

Ecophon Focus[™] A

Ecophon Focus™ A has an exposed grid system with easily demountable tiles. For applications where a robust suspended ceiling system is required. Improves absorption in the low frequency range, Ecophon Extra Bass can be installed on top of the suspended ceiling.



SYSTEM RANGE

3[Size, mm	600x600	1200x600	1200x1200	XL 1600x600	XL 1800x600	XL 2000x600	XL 2400x600
	Connect T15	•	•	•				
	Connect T24	•	•	•	•	•	•	•
	T24	•	•	•				
	Thickness (THK)	20	20	20	20	20	20	20
	Inst. Diagr.	M01, M399	M01, M399	M01	M16, M46	M16, M46	M16, M46	M16, M46

24/15



Focus A tile

Section of Focus A system with Connect T24



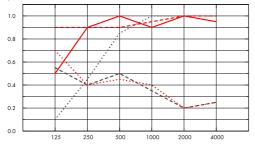
Acoustic



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.

 $\alpha_{\mathsf{p}'}$ Practical sound absorption coefficient



···· 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.
- $F_{requency Hz}$ o.d.s = overall depth of system

	тнк	o.d.s. mm		$lpha_{ m p'}$ Prac	tical sound	d absorptior	n coefficient		. α.,,	Sound absorption class
	mm	0.0.5. 11111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		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	0.95	1.00	A
+ Extra Bass,	70	200	0.90	0.90	0.90	0.95	1.00	1.00	0.95	A
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
-	20	200	0.95	0.93
+ 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

тнк	AC(1.5)	D _{nfw}	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	All Products	ÉMISSIONS DANS L'AIR INTÉRIEUR
Eurofins Indoor Air Comfort®	IAC Gold	
French VOC	A+	
Finnish M1	•	



Cradle to Cradle Certified®

This product is Cradle to Cradle Certified® at Bronze level (version 4.0).



Material Health

This product has received a C2C Certified Material Health Certificate™ at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate™ is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.

6M1>



Environmental Footprint

	kg CO2 equiv/m²	Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804
Focus A	2,60	- 14023 / EIN 13604



Circularity

Minimum post-consumer recycled content	51%
Recyclability	Fully recyclable



Fire safety

Country	Fire standard	Class	The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182.
Europe	EN 13501-1	A2-s1,d0	non-combusible according to ETV 150-1162.



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 easily demountable. Minimum demounting depth according to installation diagrams.



Installation

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



System weight

The weight of the system (including suspension grid) should be approximately 3 kg/m².



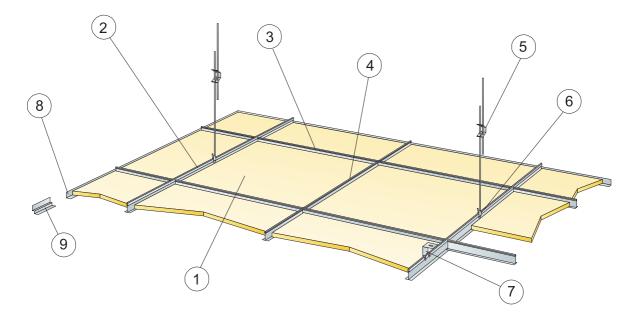
Mechanical properties

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



CE

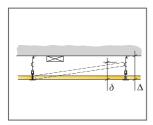
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

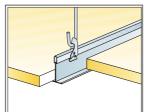


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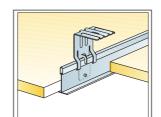
QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm	Size, mm	
	600×600	1200×600	1200x1200
1 Focus A	2,8/m²	1,4/m²	0,7/m²
2 Connect T24 or T15 Main runner, installed at 1200 mm centres (max. distance from wall 600 mm, can be extended up to 1200 mm if no live load between Main runner and wall).	0,9m/m²	0,9m/m²	0,9m/m²
B Connect T24 or T15 Cross tee, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²	0,9m/m²
Connect T24 or T15 Cross tee, L=600 mm	0,9m/m²	-	
Connect Adjustable hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²	0,7/m²
Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²	0,7/m²
For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m²	0,7/m²	0,7/m²
3 Connect Angle trim, fixed at 300 mm centres	as required	as required	as required
Connect Shadow-line trim, fixed at 300 mm centres	as required	as required	as required
Δ Min. overall depth of system, with adjustable hanger: 100 mm, with direct bracket: 50 mm			-
δ Min. demounting depth: 120 mm (130 mm with 1200x1200)			
For luminaire integration in panels use Connect Bridging	-		
When using panels in format 1200x1200 mm and XL-format in combination with T15 grid, secure grid with wall brackets			-



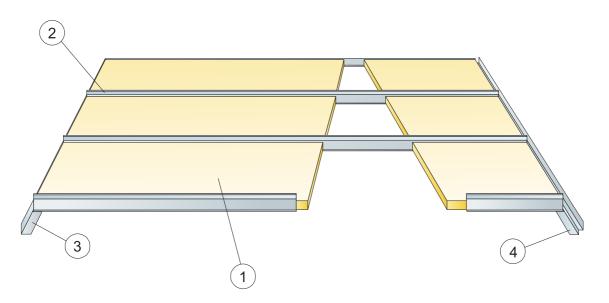


Suspension with adjustable hanger and clip



Suspension with direct bracket

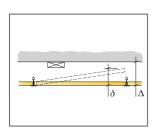
Size, mm 500x600x20	Max live load (N) 50	Min load bearing capacity (N) 160
200x600x20	50	160
200x1200x20	50	160



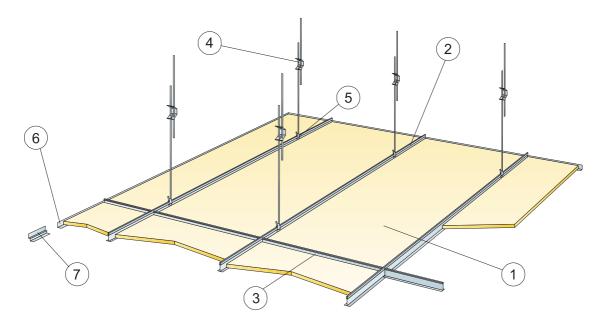
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QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm	Size, mm		
	1600×600	1800×600	2000×600	2400×600
Focus A	1,05/m²	0,95/m²	0,85/m²	0,7/m²
Connect T24 Corridor profile, installed at 600 mm centres	1,05/m²	0,95/m²	0,85/m²	0,7/m²
Connect Angle trim, fixed at 200 mm centres	as required	as required	as required	as required
Connect Shadow-line trim, fixed at 200 mm centres	as required	as required	as required	as required
Δ Min. overall depth of system: 40 mm		-		
δ Min. demounting depth: 65 mm		-		

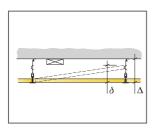


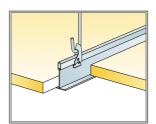
Size, mm	Max live load (N)	Min load bearing capacity (N)
1600x600x20	40	-
1800x600x20	20	-
2000x600x20	10	
2400x600x20	0	-



QUANTITY SPECIFICATION (EXCL. WASTAGE)

Size, mm 1600x600 1800x600 2000×600 2400×600 1 Focus A 1,05/m² 0,85/m² 0,95/m² 0,7/m² 2 Connect T24 Main runner, installed at 600 mm centres 1,7m/m² 1,7m/m² 1,7m/m² 1,7m/m² 3 Connect T24 Cross tee, L=600 mm 0,65m/m² 0,6m/m² 0,5m/m² 0,45m/m² 1,1/m² $1,1/m^2$ $1,1/m^2$ $1, 1/m^2$ 4 Connect Adjustable hanger, installed at 1500 mm centres (max. distance from wall 450 mm) 5 Connect Hanger clip 1,1/m² 1,1/m² 1,1/m² 1,1/m² 6 Connect Angle trim, fixed at 300 mm centres as required as required as required as required 7 Connect Shadow-line trim, fixed at 300 mm centres as required as required as required as required Δ Min. overall depth of system: 100 mm δ Min. demounting depth: 100 mm

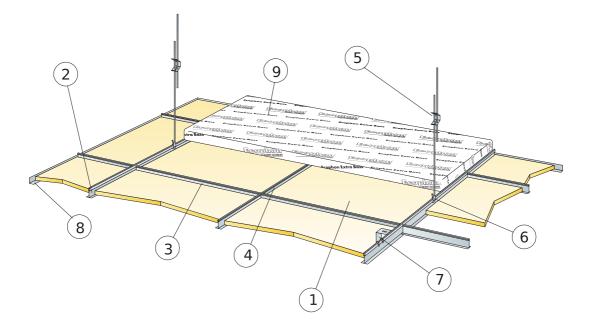




Suspension with adjustable hanger and clip

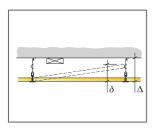
Size, mm	Max live load (N)	Min load bearing capacity (N)
1600x600x20	50	160
1800x600x20	50	160
2000x600x20	50	160
2400x600x20	50	160

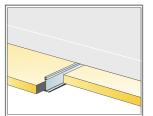
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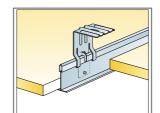
© Ecophon Group

	Size, mm	
	600×600	1200×600
Focus A	2,8/m²	1,4/m²
2 Connect T24 Main runner black, installed at 1200 mm centres (max. distance from wall 600 mm, can be extended up to 1200 mm if no live load between Mai runner and wall).	n 0,9m/m²	0,9m/m²
3 Connect T24 Cross tee black, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²
Connect T24 Cross tee black, L=600 mm	0,9m/m²	-
Connect Adjustable hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²
Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²
For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m²	0,7/m²
3 Connect Angle trim black, [fixed at 300 mm centres]	as required	as required
P Extra Bass (1200x600x50 mm)	0,7/m²	0,7/m²
Δ Min. overall depth of system: Focus A: 50 mm (Direct bracket). Focus A/with Extra bass: 100 mm.	-	-
δ Min. demounting depth: Focus A: 130 mm, Focus A/with Extra bass: 170 mm		

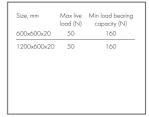




Installation with Extra Bass



Fixing with direct bracket





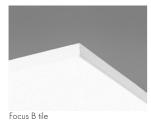
Ecophon Focus[™] B

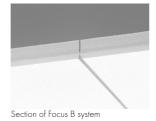
Ecophon Focus[™] B are bonded edge-to-edge directly to the soffit surface, creating a ceiling with a smooth appearance. The bevelled edge creates a narrow groove between each tile. For applications where the minimum possible overall depth of system is required.



SYSTEM RANGE

] 4	Size, mm	600x600
	Direct	•
	Thickness (THK)	20
	Inst. Diagr.	M03







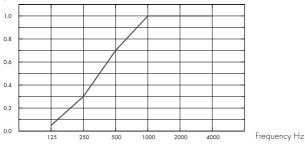
Acoustic



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.

 $lpha_{
m p}$, Practical sound absorption coefficient



Focus B 20 mm, 23 mm o.d.s.o.d.s = overall depth of system

тнк	o.d.s. mm		$lpha_{ m p'}$ Pr	actical sound	d absorption c	coefficient		α	Sound absorption class	
mm	0.0.3. 1111	125 Hz	25 Hz 250 Hz 500 Hz 1000 Hz 2000 Hz 4000 H;	4000 Hz	0. _W	Sound absorption class				
20	23	0.05	0.30	0.70	1.00	1.00	1.00	0.60	С	

THK mm	o.d.s. mm	NRC	SAA
20	23	0.75	0.77



Cradle to Cradle Certified®

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Material Health

CERTIN

This product has received a C2C Certified Material Health Certificate™ at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate™ is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.

Environmental Footprint

)°		kg CO2 equiv/m²	Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804
	Focus B	4,10	- 14025 / EIN 13804



Circularity

Minimum post-consumer recycled content	56%
Recyclability	Fully recyclable



Fire safety

)	Country	Fire standard	Class	The
	Europe	EN 13501-1	A2-s1,d0	non

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



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. 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/m²



Mechanical properties

Additional live load has to be fixed to the soffit.



