

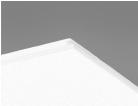
Ecophon Focus[™] Ds

Ecophon Focus[™] Ds is ideal when looking for a modular acoustic ceiling with discreet edge design. It has a concealed grid and bevelled edges with a narrow groove between each tile . Easy to install with the possibility to integrate light fittings and ventilation. For applications with high demand on both acoustics and design, and where individual tiles must be easily demountable.



SYSTEM RANGE

	Size, mm	600x600	1200x600	1200x1200	XL 1600x600	XL 1800x600	XL 2000x600	XL 2400x600
4	T24	•	•	•	•	•	•	•
	Thickness	20	20	20	20	20	20	20
	Inst. Diagr.	M581, M583, M584 , M613, M614	M581, M583, M584 , M613, M614	M582	M581, M238	M581, M238	M581, M238	M581, M238



Focus Ds tile



Section of Focus Ds system with Connect T24 Main runner PL





The individual tiles are easily demountable

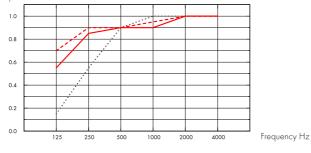
Acoustic



Sound Absorption:

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

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



- ···· Focus Ds 20 mm, 65 mm o.d.s.
- Focus Ds 20 mm, 200 mm o.d.s.
- --- Focus Ds 20 mm + Extra Bass 50 mm, 200 mm o.d.s.

o.d.s = overall depth of system

THK		o.d.s. mm	$lpha_{_{ m p'}}$ Practical sound absorption coefficient					α"	Sound absorption class	
	mm	0.0.5. 11111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
-	20	65	0.15	0.55	0.90	1.00	1.00	1.00	0.85	В
-	20	200	0.55	0.85	0.90	0.90	1.00	1.00	0.95	A
+ Extra Bass	70	200	0.70	0.90	0.90	0.95	1.00	1.00	0.95	A

	THK mm	o.d.s. mm	NRC	SAA
-	20	65	0.85	0.86
-	20	200	0.90	0.93
+ Extra Bass	70	200	0.95	0.95

тнк	AC(1.5)	D _{nfw}	CAC dB
mm	Articulation Class, ASTM E1111, ASTM E1110	Weighted normalized flanking level difference, ISO 10848-2	Ceiling Attenuation Class, ASTM 1414, ASTM E413
20	180	24	23

Indoor Air Quality

Certificate / Label	SOR AIR COMPO		
Eurofins Indoor Air Comfort®	IAC Gold	CRATIFIED PROBLE	
French VOC	A+		

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Cradle to Cradle Certified®

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

Material Health

CE

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



Carbon footprint

	kg CO2 equiv/m²	Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804
Focus Ds (EN 15804+A2)	3,68	



Circularity

Minimum post-consumer recycled content	54%
Recyclability	Fully recyclable



Fire safety

)	Country		Class	The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182.
	Europe	EN 13501-1	A2-s1,d0	horeonibusible according to ETV 150° 1102.



Humidity Resistance

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



Visual appearance

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



Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



Accessibility

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



Installation

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



System weight

	kg/m²
Focus Ds	2
Focus Ds + Connect grid system	2,9

Weight information is indicative and subject to variation.

Mechanical properties

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

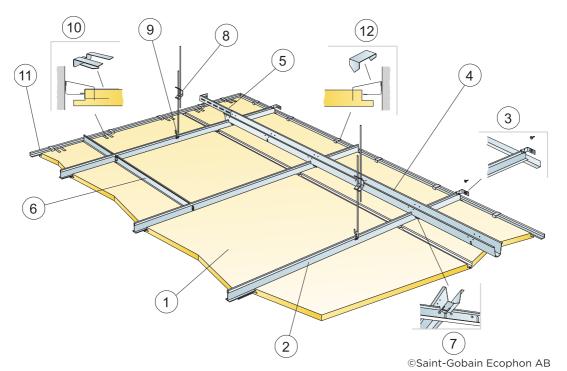
CE

CE

kg

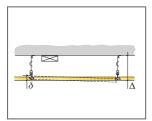
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

