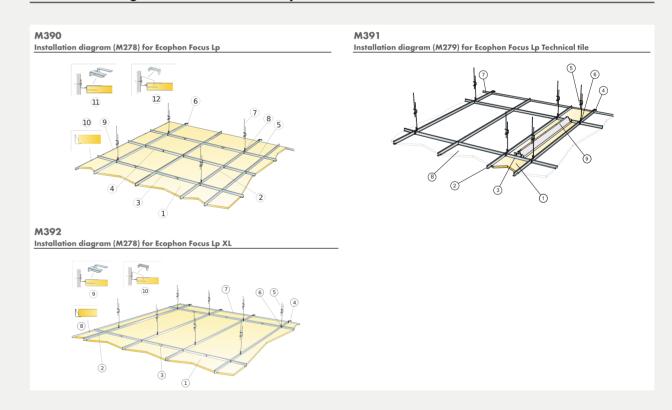
**Installation:** Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification. The systems are not recommended for small rooms (approximately 2x2 m2). Ceilings with a large amount of integrations require careful planning, design and installation.

**System weight:** The weight of the system (including suspension grid) should be approximately 3-4 kg/m<sup>2</sup>.

**Mechanical properties:** See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at www.ecophon.com. For the Technical tiles installed according to M391 there is a load bearing capacity of 100 N for each Main runner per 1200 mm. This gives a total load bearing capacity of 200 N for a load evenly distributed on two Main runners.

**CE:** Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

### Installation diagram in detail www.ecophon.com

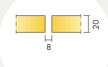


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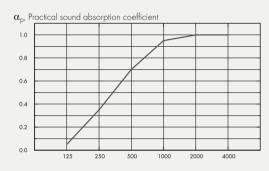


### Ecophon Focus™ SQ

### Acoustic

### Sound Absorption:

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



Focus SQ 20 mm, 20 mm o.d.s.
 o.d.s = overall depth of system

 $\alpha_{p_{i}}$  Practical sound absorption coefficient 125 Hz 250 Hz 2000 Hz 4000 Hz 500 Hz 1000 Hz 20 0.05 0.35 0.70 0.95 1.00 1.00 0.65 20

THK	AC(1.5)
mm	Articulation Class, ASTM E1111, ASTM E1110
20	190

### **Indoor Air Quality:**

Certificate / Label	Standard	Plant
Eurofins Indoor Air Comfort®	IAC	IAC Gold
French VOC	Α	A+
Finnish M1	•	

**Environmental Footprint:** Focus Lp: 3,13 (Focus family EPD in conformity with ISO 14025 / EN 15804), Focus Lp/Plant: 2,76 (Focus Lp/Plant EPD in conformity with ISO 14025 / EN 15804),

Circularity: Minimum post-consumer recycled content: 52%, Recyclability: Fully recyclable,

**Fire safety:** 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,

**Humidity Resistance:** According to EN 13964:2014 Standard: Class C, RH 95% and 30°C, Plant: Class A, RH 70% and 25°C,

Visual appearance: White Frost, nearest NCS colour sample \$ 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

Accessibility: The tiles are not demountable.

**Installation:** Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification. Rendered surfaces must have sufficient strength to be able to carry the load imposed by the tiles. If doubts, test gluing should be carried out. The surface should always be dry and clean. For best result the surface should be even, however an acceptable result could be achieved on slightly uneven surfaces.

**System weight:** The weight of the system should be approximately 2,5 kg/m<sup>2</sup>

Mechanical properties: Additional live load has to be fixed to the soffit.

**CE:** Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

### Installation diagram in detail www.ecophon.com



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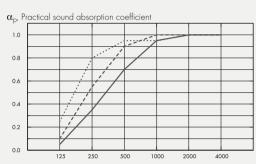
### Ecophon Focus<sup>™</sup> Levels

### Acoustic

### Sound Absorption:

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

Frequency Hz



- ···· Focus Levels 40 mm, 43 mm o.d.s.
- --- Focus Levels 30 mm, 33 mm o.d.s.
- Focus Levels 20 mm, 23 mm o.d.s.

o.d.s = overall depth of system

α<sub>p</sub>, Practical sound absorption coefficient

1.0

0.8

0.6

0.4

0.2

- Focus Levels 20/30/40 mm (M488, M489), 23-43 mm o.d.s. o.d.s = overall depth of system

THK	o.d.s. mm		$\alpha_{p'}$	Practical soun	d absorption co	efficient		$\alpha_{w}$	Sound absorption class	
mm	0.0.5. 111111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	₩.	Souria absorption class	
40	43	0.25	0.80	0.95	0.95	1.00	1.00	1.00	А	
30	33	0.10	0.55	0.90	1.00	1.00	1.00	0.85	В	
20	23	0.05	0.35	0.70	0.95	1.00	1.00	0.65	С	
0	43	0.15	0.55	0.90	0.95	1.00	1.00	0.85	В	

### **Indoor Air Quality:**

Certificate / Label

Eurofins Indoor Air Comfort® IA

French VOC A

Finnish M1

Circularity: Fully recyclable.

