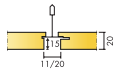# ECOPHON FOCUS™ LP

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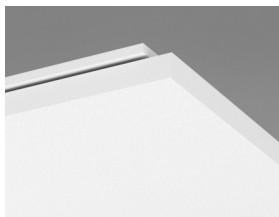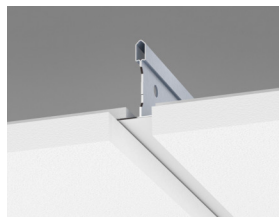
Ecophon Focus™ Lp

SYSTEM RANGE

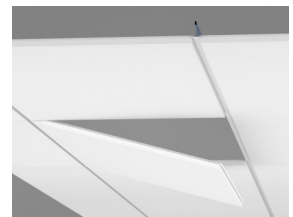| Size, mm	600x150	600x300	600x600	1200x150	1200x300	1200x600	XL 1800x600
T24	•	•	•	•	•	•	•
Thickness	20	20	20	20	20	20	20
Inst. Diagr.	M391	M390, M391	M390, M391	M391	M390, M391	M390, M391	M392

Focus Lp tile

Section of Focus Lp system with Connect T24 main-runner

Focus Lp system

Demounting of tile

TYPE OF APPLICATION
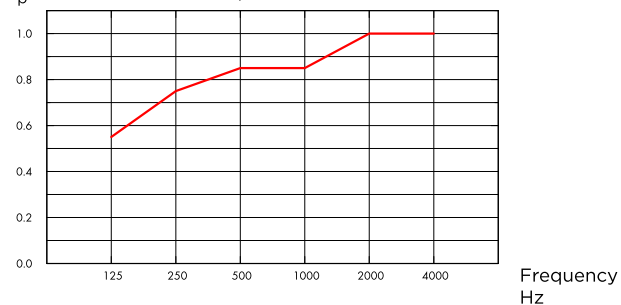
- Healthcare
- Education
- Office
- Additional areas

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	0.75	0.85	0.85	1.00	1.00	0.90	A

THK mm	o.d.s. mm	NRC	SAA
20	200	0.85	0.87
20	400	0.80	0.82

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

INDOOR AIR QUALITY

Certificate / Label	
Eurofins Indoor Air Comfort®	IAC Gold
French VOC	A+

CRADLE TO CRADLE CERTIFIED®

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

MATERIAL HEALTH

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

CARBON FOOTPRINT

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

	kg CO_2 equiv/m^2
Focus Lp	4,66

CIRCULARITY

Minimum post-consumer recycled content	57%
Recyclability	Fully recyclable

FIRE SAFETY

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

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

HUMIDITY RESISTANCE

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

VISUAL APPEARANCE

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

CLEANABILITY

Daily dusting and vacuum cleaning. Weekly wet wiping.

ACCESSIBILITY

The tiles are 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.

PACKAGING INFORMATION

Information is indicative and subject to change.

	Edge	Panels / crt	m² / crt
600x600x20	Lp	20	7.20
600x300x20	Lp	40	7.20
1200x600x20	Lp	10	7.20
1200x300x20	Lp	20	7.20
1800x600x20	Lp	6	6.48
600x150x20	Lp Technical Tile	20	1.80
600x300x20	Lp Technical Tile	20	3.60
600x600x20	Lp Technical Tile	20	7.20
1200x150x20	Lp Technical Tile	20	3.60
1200x300x20	Lp Technical Tile	20	7.20
1200x600x20	Lp Technical Tile	10	7.20

SYSTEM WEIGHT

Weight information is indicative and subject to variation.

	kg/m²
Focus Lp	2,4
Focus Lp + Connect grid system	3,4

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 70 N for each Main runner per 1200 mm. This gives a total load bearing capacity of 140 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.