CE

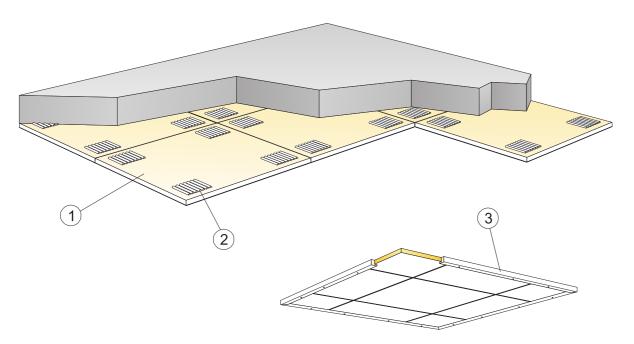
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



Indoor Air Quality

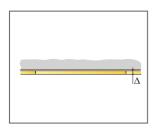
Certificate / Label	All Products	STR COM
Eurofins Indoor Air Comfort®	IAC Gold	
French VOC	A+	
Finnish M1	•	-

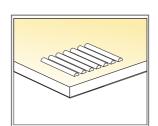
INSTALLATION DIAGRAM (M03) FOR ECOPHON FOCUS B, USING CONNECT ABSORBER GLUE



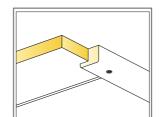
© Ecophon Group

	Size, mm
	600×600
Focus B	2,8/m²
Connect Absorber glue (0,25 l/m² - 0,4 l/m² depending on installation conditions)	as required
Use Connect Notched spatula to apply the glue.	-
When installing floating ceilings: Connect Wood trim, L=2500, fixed at 500 mm centres	as required
Δ Min. overall depth of system: 23 mm	
δ Min. demounting depth: The system is not demountable	
Cut visible edges should be painted	-





Application of glue



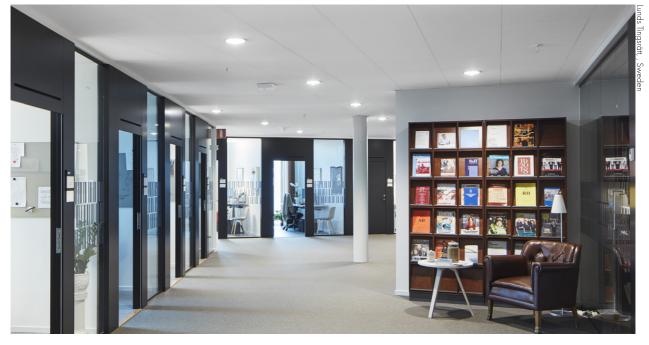
Wood trim for floating installation

Size, mm Max live Min load bearing load (N) capacity (N) 600x600x20



Ecophon Focus[™] Ds

Ecophon Focus[™] Ds has a concealed grid and symmetrical bevelled edge with an even appearance. Increases assembly ease and integration of light fittings and ventilation. For applications where a suspended ceiling with a concealed grid is required, but individual tiles must be easily demountable.





<u>∽</u>]≈	Size, mm	600x600	1200x600	1200x1200	XL 1.600x600	XL 1 800x600	XL 2000x600	XL 2400x600
	T24	•	•	•	•	•	•	•
	Thickness (THK)	20	20	20	20	20	20	20
	Inst. Diagr.	M206, M208, M394, M400	M206, M208, M394, M400	M207	M206, M208, M238	M206, M208, M238	M206, M208, M238	M206, M208, M238

© Saint-Gobain Ecophon AB



Focus Ds tile

Acoustic

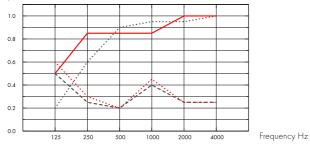


Sound Absorption:

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 system

 $lpha_{
m p\prime}$ Practical sound absorption coefficient



Section of Focus Ds system with

Connect T24 Main runner HD

···· 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.

The individual tiles are easily

demountable

o.d.s = overall depth of system

	тнк	o.d.s. mm		$lpha_{ m p'}$ Prac	tical sound	d absorption	coefficient		α	Sound absorption class
	mm	0.0.5. 11111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		Sound absorption class
-	20	65	0.20	0.60	0.90	0.95	0.95	1.00	0.90	A
-	20	200	0.50	0.85	0.85	0.85	1.00	1.00	0.90	A
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 _{nfw}	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	All Products	EMISSIONS DANS LAIR INTÉRIEUR
Eurofins Indoor Air Comfort®	IAC Gold	
French VOC	A+	
Finnish M1	•	_

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Environmental Footprint

	kg CO2 equiv/m²	Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804
Focus Ds	4,60	- 14023 / EIN 13604



Circularity

Minimum post-consumer recycled content	57%
Recyclability	Fully recyclable



Fire safety

Country		Class	The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182.
Europe	EN 13501-1	A2-s1,d0	non-composible according to EIN 15O 1182.



Mechanical properties

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



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 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



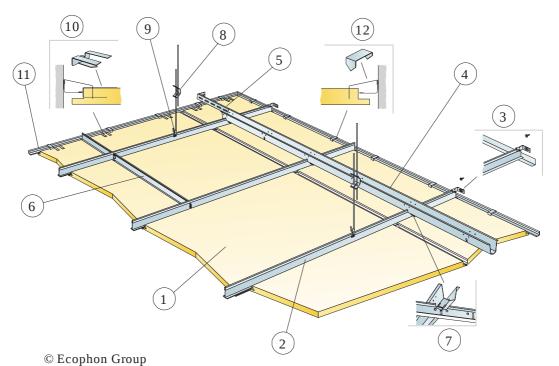
CE

CE

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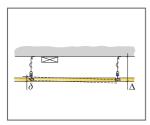
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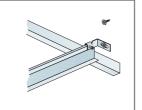
INSTALLATION DIAGRAM (M206) FOR ECOPHON FOCUS DS 600X600, 1200X600 MM AND ECOPHON FOCUS DS XL SUSPENDED INSTALLATION



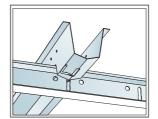
QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm					
		600×600	1200×600	1600x600	1800x600	2000x600	2400x600
1	Focus Ds	2,8/m²	1,4/m²	1,05/m²	0,95/m²	0,85/m²	0,7/m²
2	Connect T24 Main Runner HD, installed at 600 mm centres	1,7m/m²	1,7m/m²	1,7m/m²	1,7m/m²	1,7m/m²	1,7m/m²
3	Connect Wall Bracket for T-profiles	1/suspended ro	w of Main runner				
4	Connect Space Bar, installed at 1500 mm centres (max. distance from wal 300 mm)	0,7m/m²	0,7m/m²	0,7m/m²	0,7m/m²	0,7m/m²	0,7m/m²
5	Connect Wall Bracket, L=700 mm, for Connect Space Bar	1/row of Space	ə bar				
6	Connect T24 Cross Tee, L=600 mm	2/row of Main	runner				
7	Connect Space Bar Winch, installed one per joint Connect Main Runner/Connect Space Bar	1,4/m²	1,4/m²	1,4/m²	1,4/m²	1,4/m²	1,4/m²
3	Connect Adjustable hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²	0,7/m²	0,7/m²	0,7/m²	0,7/m²
7	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²	0,7/m²	0,7/m²	0,7/m²	0,7/m²
10	Connect Support clip Dg20	1pc/300-400 r	mm on every cut perim	eter tile with only 1 su	pporting edge		
11	Connect Angle trim 15/22, fixed at 300 mm centres	as required	as required	as required	as required	as required	as required
12	Connect Perimeter tile clip	1/300-400mm	on any cut edge				
	Δ Min. overall depth of system: 115 mm						-
	δ Min. demounting depth: 30 mm						-
	For luminaire integration in panels use Connect Bridging						





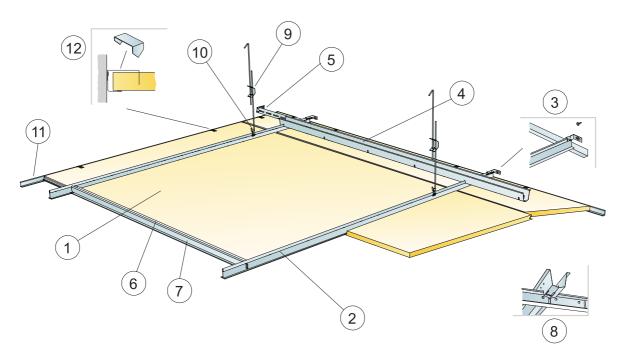
Secured Main runner at wall with Connect Wall bracket



Connection between profiles with space bar winch

Size, mm	Max live load (N)	Min load bearing capacity (N)
600x600x20	50	160
1200x600x20	50	160
1600x600x20	50	160
1800x600x20	50	160
2000x600x20	50	160
2400x600x20	50	160

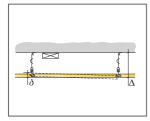
Live load/load bearing capacity

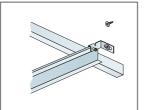


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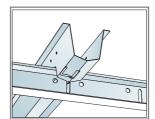
QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm
	1200×1200
Focus Ds	0,7/m²
2 Connect T24 Main runner HD, installed at 1200 mm centres (max. distance from wall 600 mm, can be extended up to 1200 mm if no I wall).	live load between Main runner and0,9m/m²
Connect Wall Bracket for T-profiles	1/suspended row of Main runner
Connect Space Bar, installed at 1500 mm centres (max. distance from wall 300 mm)	0,7m/m²
Gonnect Wall Bracket, L=700 mm, for Connect Space Bar	1/row of Space bar
Connect Edge stiffener	1,4/m²
Connect T24 Cross tee, L=1200 mm	2/row of Main runner
Connect Space Bar Winch, installed one per joint Connect Main Runner/Connect Space Bar	0,7/m²
Connect Adjustable hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²
0 Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²
1 Connect Angle trim 15/22, fixed at 300 mm centres	as required
2 Connect Perimeter tile clip	1/300-400mm on any cut edge
Δ Min. overall depth of system: 115 mm	
δ Min. demounting depth: 50 mm	
For luminaire integration in panels use Connect Bridging	



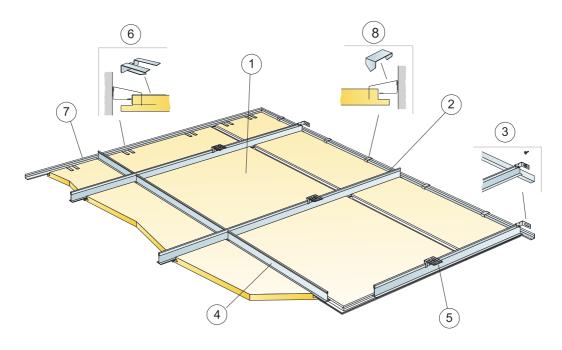


Secured Main runner at wall with Connect Wall bracket



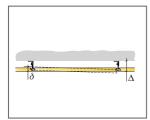
Connection between profiles with space bar winch

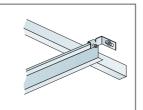
Size, mm Max live Min load bearing load (N) capacity (N) 1200x1200x20 50 160



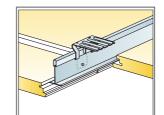
QUANTITY SPECIFICATION (EXCL. WASTAGE)

Size, mm 600x600 1200×600 1600x600 1800x600 2000×600 2400×600 1 Focus Ds 2,8/m² 1,4/m² 1,05/m² 0,95/m² 0,85/m² 0,7/m² 1,7m/m² 2 Connect T24 Main Runner HD, installed at 600 mm centres 1,7m/m² 1,7m/m² 1,7m/m² 1,7m/m² 1,7m/m² 3 Connect Wall Bracket for T-profiles 1/suspended row of Main runner 4 Connect T24 Cross Tee, L=600 2/row of Main runner 5 Connect Direct bracket, installed at 1500 mm centres $1,1/m^2$ 1,1/m² 1,1/m² $1,1/m^2$ 1,1/m² 1,1/m² 6 Connect Support clip Dg20 1/300-400mm on any cut edge 7 Connect Angle trim 15/22, fixed at 300 mm centres as required as required as required as required as required as required 8 Connect Perimeter tile clip can be used if sufficent space is available 1pc/300-400 mm on every cut perimeter tile with only 1 supporting edge Δ Min. overall depth of system: 65 mm δ Min. demounting depth: 30 mm For luminaire integration in panels use Connect Bridging





Secured Main runner at wall with Connect Wall bracket



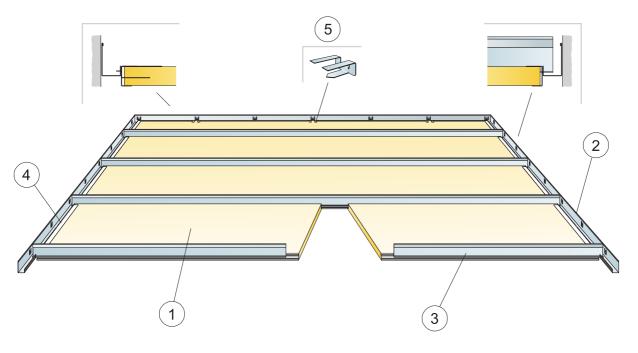
Suspension with direct fix bracket

Size, mm	Max live load (N)	Min load bearing capacity (N)
600x600x20	50	160
1200x600x20	50	160
1600x600x20	50	160
1800x600x20	50	160
2000x600x20	50	160
2400x600x20	50	160

Live load/load bearing capacity

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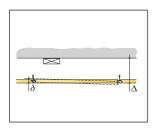
INSTALLATION DIAGRAM (M238) FOR ECOPHON FOCUS DS XL IN CORRIDORS

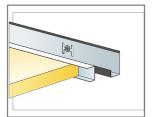


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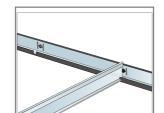
QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	Size, mm		
		1600×600	1800x600	2000x600	2400×600
	Focus Ds XL	1,05/m²	0,95/m²	0,85/m²	0,7/m²
	Connect Modular Wall trim	as required	as required	as required	as required
	Connect T24 Corridor profile	1,05/m²	0,95/m²	0,85/m²	0,7/m²
Ļ	Connect Cover trim Ds	2/tile plus end ti	les		
ō	Connect Support clip Dg 20	1 pc/300-400 m	nm on every cut perim	eter tile with only 1 su	pporting edge
	Δ Min. overall depth of system: 55 mm				
	δ Min. demounting depth: 30 mm				



