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

## Entering a universe of design flexibility

Our most comprehensive system family, Ecophon Focus will always offer a range of opportunities through different edge designs, forms, levels and installation options, allowing it to be used in most application areas.

- Options
- Level changes
- Design and precision

Product		Edge
Ecophon Focus™ A	Visible grid Easy demountable tiles	
Ecophon Focus™ B	For direct fixing with glue.	20 4
Ecophon Focus™ Ds	Concealed grid. Easily demountable tiles. Symmetric edge.	
Ecophon Focus™ Dg	Unique edge design. Floating appearance. Easily demountable tiles.	
Ecophon Focus™ D/A	Panels for corridor and bandraster with concealed grid. Easily demountable tiles.	ii,i,
Ecophon Focus™ E	Recessed visible grid. Easily demountable tiles.	
Ecophon Focus™ Ez	New design tile recessed visible grid. Easily demountable tiles	20] The second s
Ecophon Focus™ F	For direct fixing with screws.	20 20
Ecophon Focus™ Lp	Semi-concealed grid system used for highlighting direction in a room	
Ecophon Focus™ SQ	For direct fixing with glue.	S0
Ecophon Focus™ Flexiform A TECH	Flexible panels formed on site.	
Ecophon Focus™ Fixiform E	Tiles delivered flat and folded to 90 degrees level change on site.	
Ecophon Focus™ Fixiform Ds	Tiles delivered flat and folded to 90 degrees level change on site.	
Ecophon Focus™ Frieze	Creating a smooth transition between ceiling and wall.	
Ecophon Focus Edge™ 500	Slight vertical sloped moulding for free hanging units.	
Ecophon Focus™ Wing	Wing-shaped elements for free hanging ceilings.	Amore 20
Ecophon Focus™ Ds level change	Concealed grid. Symmetric edge. Different levels	
Ecophon Focus™ Levels TECH	Design system with shifting panel thickness for creating unique patterns.	



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

Ecophon Focus<sup>™</sup> 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

2 2 2 2	Size, mm	600x600	1200x600	1200x1200	XL 1600x600	XL 1800x600	XL 2000x600	XL 2400×600
15	T15	•	•	•				
	Т24	•	•	•	•	•	•	•
	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/



1

Section of Focus A system with Connect T24



Focus A system



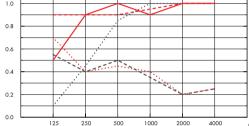
Focus A tile

## Acoustics

#### Sound Absorption:

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





- ···· Focus A 20 mm, 50 mm o.d.s.
- Focus A 20 mm, 200 mm o.d.s.
- --- Focus A 20 mm + Extra Bass 50 mm, 200 mm o.d.s.
- --- Focus A gamma 20 mm, 200 mm o.d.s.
- ··· Focus A gamma 20 mm + Extra Bass 50 mm, 200 mm o.d.s.

Frequency Hz o.d.s = overall depth of system

	THK	o.d.s.	$\alpha_{p'}$ Practice	$\mathfrak{x}_{_{\mathrm{p}}}$ , Practical sound absorption coefficient						Sound absorption
	mm	mm	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		class
	20	50	0.10	0.45	0.85	1.00	1.00	1.00	0.75	С
	20	200	0.50	0.90	1.00	0.90	1.00	1.00	1.00	А
+ Extra Bass,	70	200	0.90	0.90	0.90	0.95	1.00	1.00	0.95	А
gamma	20	200	0.55	0.40	0.50	0.35	0.20	0.25	0.30	D
gamma + Extra Bass	70	200	0.70	0.40	0.45	0.40	0.20	0.25	0.30	D

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

mm	AC(1.5) Articulation Class, ASTM E1111, ASTM E1110		CAC dB Ceiling Attenuation Class, ASTM 1414, ASTM E413
20	190	20	21



#### **Indoor Air Quality**

Certificate / Label		5 M 1 \ 3
Finnish M 1	•	A TAT A SHIP
French VOC, A+	•	



### **Environmental Footprint**

Kg CO2 equiv/m²: 1,81

From EPD in conformity with ISO 14025 / EN 15804



## Circularity

Fully recyclable.



## Fire safety

Country	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 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.



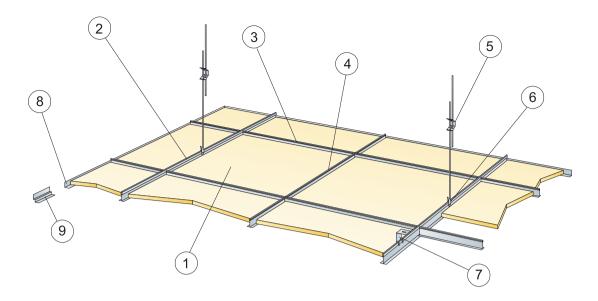
#### **Mechanical properties**

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



CE

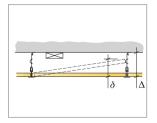
## Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

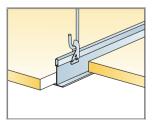


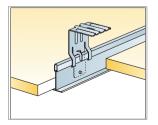
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

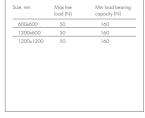
		Size, mm		
		600x600	1200×600	1200x1200
1	Focus A	2,8/m²	1,4/m²	0,7/m²
2	Connect T24 or T15 Main runner, installed at 1200 mm centres (max. distance from wall 600 mm, can be extended up to 1200 mm if no live load between Main runner and wall).	0,9m/m²	0,9m/m²	0,9m/m²
3	Connect T24 or T15 Cross tee, L=1200 mm, installed at 600 mm centres	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
8	Connect Angle trim, fixed at 300 mm centres	as required	as required	as required
9	Connect Shadow-line trim, fixed at 300 mm centres	as required	as required	as required
	$\Delta$ Min. overall depth of system, with adjustable hanger: 100 mm, with direct bracket: 50 mm	-	-	-
	$\delta$ 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





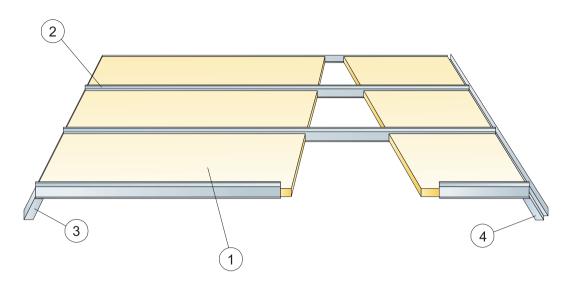




See Quantity specification

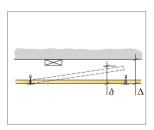
Suspension with adjustable hanger and clip

Suspension with direct bracket



#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm			
		1600x600	1800×600	2000×600	2400×600
1	Focus A	1,05/m²	0,95/m²	0,85/m²	0,7/m²
2	Connect T24 Corridor profile, installed at 600 mm centres	1,05/m²	0,95/m²	0,85/m²	0,7/m²
3	Connect Angle trim, fixed at 200 mm centres	as required	as required	as required	as required
4	Connect Shadow-line trim, fixed at 200 mm centres	as required	as required	as required	as required
	$\Delta$ Min. overall depth of system: 40 mm	-	-		-
	$\delta$ Min. demounting depth: 65 mm	-	-	-	-



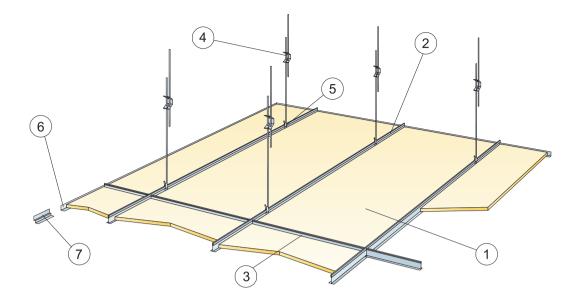




Live load/load bearing capacity

Min load bearing capacity (N)

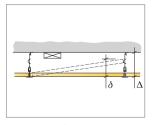
See Quantity specification

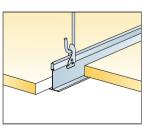


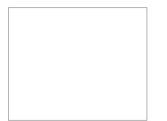
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm				
		1600x600	1800x600	2000x600	2400×600	
1	Focus A	1,05/m²	0,95/m²	0,85/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	
4	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	
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	
	$\Delta$ Min. overall depth of system: 100 mm	-	-	-	-	

 $\delta$  Min. demounting depth: 100 mm





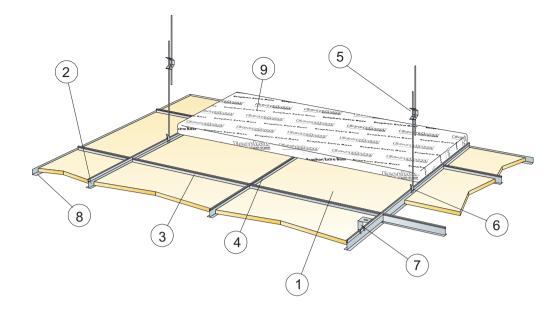


Size, mm	Max live load (N)	Min load bearing capacity (N)
1600x600	50	160
1800x600	50	160
2000x600	50	160
2400x600	50	160

See Quantity specification

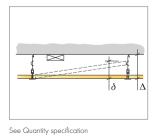
Suspension with adjustable hanger and clip

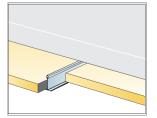
Live load/load bearing capacity

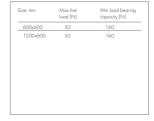


#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	
		600x600	1200×600
1	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 Main runner and wall).	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
4	Connect T24 Cross tee black, L=600 mm	0,9m/m²	-
5	Connect Adjustable Hanger, installed at 1 200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²
6	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²
7	For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m²	0,7/m²
8	Connect Angle trim black, (fixed at 300 mm centres)	as required	as required
9	Extra Bass (1200x600x50 mm)	0,7/m²	0,7/m²
	$\Delta$ Min. overall depth of system: Focus A: 50 mm (Direct bracket). Focus A/with Extra bass: 100 mm.	-	-
	$\delta$ Min. demounting depth: Focus A: 130 mm, Focus A/with Extra bass: 170 mm	-	-







Installation with Extra Bass

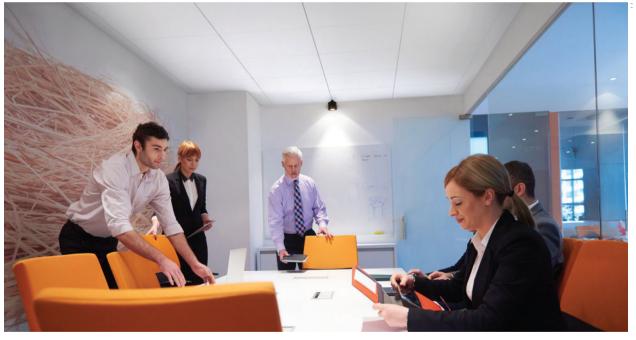
Suspension with adjustable hanger and clip Live I

Live load/load bearing capacity



# Ecophon Focus<sup>TM</sup> 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

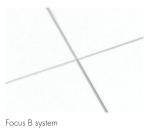
3[	Size, mm	600x600
	Direct	•
	Thickness (THK)	20
	Inst. Diagr.	M03







Section of Focus B system



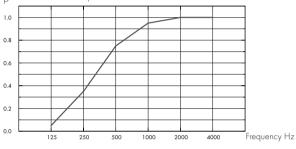
2

#### Acoustics

#### 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.

 $lpha_{p'}$  Practical sound absorption coefficient



- Focus B 20 mm, 20 mm o.d.s.

o.d.s = overall depth of system

THK	o.d.s.	$\alpha_{p}$ , Practico	, Practical sound absorption coefficient				$\alpha_{w}$	Sound absorption	
mm	mm	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		class
20	20	0.05	0.35	0.75	0.95	1.00	1.00	0.65	С

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



#### **Indoor Air Quality**

Certificate / Label		2 M 1 N 9
Finnish M 1	•	
French VOC, A+	•	



## **Environmental Footprint**

Focus B, Kg CO<sub>2</sub> equiv/m<sup>2</sup>: 4,59 From EPD in conformity with ISO 14025 / EN 15804



#### Circularity

Fully recyclable.



## Fire safety

Country	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 A, relative humidity 70% and 25°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.