COLOURS AND DESIGN

Akutex™ FT

White Frost	Moonlight sky	Highland fog	Sunset heat	Ocean storm	Morning drizzle	Peach rose

Goji berry	Scallop shells	Fresh clover	Sage garden	Eucalyptus leaf	Summer forest	Golden field

Ruby rock	Wet sand	Silent steam	Dark diamond	Cloudy day	Volcanic ash	Silver stone

Silk slate

Suspended ceiling
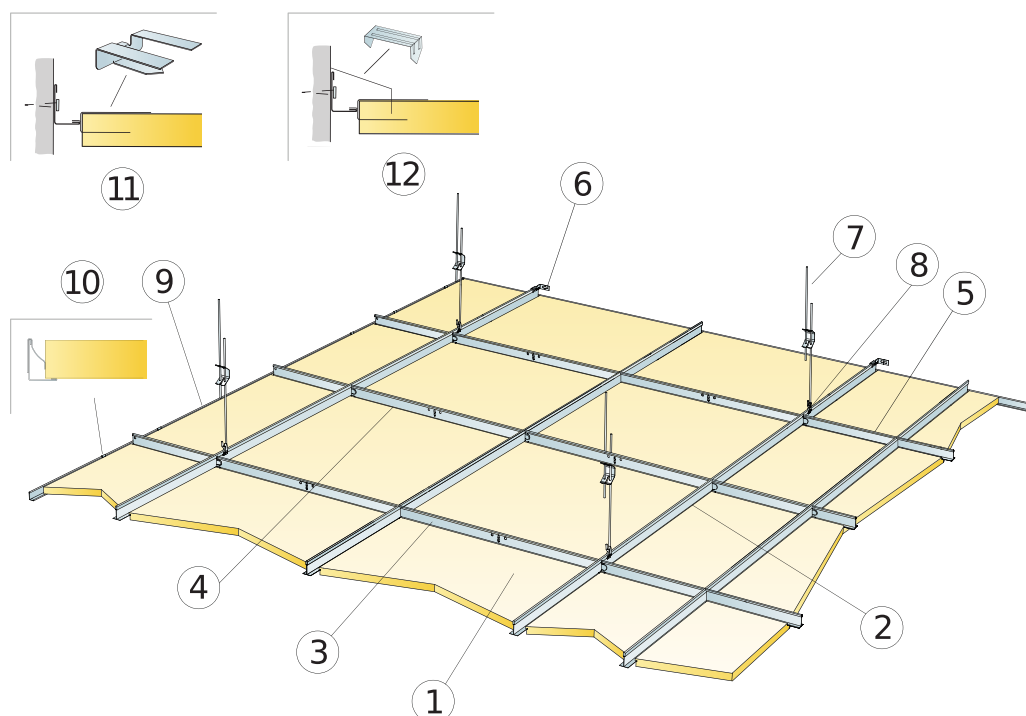
Installation diagram (M390) for Ecophon Focus Lp

Quantity specification (excl. wastage)

		Size, mm			
		600x300	600x600	1200x300	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 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 cut perimeter tile with only 1 supporting edge			
11	Connect Support clip Dg20	2per perimeter tile, cut on the long side	2per perimeter tile, cut on the long side	3per perimeter tile, cut on the long side	3per perimeter tile, cut on the long side
12	Connect Perimeter tile clip	1/300-400mm on any cut edge			
	Δ Min. overall depth of system: 115 mm	-	-	-	-
	δ Min. demounting depth: 20 mm	-	-	-	-
	For luminaire integration in panels use Connect Bridging	-	as required	-	as required