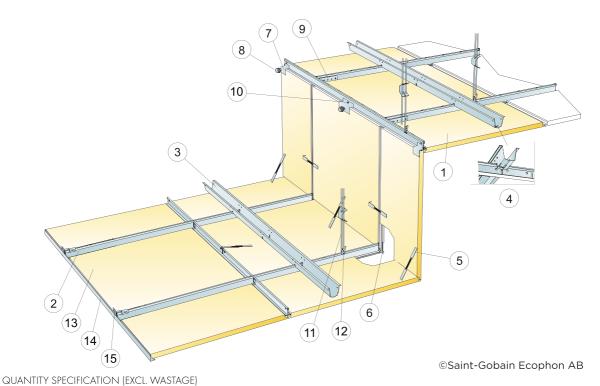


Tile and Connect Cover trim Ds



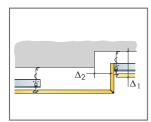
Corridor profile positioned by Modular wall trim

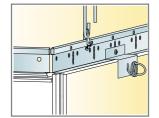
Size, mm	Max live load (N)	Min load bearing capacity (N)
1600x600x20	40	-
1800x600x20	20	-
2000x600x20	10	-
2400x600x20	0	-



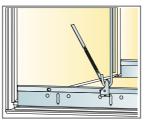
QUANTITY SPECIFICATION (EACL. WASTAGE)

		Size, mm	
		600×600	1200x600
1	Focus Ds	2,8/m²	1,4/m²
2	Connect T24 Main Runner HD, installed at 600 mm centres	1,7m/m²	1,7m/m²
3	Connect Space bar, installed at 1500 mm centres (max. distance from wall 300 mm)	0,7m/m²	0,7m/m²
4	Connect Space Bar Winch, installed one per joint Connect Main Runner/Connect Space Bar	1,4/m²	1,4/m²
5	Connect Hook	3/panel	3/panel
6	Connect Distance Ds (included in Level change Ds kit)	1/panel	1/panel
7	Connect level clip Ds (included in Level change Ds kit)	1/panel	1/panel
8	Connect Spiral anchor	1/panel	1/panel
9	Connect L-coupling	1/row of Main	runner HD
10	Connect Installation screw BR	as required	as required
11	Connect Adjustable hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²
12	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²
13		as required	as required
14	Connect Wall Bracket for T-profiles	1/suspended ro	ow of Main runner
15	Connect Angle trim 15/22, fixed at 300 mm centres	as required	as required
	Δ Min. overall depth of system: $\Delta1\text{=}165$ mm and $\Delta2\text{=}80$ mm from upper level		-
	δ Min. demounting depth: Individual ceiling tiles are non-demountable		
	Dimension: c=600 mm, h<530 mm		



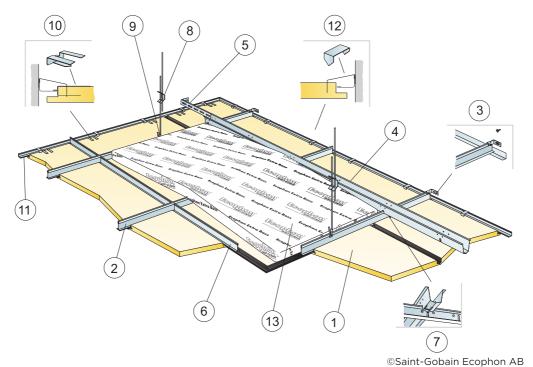


Distance between Focus Lp tiles



Distance between Focus Lp tiles

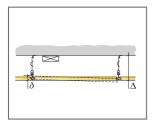
Size, mm	Max live load (N)	
600x600x20	0	160
1200x600x20	0	160

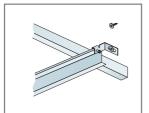


Saint Gobain Ecop

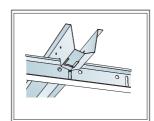
QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	
		600×600	1200×600
1	Focus Ds	2,8/m²	1,4/m²
2	Connect T24 Main runner HD, installed at 600 mm centres	1,7m/m²	1,7m/m²
3	Connect Wall Bracket for T-profiles	1/suspended ro	w of Main runner
4	Connect Space Bar, installed at 1500 mm centres (max. distance from wall 300 mm)	0,7m/m²	0,7m/m²
5	Connect Wall Bracket, L=700 mm, for Connect Space Bar	1/row of Space	bar
6	Connect T24 Cross tee, L=600 mm	2/row of Main	runner HD
7	Connect Space Bar Winch, installed one per joint Connect Main Runner/Connect Space Bar	1,4/m²	1,4/m²
8	Connect Adjustable hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²
9	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²
10	Connect Support clip Dg20	1/300-400mm	on any cut edge
11	Connect Angle trim black, (fixed at 300 mm centres)	as required	as required
12	Connect Perimeter tile clip	1/300-400mm	on any cut edge
13	Extra Bass (1200x600x50 mm)	0,7/m²	0,7/m²
	Δ Min. overall depth of system: 115 mm		
	δ Min. demounting depth: 30 mm		
-			





Connection between profiles with split pin



 Size, mm
 Max live
 Min load bearing capacity (N)

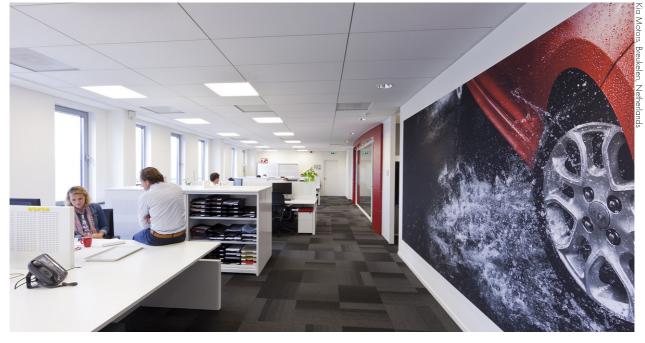
 600x600x20
 50
 160

 1200x600x20
 50
 160



Ecophon Focus[™] Dg

Ecophon Focus[™] Dg conceals the supporting tile edges and creates a distinctive floating appearance. Tiles are easily demountable even in areas where there is a very small overall depth of system. For applications where a unique demountable suspended ceiling is required.



SYSTEM RANGE

	Size, mm	600x600	1200x600	1200x1200	XL 1600x600	XL 1800x600	XL 2000x600	XL 2400x600
8	T24	•	•	•	•	•	•	•
	Thickness (THK)	20	20	25	20	20	20	20
	Inst. Diagr.	M202	M202	M203	M204	M204	M204	M204



Focus Dg tile

Acoustic

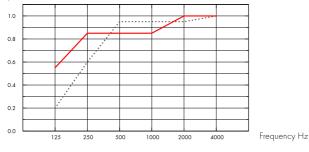


Sound Absorption:

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 system

 $lpha_{_{D'}}$ Practical sound absorption coefficient



Section of Focus Dg with Connect T24

HD Main runner

···· Focus Dg 20 mm, 65 mm o.d.s.

- Focus Dg 20 mm, 200 mm o.d.s.

Focus Dg with Connect Angle trim Ultra matt black

o.d.s = overall depth of system

ТНК	o.d.s. mm		$lpha_{p'}$ Pr	actical sound	d absorption c	oefficient		α"	Sound absorption class
mm	0.0.3. 11111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	a. W	
20	65	0.20	0.60	0.95	0.95	0.95	1.00	0.90	A
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

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



Cradle to Cradle Certified®

This product is Cradle to Cradle Certified® at Bronze level (version 4.0).



Material Health

CERTIFIED

This product has received a C2C Certified Material Health Certificate™ at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate™ is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.

Environmental Footprint

Ð?		kg CO2 equiv/m²	Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804
•	Focus Dg	4,20	- 14023 / EIN 13604



Circularity

Minimum post-consumer recycled content	59%
Recyclability	Fully recyclable



Fire safety

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



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 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/m².



Mechanical properties

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

CE

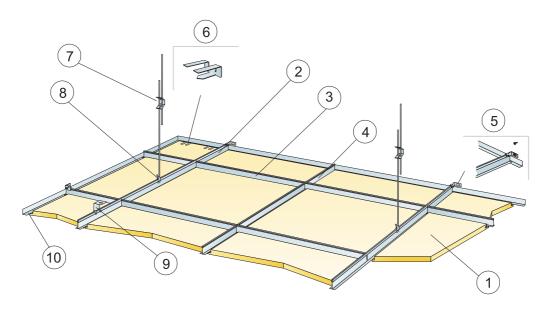
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



Indoor Air Quality

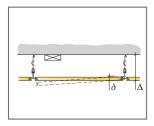
Certificate / Label	All Products
Eurofins Indoor Air Comfort®	IAC Gold
French VOC	A+
Finnish M1	•

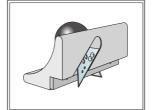




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	Size, mm	
	600×600	1200×600
1 Focus Dg	2,8/m²	1,4/m²
2 Connect T24 Main runner HD, installed at 1200 mm centres (max. distance from wall 600 mm, can be extended up to 1200 mm if no live load between Mc runner and wall).	n 0,9m/m²	0,9m/m²
3 Connect T24 Cross tee, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²
4 Connect T24 Cross tee, L=600 mm	0,9m/m²	-
5 Connect Wall Bracket for T-profiles	1/suspended re	ow of Main runner
5 Connect Support clip Dg20	1/300-400mm	on any cut edge
7 Connect Adjustable hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²
3 Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²
P For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m²	0,7/m²
10 Connect Angle trim, fixed at 300 mm centres	as required	as required
Δ Min. overall depth of system, with Adjustable hanger: 115 mm, with Direct bracket: 65 mm		-
δ Min. demounting depth: 30 mm		-
For luminaire integration in panels use Connect Bridging		



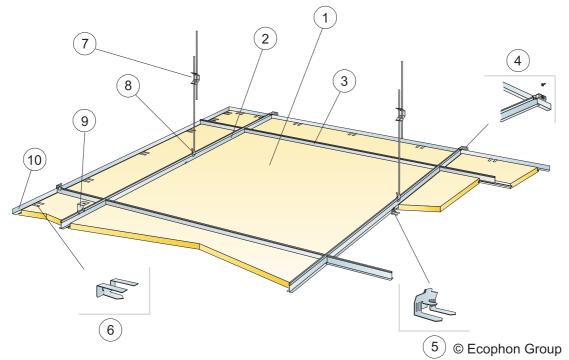


Нож для подрезки кромки Dg

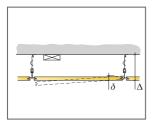


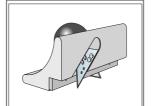
Cut edge with and without support clip



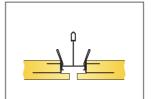


	Size, mm
	1200×1200
Focus Dg	0,7/m²
Connect T24 Main runner HD, installed at 1200 mm centres (max. distance from wall 600 mm, can be extended up to 1200 mm if no live load wall).	d between Main runner and0,9m/m²
Connect T24 Cross tee, L=1200 mm, installed at 1200 mm centres	0,9m/m²
Connect Wall Bracket for T-profiles	1/suspended row of Main runner
i Connect Edge clip	1,4/m²
Connect Support clip DG25	1/300-400mm on any cut edge
Connect Adjustable hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²
Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²
Por direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m²
0 Connect Angle trim, fixed at 300 mm centres	as required
Δ Min. overall depth of system, with Adjustable hanger: 115 mm, with Direct bracket: 65 mm	
δ Min. demounting depth: 30 mm	-
For luminaire integration in panels use Connect Bridging	



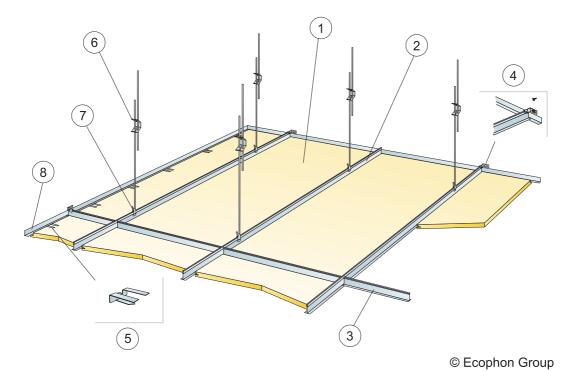


Cutting tool Dg



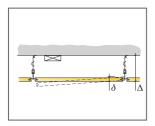
Joint between two unsupported edges with Edge clip

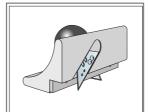
Size, mm Max live Min load bearing load (N) capacity (N) 1200x1200x25 50 160



