

Ecophon Focus™ Lp

Ecophon Focus Lp has a semi-concealed grid system and is used for highlighting direction in a room. There is a wide gap between the tiles in the emphasized direction and narrow gap in the other. The edges are sharp and well defined. The system consists of standard Focus Lp tiles in 600 or 300 mm width and Focus Lp Technical tiles in widths of 150, 300 or 600 mm.

The tiles are manufactured from high density, 3rd generation glass wool. The visible surface has an Akutex™ FT coating and the back of the tile is covered with glass tissue. The edges are painted. The Technical tiles are used to create areas for technical installations such as luminaires, ventilation, sprinklers, smoke detectors, loudspeakers etc.

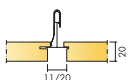
The exact width (148, 298 or 598 mm) is adopted to suit the standard sizes of luminaires on the market.

The tiles and Connect grid systems give an approximate weight of 3-4 kg/m² for the system. The grid is manufactured from galvanized steel. For best performance and system quality, use Ecophon Connect grid and accessories.



Gemeentehuis Oldebroek, Oldebroek, Netherlands

SYSTEM RANGE



Size, mm	600x150	600x300	600x600	1200x150	1200x300	1200x600	XL 1800x600
T24	•	•	•	•	•	•	•
Thickness (THK)	20	20	20	20	20	20	20
Inst. Diagr.	M279	M278, M279	M278, M279	M279	M278, M279	M278, M279	M278



Section of Focus Lp system with Connect T24 Main runner HD



Focus Lp tile



Focus Lp system



Demounting of tile

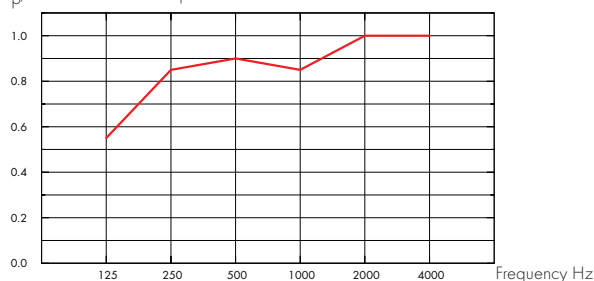


Acoustic

Sound Absorption:

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

α_p Practical sound absorption coefficient



— Focus Lp 20 mm, 200 mm o.d.s.

o.d.s = overall depth of system

THK mm	o.d.s. mm	α_p Practical sound absorption coefficient						α_w	Sound absorption class
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
20	200	0.55	0.85	0.90	0.85	1.00	1.00	0.90	A

THK mm	AC(1.5) Articulation Class, ASTM E1111, ASTM E1110	D_{nfw} Weighted normalized flanking level difference, ISO 10848-2	CAC dB Ceiling Attenuation Class, ASTM 1414, ASTM E413
20	180	24	25



Accessibility

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



Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



Visual appearance

White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance (of which more than 99% is diffuse reflection). Retro reflection coefficient 63 mcd/(m²lx). Gloss < 1.



CO₂

Kg CO₂ equiv/m²

3,9

From EPD in conformity with ISO 14025 / EN 15804



Influence of climate

The tiles withstand a permanent ambient RH up to 75% at 30°C without sagging, warping or delaminating (EN 13964).



Indoor Climate

Certificate / Label	
Finish M1	•
French VOC, A+	•
Swedish Asthma and Allergy Association	•
Danish Indoor Climate Label	•
California Emission Regulation, CDPH	•



Environmental influence

Certificate / Label	
The Nordic Ecolabel	•

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. The systems are classified as fire protective covering according to NT FIRE 003.



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 M279 there is a load bearing capacity of 100 N for each Main runner HD per 1200 mm. This gives a total load bearing capacity of 200 N for a load evenly distributed on two Main runners.