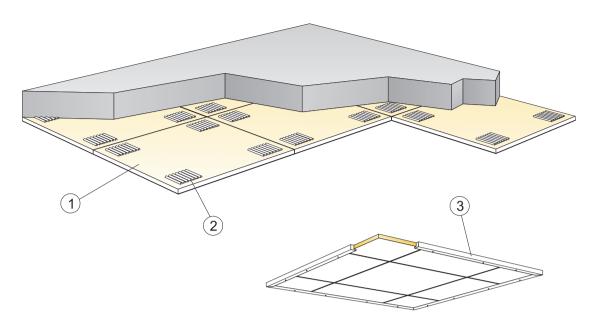
#### **Mechanical properties**

Additional live load has to be fixed to the soffit.



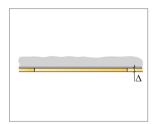
#### CE

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.

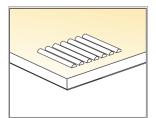


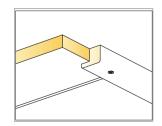
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

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



See Quantity specification







Application of glue

Wood trim for floating installation

Live load/load bearing capacity



# Ecophon Focus<sup>TM</sup> 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.



#### SYSTEM RANGE

Size, mm	600x600	1200x600	1200x1200	XL 1600×600	XL 1800×600	XL 2000×600	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

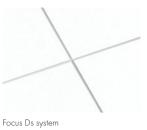
© Ecophon Group



Focus Ds tile



Section of Focus Ds system with Connect T24 Main runner HD





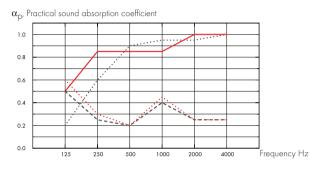
The individual tiles are easily demountable



#### Acoustics

#### Sound Absorption:

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



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

	THK	o.d.s.	$lpha_{ m p\prime}$ Practical sound absorption coefficient				$\alpha_{w}$	Sound absorption		
	mm	mm	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		class
	20	65	0.20	0.60	0.90	0.95	0.95	1.00	0.90	А
	20	200	0.50	0.85	0.85	0.85	1.00	1.00	0.90	А
gamma	20	200	0.50	0.25	0.20	0.40	0.25	0.25	0.25	E
gamma + Extra Bass	70	200	0.60	0.30	0.20	0.45	0.25	0.25	0.25	E

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

	mm	AC(1.5) Articulation Class, ASTM E1111, ASTM E1110	Weighted normalized flanking level	CAC dB Ceiling Attenuation Class, ASTM 1414, ASTM E413
1	20	180	24	25



#### **Indoor Air Quality**

Certificate / Label		
Finnish M 1	•	
French VOC, A+	•	



#### Environmental Footprint

Focus Ds, Kg CO<sub>2</sub> equiv/m<sup>2</sup>: 4,25 From EPD in conformity with ISO 14025 / EN 15804

© Ecophon Group



## Circularity

Fully recyclable.



### Fire safety

Country	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 A, relative humidity 70% and 25°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.



#### **Mechanical properties**

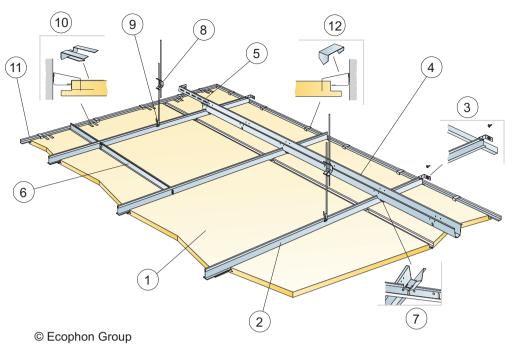
See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at www. ecophon.com.



## CE

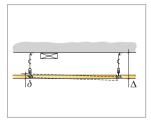
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

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



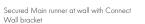
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

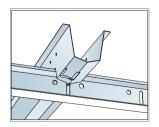
		Size, mm						
		600x600	1200×600	1600x600	1800x600	2000x600	2400x600	
1	Focus Ds	2,8/m²	1,4/m²	1,05/m²	0,95/m²	0,85/m²	0,7/m²	
2	Connect T24 Main Runner HD, installed at 600 mm centres	1,7m/m²	1,7m/m²	1,7m/m²	1,7m/m²	1,7m/m²	1,7m/m²	
3	Connect Wall Bracket for T-profiles	1/suspended ro	w of Main runner					
4	Connect Space Bar, installed at 1500 mm centres (max. distance from wall 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	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	
8	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	
9	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 n	nm on every cut perime	ter tile with only 1 supp	porting 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						
	$\Delta$ Min. overall depth of system: 115 mm							
	$\delta$ Min. demounting depth: 30 mm			-	-	-	-	
	Ear luminaire integration in panals use Connect Bridging							





er Alternational Alternational





 
 Size, mm
 Max live load [N]
 Min load bearing capacity [N]

 600x600
 50
 160

 1200x600
 50
 160

 1800x600
 50
 160

 200x600
 50
 160

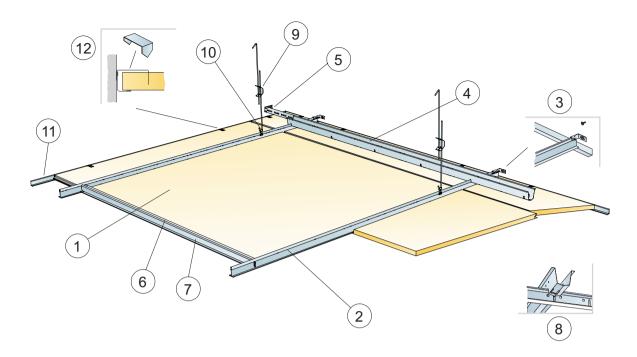
 200x600
 50
 160

 200x600
 50
 160

 200x600
 50
 160

Connection between profiles with space bar winch

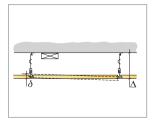
Live load/load bearing capacity



#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm
		1200×1200
1	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 live load between Main runner and wall).	0,9m/m²
3	Connect Wall Bracket for T-profiles	1/suspended row of Main runner
4	Connect Space Bar, installed at 1500 mm centres (max. distance from wall 300 mm)	0,7m/m²
5	Connect Wall Bracket, L=700 mm, for Connect Space Bar	1/row of Space bar
6	Connect Edge stiffener	1,4/m²
7	Connect T24 Cross tee, L=1 200 mm	2/row of Main runner
8	Connect Space Bar Winch, installed one per joint Connect Main Runner/Connect Space Bar	0,7/m²
9	Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²
10	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²
11	Connect Angle trim 15/22, fixed at 300 mm centres	as required
12	Connect Perimeter tile clip	1/300-400mm on any cut edge
	$\Delta$ Min. overall depth of system: 115 mm	

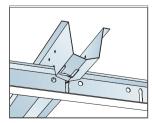
 $\delta$  Min. demounting depth: 50 mm



er er

See Quantity specification

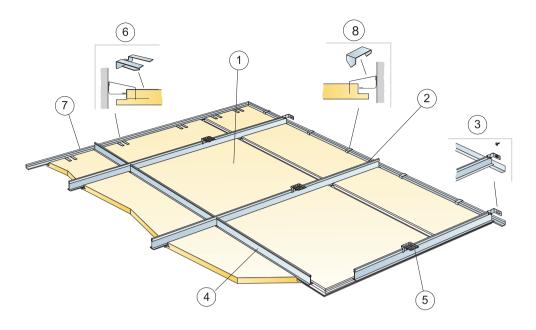
Secured Main runner at wall with Connect Wall bracket



Connection between profiles with space bar winch

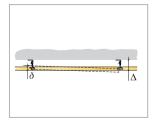
Size, mm	Max live load (N)	Min load bearing capacity (N)
1200x1200	50	160

Live load/load bearing capacity

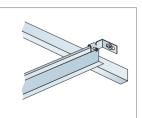


#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

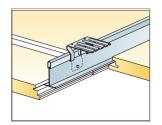
	Size, mm						
	600x600	1200x600	1600x600	1800x600	2000x600	2400×600	
1 Focus Ds	2,8/m²	1,4/m²	1,05/m²	0,95/m²	0,85/m²	0,7/m²	
2 Connect T24 Main Runner HD, installed at 600 mm centres	1,7m/m²	1,7m/m²	1,7m/m²	1,7m/m²	1,7m/m²	1,7m/m²	
3 Connect Wall Bracket for T-profiles	1/suspended ro	1/suspended row of Main runner					
4 Connect T24 Cross Tee, L=600	2/row of Main r	2/row of Main runner					
5 Connect Direct bracket, installed at 1500 mm centres	1,1/m²	1,1/m²	1,1/m²	1,1/m²	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 m	1pc/300-400 mm on every cut perimeter tile with only 1 supporting edge					
$\Delta$ Min. overall depth of system: 65 mm	-	-	-	-	-	-	
$\delta$ Min. demounting depth: 30 mm			-	-	-	-	



See Quantity specification



Secured Main runner at wall with Connect Wall bracket



 
 Size, mm
 Max live
 Min load learing copacity [N]

 600x600
 50
 160

 1200x600
 50
 160

 1600x600
 50
 160

 1800x600
 50
 160

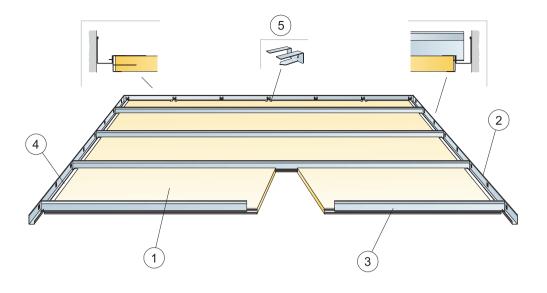
 2000x600
 50
 160

 2000x600
 50
 160

 2400x600
 50
 160

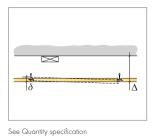
Suspension with direct fix bracket

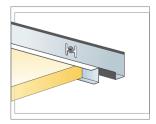
Live load/load bearing capacity



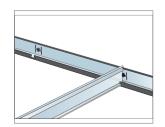
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm	Size, mm				
	1600×600	1800x600	2000×600	2400x600		
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		
Connect Cover trim Ds	2/tile plus end tile	es				
Connect Support clip Dg 20	1 pc/300-400 mi	1 pc/300-400 mm on every cut perimeter tile with only 1 supporting edge				
$\Delta$ Min. overall depth of system: 55 mm						
δ Min. demounting depth: 30 mm	-	-	-	-		
	Connect Modular Wall trim Connect T24 Corridor profile Connect Cover trim Ds Connect Support clip Dg 20	I600x600         Focus Ds XL       1,05/m²         Connect Modular Wall trim       as required         Connect T24 Corridor profile       1,05/m²         Connect Cover trim Ds       2/tile plus end tile         Connect Support clip Dg 20       1pc/300-400 m         Δ Min. overall depth of system: 55 mm       1	1600x600         1800x600           Focus Ds XL         1,05/m <sup>2</sup> 0,95/m <sup>2</sup> Connect Modular Wall trim         as required         as required           Connect T24 Corridor profile         1,05/m <sup>2</sup> 0,95/m <sup>2</sup> Connect Cover trim Ds         2/tile plus end tiles         2/tile plus end tiles           Connect Support clip Dg 20         1pc/300400 mm or every cut perime           Δ Min. overall depth of system: 55 mm         1	Id00x600         I800x600         2000x600           Focus Ds XL         1,05/m²         0,95/m²         0,85/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           Connect Cover trim Ds         2/tile plus end tiles         2/tile plus end tiles         1         1           Connect Support clip Dg 20         1pc/300-400 mm or every cut perimeter tile with only 1 support Aline. overall depth of system: 55 mm         1         1		





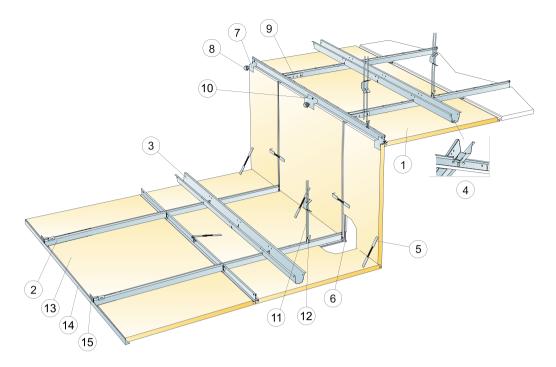
Tile and Connect Cover trim Ds



Corridor profile positioned by Modular wall trim

Size, mm	Max live load (N)	Min load bearing capacity (N)
1600x600	40	-
1800x600	20	-
2000×600	10	
2400x600	0	