**Fire safety:** 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,

Humidity Resistance: Class C, relative humidity 95% and 30°C, according to EN 13964:2014

© Ecophon Group Ecophon Focus™ Levels, Created:2021-01-22

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

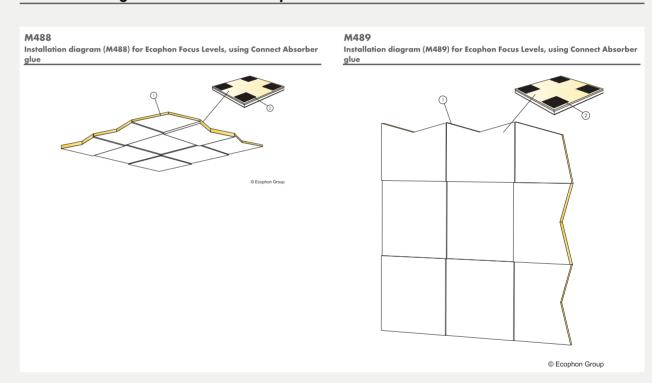
Accessibility: The tiles are not demountable.

**Installation:** Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification. Rendered surfaces must have sufficient strength to be able to carry the load imposed by the tiles. If doubts, test gluing should be carried out. The surface should always be dry and clean. For best result the surface should be even, however an acceptable result could be achieved on slightly uneven surfaces.

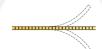
Mechanical properties: Additional live load has to be fixed to the soffit.

**CE:** Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

### Installation diagram in detail www.ecophon.com







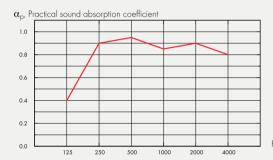
### Ecophon Focus<sup>™</sup> Flexiform A

### Acoustic

Acoustic values corresponding to a flat ceiling.

### Sound Absorption

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



Focus Flexiform A 30 mm, 200 mm o.d.s.
 o.d.s = overall depth of system

THK	o.d.s. mm		$\alpha_{p'}$	Practical soun	d absorption co	efficient		$\alpha_{\scriptscriptstyle w}$	Sound absorption class
mm	0.0.3. 111111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	∞ <sub>W</sub>	
30	200	0.40	0.90	0.95	0.85	0.90	0.80	0.90	А

THK	D <sub>nfw</sub>	CAC dB
	Weighted normalized flanking level difference, ISO 10848-2	Ceiling Attenuation Class, ASTM 1414, ASTM E413
20	24	25

### **Indoor Air Quality:**

Certificate / Label

Eurofins Indoor Air Comfort® IAC

French VOC A

Finnish M1

Circularity: Fully recyclable.

**Fire safety:** 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,

Humidity Resistance: Class C, relative humidity 95% and 30°C, according to EN 13964:2014

Visual appearance: White Frost, nearest NCS colour sample \$ 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

Accessibility: The tiles are not demountable.

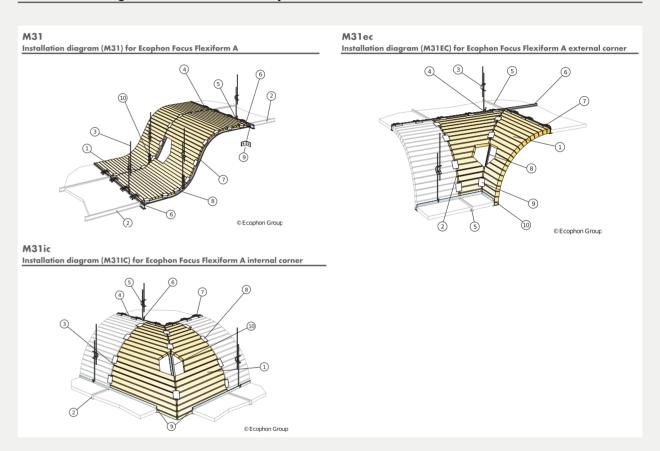
**Installation:** Installed according to installation diagrams, installation guides and drawing aid. (Please note: Extreme incident light, near windows or other light sources, can create undesired shadow effects on the structured surface on curved installations.)