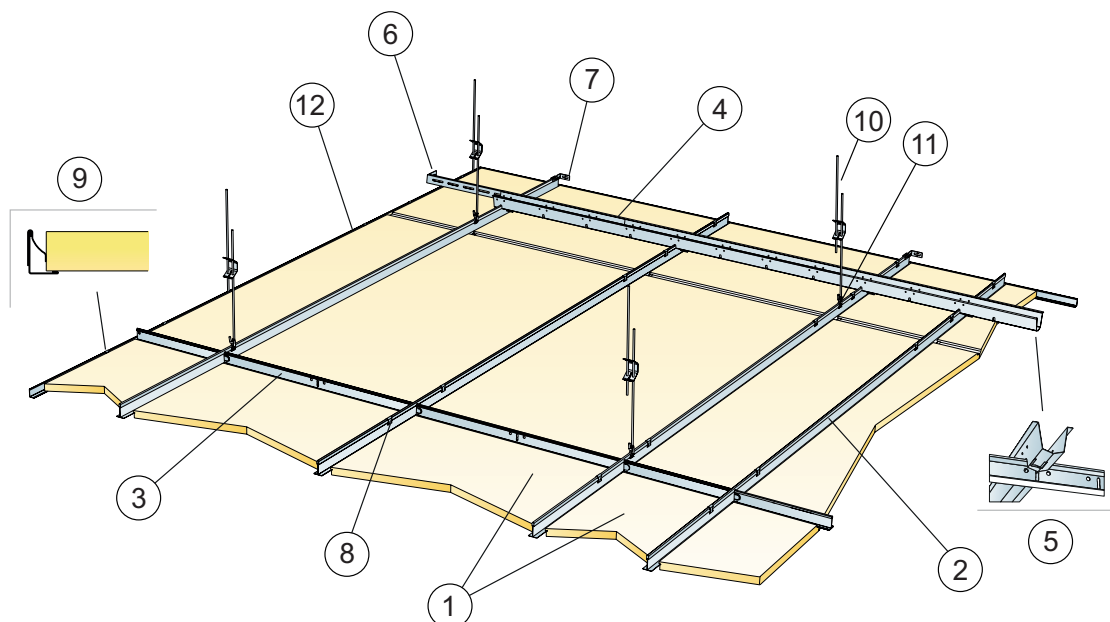
Installation

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.



CE

The CE marking confirms important product performance such as sound absorption, emissions, fire safety and load bearing capacity. All Ecophon ceiling products are CE marked according to European standard EN13964, and individual product performance is declared in Declaration of Performance (DoP) documents.



© Ecophon Group

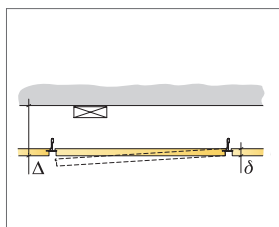
QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm				
		600x300	600x600	1200x300	1200x600	1800x600
1	Focus Lp	5,6/m ²	2,8/m ²	2,8/m ²	1,4/m ²	0,95/m ²
2	Connect T24 Main runner HD, installed at 600 mm centres		1,7/m ²		1,7/m ²	1,7/m ²
3	Connect T24 Cross tee, L=150/300/600 mm	as required	as required	as required	as required	as required
4	Connect Space bar 150, installed at 1500 mm centres (max. distance from wall 300 mm)	0,7/m ²	0,7/m ²	0,7/m ²	0,7/m ²	0,7/m ²
5	Connect Space bar winch, installed one per joint Main runner/Space bar	2,8/m ²	1,4/m ²	2,8/m ²	1,4/m ²	1,4/m ²
6	Connect Wall bracket, L=700 mm, for Space bar	1/row of Space bar				
7	Connect Wall bracket for T-profiles	1/row of suspended Main runner HD				
8	Connect Absorber distance HD	11,1/m ² [2/tile]	5,6/m ² [2/tile]	5,6/m ² [2/tile]	2,8/m ² [2/tile]	1,9/m ² [2/tile]
9	Connect Wall spring	2 pcs/on every cut perimeter tile with only 1 supporting edge	2 pcs/on every cut perimeter tile with only 1 supporting edge	2 pcs/on every cut perimeter tile with only 1 supporting edge	2 pcs/on every cut perimeter tile with only 1 supporting edge	3pcs/on every cut perimeter tile with only 1 supporting edge
10	Connect Adjustable hanger, installed at 1200 mm centres (max. distance from wall 600 mm)		0,7/m ²		0,7/m ²	0,7/m ²
11	Connect Hanger clip (not to be used in swimming hall environments)		0,7/m ²	0,7/m ²	0,7/m ²	0,7/m ²
12	Connect Angle trim, fixed at 300 mm centres	as required	as required	as required	as required	as required

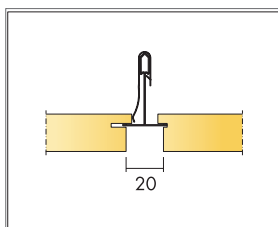
Δ Min. overall depth of system: 105 mm

δ Min. demounting depth: 20 mm

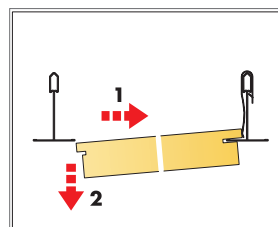
For luminaire integration in panels use Connect Bridging