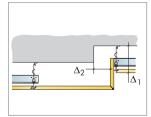
Live load/load bearing capacity

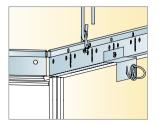


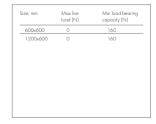
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		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 Vertical tile 450 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 r	unner 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	Focus Ds Perimeter tile L=300-600	as required	as required
14	Connect Wall Bracket for T-profiles	1/suspended ro	w of Main runner
15	Connect Angle trim 15/22, fixed at 300 mm centres	as required	as required
	$\Delta$ Min. overall depth of system: $\Delta$ 1=165 mm and $\Delta$ 2=80 mm from upper level		
	$\delta$ Min. demounting depth: Individual ceiling tiles are non-demountable	-	-

Dimension: c=600 mm, h<530 mm





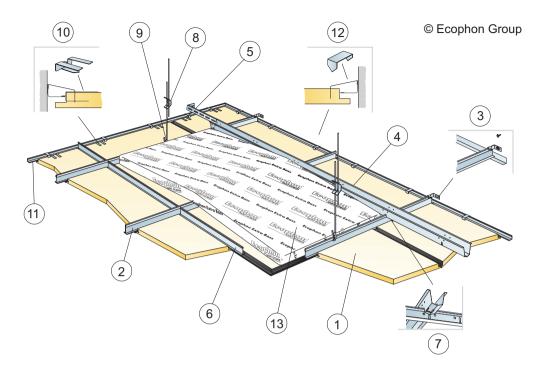


See Quantity specification

Distance between Focus Lp tiles

Lower level connection fixed with Hook Live load/load b

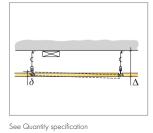
Live load/load bearing capacity

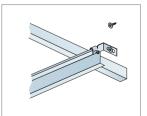


#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

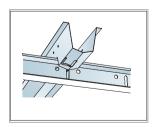
	Size, mm			
	600×600	1200x600		
Focus Ds	2,8/m²	1,4/m²		
Connect T24 Main runner HD, installed at 600 mm centres	1,7m/m²	1,7m/m²		
Connect Wall Bracket for T-profiles	1/suspended ro	w of Main runner		
Connect Space Bar, installed at 1500 mm centres (max. distance from wall 300 mm)	0,7m/m²	0,7m/m²		
Connect Wall Bracket, L=700 mm, for Connect Space Bar	1/row of Space	bar		
Connect T24 Cross tee, L=600 mm	2/row of Main	2/row of Main runner HD		
Connect Space Bar Winch, installed one per joint Connect Main Runner/Connect Space Bar	1,4/m²	1,4/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		
Connect Support clip Dg20	1/300-400mm	on any cut edge		
Connect Angle trim black, (fixed at 300 mm centres)	as required	as required		
Connect Perimeter tile clip	1/300-400mm	on any cut edge		
Extra Bass (1200x600x50 mm)	0,7/m²	0,7/m²		
Δ Min. overall depth of system: 115 mm				
	Connect T24 Main runner HD, installed at 600 mm centres         Connect Wall Bracket for T-profiles         Connect Space Bar, installed at 1500 mm centres (max. distance from wall 300 mm)         Connect Wall Bracket, L=700 mm, for Connect Space Bar         Connect T24 Cross tee, L=600 mm         Connect Space Bar Winch, installed one per joint Connect Main Runner/Connect Space Bar         Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)         Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)         Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)         Connect Support Clip (not to be used in swimming hall environments)         Connect Support clip Dg20         Connect Perimeter tile clip         Extra Bass (1200x600x50 mm)	Focus Ds         600x600           Focus Ds         2,8/m²           Connect T24 Main runner HD, installed at 600 mm centres         1,7m/m²           Connect Wall Bracket for T-profiles         1/suspended ro           Connect Wall Bracket for T-profiles         1/suspended ro           Connect Wall Bracket, L=700 mm, for Connect Space Bar         1/row of Space           Connect Yall Bracket, L=700 mm, for Connect Space Bar         1/row of Space           Connect Yall Bracket, L=600 mm         2/row of Main Runner/Connect Space Bar           Connect Space Bar Winch, installed one per joint Connect Main Runner/Connect Space Bar         1,4/m²           Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)         0,7/m²           Connect Support clip [not to be used in swimming hall environments]         0,7/m²           Connect Support clip Dg20         1/300400mm           Connect Perimeter tile clip         1/300400mm           Extra Bass (1200x600x50 mm)         0,7/m²		

 $\delta$  Min. demounting depth: 30 mm





Connection between profiles with split pin



Connection between profiles with space bar winch

Size, mm	Max live load (N)	Min load bearing capacity (N)
600x600	50	160
1200x600	50	160

Live load/load bearing capacity



# Ecophon Focus™ Dg

Ecophon Focus<sup>TM</sup> 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 1600×600	XL 1800×600	XL 2000×600	XL 2400×600
Т24	•	•	•	•	•	•	•
Thickness (THK)	20	20	25	20	20	20	20
Inst. Diagr.	M202	M202	M203	M204	M204	M204	M204





Section of Focus Dg with Connect T24 HD Main runner



Focus Dg system



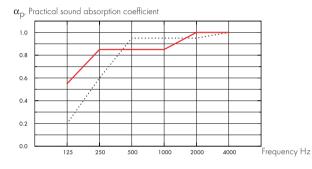
Focus Dg with Connect Angle trim Ultra matt black



## Acoustics

#### Sound Absorption:

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



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

ТНК	o.d.s.	$\alpha_{p}$ , Practico	al sound abs	orption coe	fficient			$\alpha_{w}$	Sound absorption
mm	mm	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		class
20	65	0.20	0.60	0.95	0.95	0.95	1.00	0.90	А
20	200	0.55	0.85	0.85	0.85	1.00	1.00	0.90	А

•

M1>

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

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



## Indoor Air Quality

Certificat	e / Label
Finnish M	1
French VC	DC, A+



#### **Environmental Footprint**

Kg CO2 equiv/m²: 2,76

From EPD in conformity with ISO 14025 / EN 15804



## Circularity

Fully recyclable.

$\times$

#### Fire safety

Country	Standard	Class
Europe	EN 13501-1	A2-s1,d0

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



#### **Humidity Resistance**

Class A, relative humidity 70% and 25°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.



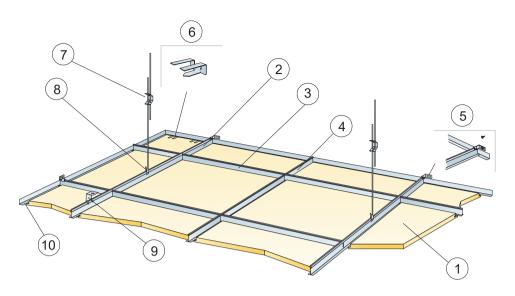
## **Mechanical properties**

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



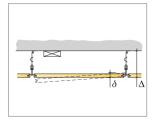
## CE

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.



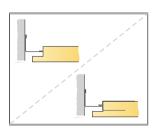
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		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 Main runner and wall).	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 row of Main runner	
6	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
8	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²
9	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
	$\Delta$ Min. overall depth of system, with Adjustable hanger: 115 mm, with Direct bracket: 65 mm		
	δ Min. demounting depth: 30 mm		



See Quantity specification

Cutting tool Dg



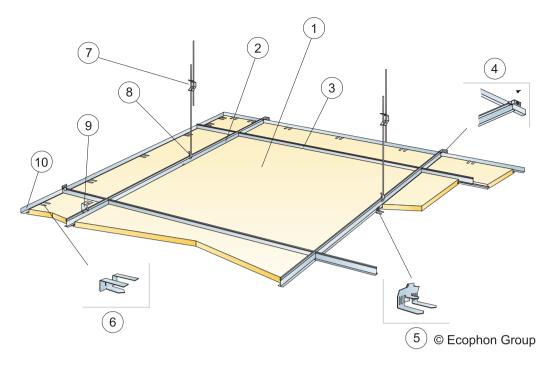
 
 Size, mm
 Max live
 Min load bearing capacity (N)

 600x600
 50
 160

 1200x600
 50
 160

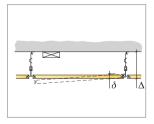
Cut edge with and without support clip

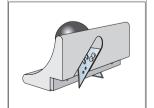
Live load/load bearing capacity



#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

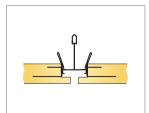
		Size, mm
		1200×1200
1	Focus Dg	0,7/m²
2	Connect T24 Main runner HD, installed at 1200 mm centres (max. distance from wall 600 mm, can be extended up to 1200 mm if no live load between Main runner and wall).	0,9m/m²
3	Connect T24 Cross tee, L=1200 mm, installed at 1200 mm centres	0,9m/m²
4	Connect Wall Bracket for T-profiles	1/suspended row of Main runner
5	Connect Edge clip	1,4/m²
6	Connect Support clip DG25	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
8	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²
9	For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m²
10	Connect Angle trim, fixed at 300 mm centres	as required
	$\Delta$ Min. overall depth of system, with Adjustable hanger: 115 mm, with Direct bracket: 65 mm	
	$\delta$ Min. demounting depth: 30 mm	-





See Quantity specification

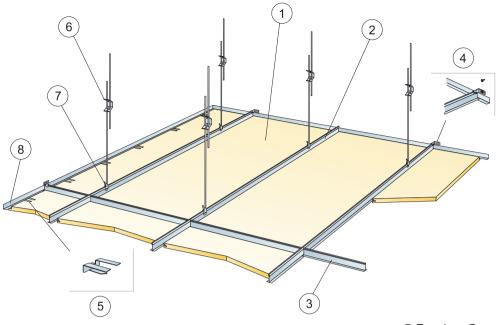
Cutting tool Dg



Joint between two unsupported edges with Edge clip

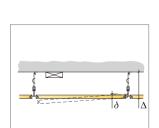


Live load/load bearing capacity



#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

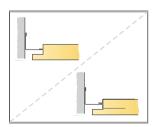
		Size, mm			
		1600x600	1800×600	2000×600	2400×600
1	Focus Dg XL	1,05/m²	0,95/m²	0,85/m²	0,7/m²
2	Connect T24 Main runner HD, installed at 600 mm centres	1,7m/m²	1,7m/m²	1,7m/m²	1,7m/m²
3	Connect T24 Cross tee, L=600 mm	0,65m/m²	0,6m/m²	0,5m/m²	0,45m/m²
4	Connect Wall Bracket for T-profiles	1/suspended row of Main runner			
5	Connect Support clip Dg20	1 pc/300-400 mm on every cut perimeter tile with only 1 supporting edge			porting 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
	$\Delta$ Min. overall depth of system: 115 mm	-	-	-	-
	$\delta$ Min. demounting depth: 30 mm	-	-	-	-



See Quantity specification



Cutting tool Dg



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

 1600x600
 50
 160

 1800x600
 50
 160

 2000x600
 50
 160

 2400x600
 50
 160

Cut edge with and without support clip

Live load/load bearing capacity



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

Ecophon Focus<sup>™</sup> DA features an edge D on the long side and edge A on the short side. Each panel is individually demounted. Fulfills the strictest functional and aesthetic demands. Especially developed for corridor and bandraster solutions where long panels are required.



SYSTEM RANGE

Size, mm	XL 1 <i>7</i> 20x600	XL 2000x600	XL 2400x600
T24	•	•	•
Thickness (THK)	20	20	20
Inst. Diagr.	M17	M17	M17



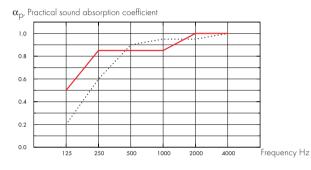
Focus D/A tile



#### **Acoustics**

#### **Sound Absorption:**

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



Focus D/A for Bandraster

- ···· Focus D/A 20 mm, 65 mm o.d.s.
- Focus D/A 20 mm, 200 mm o.d.s.
- o.d.s = overall depth of system

ТНК	o.d.s.	s. $\alpha_{ m p}$ , Practical sound absorption coefficient						$\alpha_{w}$	Sound absorption
mm	mm	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		class
20	65	0.20	0.60	0.90	0.95	0.95	1.00	0.90	А
20	200	0.50	0.85	0.85	0.85	1.00	1.00	0.90	А

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

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



#### **Indoor Air Quality**

Certificate / Label		E M1>
Finnish M 1	•	T INT
French VOC, A+	•	



## **Circularity**

Fully recyclable.