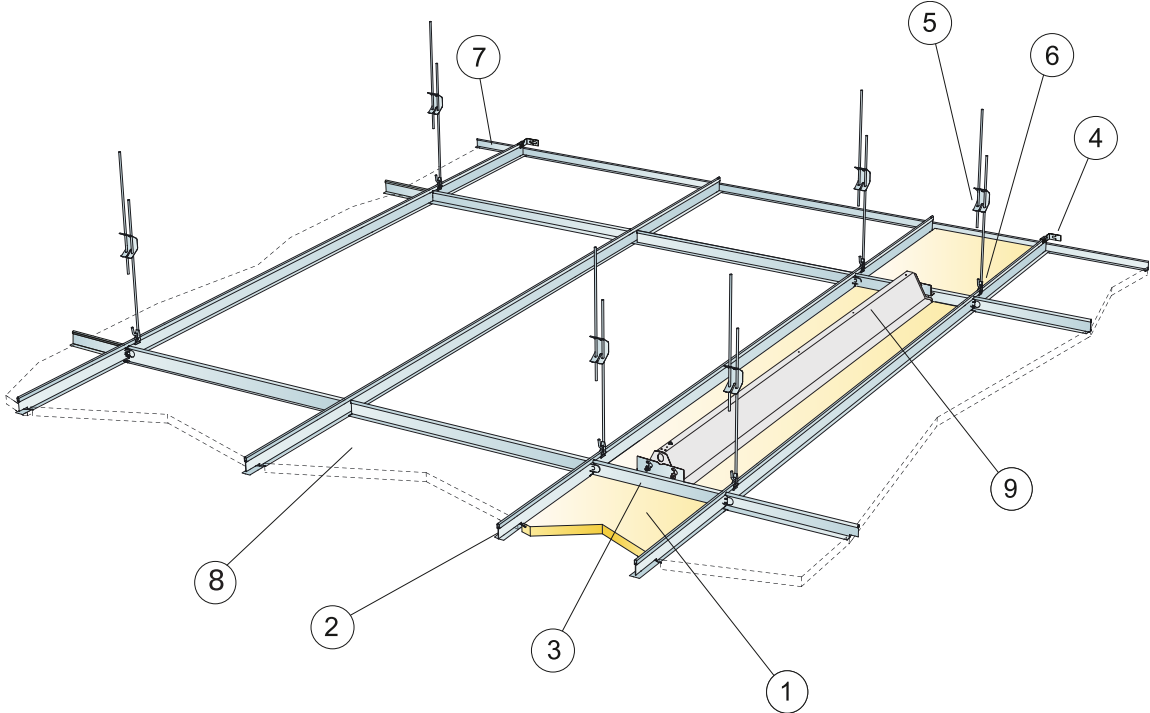Distance between Focus Lp tiles

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

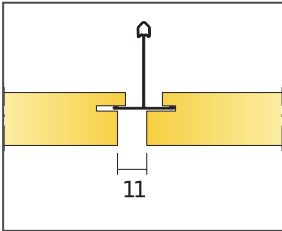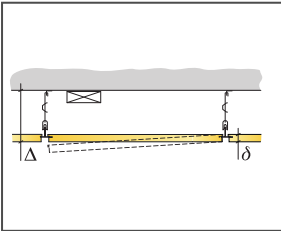| Size, mm	Max live load (N)	Min load bearing capacity (N)
600x300x20	30	160
600x600x20	30	160
1200x300x20	30	160
1200x600x20	30	160

Live load/load bearing capacity

ecophon SAINT-GOBAIN

Installation diagram (M391) for Ecophon Focus Lp Technical tile

Quantity specification (excl. wastage)