**System weight:** The weight is approximately 3 kg/m<sup>2</sup>, depending on the installation method.

Mechanical properties: Additional live load has to be fixed to the soffit.

**CE:** Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

### Installation diagram in detail www.ecophon.com



© Ecophon Group Ecophon Focus<sup>TM</sup> Flexiform A, Created:2021-01-22 © Ecophon Group



### Ecophon Focus Edge™ 500

Acoustic: Ecophon Focus Edge 500 is a perimeter component. For acoustic data on the system - please see corresponding ceiling system (Focus Ds, Focus Dg or Focus/Master E).

Circularity: Fully recyclable.

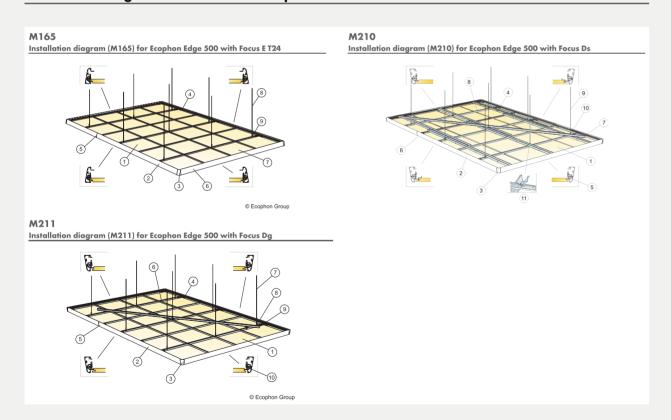
Fire safety: Europe: EN 13501-1, A1,

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

Mechanical properties: Additional live load has to be fixed to the soffit.

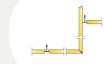
**CE:** Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

### Installation diagram in detail www.ecophon.com







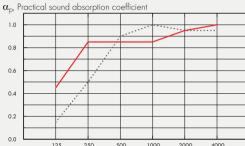


### Ecophon Focus<sup>™</sup> Fixiform E

### Acoustic

Acoustic values corresponding to a flat ceiling.

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



- ···· Focus Fixiform E 20 mm, 60 mm o.d.s.
- Focus Fixiform E 20 mm, 200 mm o.d.s.

o.d.s = overall depth of system

125	250	300	1000	2000	4000
				α.	Practical sound abs

THK	o.d.s. mm		$\alpha_{p'}$	Practical soun	id absorption co	efficient		$\alpha_{\scriptscriptstyle \sf W}$	Sound absorption class
mm	0.0.3. 11111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	o.₩	Journal absorption class
20	60	0.15	0.50	0.90	1.00	0.95	0.95	0.80	В
20	200	0.45	0.85	0.85	0.85	0.95	1.00	0.90	A

TH	D <sub>nfw</sub>	CAC dB
	Weighted normalized flanking level difference, ISO 10848-2	Ceiling Attenuation Class, ASTM 1414, ASTM E413
20	24	25

### **Indoor Air Quality:**

Certificate / Label Eurofins Indoor Air Comfort® French VOC Finnish M1

Circularity: Fully recyclable.

Fire safety: 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,

Humidity Resistance: Class C, relative humidity 95% and 30°C, according to EN 13964:2014

Visual appearance: White Frost, nearest NCS colour sample \$ 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

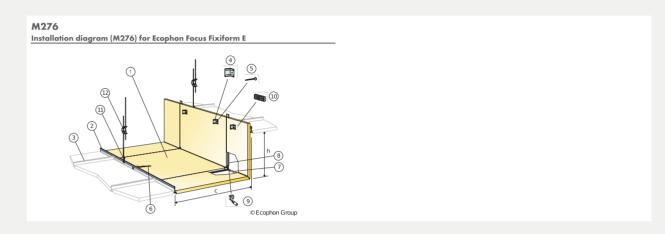
Accessibility: The panels are demountable via adjacent flat ceiling tiles.

Installation: Installed according to installation diagrams, installation guides and drawing aid. Focus Fixiform E is supplied with all necessary installation accessories.