Fire safety		
Country	Standard	Class
Europe	EN 13501-1	A2-s1,d0

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



#### **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 diagram and bandraster/grid supplier recommendations.



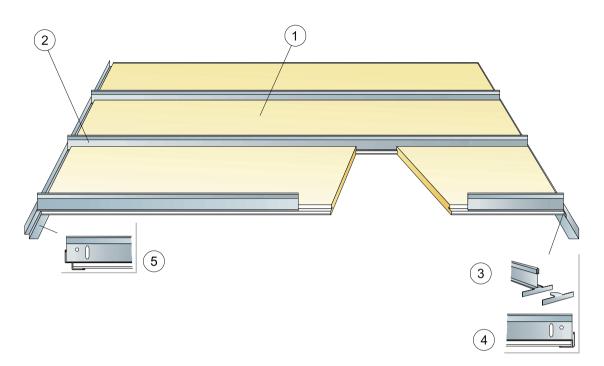
#### Mechanical properties

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



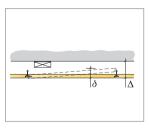
## CE

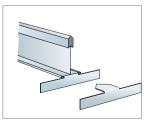
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

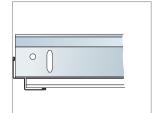


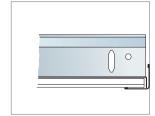
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	Size, mm		
		1720×600	2000×600	2400×600	
1	Focus D/A for corridors	0,97/m²	0,85/m²	0,7/m²	
2	Connect T24 Corridor profile, installed at 600 mm centres	0,95/m²	0,85/m²	0,7/m²	
3	Connect End fixing plate	1,95/m²	1,7/m²	1,4/m²	
4	Connect Angle trim, fixed at 200 mm centres	as required	as required	as required	
5	Connect Shadow-line trim, fixed at 200 mm centres	as required	as required	as required	
	$\Delta$ Min. overall depth of system: 50 mm		-	-	
	$\delta$ Min. demounting depth: 75 mm		-	-	









e Connection to wall with shadow-line trim

Connection to wall with angle trim

See Quantity specification



# Ecophon Focus<sup>TM</sup> 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

	Size, mm	600x600	1200x600	1200x1200	XL 1600×600	XL 1800x600	XL 2000x600	XL 2400x600
24/15	т15	•	•	•				
	T24	•	•	•	•	•	•	•
	Thickness (THK)	20	20	20	20	20	20	20
	Inst. Diagr.	M12	M12	M12	M47, M49	M47, M49	M47, M49	M47, M49

© Ecophon Group





Section of Focus E system with Connect T24



Focus E system



Focus E with Connect Angle trim

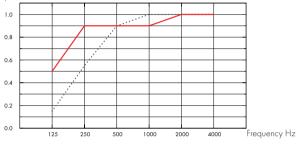


## Acoustics

#### Sound Absorption:

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





- ···· Focus E 20 mm, 60 mm o.d.s.
- Focus E 20 mm, 200 mm o.d.s.
- o.d.s = overall depth of system

ТНК	o.d.s.	$\alpha_{p}$ , Practico	al sound abs	orption coe	efficient			$\alpha_{w}$	Sound absorption
mm	mm	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		class
20	60	0.15	0.55	0.90	1.00	1.00	1.00	0.85	В
20	200	0.50	0.90	0.90	0.90	1.00	1.00	0.95	А

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

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



#### **Indoor Air Quality**

Certificate / Label		······································
Finnish M 1	•	A MITA
French VOC, A+	•	



## **Environmental Footprint**

Focus E, Kg CO<sub>2</sub> equiv/m<sup>2</sup>: 3,68

From EPD in conformity with ISO 14025 / EN 15804



## Circularity

Fully recyclable.

$\times$

#### Fire safety

Country	Standard	Class
Europe	EN 13501-1	A2-s1,d0

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



#### **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, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification.



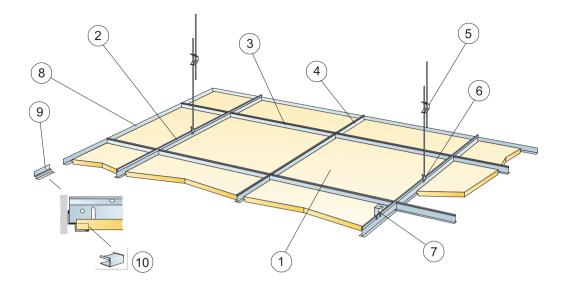
## **Mechanical properties**

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



## CE

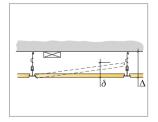
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

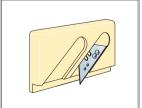


#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	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 1 200 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
8	Connect Angle trim, fixed at 300 mm centres	as required	as required	as required
9	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
	$\Delta$ Min. overall depth of system, with adjustable hanger: 110 mm, with direct bracket: 60 mm	-	-	-
	$\delta$ Min. demounting depth: 120 mm, (1200x1200 mm, T15: 160 mm)	-	-	-

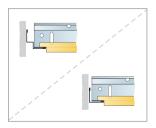
For luminaire integration in panels use Connect Bridging



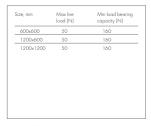


See Quantity specification

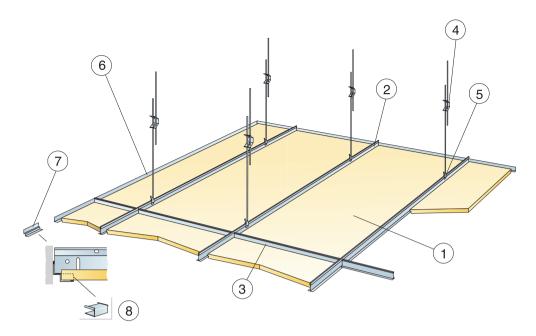
Cutting tool E



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

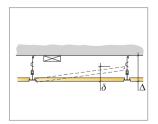


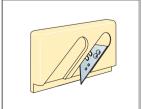
Live load/load bearing capacity



#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

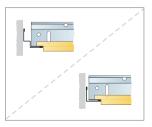
		Size, mm	Size, mm		
		1600x600	1800×600	2000×600	2400×600
1	Focus E	1,05/m²	0,95/m²	0,85/m²	0,7/m²
2	Connect T24 Main runner, installed at 600 mm centres	1,7m/m²	1,7m/m²	1,7m/m²	1,7m/m²
3	Connect T24 Cross tee, L=600 mm	0,65m/m²	0,6m/m²	0,5m/m²	0,45m/m²
4	Connect Adjustable hanger, installed at 1500 mm centres (max. distance from wall 450 mm)	1,1/m²	1,1/m²	1,1/m²	1,1/m²
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
8	Connect E-plug (for Shadow-line trim)	as required	as required	as required	as required
	$\Delta$ Min. overall depth of system: 110 mm	-	-	-	-
	$\delta$ Minimum demounting depth: 110 mm	-	-	-	-





See Quantity specification

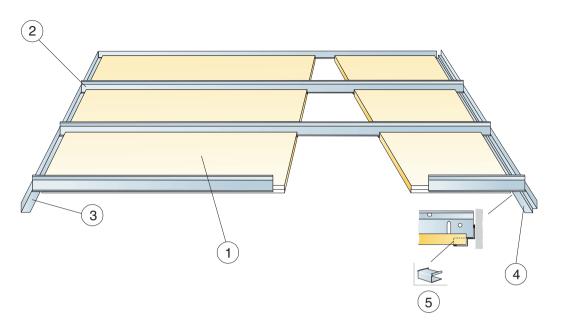
Cutting tool E



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

Size, mm	Max live load (N)	Min load bearing capacity (N)
1600x600	50	160
1800×600	50	160
2000x600	50	160
2400x600	50	160

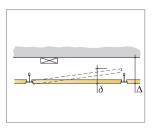
Live load/load bearing capacity

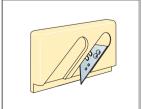


## © Ecophon Group

#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

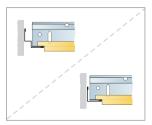
		Size, mm			
		1600x600	1800×600	2000×600	2400×600
1	Focus E	1,05/m²	0,95/m²	0,85/m²	0,7/m²
2	Connect T24 Corridor profile, installed at 600 mm centres	1,05/m²	0,95/m²	0,85/m²	0,7/m²
3	Connect Angle trim, fixed at 200 mm centres	as required	as required	as required	as required
4	Connect Shadow-line trim, fixed at 200 mm centres	as required	as required	as required	as required
5	Connect E-plug (for Shadow-line trim)	as required	as required	as required	as required
	$\Delta$ Min. overall depth of system: 50 mm	-	-		-
	$\delta$ Min. demounting depth: 75 mm	-	-		-





See Quantity specification

Cutting tool E



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

Size, mm	Max live load (N)	Min load bearing capacity (N)
1600x600	40	-
1800x600	20	-
2000x600	10	
2400x600	0	

Live load/load bearing capacity



## Ecophon Focus<sup>TM</sup> Ez

Ecophon Focus™ Ez has a recessed visible grid with diagonal edge design, creating a new design feature to the celling. For applications with high demands on good acoustics and speech intelligibility.



#### SYSTEM RANGE

Size, mm	600x600
T24	•
Thickness (THK)	40
Inst. Diagr.	M393





Section of Focus Ez system with Connect T24



Focus Ez system

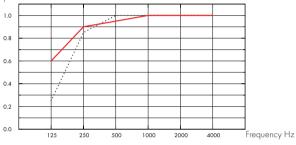


## Acoustics

#### Sound Absorption:

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





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

ТНК		. $\alpha_{ m pr}$ Practical sound absorption coefficient						$\alpha_{w}$	Sound absorption
mm	mm	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		class
40	60	0.25	0.85	1.00	1.00	1.00	1.00	1.00	А
40	200	0.60	0.90	0.95	1.00	1.00	1.00	1.00	А

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

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



## **Indoor Air Quality**

Certificate / Label	ANT STON CLASS	L'AIR	
Finnish M 1	•		+
French VOC, A+	•		



## **Environmental Footprint**

Kg CO2 equiv/m<sup>2</sup>: 5,94

From EPD in conformity with ISO 14025 / EN 15804



## Circularity

Fully recyclable.

$\times$

### Fire safety

Country	Standard	Class
Europe	EN 13501-1	A2-s1,d0

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



## **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, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification.



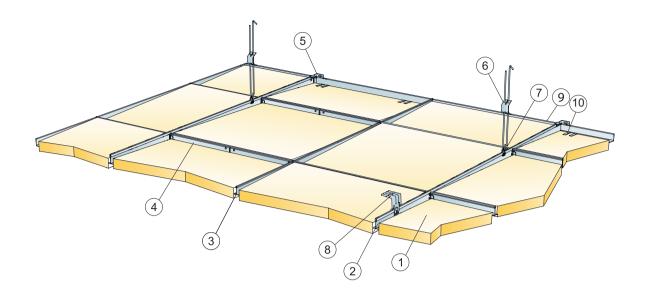
## **Mechanical properties**

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



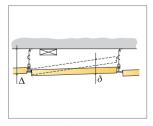
## CE

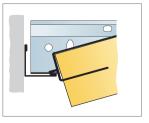
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

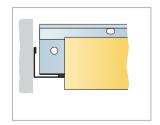


		Size, mm
		600x600
1	Focus Ez	2,8/m²
2	Connect T24 Main runner, installed at 1200 mm centres (max. distance from wall 600 mm, can be extended up to 1200 mm if no live load between Main runner and wall).	0,9m/m²
3	Connect T24 Cross tee, L=1200 mm, installed at 600 mm centres	1,7m/m²
4	Connect T24 Cross tee, L=600 mm	0,9m/m²
5	Connect Wall Bracket for T-profiles	1/suspended rov of Main runner
6	Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²
7	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²
8	For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m²
9	Connect Angle trim, fixed at 300 mm centres	as required
10	Connect Support clip DG25	2/300-400mm on any cut edge
	$\Delta$ Min. overall depth of system, with Adjustable hanger: 110 mm, with Direct bracket: 80 mm	-

 $\delta$  Min. demounting depth: 80 mm







Size, mm Max live Min load bearing capacity (N) 600x600 40 160

See Quantity specification

Cut edge with Connect Support clip Dg25



Live load/load bearing capacity



## Ecophon Focus<sup>TM</sup> F

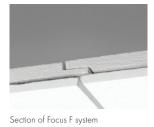
Ecophon Focus<sup>TM</sup> F installs directly to an existing plaster ceiling, boarding, battens or concrete, to create a ceiling with a smooth appearance. For applications requiring a ceiling mechanically secured to the structural soffit.