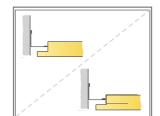
QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm			
	1600×600	1800×600	2000×600	2400×600
1 Focus Dg XL	1,05/m²	0,95/m²	0,85/m²	0,7/m²
2 Connect T24 Main runner HD, installed at 600 mm centres	1,7m/m²	1,7m/m²	1,7m/m²	1,7m/m²
3 Connect T24 Cross tee, L=600 mm	0,65m/m²	0,6m/m²	0,5m/m²	0,45m/m²
4 Connect Wall Bracket for T-profiles	1/suspended ro	1/suspended row of Main runner		
5 Connect Support clip Dg20	1pc/300-400 m	1pc/300-400 mm on every cut perimeter tile with only 1 supporting edge		
6 Connect Adjustable hanger, installed at 1500 mm centres (max. distance from wall 450 mm)	1,1/m²	1,1/m²	1,1/m²	1,1/m²
7 Connect Hanger clip	1,1/m²	1,1/m²	1,1/m²	1,1/m²
8 Connect Angle trim, fixed at 300 mm centres	as required	as required	as required	as required
Δ Min. overall depth of system: 115 mm	-	-	-	
δ Min. demounting depth: 30 mm	-			





Cutting tool Dg



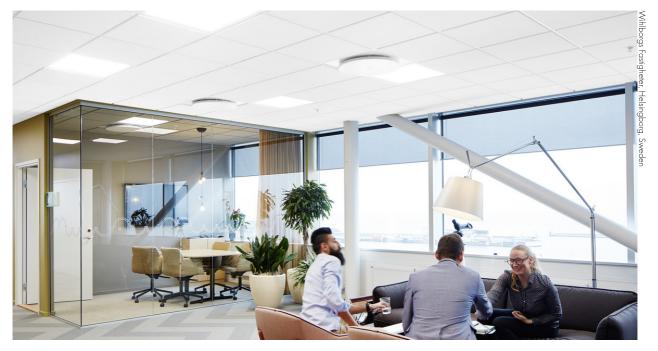
Cut edge with and without support clip

Size, mm	Max live load (N)	Min load bearing capacity (N)
1600x600x20	50	160
1800x600x20	50	160
2000x600x20	50	160
2400x600x20	50	160



Ecophon Focus[™] E

Ecophon Focus™ E has a recessed visible grid and a tegular edge, creating a ceiling with a shadow effect that accentuates each tile and partially conceals the grid. For applications where an attractive suspended ceiling is required and easy removal of individual tiles is essential.



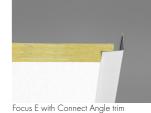
SYSTEM RANGE

19 8	Size, mm	600x600	1200x600	1200×1200
	Connect T15	•	•	•
	Connect T24	•	•	•
	Thickness (THK)	20	20	20
	Inst. Diagr.	M12	M12	M12





Focus E system



Focus E tile

Acoustic

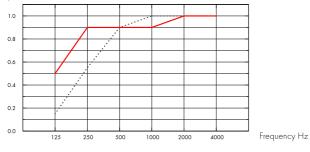


Sound Absorption:

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.

 $lpha_{_{D'}}$ Practical sound absorption coefficient

T24



····· 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

ТНК	o.d.s. mm	$lpha_{ m p}$, Practical sound absorption coefficient	α"	Sound absorption class					
mm	0.0.3. 11111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	o.w	
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	A

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

тнк	AC(1.5)	D _{nfw}	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	180	22	23



Indoor Air Quality

Certificate / Label	All Products	SOR AIR COM
Eurofins Indoor Air Comfort®	IAC Gold	
French VOC	A+	
Finnish M1	•	-



Material Health

This product has received a C2C Certified Material Health Certificate™ at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate™ is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



Cradle to Cradle Certified®

This product is Cradle to Cradle Certified® at Bronze level (version 4.0).

Environmental Footprint





Circularity

CERTIFIED

Minimum post-consumer recycled content	55%
Recyclability	Fully recyclable



Fire safety

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



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 easily demountable. Minimum demounting depth according to installation diagrams.



Installation

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



System weight

The weight of the system (including suspension grid) should be approximately 3 kg/m².



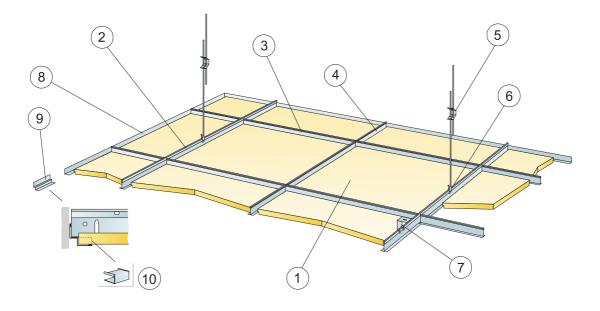
Mechanical properties

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

CE

CE

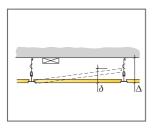
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

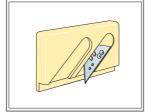


© Ecophon Group

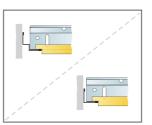
QUANTITY SP	PECIFICATION (EXCL	WASTAGE)
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		Size, mm		
		600x600	1200×600	1200x1200
1	Focus E T24 or T15	2,8/m²	1,4/m²	0,7/m²
2	Connect T24 or T15 Main runner, installed at 1200 mm centres (max. distance from wall 600 mm, can be extended up to 1200 mm if no live load between Main runner and wall).	0,9m/m²	0,9m/m²	0,9m/m²
3	Connect T24 or T15 Cross tee, L=1200 mm	1,7m/m²	1,7m/m²	0,9m/m²
4	Connect T24 or T15 Cross tee, L=600 mm	0,9m/m²	-	
5	Connect Adjustable hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²	0,7/m²
6	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²	0,7/m²
7	For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m²	0,7/m²	0,7/m²
3	Connect Angle trim, fixed at 300 mm centres	as required	as required	as required
7	Connect Shadow-line trim, fixed at 300 mm centres	as required	as required	as required
10) Connect E-plug (for Shadow-line trim)	as required	as required	as required
	Δ Min. overall depth of system, with adjustable hanger: 110 mm, with direct bracket: 60 mm		-	
	δ Min. demounting depth: 120 mm, (1200x1200 mm, T15: 160 mm)	-	-	
	For luminaire integration in panels use Connect Bridging			-
-				





Cutting tool E



Tegular rebate with angle trim and T-profile on foot of shadow-line trim.

Size, mm	load (N)	1 7 1 7
600x600x20	50	160
1200x600x20	50	160
1200x1200x20	50	160



Ecophon Focus[™] F

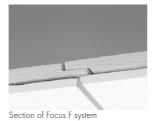
Ecophon Focus™ F installs directly to an existing plaster ceiling, boarding, battens or concrete, to create a ceiling with a smooth appearance. For applications requiring a ceiling mechanically secured to the structural soffit.





20	Size, mm	600x600	1200x600
	Direct	•	•
	Thickness (THK)	20	20
	Inst. Diagr.	M15	M15









Focus F tile

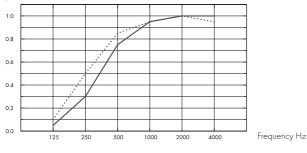
Acoustic



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.

 $lpha_{
m p\prime}$ Practical sound absorption coefficient



– 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

ТНК	o.d.s. mm	$lpha_{ m p}$, Practical sound absorption coefficient					α	Sound absorption class	
mm		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	~~ _W	
20	20	0.05	0.30	0.75	0.95	1.00	1.00	0.60	С
20	40	0.10	0.50	0.85	0.95	1.00	0.95	0.80	В

THK mm	o.d.s. mm	NRC	SAA
20	20	0.75	0.76
20	40	0.85	0.82



Indoor Air Quality

Certificate / Label	All Products	EMISSIONS DANS L'AIR INTÉRIEUR
Eurofins Indoor Air Comfort®	IAC Gold	
French VOC	A+	
Finnish M1	•	-

CJ

Cradle to Cradle Certified®

This product is Cradle to Cradle Certified® at Bronze level (version 4.0).



Material Health

This product has received a C2C Certified Material Health Certificate™ at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate™ is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.

	Enviro	nmenta	l Footprint
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		kg CO2 equiv/m²	Life-cycle stages A1 to C4 from EPD, in conformity with ISO
•	Focus F	4,90	14025 / EN 15804



Circularity

Minimum post-consumer recycled content	59%
Recyclability	Fully recyclable



Fire safety

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



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. 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/m²

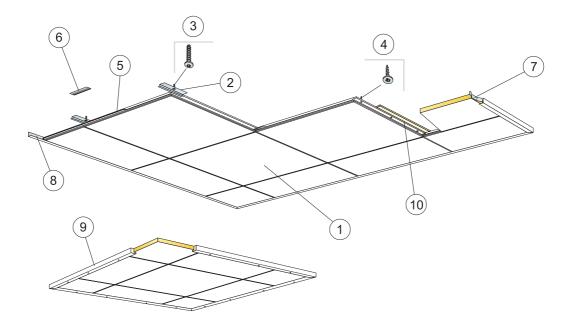


Mechanical properties

Additional live load has to be fixed to the soffit.

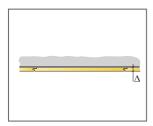
CE

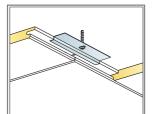
CE



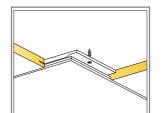
© Ecophon Group

		Size, mm	
		600×600	1200×600
1	Focus F	2,8/m²	1,4/m²
2	Connect Direct fixing plate, installed at 600 mm centres (for use in concrete)	2,8/m²	2,8/m²
3	Connect Anchor screw, installed at 600 mm centres (for use in concrete)	2,8/m²	2,8/m²
4	Connect Installation screw MVL (for use in plasterboard or timber)	8,3/m²	7/m²
5	Connect Spline F, L=600 mm. Must be used in Sweden, Denmark, Norway and Finland at fireclass 'Tändskyddande beklädnad'	2,8/m²	1,4/m²
6	Connect Spline, L=150 mm	2,8/m²	1,4/m²
7	Connect Wall spring spacer	1/panel in the last row	2/panel in the last row
8	Connect Angle trim, fixed at 300 mm centres	as required	as required
9	For use when installing floating ceilings: Connect Wood trim, L=2500 mm, fixed at 500 mm centres	as required	as required
10	Timber installed at 600 mm centres (300 mm if thermal insulation is placed above), with the screw fixings along the timber.	as required	as required
	Δ Min. overall depth of system: 20 mm		
	δ Min. demounting depth: The system is not demountable	-	





Installation in concrete



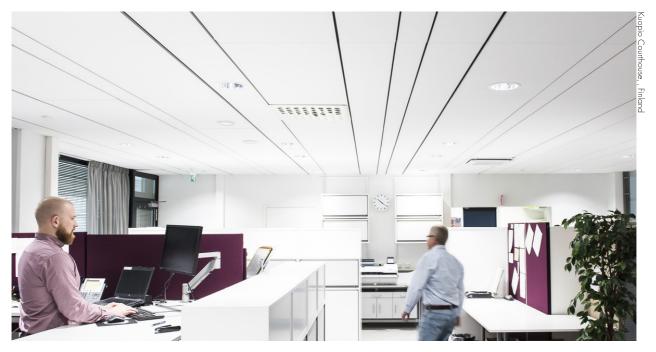
Installation in plasterboard or timber





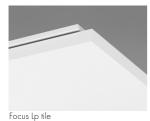
Ecophon Focus[™] Lp

Ecophon Focus[™] Lp has a semi-concealed grid system used for highlighting direction in a room. Features a wide gap between tiles in the emphasised direction and a narrow gap in the other. The system consists of standard Focus[™] Lp tiles and Focus[™] Lp Technical tiles.



SYSTEM RANGE

	Size, mm	600x150	600x300	600x600	1200x150	1200x300	1200x600	XL 1800x600
11/20	T24	•	•	•	•	•	•	•
	Thickness (THK)	20	20	20	20	20	20	20
	Inst. Diagr.	M391	M390, M391	M390, M391	M391	M390, M391	M390, M391	M392









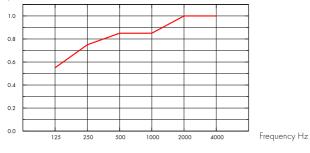
Acoustic



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.

 $lpha_{
m p\prime}$ Practical sound absorption coefficient



- Focus Lp 20 mm, 200 mm o.d.s.

o.d.s = overall depth of system

ТНК	o.d.s. mm		$lpha_{p'}$ Pr	actical sound	d absorption c	coefficient		α	Sound absorption class
mm	0.0.5. 11111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	~~ _W	
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

тнк	AC(1.5)	D _{nfw}	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	180	24	25



Indoor Air Quality

Certificate / Label	Standard	AND AND COMPANY COMPANY AND AND LAR INTEREUR
Eurofins Indoor Air Comfort®	IAC Gold	
French VOC	A+	
Finnish M1	•	



Cradle to Cradle Certified®

This product is Cradle to Cradle Certified® at Bronze level (version 4.0).



Material Health

This product has received a C2C Certified Material Health Certificate™ at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate™ is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



Environmental Footprint

2		kg CO2 equiv/m²	Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804
	Focus Lp	4,66	- 14023 / EIN 13604



Circularity

Minimum post-consumer recycled content	57%
Recyclability	Fully recyclable



Fire safety

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



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 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/m².