INSTALLATION DIAGRAM (M581) FOR ECOPHON FOCUS DS 600X600, 1200X600 MM AND ECOPHON FOCUS DS XL SUSPENDED INSTALLATION

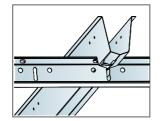


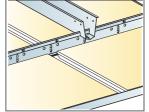
QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm					
	600×600	1200×600	1600x600	1800×600	2000×600	2400×600
1 Focus Ds	2,8/m²	1,4/m²	1,05/m²	0,95/m²	0,85/m²	0,7/m²
2 Connect T24 Main Runner PL, 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	ow of Main runner				
4 Connect Space Bar, installed at 1500 mm centres (max. distance from wc 300 mm]	ll 0,7m/m²	0,7m/m²	0,7m/m²	0,7m/m²	0,7m/m²	0,7m/m²
5 Connect Wall Bracket, L=700 mm, for Connect Space Bar	1/row of Space	ə bar				
5 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
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
Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²	0,7/m²	0,7/m²	0,7/m²	0,7/m²
10 Connect Support clip DG20	1pc/300-400 r	mm on every cut perim	eter tile with only 1 su	pporting edge		
11 Connect Angle trim 15/22, fixed at 300 mm centres	as required	as required	as required	as required	as required	as required
12 Connect Perimeter tile clip	1/300-400mm	on any cut edge				
Δ Min. overall depth of system: 120 mm	-	-	-	-	-	-
δ Min. demounting depth: 30 mm	-	-	-	-	-	-
For luminaire integration in panels use Connect Bridging	-	-	-	-	-	-



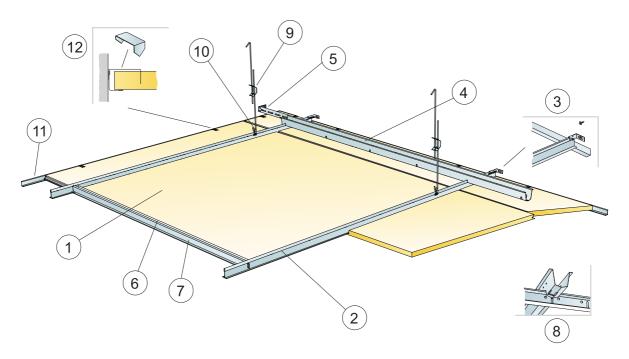






Installation with Main runner PL and space bar Live

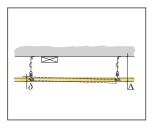
Size, mm	Max live load (N)	Min load bearing capacity [N]
600x600x20	35	160
1200x600x20	35	160
1600x600x20	35	160
1800x600x20	35	160
2000x600x20	35	160
2400x600x20	35	160

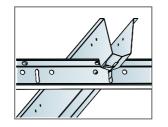


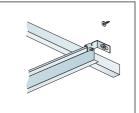
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QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm
		1200×1200
1	Focus Ds	0,7/m²
2	Connect T24 Main Runner PL, installed at 1200 mm centres	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/m ²
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=1200 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
	Δ Min. overall depth of system: 120 mm	-
	δ Min. demounting depth: 50 mm	-
	For luminaire integration in panels use Connect Bridging	