#### SYSTEM RANGE

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









Focus F is installed by screw fixing

Focus F tile

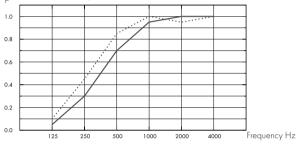


#### **Acoustics**

#### 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.

 $\alpha_{p^{\prime}}$  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.	$lpha_{ m pr}$ Practical sound absorption coefficient						$\alpha_{w}$	Sound absorption
mm	mm	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		class
20	20	0.05	0.30	0.70	0.95	1.00	1.00	0.60	С
20	40	0.10	0.45	0.85	1.00	0.95	1.00	0.75	С

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



## **Indoor Air Quality**

Certificate / Label		
Finnish M 1	•	
French VOC, A+	•	



## **Environmental Footprint**

Focus F, Kg CO<sub>2</sub> equiv/m<sup>2</sup>: 4,58

From EPD in conformity with ISO 14025 / EN 15804



## Circularity

Fully recyclable.



Fire safety			
Country	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 A, relative humidity 70% and 25°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.



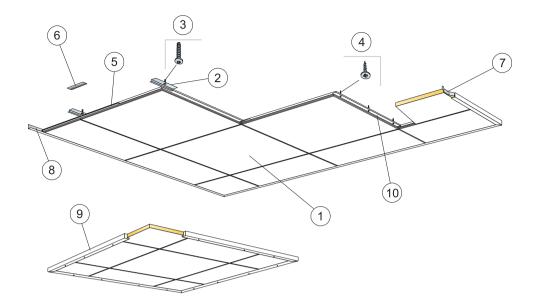
## **Mechanical properties**

Additional live load has to be fixed to the soffit.



#### CE

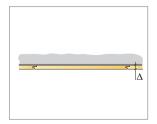
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

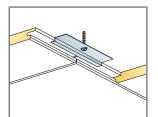


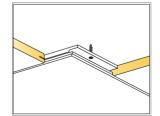
## © Ecophon Group

#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	
		600x600	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
	$\Delta$ Min. overall depth of system: 20 mm	-	-
	$\delta$ Min. demounting depth: The system is not demountable	-	-







Size, mm Max live Min load bearing copacity (N) 600x000 · · 1200x600 · ·

See Quantity specification

Installation in concrete

Installation in plasterboard or timber



## Ecophon Focus<sup>TM</sup> Lp

Ecophon Focus<sup>™</sup> 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<sup>™</sup> Lp tiles and Focus<sup>™</sup> Lp Technical tiles.



#### SYSTEM RANGE

30	Size, mm	600x150	600x300	600x600	1200x150	1200×300	1200x600	XL 1800x600
	Т24	•	•	•	•	•	•	•
	Thickness (THK)	20	20	20	20	20	20	20
	Inst. Diagr.	M391	M390, M391	M390, M391	M391	M390, M391	M390, M391	M392





Connect T24 Main runner

Focus Lp system



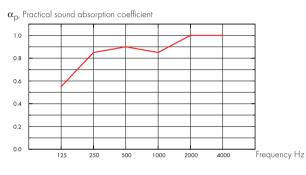
Demounting of tile



## Acoustics

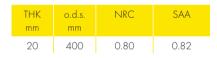
### Sound Absorption:

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



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

THK	o.d.s.	$\alpha_{p'}$ Practice	al sound ab:	sorption coe	fficient			$\alpha_{w}$	Sound absorption
mm	mm	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		class
20	200	0.55	0.85	0.90	0.85	1.00	1.00	0.90	A



mm	AC(1.5) Articulation Class, ASTM E1111, ASTM E1110	Weighted normalized flanking level	CAC dB Ceiling Attenuation Class, ASTM 1414, ASTM E413
20	180	24	25



## Indoor Air Quality

Certificate / Label		2 M1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Finnish M 1	•	
French VOC, A+	•	



## **Environmental Footprint**

Focus Lp, Kg CO<sub>2</sub> equiv/m<sup>2</sup>: 4,21

From EPD in conformity with ISO 14025 / EN 15804  $\,$ 

## Circularity

Fully recyclable.

$\mathbf{\times}$

### Fire safety

Country	Standard	Class
Europe	en 13501-1	A2-s1,d0

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



## **Humidity Resistance**

Class A, relative humidity 70% and 25°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, 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.



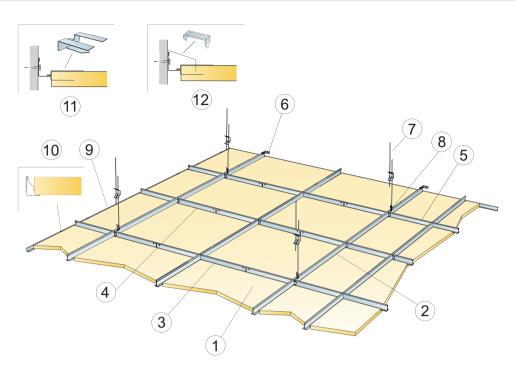
## **Mechanical properties**

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



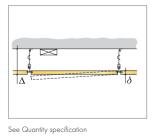
## CE

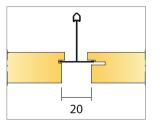
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



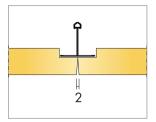
		Size, mm			
		600x300	600×600	1200×300	1200x600
1	Focus Lp	5,6/m²	2,8/m²	2,8/m²	1,4/m²
2	Connect T24 Main runner, installed at 1200 mm centres (max distance from wall 600 mm)	0,9m/m²	0,9m/m²	0,9m/m²	0,9m/m²
3	Connect T24 Cross tee L=1200 mm	3,4m/m²	1,7m/m²	3,4m/m²	1,7m/m²
4	Connect T24 Cross tee, L=600 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	v of Main runner		
7	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
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 c	ut perimeter tile with or	nly 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 o	n any cut edge		
	$\Delta$ Min. overall depth of system: 115 mm				
	$\delta$ Min. demounting depth: 20 mm				

For luminaire integration in panels use Connect Bridging





Distance between Focus Lp tiles



 
 Size, mm
 Max live
 Min load bearing capacity [N]

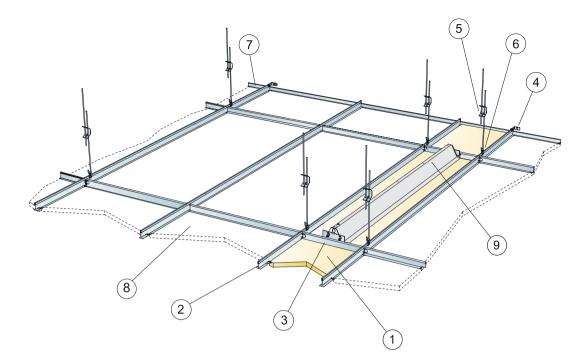
 000x300
 30
 160

 1200x300
 30
 160

 1200x600
 30
 160

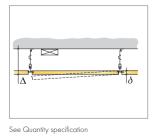
Non-supported edges meeting with space for cross-tee.

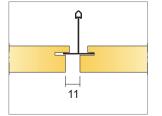
Live load/load bearing capacity



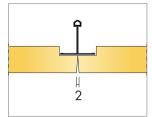
		Size, mm					
		600x150	600x300	600×600	1200×150	1200×300	1200x600
1	Focus Lp Technical tile	11,1/m²	5,6/m²	2,8/m²	5,6/m²	2,8/m²	1,4/m²
2	Connect T24 Main runner	6,7m/m²	3,35m/m²	1,7m/m²	6,7m/m²	3,35m/m²	1,7m/m²
3	Connect T24 Cross tee, L=150/300/600 mm	1,7m/m²	1,7m/m²	1,7m/m²	0,85m/m²	0,85m/m²	0,85m/m²
4	Connect Wall Bracket for T-profiles	1/suspended ro	w of Main runner				
5	Connect Adjustable hanger, installed at 1 200 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
6	Connect Hanger clip	5,6/m²	2,8/m²	1,4/m²	5,6/m²	2,8/m²	1,4/m²
7	Connect Angle trim, fixed at 300 mm centres	as required	as required	as required	as required	as required	as required
8	Focus Lp (adjacent ceiling)						
9	Ecophon line lp						
	$\Delta$ Min. overall depth of system: 105 mm (190 mm when using Connect Space bar connector)						
	$\delta$ 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 Technical tiles can be installed next to each other.						

For integration with a unbroken luminaire, width smaller than 300 mm use Connect Spacebar connector, max height 75 mm





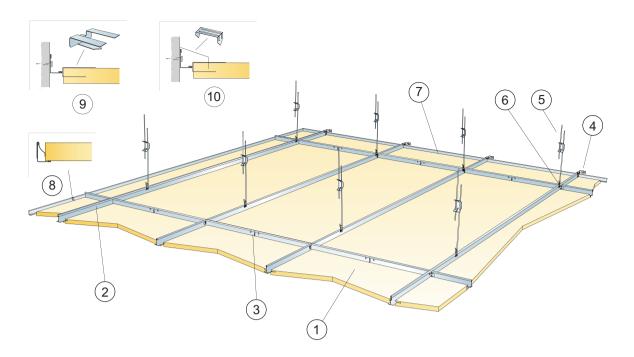
Distance between Focus Lp and Focus Lp Technical tile



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

Size, mm	Max live load (N)	Min load bearing capacity (N)
600x150	50	160
600x300	50	160
600x600	50	160
1200×150	50	160
1200x300	50	160
1200×600	50	160
1200x600	50	160

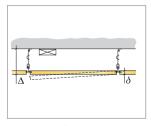
Live load/load bearing capacity

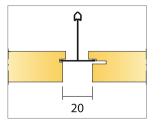


		Size, mm
		1800×600
1	Focus Lp	0,95/m²
2	Connect T24 Main runner, installed at 600 mm centres	1,7m/m²
3	Connect T24 Cross tee, L=600 mm	0,6m/m²
4	Connect Wall Bracket for T-profiles	1/suspended row of Main runner
5	Connect Adjustable hanger, installed at 1500 mm centres (max. distance from wall 450 mm)	1,1/m²
6	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²
7	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
	$\Delta$ Min. overall depth of system: 115 mm	

 $\delta$  Min. demounting depth: 20 mm

For luminaire integration in panels use Connect Bridging





**Р** || 2 Size, mm Max live Min load bearing load (N) capacity (N) 1800x600 50 160

See Quantity specification

Distance between Focus Lp tiles



Live load/load bearing capacity



# Ecophon Focus<sup>TM</sup> 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

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





Section of Focus SQ system



Focus SQ system

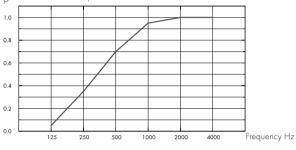


## Acoustics

#### **Sound Absorption:**

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





– Focus SQ 20 mm, 20 mm o.d.s.

o.d.s = overall depth of system

THK	K o.d.s.	$lpha_{ m p}$ , Practical sound absorption coefficient						$\alpha_{w}$	Sound absorption			
mm	mm	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		class			
20	20	0.05	0.35	0.70	0.95	1.00	1.00	0.65	С			

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



## Indoor Air Quality





## Environmental Footprint

Focus SQ, Kg CO<sub>2</sub> equiv/m<sup>2</sup>: 5,37

From EPD in conformity with ISO 14025 / EN 15804



## Circularity

Fully recyclable.



Fire safety			
Country	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 A, relative humidity 70% and 25°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.