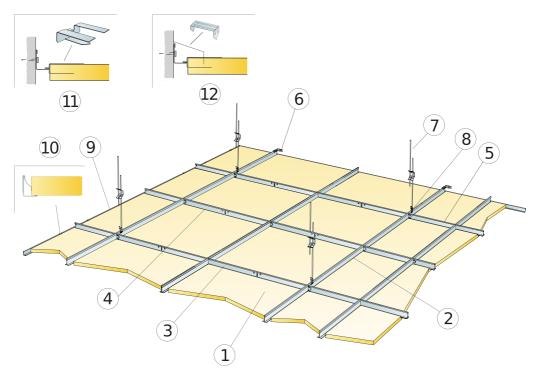


Mechanical properties

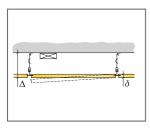
See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at www.ecophon.com. For the Technical tiles installed according to M391 there is a load bearing capacity of 100 N for each Main runner HD per 1200 mm. This gives a total load bearing capacity of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

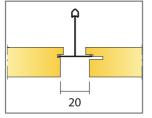
CE

CE

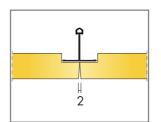


		Size, mm				
		600×300	600×600	1200x300	1200×600	
1	Focus Lp	5,6/m²	2,8/m²	2,8/m²	1,4/m²	
2	Connect T24 Main runner, installed at 1200 mm centres (max distance from wall 600 mm)	0,9m/m²	0,9m/m²	0,9m/m²	0,9m/m²	
3	Connect T24 Cross tee L=1200 mm	3,4m/m²	1,7m/m²	3,4m/m²	1,7m/m²	
4	Connect T24 Cross tee, L=600 mm		0,9m/m²			
5	Connect T24 Cross tee, L=300 mm	0,9m/m²	-			
6	Connect Wall Bracket for T-profiles	1/suspended row of Main runner				
7	Connect Adjustable hanger, installed at 1 200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²	0,7/m²	0,7/m²	
8	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²	0,7/m²	0,7/m²	
9	Connect Angle trim, fixed at 300 mm centres	as required	as required	as required	as required	
10	Connect Wall spring	2 pcs/on every cut perimeter	tile with only 1 supporting edge			
11	Connect Support clip Dg20	2per perimeter tile, cut on the long side	2per perimeter tile, cut on the long side	3per perimeter tile, cut on the long side	3per perimeter tile, cut on the long side	
12	Connect Perimeter tile clip	1/300-400mm on any cut ed	ge			
	Δ Min. overall depth of system: 115 mm					
	δ Min. demounting depth: 20 mm					
	For luminaire integration in panels use Connect Bridging					



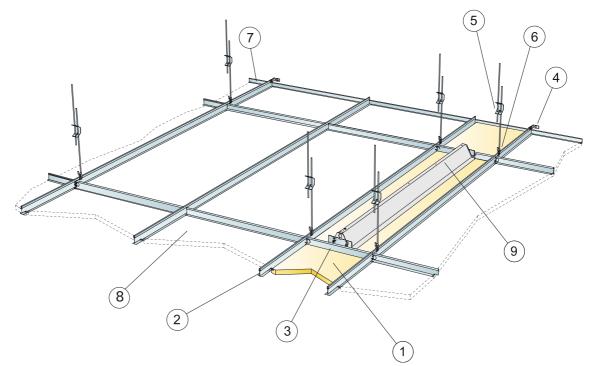


Distance between Focus Lp tiles

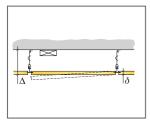


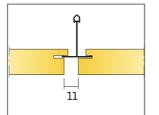
Non-supported edges meeting with space for cross-tee.

Size, mm	Max live load (N)	Min load bearing capacity (N)
600x300x20	30	160
600x600x20	30	160
1200x300x20	30	160
1200x600x20	30	160

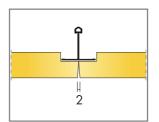


	Size, mm					
	600x150	600x300	600x600	1200×150	1200x300	1200x600
Focus Lp Technical tile	11,1/m²	5,6/m²	2,8/m²	5,6/m²	2,8/m²	1,4/m²
2 Connect T24 Main runner	6,7m/m²	3,35m/m²	1,7m/m²	6,7m/m²	3,35m/m²	1,7m/m²
Connect T24 Cross tee, L=150/300/600 mm	1,7m/m²	1,7m/m²	1,7m/m²	0,85m/m²	0,85m/m²	0,85m/m²
Connect Wall Bracket for T-profiles	1/suspended ro	w of Main runner				
i Connect Adjustable hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	5,6/m²	2,8/m²	1,4/m²	5,6/m²	2,8/m²	1,4/m²
Connect Hanger clip	5,6/m²	2,8/m²	1,4/m²	5,6/m²	2,8/m²	1,4/m²
Connect Angle trim, fixed at 300 mm centres	as required	as required	as required	as required	as required	as required
3 Focus Lp (adjacent ceiling)	-			-		-
P Ecophon line lp						
Δ Min. overall depth of system: 105 mm [190 mm when using Connect Space bar connector]		-	-	-	-	-
δ Min. demounting depth: 20 mm						
For luminaire integration in panels use Connect Bridging		-	-			-
The area in quantity specification for M279 refers to the installation area between the two suspended Main runners. Maximum two rows of Technico tiles can be installed next to each other.	-	-	-	-	-	-
For luminaire integration in panels use Connect Bridging		-	-	-	-	



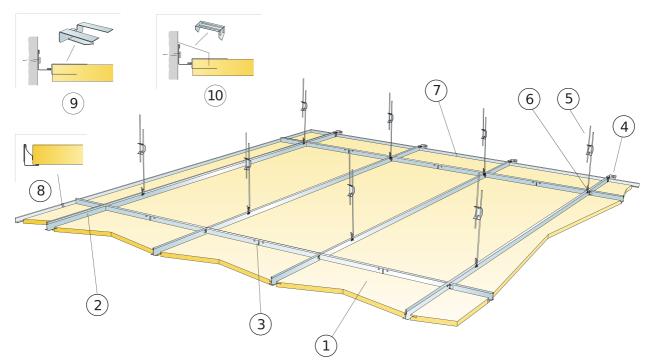


Distance between Focus Lp and Focus Lp Technical tile

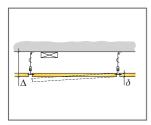


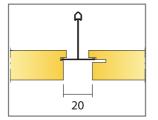
Non-supported edges meeting with space for cross-tee.

Size, mm	Max live load (N)	Min load bearing capacity (N)
600x150x20	50	160
600x300x20	50	160
600x600x20	50	160
1200x150x20	50	160
1200x300x20	50	160
1200x600x20	50	160

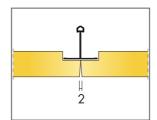


		Size, mm
		1800×600
1	Focus Lp	0,95/m²
2	Connect T24 Main runner, installed at 600 mm centres	1,7m/m²
3	Connect T24 Cross tee, L=600 mm	0,6m/m²
4	Connect Wall Bracket for T-profiles	1/suspended row of Main runner
5	Connect Adjustable hanger, installed at 1500 mm centres (max. distance from wall 450 mm)	1,1/m²
6	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²
7	Connect Angle trim, fixed at 300 mm centres	as required
8	Connect Wall spring	3pcs/on every cut perimeter tile with only 1 supporting edge
9	Connect Support clip Dg20	4per perimeter tile, cut on the long side
10	Connect Perimeter tile clip	1/300-400mm on any cut edge
	Δ Min. overall depth of system: 115 mm	
	δ Min. demounting depth: 20 mm	
	For luminaire integration in panels use Connect Bridging	





Distance between Focus Lp tiles



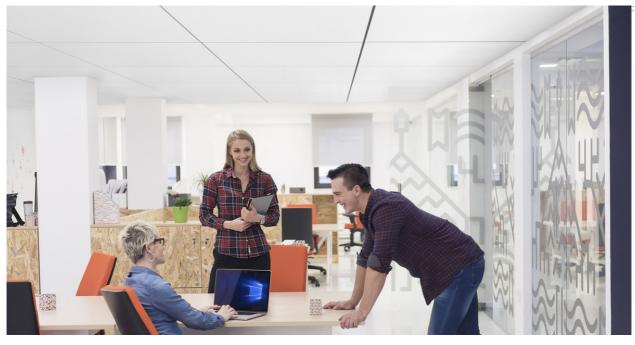
Non-supported edges meeting with space for cross-tee.

Size, mm Max live Min load bearing load (N) capacity (N) 1800x600x20 50 160



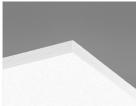
Ecophon Focus[™] SQ

Ecophon Focus[™] SQ bonds directly to the soffit surface. Tiles are installed with a gap between each tile, creating a ceiling with a smooth appearance. For applications where the minimum possible overall depth of system is required due to limited space or other reason.



SYSTEM RANGE

50 8 8	Size, mm	600x600	1200x600
	Direct	•	•
	Thickness (THK)	20	20
	Inst. Diagr.	M107	M107







Focus SQ tile

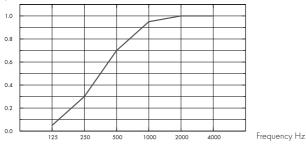
Acoustic



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.

 $lpha_{
m p\prime}$ Practical sound absorption coefficient



Focus SQ 20 mm, 23 mm o.d.s.o.d.s = overall depth of system

THK mm	o.d.s. mm		$lpha_{p'}$ Pr	actical soun	d absorption c	coefficient		α"	Sound absorption class
	0.0.5. 11111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	a. w	Sound absorption class
20	23	0.05	0.30	0.70	0.95	1.00	1.00	0.60	С

THK mm	o.d.s. mm	NRC	SAA
20	23	0.75	0.75

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



Cradle to Cradle Certified®

This product is Cradle to Cradle Certified® at Bronze level (version 4.0).



Material Health

This product has received a C2C Certified Material Health Certificate™ at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate™ is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



Environmental Footprint

)°	kg CO2 equiv/m²		Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804
	Focus SQ	4,88	— 14023 / EIN 13804



Circularity

)	Minimum post-consumer recycled content	57%
	Recyclability	Fully recyclable

Fire safety

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



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. 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 2



Mechanical properties

Additional live load has to be fixed to the soffit.

CE

CE

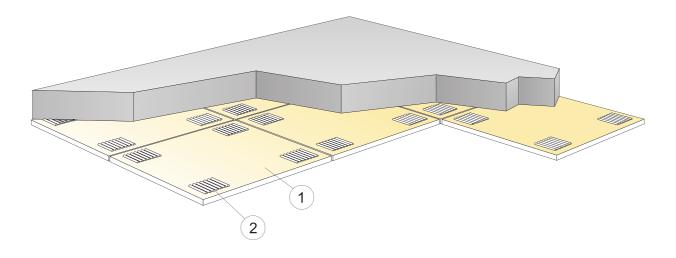


Indoor Air Quality

Certificate / Label	All Products
Eurofins Indoor Air Comfort®	IAC Gold
French VOC	A+
Finnish M1	•

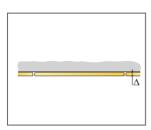


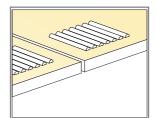
INSTALLATION DIAGRAM (M107) FOR ECOPHON FOCUS SQ, USING CONNECT ABSORBER GLUE



© Ecophon Group

QUANTITY SPECIFICATION (EXCL. WASTAGE) Size, mm 600×600 1200x600 2,8/m² 1,4/m² Focus SQ 2 Connect Absorber glue (0,25 l/m² - 0,4 l/m² depending on installation conditions) as required as required Use Connect Notched spatula to apply the glue. Δ Min. overall depth of system: 23 mm δ Min. demounting depth: The system is not demountable Cut visible edges should be painted * Panel Module size 600x600 (592x592), 1200x600 (1192x592)





Application of glue

Max live Min load bearing load (N) capacity (N) Size, mm 600x600x20 1200x600x20



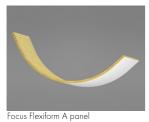
Ecophon Focus[™] Flexiform A

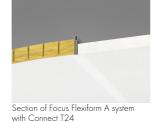
Ecophon Focus™ Flexiform A panels are delivered flat and formed on site into concave or convex form by means of special profiles. Ideal for creating surfaces with special curvatures, or if the dimensions of the installations above the suspended ceiling cannot be accommodated.



SYSTEM RANGE

Size, mm				
	1200x600	1600x600	2000x600	2400x600
T24	•	•	•	•
Thickness (THK)	30	30	30	30
Inst. Diagr.	M31, M31ec, M31ic	M31, M31ec, M31ic	M31, M31ec, M31ic	M31, M31ec, M31ic







Acoustic

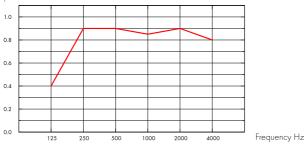


Acoustic values corresponding to a flat ceiling.

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.