**Mechanical properties:** Additional live load has to be fixed to the soffit.

**CE:** Ecophon ceiling systems are CE marked according to the European harmonized standard EN 13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

### Installation diagram in detail www.ecophon.com



© Ecophon Group Ecophon Focus™ Fixiform E, Created:2021-01-22 © Ecophon Group Ecophon Focus™ Fixiform E, Created:2021-01-22





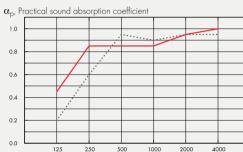
### Ecophon Focus<sup>™</sup> Fixiform Ds

### Acoustic

Acoustic values corresponding to a flat ceiling.

### Sound Absorption

Test results according to EN ISO 354. Classification according to EN ISO 11654.



- ···· Focus Fixiform Ds 20 mm, 75 mm o.d.s.
- Focus Fixiform Ds 20 mm, 200 mm o.d.s.

o.d.s = overall depth of system

125	250	500	1000	2000	4000	
				α.	Practical	sound absorption

THK	o.d.s. mm		$\alpha_{p'}$	Practical soun	d absorption co	efficient		$\alpha_{\scriptscriptstyle \sf W}$	Sound absorption class
mm	0.0.3. 111111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	₩.	Sound absorption class
20	75	0.20	0.60	0.95	0.90	0.95	0.95	0.90	А
20	200	0.45	0.85	0.85	0.85	0.95	1.00	0.90	А

THI	D <sub>nfw</sub> Weighted normalized flanking level difference, ISO 10848-2	CAC dB  Ceiling Attenuation Class, ASTM 1414, ASTM E413
20	24	25

### **Indoor Air Quality:**

Certificate / Label

Eurofins Indoor Air Comfort® IAC

French VOC A

Finnish M1

Circularity: Fully recyclable.

Fire safety: 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,

Humidity Resistance: Class C, relative humidity 95% and 30°C, according to EN 13964:2014

Visual appearance: White Frost, nearest NCS colour sample \$ 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

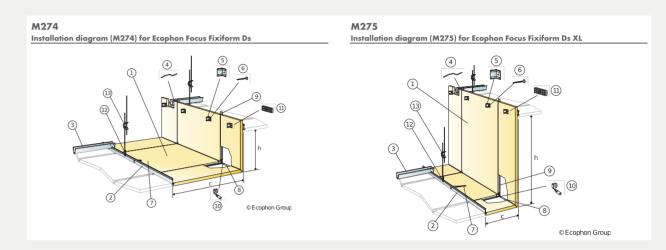
Accessibility: The panels are demountable via adjacent flat ceiling tiles.

**Installation:** Installed according to installation diagrams, installation guides and drawing aid. Focus Fixiform Ds is supplied with all necessary installation accessories.

**Mechanical properties:** Additional live load has to be fixed to the soffit.

**CE:** Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

### Installation diagram in detail www.ecophon.com



© Ecophon Group Ecophon Focus™ Fixiform Ds, Created:2021-01-22 © Ecophon Group Ecophon Focus™ Fixiform Ds, Created:2021-01-22



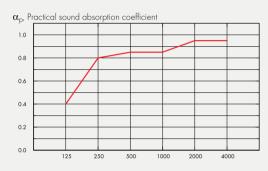


### Ecophon Focus<sup>™</sup> Frieze

### Acoustic

### Sound Absorption:

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



Focus Frieze E 20 mm, 200 mm o.d.s.o.d.s = overall depth of system

THK	o.d.s. mm		$\alpha_{p'}$	Practical soun	d absorption co	efficient		$\alpha_{w}$	Sound absorption class
mm	0.u.s. IIIII	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	₩,	
20	200	0.40	0.80	0.85	0.85	0.95	0.95	0.90	А

THK	AC(1.5)	D <sub>nfw</sub>	CAC dB
mm	Articulation Class, ASTM E1111, ASTM E1110	Weighted normalized flanking level difference, ISO 10848-2	Ceiling Attenuation Class, ASTM 1414, ASTM E413
20	190	24	25

### **Indoor Air Quality:**

 Certificate / Label

 Eurofins Indoor Air Comfort®
 IAC

 French VOC
 A

 Finnish M1
 •

Circularity: Fully recyclable.

**Fire safety:** 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,

Humidity Resistance: Class C, relative humidity 95% and 30°C, according to EN 13964:2014

Visual appearance: White Frost, nearest NCS colour sample \$ 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

Accessibility: The tiles are not demountable.