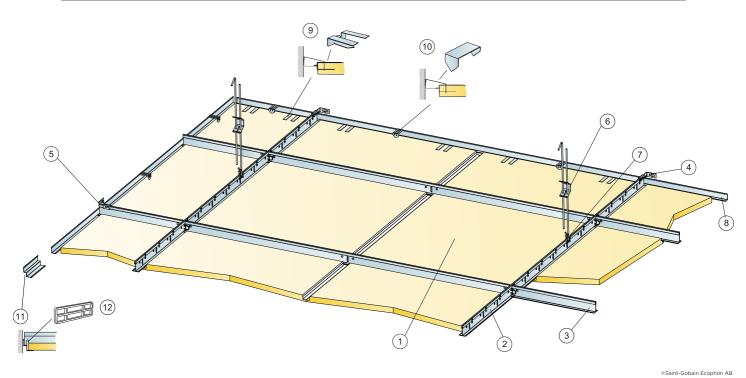




Secured Main runner at wall with Connect Wall bracket

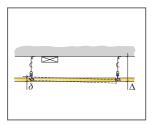
Size, mm	Max live load [N]	Min load bearing capacity (N)
1200x1200x20	50	160

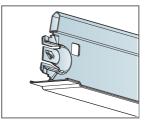
INSTALLATION DIAGRAM (M583) FOR ECOPHON FOCUS DS 600X600, 1200X600 MM. SUSPENDED INSTALLATION



QUANTITY SPECIFICATION (EXCL. WASTAGE)

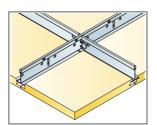
		Size, mm	
		600×600	1200×600
1	Focus Ds	2,8/m²	1,4/m²
2	Connect T24 Main Runner PL, installed at 1200 mm centres	0,9m/m²	0,9m/m²
3	Connect T24 Cross Tee PL, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²
4	Connect Wall Bracket, fixed 1200mm centres for Main runner	2/suspended ro	w of Main runner
5	Connect Wall Bracket, fixed 1200mm centres for Cross tee	1/row of cross te	е
6	Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²
7	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²
8	Connect Angle trim 15/22, fixed at 300 mm centres	as required	as required
9	Connect Support clip DG20	1pc/300-400 m tile with only 1 st	nm on every cut perimeter upporting edge
10	Connect Perimeter tile clip	1/perimeter tile	
11	Connect Shadow-line trim, fixed at 300 mm centres	as required	as required
12	Connect Wall spacer 5	1 on the long side tile	e of every cut perimeter
	Δ Min. overall depth of system: 120 mm		-
	δ Min. demounting depth: 30 mm	-	-
	For luminaire integration in panels use Connect Bridging	-	





See Quantity Specification

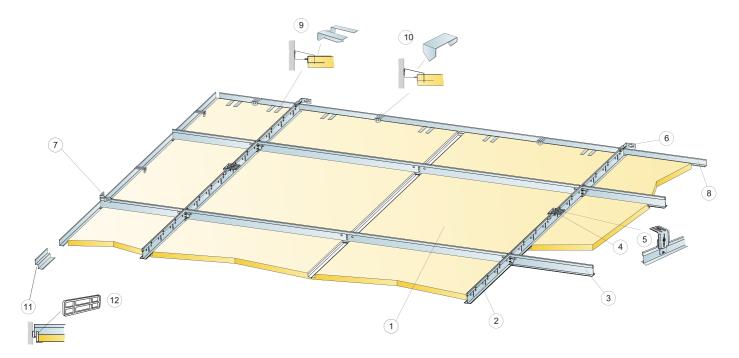
Cross tee PL



Installation with Main runner PL and Cross tee PL

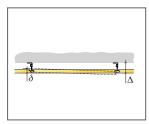
Size, mm	Max live load (N)	Min load bearing capacity [N]
600x600x20	50	160
1200x600x20	50	160

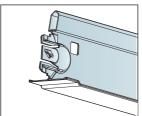
INSTALLATION DIAGRAM (M584) FOR ECOPHON FOCUS DS 600X600, 1200X600 MM. DIRECT INSTALLATION