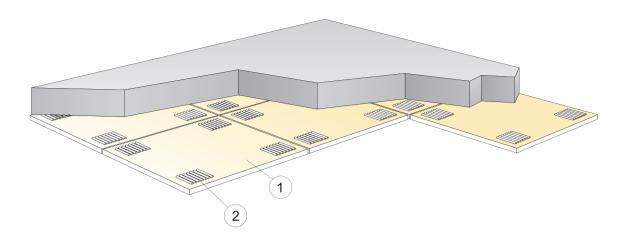
## **Mechanical properties**

Additional live load has to be fixed to the soffit.



#### CE

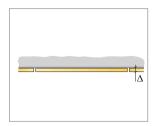
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

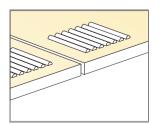


## © Ecophon Group

#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm	Size, mm		
	600×600	1200x600		
Focus SQ	2,8/m <sup>2</sup>	1,4/m²		
Connect Absorber glue (0,25 l/m² - 0,4 l/m² depending on installation conditions)	as required	as required		
$\Delta$ Min. overall depth of system: 23 mm	-	-		
$\delta$ Min. demounting depth: The system is not demountable		-		
Visible edges should be painted	-	-		
Use Connect Notched spatula to apply the glue.	-	-		
* Panel Module size 600x600 (592x592), 1200x600 (1192x592)	-	-		
	Connect Absorber glue [0,25 1/m² - 0,4 1/m² depending on installation conditions]         Δ Min. overall depth of system: 23 mm         δ Min. demounting depth: The system is not demountable         Visible edges should be painted         Use Connect Notched spatula to apply the glue.	Focus SQ         28/m²           Connect Absorber glue (0,25 1/m² - 0,4 1/m² depending on installation conditions)         as required                Δ Min. overall depth of system: 23 mm		







See Quantity specification

Application of glue

Live load/load bearing capacity



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

Ecophon Focus<sup>TM</sup> 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	2000×600	2400x600
Ŵ	T24	•	•	•	•
	Thickness (THK)	30	30	30	30
	Inst. Diagr.	M31, M31ec, M31ic	M31, M31ec, M31ic	M31, M31ec, M31ic	M31, M31ec, M31ic

ka Sala Widowiskowo-Sportowo, Kepno, Polanc







Section of Focus Flexiform A system with Connect T24



Focus Flexiform A system

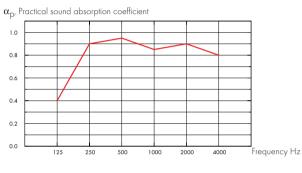
## 1

Acoustic values corresponding to a flat ceiling.

## Sound Absorption:

**Acoustics** 

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



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

o.d.s = overall depth of system

THK	o.d.s.							$\alpha_{w}$	Sound absorption			
mm	mm	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		class			
30	200	0.40	0.90	0.95	0.85	0.90	0.80	0.90	A			

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



## Indoor Air Quality

Certificate / Label		
French VOC, A	•	
Finnish M 1	•	



## Circularity

Fully recyclable.



## Fire safety

Country	Standard	Class	
Europe	EN 13501-1	A2-s1,d0	

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



## **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.)



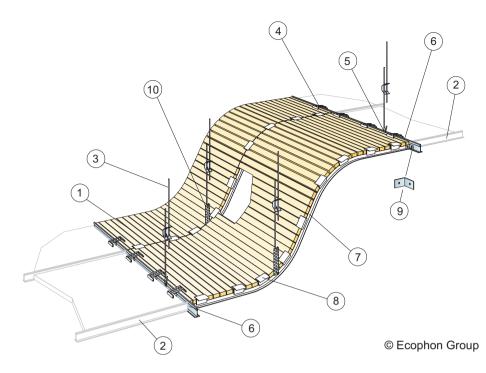
## **Mechanical properties**

Additional live load has to be fixed to the soffit.



## CE

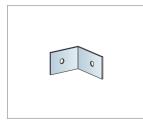
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

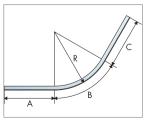


		Size, mm	Size, mm		
		1200x600	1600x600	2000x600	2400×600
1	Focus Flexiform A	as required	as required	as required	as required
2	Connect T24 Cross tee (adjacent ceiling)	as required	as required	as required	as required
3	Connect Adjustable hanger, installed at 1200 mm centres	as required	as required	as 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
	Electiferen erefiler Berlin, ef energ (ereenen ereenen) ette 200 ere				

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.





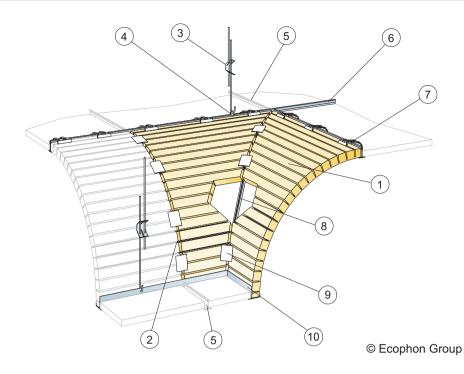
Size, mm	Max live load (N)	Min load bearing capacity (N)
1200x600	0	160
1600x600	0	160
2000×600	0	160
2400x600	0	160

Connect Angle bracket

Example with dimensions of Flexiform profile

Suspension with metal strip

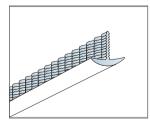




		Size, mm			
		1200×600	1600x600	2000×600	2400×600
1	Focus Flexiform A	as required	as required	as required	as required
2	Connect Flexiform profile/Flexible Flexiform profile , installed at 600 mm centres.	as required	as required	as required	as required
3	Connect Adjustable hanger, installed at 1200 mm 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
8	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.



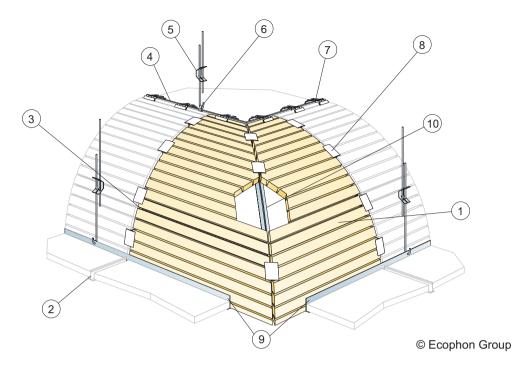




Live load/load bearing capacity

Min load bearing capacity (N)

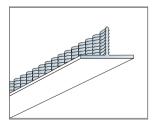
Profile for external corner

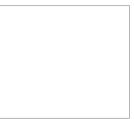


		Size, mm			
		1200×600	1600x600	2000×600	2400×600
1	Focus Flexiform A	as required	as required	as required	as required
2	Connect T24 Cross tee (adjacent ceiling)	as required	as required	as required	as required
3	Connect Flexiform profile/Flexible Flexiform profile , installed at 600 mm centres.	as required	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
6	Connect Hanger clip	as required	as required	as required	as required
7	Connect Clip 100/20	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 F-trim F	as required	as required	as required	as required
10	Connect Flexiform profile/Flexible Flexiform profile , installed at 600 mm centres.	as required	as required	as required	as required
	Elaviform profile: Padius of augus (concerve or convery) min 200 mm				

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.







2000x600 0 160 2400x600 0 160

Min load bearing capacity (N)

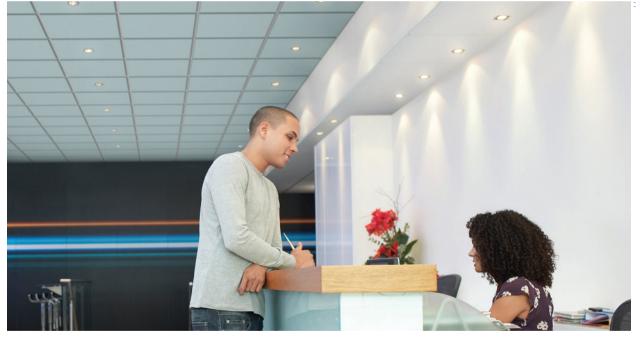
Profile for internal corner

Live load/load bearing capacity



# Ecophon Focus<sup>TM</sup> 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
: <b></b>	T24	•
	Thickness (THK)	20
	Inst. Diagr.	M276

<u>\_\_\_</u>







Focus Fixfiorm E system



Focus Fixiform E system upper level

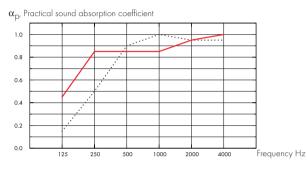
# 5

Acoustics

Acoustic values corresponding to a flat ceiling.

#### Sound Absorption:

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



- ···· Focus 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.	${f lpha}_{ m p}$ , Practical sound absorption coefficient						$\alpha_{w}$	Sound absorption
mm	mm	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		class
20	60	0.15	0.50	0.90	1.00	0.95	0.95	0.80	В
20	200	0.45	0.85	0.85	0.85	0.95	1.00	0.90	A

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



## **Indoor Air Quality**

Certificate / Label		EMISSIONS DANS L'AIR INTÉRIEUR
Finnish M 1	•	
French VOC, A+	•	



#### Circularity

Fully recyclable.

## Fire safety

Country	Standard	Class	
Europe	EN 13501-1	A2-s1,d0	

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



## 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.



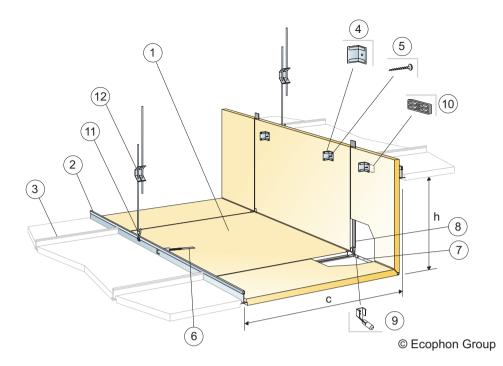
## **Mechanical properties**

Additional live load has to be fixed to the soffit.



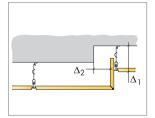
## CE

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.

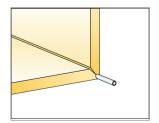


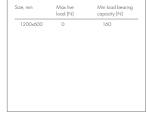
		Size, mm
		1200×600
1	Focus Fixiform E (kit)	as required
2	Connect T24 Main runner	1,8m/m²
3	Connect T24 Cross tee (adjacent ceiling)	as required
4	Angle Bracket Fixiform (included in Fixiform kit)	
5	Absorber screw metal 50 (included in Fixiform kit)	
6	Connect Hook (included in Fixiform kit)	
7	Reinforcement 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/m²
	$\Delta$ Min. overall depth of system: $\Delta$ 1=160 mm and $\Delta$ 2=80 mm from upper level	
	$\delta$ Min. demounting depth: Individual ceiling tiles are non-demountable	-

Dimension: c=600 mm, h<530 mm



See Quantity specification





The fold is reinforced by a rod

Upper level connection to Main runner Live

Live load/load bearing capacity



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

Ecophon Focus<sup>TM</sup> 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

l <u>i</u>	Size, mm		XL	XL	XL
1		1200x600	1500x600	1900x600	2300x600
	T24	•	•	•	•
	Thickness (THK)	20	20	20	20
	Inst. Diagr.	M274	M275	M275	M275









Focus Fixiform panel

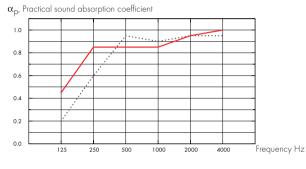


#### Acoustics

Acoustic values corresponding to a flat ceiling.

#### Sound Absorption:

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



- ··· Focus Fixiform Ds 20 mm, 75 mm o.d.s.
- Focus Fixiform Ds 20 mm, 200 mm o.d.s.
- o.d.s = overall depth of system

THK mm	o.d.s. mm	${f lpha}_{ m p}$ , Practical sound absorption coefficient						$\alpha_{w}$	Sound absorption
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		class
20	75	0.20	0.60	0.95	0.90	0.95	0.95	0.90	А
20	200	0.45	0.85	0.85	0.85	0.95	1.00	0.90	A

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



## **Indoor Air Quality**

Certificate / Label		MIN CLAR
Finnish M 1	•	
French VOC, A+	•	



## Circularity

Fully recyclable.



## Fire safety

Country	Standard	Class	The glass wool
Europe	EN 13501-1	A2-s1,d0	non-combustible

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



## **Humidity Resistance**

Class A, relative humidity 70% and 25°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.