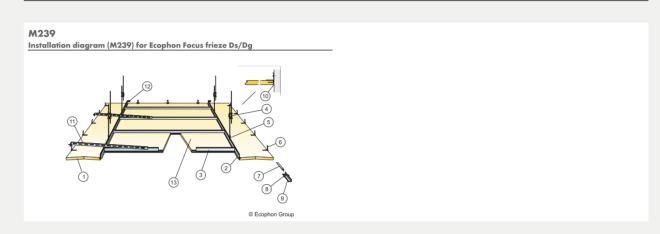
**Installation:** Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification.

**System weight:** The system consists of Ecophon Focus<sup>™</sup> frieze tiles and Connect<sup>™</sup> grid systems, with an approximate weight of 3 kg/m².

**Mechanical properties:** See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at www.ecophon.com.

**CE:** Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

### Installation diagram in detail www.ecophon.com



© Ecophon Group Ecophon Focus<sup>TM</sup> Frieze, Created:2021-01-22 © Ecophon Group









### Ecophon Focus™ Wing

Acoustic: Ecophon Focus Wing is a perimeter component. As such it is absorbent, however, for acoustic data on the system - please see corresponding ceiling system (Focus Ds or Focus/Master E).

### **Indoor Air Quality:**

Certificate / Label

Eurofins Indoor Air Comfort® IAC Gold
French VOC A+

Circularity: Fully recyclable

**Fire safety:** 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,

Humidity Resistance: Class C, relative humidity 95% and 30°C, according to EN 13964:2014

Visual appearance: White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

Accessibility: The tiles are not demountable.

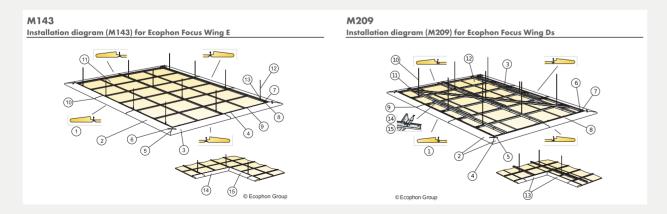
**Installation:** Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification.

**System weight:** The systems consist of Ecophon Focus<sup>TM</sup> Wing elements and Connect<sup>TM</sup> grid systems, with an approximate weight of 1 kg/m.

Mechanical properties: No additional live load is allowed.

**CE:** Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

### Installation diagram in detail www.ecophon.com



### Ecophon Square 43™

### **Lighting performance:**

System effect: 27 W Light source: LED 24,5 W Luminous flux Square Dg, Ds, E: 3281 Im Luminous flux Square Eg, Ez: 2898 Im Light efficiency Square Dg, Ds, E: 121,4 Im/W Light efficiency Square Dg, Ds, E: 108 Im/W Colour temperature: 4000K Color rendering index: Ra ≥80 Colour tolerance: MacAdam ≤3 SDCM Light output ratio (LOR): 100% Light distribution up/down: 0/100 Expected lifespan: L90 >50 000 h Expected lifespan: L70 >100 000 h

**Connection:** The standard on/off electronic HF ballast delivered with 2,5 meters of cable 3x0,75 mm<sup>2</sup> and Euro pluga. The SwitchDIM/DALI delivered without cable.

**Electrical data:** 220-240 V, 50-60 Hz, power factor cos \$\phi > 0.98\$. Electronic HF ballast or electronic HF dim ballast for digital regulation. Light source: led module of 27W total.

Electrical approvals: IP20, Class 1.

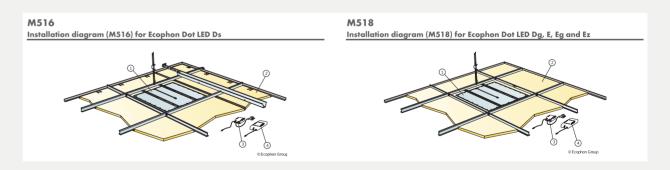
**Visual appearance:** Tile surface finish; White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

**Accessibility:** The tiles are easily demountable. Minimum demounting depth according to installation diagrams.

**Installation:** Installed according to system range which include information regarding minimum overall depth of system. The tile with luminaire housing rests on the T-profiles and the SwitchDIM/DALI and standard on/off ballasts are fastened to the grid or tile next to the luminaire with velcro. Once the tile with luminaire and ballast are in place a certified installation electrician must connect the wiring to sockets or to the next luminaire.