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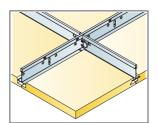
		Size, mm		
		600x600	1200×600	
1	Focus Ds	2,8/m ²	1,4/m²	
2	Connect T24 Main Runner PL, installed at 1200 mm centres	0,9m/m ²	0,9m/m²	
3	Connect T24 Cross Tee PL, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²	
4	Connect Direct bracket, installed at 1200 mm centres	0,7/m²	0,7/m²	
5	Alt. Connect Adjust direct bracket, installed at 1200 mm centres	0,7/m²	0,7/m²	
5	Connect Wall Bracket, fixed 1200mm centres for Main runner	2/suspended ro	2/suspended row of Main runner	
7	Connect Wall Bracket, fixed 1200mm centres for Cross tee	1/row of cross	ee	
8	Connect Angle trim 15/22, fixed at 300 mm centres	as required	as required	
9	Connect Support clip DG20		1pc/300-400 mm on every cut perimeter tile with only 1 supporting edge	
10	Connect Perimeter tile clip	1/perimeter tile		
11	Connect Shadow-line trim, fixed at 300 mm centres	as required	as required	
12	Connect Wall spacer 5	1 on the long sic tile	le of every cut perimeter	
	Δ Min. overall depth of system: 65 mm	-	-	
	δ Min. demounting depth: 30 mm	-	-	
	For luminaire integration in panels use Connect Bridging	-	-	





See Quantity Specification

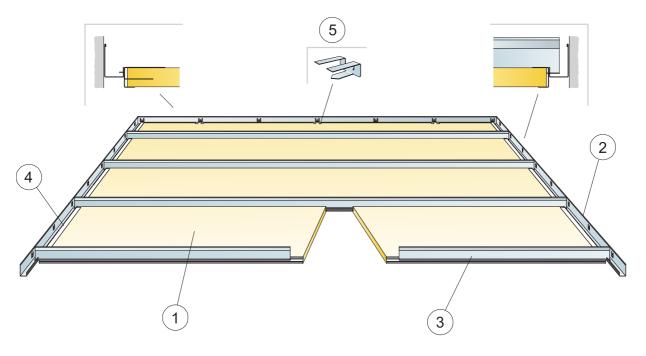
Cross tee PL



Installation with Main runner PL and Cross tee PL

Size, mm 600x600x20	Max live load (N) 50	
1200x600x20	50	160
1200200020	50	100

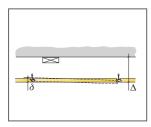
INSTALLATION DIAGRAM (M238) FOR ECOPHON FOCUS DS XL IN CORRIDORS

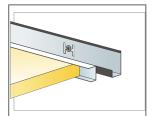


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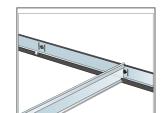
QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	Size, mm			
		1600×600	1800×600	2000×600	2400×600	
1	Focus Ds XL	1,05/m²	0,95/m²	0,85/m²	0,7/m²	
2	Connect Modular Wall trim	as required	as required	as required	as required	
3	Connect T24 Corridor profile	1,05/m²	0,95/m²	0,85/m²	0,7/m²	
1	Connect Cover trim Ds	2/tile plus end til	les			
5	Connect Support clip Dg 20 0547	1pc/300-400 m	1pc/300-400 mm on every cut perimeter tile with only 1 supporting edge			
	Δ Min. overall depth of system: 55 mm		-	-	-	
	δ Min. demounting depth: 30 mm		-		-	





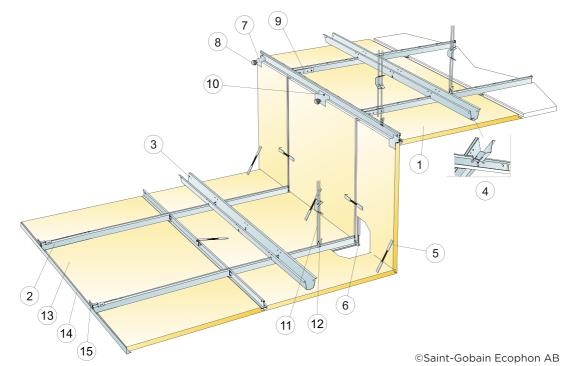
Tile and Connect Cover trim Ds



Corridor profile positioned by Modular wall trim

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

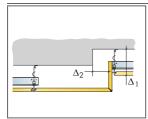
INSTALLATION DIAGRAM (M613) FOR ECOPHON FOCUS DS LEVEL CHANGE. SUSPENDED INSTALLATION