 $lpha_{_{
m D'}}$ Practical sound absorption coefficient



- Focus Flexiform A 30 mm, 200 mm o.d.s.

o.d.s = overall depth of system

ТНК	o.d.s. mm		$lpha_{p'}$ Pr	actical sound	d absorption c	coefficient		α"	Sound absorption class
mm	0.0.5. 11111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
30	200	0.40	0.90	0.90	0.85	0.90	0.80	0.90	A

тнк	D _{nfw}	CAC dB
mm	Weighted normalized flanking level difference, ISO 10848-2	Ceiling Attenuation Class, ASTM 1414, ASTM E413
20	24	25



Indoor Air Quality

Certificate / Label	All Products	EMBSIONS DANS L'AIR INTÉRIEUR
Eurofins Indoor Air Comfort®	IAC Gold	
French VOC	A+	
Finnish M1	•	-

Environmental Footprint

b		kg CO2 equiv/m²	Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804
	Focus Flexiform A	3,1	- 14023 / EIN 13804



Circularity

Minimum post-consumer recycled content	39%
Recyclability	Fully recyclable



Fire safety

)	Country	Fire standard	Class	The
	Europe	EN 13501-1	A2-s1,d0	non-

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



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. (Please note: Extreme incident light, near windows or other light sources, can create undesired shadow effects on the structured surface on curved installations.)



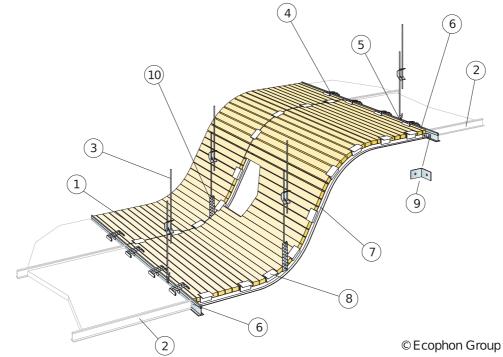
System weight

The weight is approximately 3 kg/m², depending on the installation method.

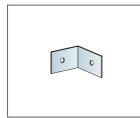


Mechanical properties

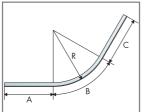
Additional live load has to be fixed to the soffit.



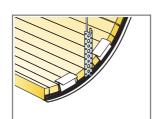
	Size, mm			
	1200×600	1600x600	2000×600	2400×600
1 Focus Flexiform A	as required	as required	as required	as required
2 Connect T24 Cross tee (adjacent ceiling)	as required	as required	as required	as required
3 Connect Adjustable hanger, installed at 1200 mm centres	as required	as required	as required	as required
4 Connect Clip 100/20	as required	as required	as required	as required
5 Connect Hanger clip	as required	as required	as required	as required
6 Connect T24 Main runner	1,8m/m²	-	-	-
7 Connect Flexiform profile/Flexible Flexiform profile, installed at 600 mm centres.	as required	as required	as required	as required
8 Connect Flexiform clip, fixed at 100-300 mm (depending on the radius of curve)	as required	as required	as required	as required
9 Connect Angle bracket	as required	as required	as required	as required
10 Perforated strip (not supplied by Ecophon)	as required	as required	as required	as required
Flexiform profile: Radius of curve (concave or convex) min 200 mm.	-			
Length of flexiform profile: max 2400 mm. When Flexiform profiles are longer than 1 m, intermidiate suspensions are required.	-	-	-	



Connect Angle bracket

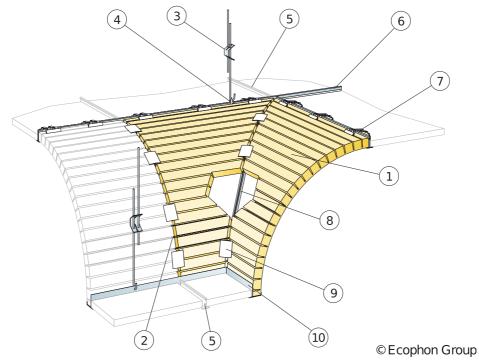


Example with dimensions of Flexiform profile

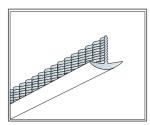


Suspension with metal strip

Size, mm	Max live load (N)	Min load bearing capacity (N)
1200x600x30	0	160
1600x600x30	0	160
2000x600x30	0	160
2400x600x30	0	160

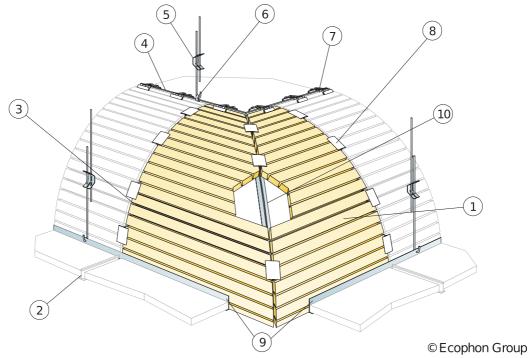


	Size, mm			
	1200×600	1600×600	2000×600	2400×600
1 Focus Flexiform A	as required	as required	as required	as required
2 Connect Flexiform profile/Flexible Flexiform profile, installed at 600 mm centres.	as required	as required	as required	as required
3 Connect Adjustable hanger, installed at 1200 mm centres	as required	as required	as required	as required
4 Connect Hanger clip	as required	as required	as required	as required
5 Connect T24 Cross tee (adjacent ceiling)	as required	as required	as required	as required
6 Connect T24 Main runner	1,8m/m²			-
7 Connect Clip 100/20	as required	as required	as required	as required
3 Connect Flexible external corner profile	as required	as required	as required	as required
9 Connect Flexiform clip, fixed at 100-300 mm (depending on the radius of curve)	as required	as required	as required	as required
10 Connect F-trim F	as required	as required	as required	as required
Flexiform profile: Radius of curve (concave or convex) min 200 mm.	-	-	-	-
Length of flexiform profile: max 2400 mm. When Flexiform profiles are longer than 1 m, intermidiate suspensions are required.				

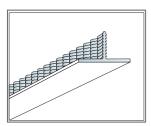


Profile for external corner

Size, mm	Max live load (N)	Min load bearing capacity (N)
1200x600x30	0	160
1600x600x30	0	160
2000x600x30	0	160
2400x600x30	0	160



	Size, mm	Size, mm			
	1200×600	1600x600	2000×600	2400×600	
1 Focus Flexiform A	as required	as required	as required	as required	
2 Connect T24 Cross tee (adjacent ceiling)	as required	as required	as required	as required	
3 Connect Flexiform profile/Flexible Flexiform profile, installed at 600 mm centres.	as required	as required	as required	as required	
4 Connect T24 Main runner	1,8m/m²	-	-		
5 Connect Adjustable hanger, installed at 1200 mm centres	as required	as required	as required	as required	
5 Connect Hanger clip	as required	as required	as required	as required	
7 Connect Clip 100/20	as required	as required	as required	as required	
3 Connect Flexiform clip, fixed at 100-300 mm (depending on the radius of curve)	as required	as required	as required	as required	
9 Connect F-trim F	as required	as required	as required	as required	
10 Connect Flexiform profile/Flexible Flexiform profile	as required	as required	as required	as required	
Flexiform profile: Radius of curve (concave or convex) min 200 mm.	-				
Length of flexiform profile: max 2400 mm. When Flexiform profiles are longer than 1 m, intermidiate suspensions are required.		-	-		



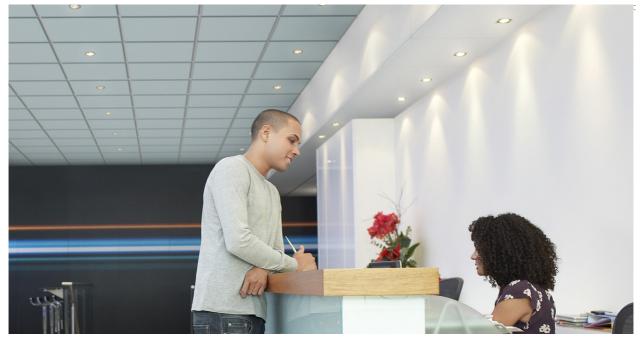
Profile for internal corner

1200x600x30	load (N) 0	capacity (N) 160
1200x000x30	0	100
1600x600x30	0	160
2000x600x30	0	160
2400x600x30	0	160



Ecophon Focus[™] Fixiform E

Ecophon Focus[™] Fixiform E creates distinct transitions between different levels of ceiling to accommodate various ceiling service installations or to add shape and structure to the room. Tiles are delivered flat and folded to 90 degrees on site before installation.



SYSTEM RANGE

Size, mm	1200x600
Т24	•
Thickness (THK)	20
Inst. Diagr.	M276









Focus Fixiform panel

Acoustic

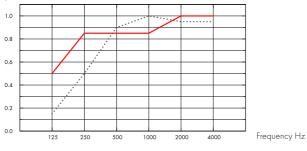


Acoustic values corresponding to a flat ceiling.

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.

 $lpha_{
m p}$, Practical sound absorption coefficient



- ···· 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

ТНК	o.d.s. mm	${f lpha}_{ ho'}$ Practical sound absorption coefficient						α"	Sound absorption class
mm	0.0.3. 11111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	~~ _W	
20	60	0.15	0.50	0.90	1.00	0.95	0.95	0.80	В
20	200	0.50	0.85	0.85	0.85	1.00	1.00	0.90	A

тнк	D _{nfw}	CAC dB
mm	Weighted normalized flanking level difference, ISO 10848-2	Ceiling Attenuation Class, ASTM 1414, ASTM E413
20	24	25



Indoor Air Quality

Certificate / Label	All Products	EMISSIONS DANS L'AIR INTÉRIEUR
Eurofins Indoor Air Comfort®	IAC Gold	
French VOC	A+	
Finnish M1	•	



Circularity

Minimum post-consumer recycled content	57%
Recyclability	Fully recyclable



Fire safety

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



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 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.

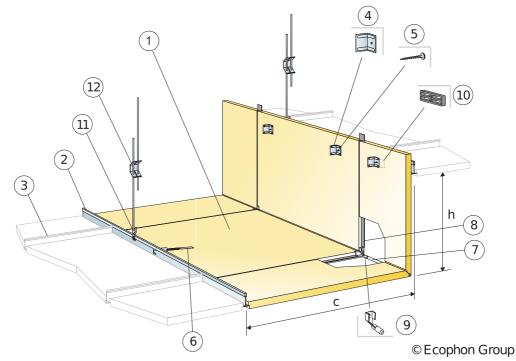


Mechanical properties

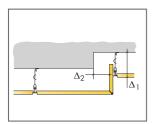
Additional live load has to be fixed to the soffit.

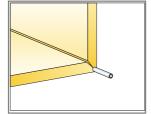


CE

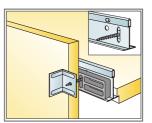


		Size, mm
		1200×600
1	Focus Fixiform E (kit)	as required
2	Connect T24 Main runner	1,8m/m²
3	Connect T24 Cross tee (adjacent ceiling)	as required
4	Angle Bracket Fixiform (included in Fixiform kit)	-
5	Absorber screw metal 50 (included in Fixiform kit)	-
6	Connect Hook (included in Fixiform kit)	-
7	Reinforcement rod (included in Fixiform kit)	-
8	Connect F Spline (included in Fixiform kit)	-
9	Plug for reinforcement rod (included in Fixiform kit)	-
10	Distance (included in Fixiform kit)	
11	Connect Hanger clip	1 pcs/hanger
12	Connect Adjustable hanger, installed at 600 mm centres at the level change	1,4/m ²
	Δ Min. overall depth of system: Δ 1=160 mm and Δ 2=80 mm from upper level	-
	δ Min. demounting depth: Individual ceiling tiles are non-demountable	
	Dimension: c=600 mm, h≤530 mm	





The fold is reinforced by a rod



Upper level connection to Main runner

Size, mm load (N) 1200x600x20 0 160



Ecophon Focus[™] Fixiform Ds

Ecophon Focus™ Fixiform Ds creates distinct transitions between different ceiling levels to accommodate various ceiling service installations or to offer shape and structure to a room. Tiles are delivered flat and folded to 90 degrees on site before installation.



SYSTEM RANGE

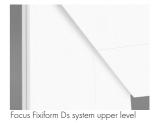
Size, mm	1200x600	XL 1 500x600	XL 1900x600	XL 2300x600
Т24	•	•	•	•
Thickness (THK)	20	20	20	20
Inst. Diagr.	M274	M275	M275	M275

-









Focus Fixiform panel

Acoustic

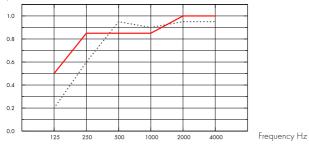


Acoustic values corresponding to a flat ceiling.