### Installation diagram in detail www.ecophon.com



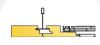
© Ecophon Group Ecophon Focus<sup>TM</sup> Wina, Created:2021-01-22 © Ecophon Group

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### Ecophon Dot™

### **Lighting performance:**

System effect Dot: 27 W Light source: LED 24,5 W Luminous flux Dot Dg, Ds, E: 2936 Im Luminous flux Dot Eg, Ez: 2635 Im Light efficiency Dot Dg, Ds, E: 108,7 Im/W Light efficiency Dot Eg, Ez: 99 Im/W Colour temperature: 4000K Color rendering index: Ra ≥80 Colour tolerance: MacAdam ≤3 SDCM Light output ratio (LOR): 100% Light distribution up/down: 0/100 Expected lifespan: L90 >50 000 h Expected lifespan: L70 >100 000 h

**Connection:** The standard on/off electronic HF ballast delivered with 2,5 meters of cable 3x0,75 mm<sup>2</sup> and Euro pluga. The SwitchDIM/DALI delivered without cable.

**Electrical data:** 220-240 V, 50-60 Hz, power factor cos φ>0,98. Electronic HF ballast or electronic HF dim ballast for digital regulation. Light source: led module of 27W total.

Electrical approvals: IP20, Class 1.

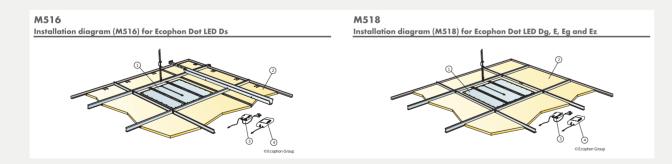
**Visual appearance:** Tile surface finish; White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

**Accessibility:** The tiles are easily demountable. Minimum demounting depth according to installation diagrams.

**Installation:** Installed according to system range which include information regarding minimum overall depth of system. The tile with luminaire housing rests on the T-profiles and the SwitchDIM/DALI and standard on/off ballasts are fastened to the grid or tile next to the luminaire with velcro. Once the tile with luminaire and ballast are in place a certified installation electrician must connect the wiring to sockets or to the next luminaire.

### Installation diagram in detail www.ecophon.com



### Ecophon Line™

### **Lighting performance:**

System effect: 27 W Light source: LED 24,5 W Luminous flux: 2143 lm Light efficiency: 80,3 lm/W Colour temperature: 4000K Color rendering index: Ra ≥80 Colour tolerance: MacAdam ≤3 SDCM Light output ratio (LOR): 100% Light distribution up/down: 0/100 Expected lifespan: L90 >50 000 h Expected lifespan: L70 >100 000 h

**Connection:** The standard on/off electronic HF ballast delivered with 2,5 meters of cable 3x0,75 mm<sup>2</sup> and Euro plugg. The SwitchDIM/DALI delivered without cable.

**Electrical data:** 220-240 V, 50-60 Hz, power factor cos φ>0,98. Electronic HF ballast or electronic HF dim ballast for digital regulation. Light source: led module of 27W total.

Electrical approvals: IP20, Class 1.

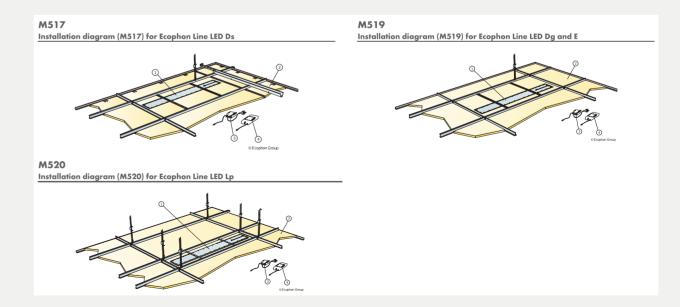
**Visual appearance:** Tile surface finish; White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.

Cleanability: Daily dusting and vacuum cleaning. Weekly wet wiping.

**Accessibility:** The tiles are easily demountable. Minimum demounting depth according to installation diagrams.

**Installation:** Installed according to system range which include information regarding minimum overall depth of system. The tile with luminaire housing rests on the T-profiles and the SwitchDIM/DALI and standard on/off ballasts are fastened to the grid or tile next to the luminaire with velcro. Once the tile with luminaire and ballast are in place a certified installation electrician must connect the wiring to sockets or to the next luminaire.

### Installation diagram in detail www.ecophon.com



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Ecophon is the leading supplier of solutions for indoor acoustic environments that improve working performance, wellbeing and quality of life.

The principles guiding our work are grounded in our Swedish heritage, where a human approach and a common responsibility for people's lives and future challenges come naturally. Ecophon is part of the Saint-Gobain Group, a world leader in sustainable habitat solutions that balance the need for comfort and cost-effectiveness with energy efficiency and environmental responsibility.

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