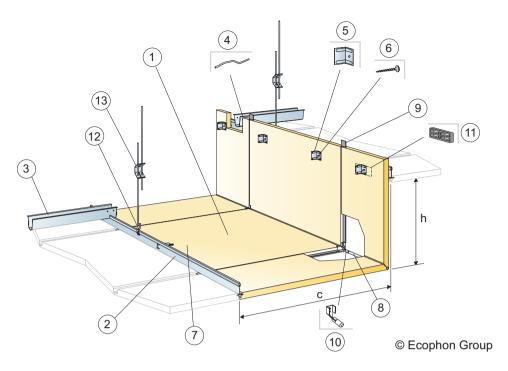
## **Mechanical properties**

Additional live load has to be fixed to the soffit.



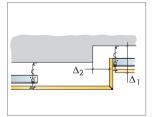
## CE

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.

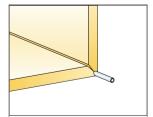


		Size, mm
		1200x600
1	Focus Fixiform Ds (kit)	as required
2	Connect T24 Main runner HD	as required
3	Connect Space bar, installed at 1500 mm centres (max. distance from wall 300 mm)	as required
4	Connect Space bar winch, installed one per joint Main runner/Space bar	as required
5	Angle Bracket Fixiform (included in Fixiform kit)	
6	Absorber screw metal 50 (included in Fixiform kit)	
7	Connect Hook (included in Fixiform kit)	
8	Reinforcement rod (included)	
9	Connect F Spline (included in Fixiform kit)	
10	Plug for reinforcement rod (included)	
11	Distance (included in Fixiform kit)	
12	Connect Hanger clip	1 pcs/hange
13	Connect Adjustable hanger, installed at 600 mm centres at the level change	1,4/m²
	$\Delta$ Min. overall depth of system: $\Delta$ 1=165 mm and $\Delta$ 2=80 mm from upper level	
	$\delta$ Min. demounting depth: Individual ceiling tiles are non-demountable	-

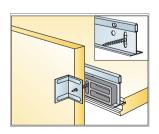
Dimension: c=600 mm, h<530 mm



See Quantity specification



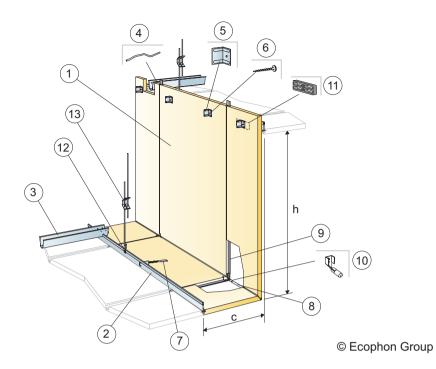
The fold is reinforced by a rod



Size, mm Max Ive Min load load (N) capacity (N) 1200x600 0 160

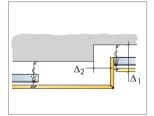
Upper level connection to Main runner

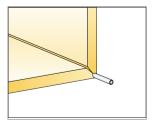
Live load/load bearing capacity

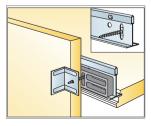


1	Focus Fixiform Ds XL (kit)
2	Connect T24 Main runner HD
3	Connect Space bar, installed at 1500 mm centres (max. distance from wall 300 mm)
4	Connect Space bar winch, installed one per joint Main runner/Space bar
5	Angle Bracket Fixiform (included in Fixiform kit)
6	Absorber screw metal 50 (included 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
13	Connect Adjustable hanger, installed at 600 mm centres at the level change
	$\Delta$ Min. overall depth of system: $\Delta$ 1=165 mm and $\Delta$ 2=80 mm from upper level
	$\delta$ 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)







Max live load (N) Min load bearing capacity (N)

See Quantity specification

The fold is reinforced by a rod

Upper level connection to Main runner

Live load/load bearing capacity

Size, mm



# Ecophon Focus<sup>TM</sup> Frieze

Ecophon Focus<sup>™</sup> 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.



#### SYSTEM RANGE

0	Size, mm	
		2400×600
	T24	•
	Thickness (THK)	20
	Inst. Diagr.	M110, M239

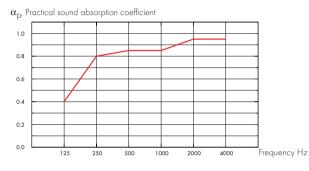




#### **Acoustics**

#### Sound Absorption:

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



Focus frieze system

– Focus Frieze E 20 mm, 200 mm o.d.s.

o.d.s = overall depth of system

		$\alpha_{p}$ , Practico						~~	Sound absorption
mm	mm	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		class
20	200	0.40	0.80	0.85	0.85	0.95	0.95	0.90	A

mm	AC(1.5) Articulation Class, ASTM E1111, ASTM	- 11.00	CAC dB Ceiling Attenuation Class, ASTM 1414,
	E1110	difference, ISO 10848-2	ASTM E413
20	190	24	25



## **Indoor Air Quality**

Certificate / Label		MIN CLASS
Finnish M 1	•	
French VOC, A+	•	



#### **Circularity**

Fully recyclable.



## **Fire safety**

Country	Standard	Class
Europe	EN 13501-1	A2-s1,d0

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



## **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.

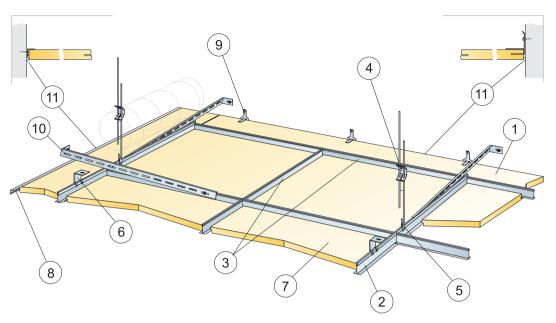


#### **Mechanical properties**

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



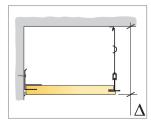
#### CE

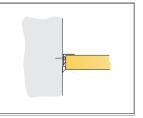


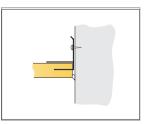
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

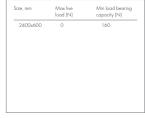
		Size, mm	
		2400×600	
1	Focus Frieze	as required	
2	Connect T24 Main runner		
3	Connect T24 Cross tee, L=600 mm	as required	
4	Connect Adjustable hanger, installed at 1200 mm centres	as required	
5	Connect Hanger clip	as required	
6	Connect Direct bracket (only in combination with Frieze trim)	as required	
7	Focus A or E, Master A or E	as required	
8	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	
	$\Delta$ Min. overall depth of system: with Adjustable hanger: 110 mm, with Direct bracket: 60 mm	-	
	$\delta$ 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







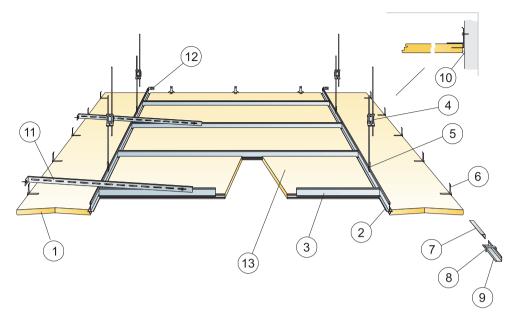


See Quantity specification

Fixing with frieze trim

Fixing with frieze bracket

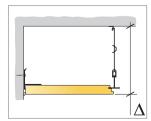
Live load/load bearing capacity

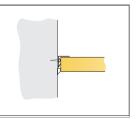


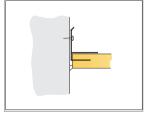
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm
		2400×600
1	Focus frieze Ds/Dg	as required
2	Connect T24 Main runner	
3	Connect T24 Cross Tee L=600/1200/1800 alt. Main runner	as required
4	Connect Adjustable hanger, installed at 1200 mm centres	as required
5	Connect Hanger clip	as required
6	Connect Frieze bracket, installed at 500 mm centre. Minimum free depth above tile 150 mm.	as required
7	Connect Frieze trim, fixed at 300 mm centres.	as required
8	Connect Perimeter tile clip	1/300-400mm on any cut edge
9	Connect Angle trim	as required
10	Acrylic sealant, (not supplied by Ecophon)	as required
11	Connect Wall bracket, L=700 mm, for space bar	as required
12	Connect Wall bracket for T-profiles	as required
13	Ecophon Focus Ds or Dg	as required
	$\Delta$ Min. overall depth of system: 110 mm	-
	$\delta$ 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









See Quantity specification

Live load/load bearing capacity

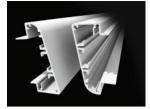
## Ecophon Focus Edge™ 500

Ecophon Focus Edge<sup>™</sup> 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.





	Size, mm				
1		600x600	1200x600	1200x1200	1200x1200
_	T24	•	•	•	•
	Thickness (THK)	20	20	20	25
	Inst. Diagr.	M165, M210, M211	M165, M210, M211	M165	M211





Ecophon Edge 500 Corner







Ecophon Edge 500 Profile

5

Ecophon Edge 500 Profile

#### Acoustics

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	Standard	Class
Europe	EN 13501-1	Al



#### Installation

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

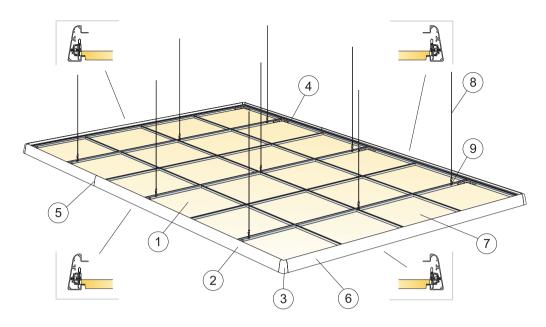


#### Mechanical properties

Additional live load has to be fixed to the soffit.



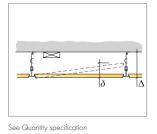
CE



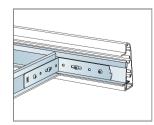
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	Size, mm	
		600x600	1200×600	1200×1200
1 Focus E		2,8/m²	1,4/m²	0,7/m²
2 Conne	ct Edge 500 Profile	as required	as required	as required
3 Conne	ct Edge Corner	as required	as required	as required
4 Conne	ct L-coupling	as required	as required	as required
5 Joint wi	ith Guide pins and Joint fixing bracket, (see Edge kit for further details)	as required	as required	as required
6 Conne	ct Edge profile clip E, (18 pcs/kit included in Connect Edge kit E)	as required	as required	as required
7 Focus E	E tile and Connect grid	as required	as required	as required
8 Conne	ct Adjustable wire hanger, installed at 1200 mm centres	as required	as required	as required
9 Conne	ct Hanger clip	as required	as required	as required
$\Delta$ Min.	overall depth of system: 130 mm	-		
$\delta$ Min.	demounting depth: See Focus/Master E			
Conne	ct Edge kit E consists of the following components:			
	Connect Edge profile clip with screw RTK 3,5x19, 4 pcs Joint fixing bracket, 1 pc socket screw wrench 2 mm, 1 pc socket wrench T10, 12 pcs guide pins, 24 pcs screws RTK ST 3,5x9,5 (for fixing to extrusion), 1 pc installation guide			
Not inc	cluded in kit: Connect L-coupling			

Not included in kit: Connect Installation screw BR for L-coupling



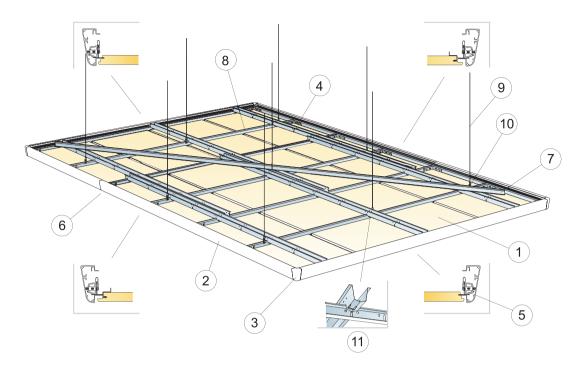
Joint between tile and Edge profile



Connection between T-profile and Edge extrusion

Size, mm	Max live load (N)	Min load bearing capacity (N)
600x600	50	160
1200x600	50	160
1200x1200	50	160