Sound Absorption:

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

 $lpha_{
m p}$, Practical sound absorption coefficient



- ···· 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

ТНК	o.d.s. mm	${f lpha}_{ m p'}$ Practical sound absorption coefficient						α	Sound absorption class
mm	0.0.3. 11111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
20	75	0.20	0.60	0.95	0.90	0.95	0.95	0.90	A
20	200	0.50	0.85	0.85	0.85	1.00	1.00	0.90	A

ТНК	D _{nfw}	CAC dB
mm	Weighted normalized flanking level difference, ISO 10848-2	Ceiling Attenuation Class, ASTM 1414, ASTM E413
20	24	25



Indoor Air Quality

Certificate / Label	All Products	SOR AIR COAL
Eurofins Indoor Air Comfort®	IAC Gold	
French VOC	A+	
Finnish M1	•	-





Circularity

Minimum post-consumer recycled content	57%
Recyclability	Fully recyclable



Fire safety

\land				
\mathbf{D}	Country Fire standard		Class	The glass wool core of the tiles is tested and classified as
	Europe	EN 13501-1	A2-s1,d0	non-combustible according to EN ISO 1182.



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 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.

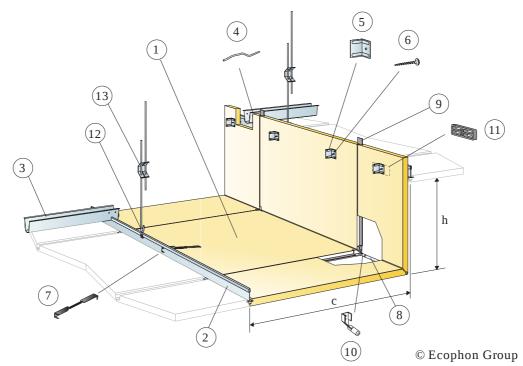


Mechanical properties

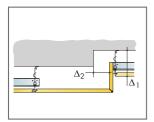
Additional live load has to be fixed to the soffit.

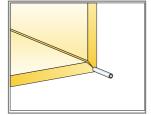


CE

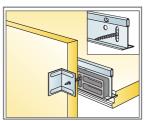


		Size, mm
		1200×600
1	Focus Fixiform Ds (kit)	as required
2	Connect T24 Main runner HD	as required
3	Connect Space bar, installed at 1500 mm centres (max. distance from wall 300 mm)	as required
4	Connect Space bar winch, installed one per joint Main runner/Space bar	as required
5	Angle Bracket Fixiform (included in Fixiform kit)	-
5	Absorber screw metal 50 (included in Fixiform kit)	
7	Connect Hook (included in Fixiform kit)	
3	Reinforcement rod (included)	
)	Connect F Spline (included in Fixiform kit)	
0	Plug for reinforcement rod (included)	-
1	Distance (included in Fixiform kit)	-
2	Connect Hanger clip	1 pcs/hanger
3	Connect Adjustable hanger, installed at 600 mm centres at the level change	1,4/m²
	Δ Min. overall depth of system: Δ 1=165 mm and Δ 2=80 mm from upper level	-
	δ Min. demounting depth: Individual ceiling tiles are non-demountable	-
	Dimension: c=600 mm, h<530 mm	



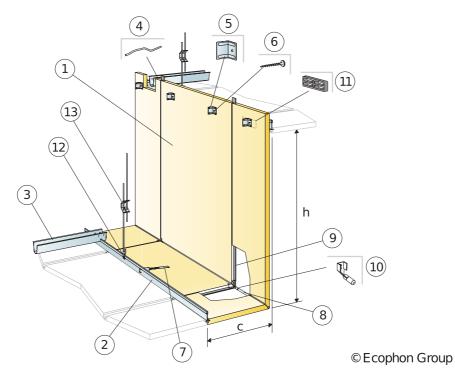


The fold is reinforced by a rod

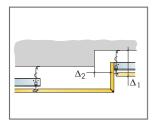


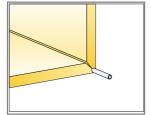
Upper level connection to Main runner

Size, mm Max live Min load bearing load (N) capacity (N) 1200x600x20 0 160

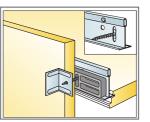


		Size, mm	Size, mm	
		1500×600	1900×600	2300×600
1	Focus Fixiform Ds XL (kit)	as required	as required	as required
2	Connect T24 Main runner HD	as required	as required	as required
3	Connect Space bar, installed at 1500 mm centres (max. distance from wall 300 mm)	as required	as required	as required
4	Connect Space bar winch, installed one per joint Main runner/Space bar	as required	as required	as required
5	Angle Bracket Fixiform (included in Fixiform kit)			-
6	Absorber screw metal 50 (included in Fixiform kit)			-
7	Connect Hook (included in Fixiform kit)			
8	Reinforcement rod (included in Fixiform kit)			
9	Connect F Spline (included in Fixiform kit)			
10	Plug for reinforcement rod (included in Fixiform kit)			
11	Distance (included in Fixiform kit)			
12	Connect Hanger clip	1 pcs/hanger	1 pcs/hanger	1 pcs/hanger
13	Connect Adjustable hanger, installed at 600 mm centres at the level change	1,4/m²	1,4/m²	1,4/m²
	Δ Min. overall depth of system: Δ 1=165 mm and Δ 2=80 mm from upper level			
	δ Min. demounting depth: Individual ceiling tiles are non-demountable			
	Dimension: c=300 mm, h<1130 mm (XL 1500), h<1530 mm (XL 1900), h<1930 mm (XL 2300)			





The fold is reinforced by a rod



Upper level connection to Main runner

Size, mm	Max live load (N)	Min load bearing capacity (N)
1500x600x20	0	160
1900x600x20	0	160
2300x600x20	0	160
2300x000x20	0	100



Ecophon Focus[™] Frieze

Ecophon Focus[™] Frieze is available for edge Dg, Ds, A and E. The frieze can be connected to the wall without any visible trims. For applications where a smooth continuous transition between ceiling and wall is needed.





Size, mm	2400x600
T24	•
Thickness (THK)	20
Inst. Diagr.	M110, M239



Focus frieze system

Focus frieze panel

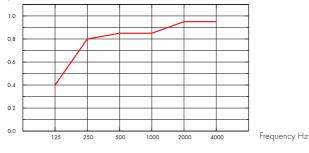
Acoustic



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.

 $lpha_{
m p\prime}$ Practical sound absorption coefficient



- Focus Frieze 20 mm, 200 mm o.d.s.

o.d.s = overall depth of system

THK mm	o.d.s. mm	$\alpha_{ m p}$, Practical sound absorption coefficient		α	Sound absorption class				
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	~~ _W	
20	200	0.40	0.80	0.85	0.85	0.95	0.95	0.90	A

тнк	AC(1.5)	D _{nfw}	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	All Products	EMISSIONS DANS L'AIR INTÉRIEUR
Eurofins Indoor Air Comfort®	IAC Gold	
French VOC	A+	
Finnish M1	•	



Cradle to Cradle Certified®

This product is Cradle to Cradle Certified® at Bronze level (version 4.0).



Material Health

This product has received a C2C Certified Material Health Certificate™ at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate™ is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



Circularity

)	Minimum post-consumer recycled content	59%	
	Recyclability	Fully recyclable	

Fire safety

	Country	Fire standard	Class	The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182.
\smile	Europe	EN 13501-1	A2-s1,d0	non-combusible according to ETV 150-1182.



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, installationguides and drawing aid. For information regarding minimum overall depthof system see quantity specification.



System weight

The system consists of Ecophon Focus™ frieze tiles and Connect™ grid systems, with an approximate weight of 3 kg/m².

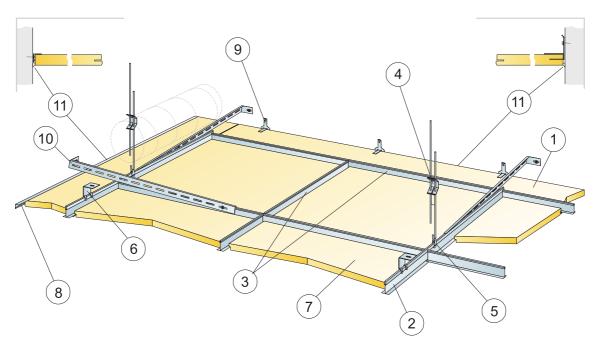


Mechanical properties

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

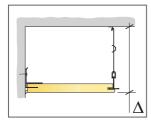
CE

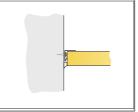
CE



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		Size, mm
		2400×600
1	Focus Frieze	as required
2	Connect T24 Main runner	-
3	Connect T24 Cross tee, L=600 mm	as required
4	Connect Adjustable hanger, installed at 1200 mm centres	as required
5	Connect Hanger clip	as required
6	Connect Direct bracket (only in combination with Frieze trim)	as required
7	Focus A or E, Master A or E	as required
3	Connect Frieze trim, fixed at 300 mm centres. If this solution is used on two opposite walls, the inner part if the ceiling needs to be stabilized towards the walls. Minimum free depth above tile 0 mm.	as required
9	Connect Frieze bracket, installed at 500 mm centre. Minimum free depth above tile 150 mm.	as required
10) Connect Wall bracket, L=700 mm, for space bar	as required
11	Acrylic sealant, (not supplied by Ecophon)	as required
	Δ Min. overall depth of system: with Adjustable hanger: 110 mm, with Direct bracket: 60 mm	
	δ Min. demounting depth: The system is not demountable	
	Focus Frieze: Min. overall depth of system: 160 mm	
	Focus Frieze: Min. demounting depth: The system is non-demountable	
	Ecophon Focus frieze: can be divided in two parts if width is less than 300 mm	



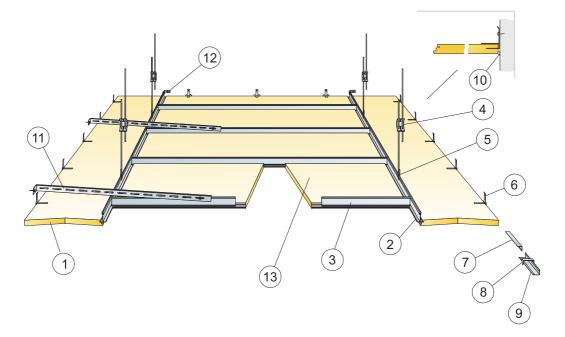


Fixing with frieze trim



Fixing with frieze bracket

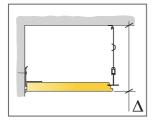
Size, mm Max live Min load bearing load (N) capacity (N) 2400x600x20 0 160

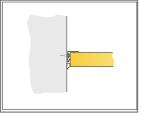


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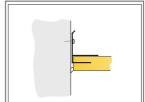
QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm
	2400×600
Focus frieze Ds/Dg	as required
Connect T24 Main runner	-
Connect T24 Cross Tee L=600/1200/1800 alt. Main runner	as required
Connect Adjustable hanger, installed at 1200 mm centres	as required
Connect Hanger clip	as required
Connect Frieze bracket, installed at 500 mm centre. Minimum free depth above tile 150 mm.	as required
Connect Frieze trim, fixed at 300 mm centres.	as required
Connect Perimeter tile clip	1/300-400mm on any cut edge
Connect Angle trim	as required
Acrylic sealant, (not supplied by Ecophon)	as required
Connect Wall bracket, L=700 mm, for space bar	as required
Connect Wall bracket for T-profiles	as required
Focus Ds or Dg	as required
Δ Min. overall depth of system: 110 mm	
δ Min. demounting depth: Focus frieze tiles are non-demountable, center part according to each system	
Ecophon Focus frieze: can be divided in two parts if width is less than 300 mm	
	Connect T24 Main runner Connect T24 Cross Tee L=600/1200/1800 alt. Main runner Connect Adjustable hanger, installed at 1200 mm centres Connect Hanger clip Connect Frieze bracket, installed at 500 mm centres. Connect Frieze trim, fixed at 300 mm centres. Connect Perimeter tile clip Connect Angle trim Acrylic sealant, (not supplied by Ecophon) Connect Wall bracket, L=700 mm, for space bar Connect Wall bracket for T-profiles Focus Ds or Dg Δ Min. overall depth of system: 110 mm δ Min. demounting depth: Focus frieze tiles are non-demountable, center part according to each system





Fixing with frieze trim



Fixing with frieze bracket

Size, mm Max live Min load bearing load (N) capacity (N) 2400x600x20 0 160

Ecophon Focus Edge[™] 500

Ecophon Focus Edge[™] 500 is a system used as free hanging unit(s) in applications where the installation of a wall-to-wall ceiling is not possible. The system consists of profiles and corners which together form a well designed perimeter trim.



SYSTEM RANGE

Size, mm	600x600	1200x600	1200x1200	1200x1200
T24	•	•	•	•
Thickness (THK)	20	20	20	25
Inst. Diagr.	M165, M210, M211	M165, M210, M211	M210	M211



Connect Edge 500 in position for Focus E installation

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

)	Country		Class
	Europe	EN 13501-1	Al



Installation

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



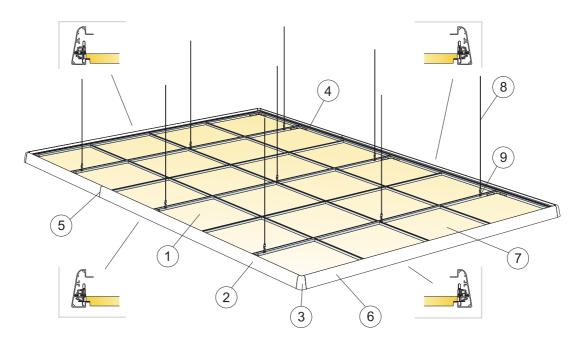
Mechanical properties

Additional live load has to be fixed to the soffit.