See Quantity specification



Distance between Focus Lp tiles

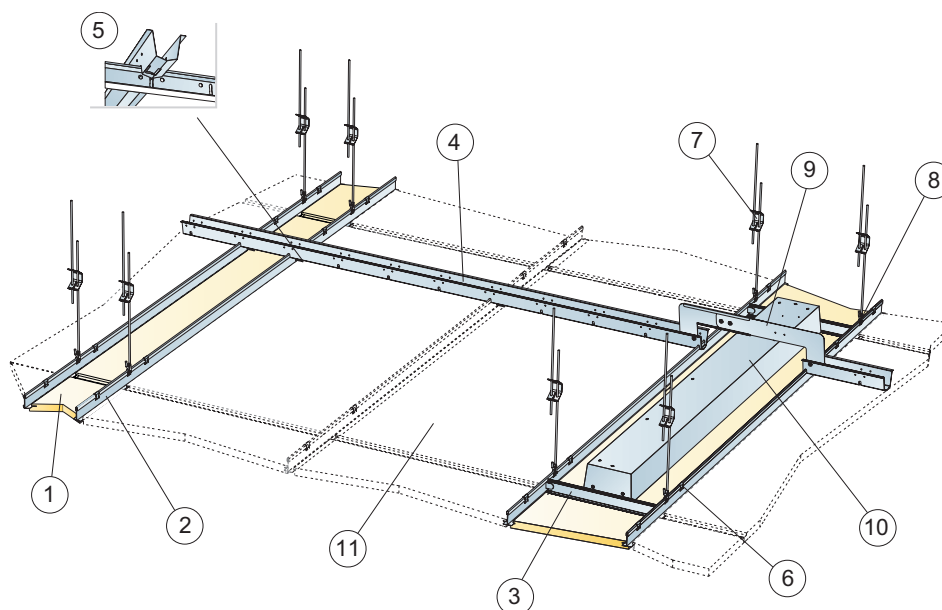


Demounting of tile

Size, mm	Max live load [N]	Min load bearing capacity [N]
600x300	50	160
600x600	50	160
1200x300	50	160
1200x600	50	160
1800x600	50	160

Live load/load bearing capacity

INSTALLATION DIAGRAM (M279) FOR ECOPHON FOCUS LP TECHNICAL TILE

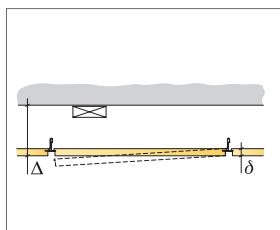


© Ecophon Group

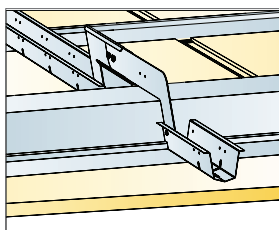
QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm					
		600x150	600x300	600x600	1200x150	1200x300	1200x600
1	Focus Lp Technical tile	11,1/m ²	5,6/m ²	2,8/m ²	5,6/m ²	2,8/m ²	1,4/m ²
2	Connect T24 Main runner HD	6,7m/m ²	3,3m/m ²	1,7m/m ²	6,7m/m ²	3,3m/m ²	1,7m/m ²
3	Connect T24 Cross tee, L=150/300/600 mm	as required	as required	as required	as required	as required	as required
4	Connect Space bar 150, installed at 1500 mm centres (max. distance from wall 300 mm)	0,7m/m ²	0,7m/m ²	0,7m/m ²	0,7m/m ²	0,7m/m ²	0,7m/m ²
5	Connect Space bar winch, installed one per joint Main runner/ Space bar	8,9/m ²	4,4/m ²	2,2/m ²	8,9/m ²	4,4/m ²	2,2/m ²
6	Connect Absorber distance HD	22,2/m ² (2/tile)	11,1/m ² (2/tile)	5,6/m ² (2/tile)	11,1/m ² (2/tile)	5,6/m ² (2/tile)	2,8/m ² (2/tile)
7	Connect Adjustable hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	5,6/m ²	2,8/m ²	1,4/m ²	5,6/m ²	2,8/m ²	1,4/m ²
8	Connect Hanger clip	5,6/m ²	2,8/m ²	1,4/m ²	5,6/m ²	2,8/m ²	1,4/m ²
9	Connect Spacebar connector	as required	as required	as required	as required	as required	as required
10	Ecophon line Lp						
11	Focus Lp (adjacent ceiling)						
Δ Min. overall depth of system: 105 mm (190 mm when using Connect Space bar connector)							
δ Min. demounting depth: 20 mm							

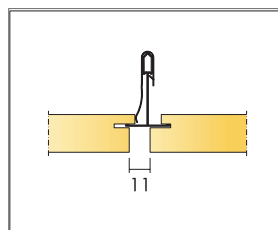
The area in quantity specification for M279 refers to the installation area between the two suspended Main runners. Maximum two rows of Technical tiles can be installed next to each other.



See Quantity specification



Connect Spacebar connector adjustable < 300 mm



Distance between Focus Lp and Focus Lp Technical tile

Size, mm	Max live load [N]	Min load bearing capacity [N]
600x150	50	160
600x300	50	160
600x600	50	160
1200x150	50	160
1200x300	50	160
1200x600	50	160

Live load/load bearing capacity