Live load/load bearing capacity

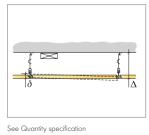


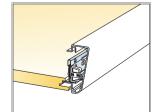
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	Size, mm	
		600×600	1200×600	1200×1200
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 L-coupling	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, installed at 1500 mm centres (max. distance from wall 300 mm)			
12	Connect Space Bar Winch, installed one per joint Connect Main Runner/Connect Space Bar	1,4/m²	1,4/m²	0,7/m²
	$\Delta$ Min. overall depth of system: 135 mm	-	-	-
	$\delta$ Min. demounting depth: 30 mm (50 mm with 1200x1200)			
	Connect Edge kit Ds/Dg consists of the following components:			
	18 pcs Connect Edge profile clip with screw RTK 3,5x25, 4 pcs Joint fixing bracket, 1 pc socket screw wrench 2 m screw wrench T10, 12 pcs guide pins, 24 pcs screws RTK ST 3,5x9,5 (for fixing to extrusion), 2 pcs installation gui			

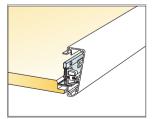
Not included in kit: Connect L-coupling

Not included in kit: Connect Installation screw BR for L-coupling





Joint with tile side Ds 1



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

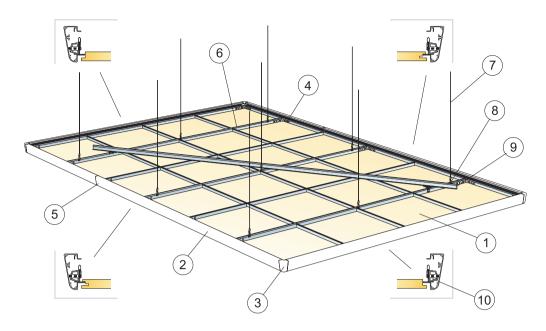
 600x600
 50
 160

 1200x600
 50
 160

 1200x1200
 50
 160

Joint with tile side Ds2 and extra profile

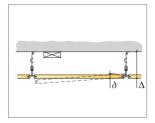
Live load/load bearing capacity



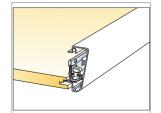
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm		
		600x600	1200×600	1200x1200
1	Focus Dg	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 L-coupling	as required	as required	as required
5	Joint with Guide pins and Joint fixing bracket, (see Edge kit for further details)	as required	as required	as required
6	Focus Dg tile and Connect grid system (see Focus Dg system page for further details)	as required	as required	as required
7	Connect Adjustable wire hanger, installed at 1200 mm centres	as required	as required	as required
8	Connect Hanger clip	as required	as required	as required
9	Connect Main runner for adjustment and stabilisation of grid	as required	as required	as required
10	Connect Edge profile clip, (18 pcs/kit included in Connect Edge kit Ds/Dg)	as required	as required	as required
	$\Delta$ Min. overall depth of system: 135 mm	-	-	-
	$\delta$ Min. demounting depth: 30 mm (50 mm with 1200x1200)			
	Connect Edge kit Ds/Dg consists of the following components:			
	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			
	Not included in kit: Connect L-coupling			

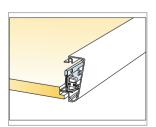
Not included in kit: Connect Installation screw BR for L-coupling



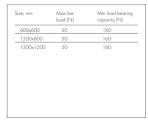
See Quantity specification



Joint between tile and Edge profile



Connection between T-profile and Edge extrusion



Live load/load bearing capacity



### Ecophon Focus<sup>™</sup> Wing

Ecophon Focus<sup>TM</sup> Wing installs as the perimeter of a floating ceiling when used together with Ecophon Focus<sup>TM</sup> Ds or E. It is a system of wing shaped absorbers for free hanging suspended ceilings when a wall to wall ceiling is not preferred.



#### SYSTEM RANGE

 Size, mm	600×200	1200x200
T24	•	•
Thickness (THK)	50	50
Inst. Diagr.	M209	M143, M209





Section of Focus Wing system with

Connect T24



Section of Focus Wing system with Connect T24



Section of Focus Wing system with Connect T24

### 5

### Acoustics

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



#### **Indoor Air Quality**

Certificate / Label		
French VOC, A	•	
Finnish M1	•	



#### Circularity

Fully recyclable.



#### Fire safety

Country	Standar	d Class	
Europe	EN 135	01-1 A2-s1,d0	

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.

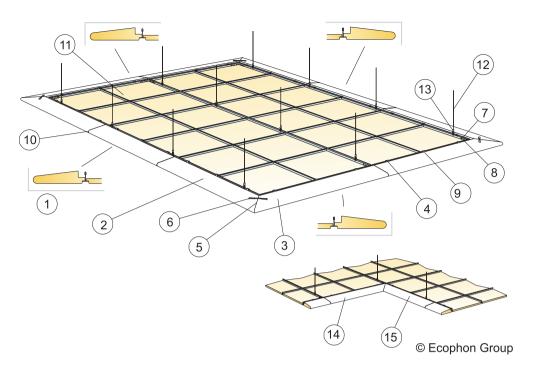


#### **Mechanical properties**

No additional live load is allowed.

# CE

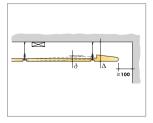
CE



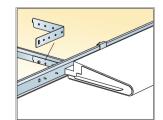
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm
		1200x200
1	Focus Wing E (Straight Kit E, see installation guide)	as required
2	Focus Wing E/external corner right (incl. in external corner kit, see installation guide)	as required
3	Focus Wing E/external corner left (incl. in external corner kit, see installation guide)	as required
4	Connect Wing Cantilever (incl. In kits)	as required
5	Connect Spline (incl. in kit)	as required
6	Connect Hook (incl. in kit)	as required
7	Connect L-coupling	as required
8	Connect Installation screw BR	as required
9	Connect Installation Screw MVL (included in kits)	as required
10	Connect Wing Distance	as required
11	Ecophon Focus/Master E system with a frame of Connect Main runner HD	as required
12	Connect Adjustable wire hanger, installed at 1200 mm centres	as required
13	Connect Hanger clip	as required
14	Focus Wing E/internal corner right (incl. in internal corner kit)	as required
15	Focus Wing E/internal corner left (incl. in internal corner kit)	as required
	$\Delta$ Min. overall depth of system: 130 mm	

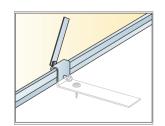
 $\delta$  Min. demounting depth: See Focus/Master E



See Quantity specification

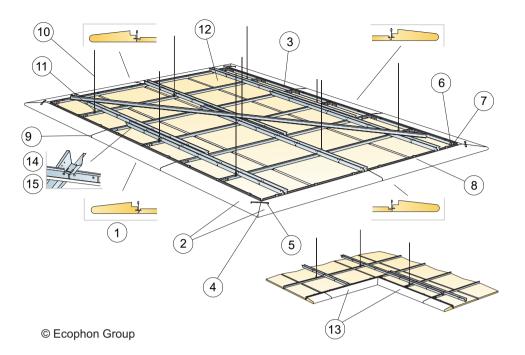


Straight elements are fitted with a special accessory



Size, mm Max live Min load bearing load [N] capacity [N] 1200x200 0 160 Live load/load bearing capacity

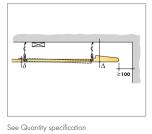
Adjustment of the element

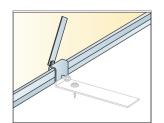


#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

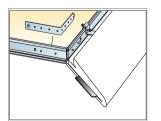
	Size, mm		
		600x200	1200×200
1	Focus Wing Ds (Straight Kit Ds, see installation guide)		as required
2	Focus Wing Ds/external corner (incl. in external corner kit, see installation guide)		as required
3	Connect Wing Cantilever (incl. In kits)		as required
4	Connect Spline (incl. in kits)		as required
5	Connect Hook (incl. in kit)		as required
6	Connect L-coupling		as required
7	Connect Installation screw BR		as required
8	Connect Installation Screw MVL (included in kits)		as required
9	Connect Wing Distance		as required
10	Connect Adjustable wire hanger, installed at 1200 mm centres		as required
11	Connect Hanger clip		as required
12	Ecophon Focus Ds system with a frame of Connect Main runner HD		as required
13	Focus Wing Ds/internal corner (see internal corner for details)		as required
14	Connect Space bar, installed at 1500 mm centres (max. distance from wall 300 mm)		as required
15	Connect Space bar winch, installed one per joint Main runner/Space bar		
	$\Delta$ Min. overall depth of system: 135 mm		

 $\delta$  Min. demounting depth: 30 mm (50 mm with 1200x1200)









Size, mm Max live Min load bearing load [N] capacity [N] 1200x200 0 -

Corner elements are fitted with a spline

Live load/load bearing capacity

### Ecophon Focus<sup>TM</sup> Levels TECH

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.

Akutex



#### SYSTEM RANGE

PR										
		600x600	600x600	600x600	1200x300	1200x300	1200x300	1200x600	1200x600	1200x600
		•	•	•	•	•	•	•	•	•
		20	30	40	20	30	40	20	30	40
	Inst.	M488, M489								

1





Focus Levels system



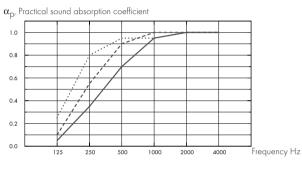
Section of Focus Levels system



#### Acoustics

#### 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 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

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

1.0 0.8 0.4 0.2 0.0 125 250 500 1000 2000 4000 Frequency Hz

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

ТНК	o.d.s.	${f lpha}_{ m p}$ , Practical sound absorption coefficient					$\alpha_{w}$	Sound absorption	
mm	mm	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		class
40	43	0.25	0.80	0.95	0.95	1.00	1.00	1.00	А
30	33	0.10	0.55	0.90	1.00	1.00	1.00	0.85	В
20	23	0.05	0.35	0.70	0.95	1.00	1.00	0.65	С
0	43	0.15	0.55	0.90	0.95	1.00	1.00	0.85	В



#### Indoor Air Quality

Certificate / Label		
French VOC, A	•	
Finnish M 1	•	



#### Circularity

Fully recyclable.



#### Fire safety

Country	Standard	Class
Europe	en 13501-1	A2-s1,d0

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



#### **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.

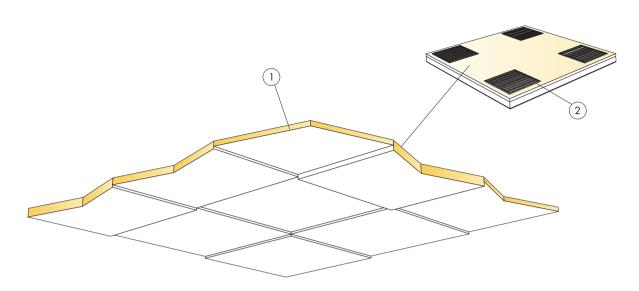


#### **Mechanical properties**

Additional live load has to be fixed to the soffit.

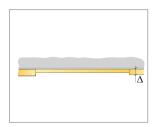


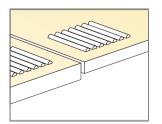
### CE



#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

1	Focus Levels			
2	Connect Absorber glue (0,25 1/m² - 0,4 1/m² depending on installation conditions)			
	$\Delta$ Min. overall depth of system: 23 mm			
	$\delta$ Min. demounting depth: The system is not demountable			
	Visible edges should be painted			
	Use Connect Notched spatula to apply the glue.			







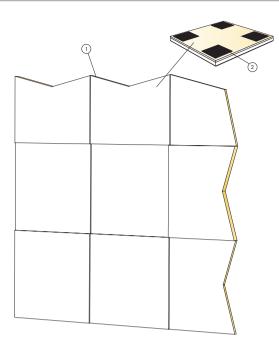
Min load bearing capacity (N)

See Quantity specification

Application of glue

Live load/load bearing capacity

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



© Ecophon Group

#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

1	Focus Levels

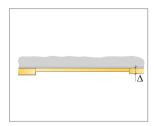
2 Connect Absorber glue (0,25 l/m<sup>2</sup> - 0,4 l/m<sup>2</sup> depending on installation conditions)

 $\Delta$  Min. overall depth of system: 23 mm

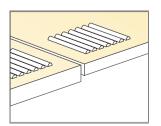
 $\delta$  Min. demounting depth: The system is not demountable

Visible edges should be painted

Use Connect Notched spatula to apply the glue.



See Quantity specification





Application of glue

Live load/load bearing capacity