CE

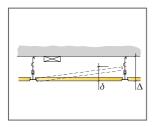
Additional live load has to be fixed t

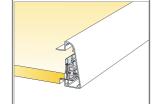


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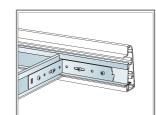
QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm	
	600×600	1200×600
1 Focus E	2,8/m²	1,4/m²
2 Connect Edge 500 Profile	as required	as required
3 Connect Edge Corner	as required	as required
4 Connect Leoupling	as required	as required
5 Joint with Guide pins and Joint fixing bracket, (see Edge kit for further details)	as required	as required
6 Connect Edge profile clip E, [18 pcs/kit included in Connect Edge kit E]	as required	as required
7 Focus E tile and Connect grid	as required	as required
8 Connect Adjustable wire hanger, installed at 1200 mm centres	as required	as required
9 Connect Hanger clip	as required	as required
Connect Edge kit E: 18 pcs Connect Edge profile clip with screw RTK 3,5x19, 4 pcs Joint fixing bracket, 1 pc socket screw wrench 2 mm, 1 pc socket screw wrench T10, 12 pcs guide pins, 24 pcs screws RTK ST 3,5x9,5 (for fixing to extrusion), 1 pc installation guide	as required	as required
Not included in kit: Connect L-coupling		
Not included in kit: Connect Installation screw BR for L-coupling		
Δ Min. overall depth of system: 130 mm		
δ Min. demounting depth: See Focus/Master E		

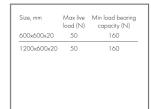


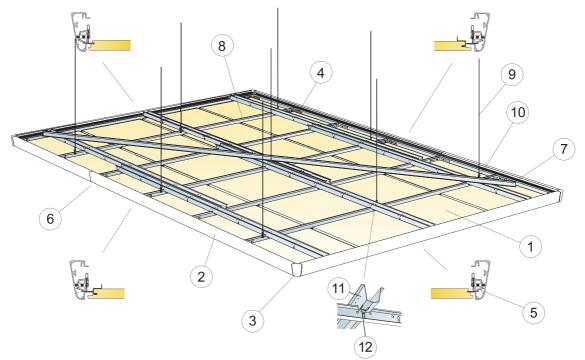


Joint between tile and Edge profile

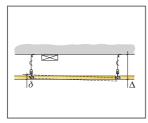


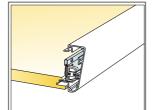
Connection between T-profile and Edge extrusion



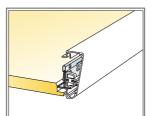


		Size, mm		
		600x600	1200×600	1200x1200
1	Focus Ds	2,8/m²	1,4/m²	0,7/m²
2	Connect Edge 500 Profile	as required	as required	as required
3	Connect Edge 500 Corner	as required	as required	as required
4	Connect Lcoupling	as required	as required	as required
5	Connect Edge profile clip, (18 pcs/kit included in Connect Edge kit Ds/Dg)	as required	as required	as required
6	Joint with Guide pins and Joint fixing bracket, (see Edge kit for further details)	as required	as required	as required
7	Connect Main runner for adjustment and stabilisation of grid	as required	as required	as required
8	Focus Ds tile and Connect grid system (see Focus Ds system page for further details)	as required	as required	as required
9	Connect Adjustable wire hanger, installed at 1200 mm centres	as required	as required	as required
10	Connect Hanger clip	as required	as required	as required
11	Connect Space bar	as required	as required	as required
12	Connect Space Bar Winch, installed one per joint Connect Main Runner/Connect Space Bar	1,4/m²	1,4/m²	0,7/m²
	Connect Edge Kit Ds/Dg: 18 pcs Connect Edge profile clip with screw RTK 3,5x25, 4 pcs Joint fixing bracket, 1 pc socket screw wrench 2 mm, 1 pc socket screw wrench T10, 12 pcs guide pins, 24 pcs screws RTK ST 3,5x9,5 (for fixing to extrusion), 2 pcs installation guides	as required	as required	as required
	Not included in kit: Connect Lcoupling	-		
	Not included in kit: Connect Installation screw BR for Looupling	-		
	Δ Min. overall depth of system: 135 mm	-		
	δ Min. demounting depth: 30 mm (50 mm with 1200x1200)		-	



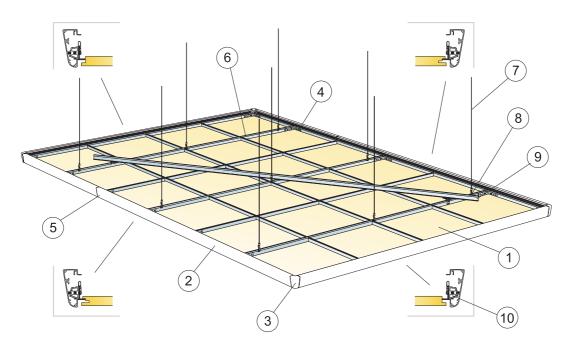


Joint with tile side Ds1



Joint with tile side Ds2 and extra profile

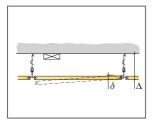
Size, mm	load (N)	1 1 1 1
600x600x20	50	160
1200x600x20	50	160
1200x1200x20	50	160

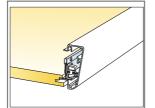


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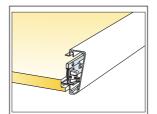
QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm		
	600×600	1200×600	1200×1200
Focus Dg	2,8/m²	1,4/m²	0,7/m²
2 Connect Edge 500 Profile	as required	as required	as required
Connect Edge 500 Corner	as required	as required	as required
Connect Lcoupling	as required	as required	as required
joint with Guide pins and Joint fixing bracket, (see Edge kit for further details)	as required	as required	as required
Focus Dg tile and Connect grid system (see Focus Dg system page for further details)	as required	as required	as required
Connect Adjustable wire hanger, installed at 1200 mm centres	as required	as required	as required
Connect Hanger clip	as required	as required	as required
Connect Main runner for adjustment and stabilisation of grid	as required	as required	as required
0 Connect Edge profile clip, (18 pcs/kit included in Connect Edge kit Ds/Dg)	as required	as required	as required
Connect Edge Kit Ds/Dg: 18 pcs Connect Edge profile clip with screw RTK 3,5x25, 4 pcs Joint fixing bracket, 1 pc socket screw wrenc mm, 1 pc socket screw wrench T10, 12 pcs guide pins, 24 pcs screws RTK ST 3,5x9,5 (for fixing to extrusion), 2 pcs installation guides	h 2 as required	as required	as required
Not included in kit: Connect Looupling			
Not included in kit: Connect Installation screw BR for L-coupling			
Δ Min. overall depth of system: 135 mm			
δ Min. demounting depth: 30 mm (50 mm with 1200x1200)		-	





Joint between tile and Edge profile



Connection between T-profile and Edge extrusion

600x600x20	load (N) 50	capacity (N) 160
1200x600x20	50	160
1200x1200x25	50	160

Live load/load bearing capacity



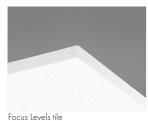
Ecophon Focus[™] Levels

Focus Levels is a new design system consisting of tiles with three different thicknesses: 40, 30 and 20 mm. The tiles are glued directly next to each other and by varying the tile thickness, you can create unique design solutions with built in level shiftings. The system is easy to install in ceilings and/or on walls. Use Connect Absorber glue for best result. The tiles are made of glass wool and the exposed surface has a Akutex surface of highest quality. The tiles are not demountable.



SYSTEM RANGE

1972	Size, mm									
		600x600	600x600	600x600	1200x300	1200x300	1200x300	1200x600	1200x600	1200x600
	Direct	•	•	•	•	•	•	•	•	•
	Thickness (THK)	20	30	40	20	30	40	20	30	40
	Inst. Diagr.	M488, M489								







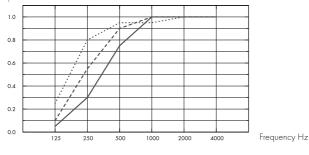
Acoustic



Sound Absorption:

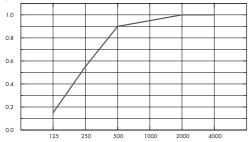
Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.

 $\alpha_{_{D'}}$ Practical sound absorption coefficient



- ···· 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

 $lpha_{
m p\prime}$ Practical sound absorption coefficient



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

ТНК			$lpha_{ m p'}$ Pr	actical sound		a	Sound absorption class		
mm	o.d.s. mm	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	α_{w}	Sound absorption class
40	43	0.25	0.80	0.95	0.95	1.00	1.00	1.00	A
30	33	0.10	0.55	0.90	1.00	1.00	1.00	0.85	В
20	23	0.05	0.30	0.75	1.00	1.00	1.00	0.60	С
0	43	0.15	0.55	0.90	0.95	1.00	1.00	0.85	В

Frequency Hz

THK mm	o.d.s. mm	NRC	SAA
20	23	0.75	0.78

Indoor Air Quality

Certificate / Label	All Products
Eurofins Indoor Air Comfort®	IAC Gold
French VOC	A+
Finnish M1	•



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Cradle to Cradle Certified®

This product is Cradle to Cradle Certified® at Bronze level (version 4.0).

Material Health

CERTIFIED

This product has received a C2C Certified Material Health Certificate™ at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate™ is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



Environmental Footprint

	kg CO2 equiv/m²
Focus Levels 20mm	5,03
Focus Levels 30mm	6,23
Focus Levels 40mm	7,44

Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804



Circularity

Minimum post-consumer recycled content (20 mm)	58%
Minimum post-consumer recycled content (30 mm)	62%
Minimum post-consumer recycled content (40 mm)	64%
Recyclability	Fully recyclable



Fire safety

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



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. 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.



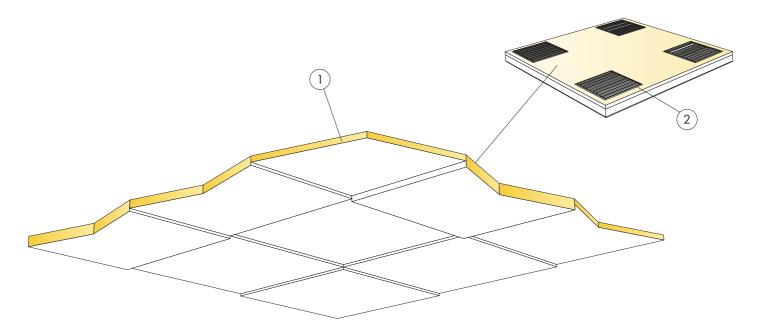
Mechanical properties

Additional live load has to be fixed to the soffit.



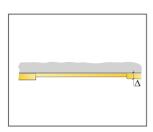
CE

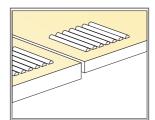
INSTALLATION DIAGRAM (M488) FOR ECOPHON FOCUS LEVELS, USING CONNECT ABSORBER GLUE



© Ecophon Group

	Size, mm		
	600×600	1200×300	1200x600
1 Focus levels	2,8/m²	2,8/m²	2,8/m²
2 Connect Absorber glue (0,25 l/m² - 0,4 l/m² depending on installation conditions)	as required	as required	as required
Use Connect Notched spatula to apply the glue.	-	-	-
Δ Min. overall depth of system: 23 mm	-	-	-
δ Min. demounting depth: The system is not demountable	-		-
Cut visible edges should be painted			
Installation shows 30% of each thickness		-	-

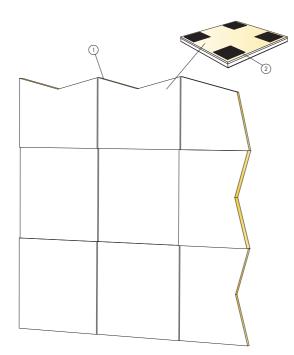




Application of glue

Size, mm	Max live load (N)	Min load bearing capacity (N)
600x600x20	-	÷
600x600x30		-
600x600x40		-
1200x300x20		-
1200x300x30	-	-
1200x300x40		-

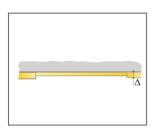
INSTALLATION DIAGRAM (M489) FOR ECOPHON FOCUS LEVELS, USING CONNECT ABSORBER GLUE

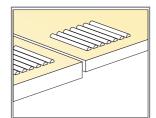


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QUANTITY SPECIFICATION (EXCL. WASTAGE)

Size, mm		
600×600	1200×300	1200×600
2,8/m²	2,8/m²	2,8/m²
as required	as required	as required
	-	-
-		-
-		
-		-
	-	
	600×600 2,8/m ² as required - - -	600x600 1200x300 2,8/m² 2,8/m² as required as required - - - - - - - - - - - - - - - - - -





Application of glue

Size, mm	Max live load (N)	Min load bearing capacity (N)
600x600x20	-	÷
600x600x30		-
600x600x40		-
1200x300x20		-
1200x300x30		-
1200x300x40		-