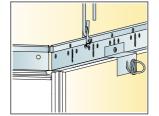


QUANTITY SPECIFICATION (EXCL. WASTAGE)

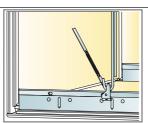
Size, mm 600×600 1200×600 Focus Ds 2,8/m² 1,4/m² 2 Connect T24 Main Runner PL, installed at 600 mm centres 1,7m/m² 1,7m/m² 3 Connect Space bar, installed at 1500 mm centres (max. distance from Vertical tile 450 mm) 0,7m/m² 0,7m/m² Connect Space Bar Winch, installed one per joint Connect Main Runner/Connect Space Bar 1,4/m² 1,4/m² 4 5 Connect Hook 3/panel 3/panel 6 Connect Level Clip 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 1/row of Main runner Connect L-coupling 10 Connect Installation screw BR (2000 pcs) 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 Angle trim 15/22, fixed at 300 mm centres as required as required 15 1/suspended row of Main runner Connect Wall Bracket for T-profiles Δ Min. overall depth of system: 150 mm from upper level δ Min. demounting depth: Individual ceiling tiles are non-demountable

Dimension: c=600 mm, h<530 mm



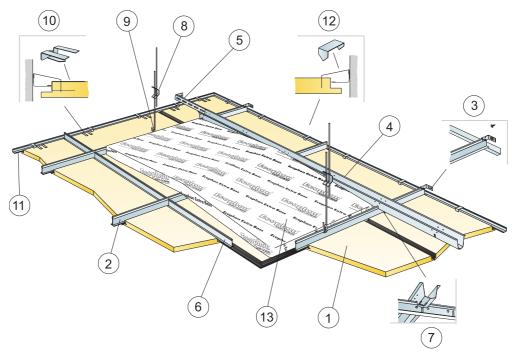


Upper level connection to Main runner PL



Lower level connection fixed with Hook

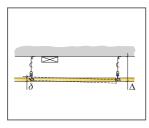
Size, mm 600x600x20	Max live load (N) 0	Min load bearing capacity [N] 160
1200x600x20	0	160

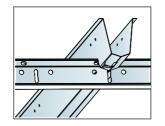


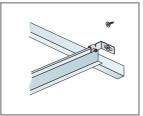
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QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	Size, mm	
		600×600	1200×600	
1	Focus Ds	2,8/m²	1,4/m²	
2	Connect T24 Main Runner PL, installed at 600 mm centres	1,7m/m²	1,7m/m²	
3	Connect Wall Bracket for T-profiles	1/suspended ro	1/suspended row of Main runner	
4	Connect Space Bar, installed at 1500 mm centres (max. distance from wall 300 mm)	0,7m/m²	0,7m/m²	
5	Connect Wall Bracket, L=700 mm, for Connect Space Bar	1/row of Space	1/row of Space bar	
5	Connect T24 Cross tee, L=600 mm	2/row of Main	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	
8	Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²	
7	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²	
10	Connect Support clip DG20	1/300-400mm	1/300-400mm on any cut edge	
11	Connect Angle trim black, fixed at 300 mm centres	as required	as required	
12	Connect Perimeter tile clip	1/300-400mm	1/300-400mm on any cut edge	
13	Extra Bass (1200x600x50 mm)	0,7/m²	0,7/m²	
	Δ Min. overall depth of system: 120 mm	-	-	
	δ Min. demounting depth: 30 mm	-	-	







Connection between profiles with split pin