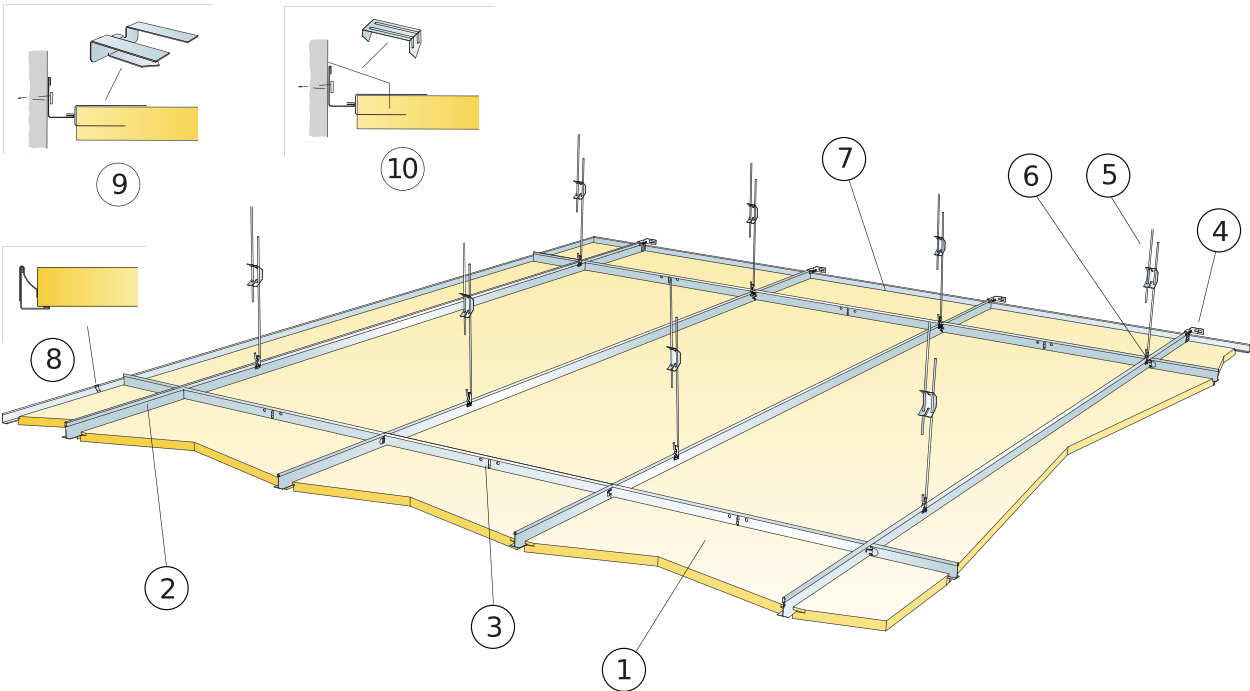|	Size, mm					
	600x150	600x300	600x600	1200x150	1200x300	1200x600
1 Focus Lp Technical tile	11,1/m²	5,6/m²	2,8/m²	5,6/m²	2,8/m²	1,4/m²
2 Connect T24 Main runner	6,7m/m²	3,35m/m²	1,7m/m²	6,7m/m²	3,35m/m²	1,7m/m²
3 Connect T24 Cross tee, L=150/300/600 mm	1,7m/m²	1,7m/m²	1,7m/m²	0,85m/m²	0,85m/m²	0,85m/m²
4 Connect Wall Bracket for T-profiles	1/suspended row of Main runner					
5 Connect Adjustable hanger (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	-	-	-	-	-	-
Δ Min. overall depth of system: 105 mm (190 mm when using Connect Space bar connector)	-	-	-	-	-	-
δ Min. demounting depth: 20 mm	-	-	-	-	-	-
For luminaire integration in panels use Connect Bridging	-	-	as required	-	-	as required
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 continuous luminaire, width < 300 mm use Connect Spacebar connector, max height 75 mm	-	-	-	-	-	-

Distance between Focus Lp and Focus Lp Technical tile
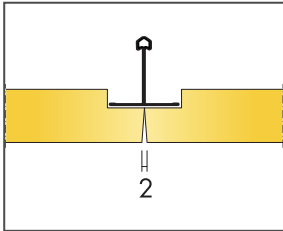
Non-supported edges meeting with space for cross-tee.

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

Live load/load bearing capacity

XL in grid

Installation diagram (M392) for Ecophon Focus Lp XL

Quantity specification (excl. wastage)

		Size, mm
		1800x600
1	Focus Lp	0,95/m²
2	Connect T24 Main runner, installed at 600 mm centres	1,7m/m²
3	Connect T24 Cross tee, L=600 mm	0,6m/m²
4	Connect Wall Bracket for T-profiles	1/suspended row of Main runner
5	Connect Adjustable hanger, installed at 1500 mm centres (max. distance from wall 450 mm)	1,1/m²
6	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²
7	Connect Angle trim, fixed at 300 mm centres	as required
8	Connect Wall spring	3pcs/on every cut perimeter tile with only 1 supporting edge
9	Connect Support clip Dg20	4per perimeter tile, cut on the long side
10	Connect Perimeter tile clip	1/300-400mm on any cut edge
Δ Min. overall depth of system: 115 mm		-
δ Min. demounting depth: 20 mm		-
For luminaire integration in panels use Connect Bridging		as required
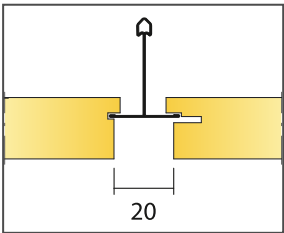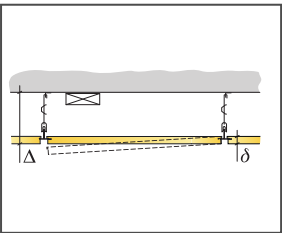
Distance between Focus Lp tiles
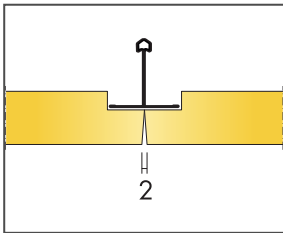
Non-supported edges meeting with space for cross-tee.

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

Live load/load bearing capacity