

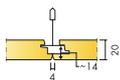
Ecophon Hygiene Protec™ Ds

Ecophon Hygiene Protec™ Ds has a concealed grid and are particle repellent for clean rooms, where disinfection and/or cleaning is required on a regular basis. The fully sealed absorbers have low emission levels, ensuring high indoor air quality. They are resistant to mould and bacteria growth.



Pharma Labor-Vorbereitung, Greven, Germany

SYSTEM RANGE



Size, mm	600x600	1200x600
T24	•	•
Thickness (THK)	20	20
Inst. Diag.	M468	M468



Hygiene Protec Ds tile



Hygiene Protec Ds C1 section with Connect Hold Down Clip Ds



Sealed junction with wall



Hygiene Protec Ds C1 system

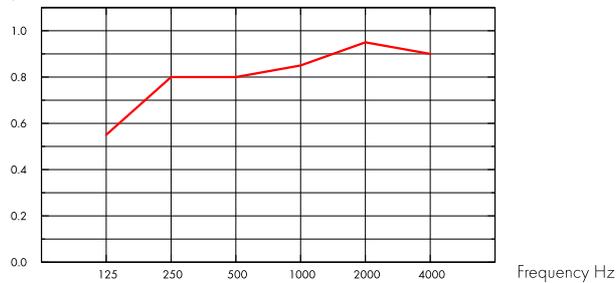
Acoustic



Sound Absorption:

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

α_p , Practical sound absorption coefficient



— Hygiene Protec Ds 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	0.80	0.80	0.85	0.95	0.90	0.85	B



Indoor Air Quality

Certificate / Label	
Eurofins Indoor Air Comfort®	IAC
French VOC	A
Finnish M1	•



Environmental Footprint

	kg CO ₂ equiv/m ²	Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804
Hygiene Protec Ds	7,10	



Circularity

Minimum post-consumer recycled content	47%
Recyclability	Fully recyclable



Fire safety

Country	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 500, nearest NCS colour sample S 0500-N, 84% light reflectance.



Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



Advanced Cleanability

Steam cleaning. Withstand use of hydrogen peroxide vapor.



Surface Endurance

Product tested according to ISO 11998, and withstand 200 cycles.



Chemical resistance/Disinfection

Chemical	Active Substance	Concentration
Ethanol	Ethanol	70%
Chlorine	Sodium Hypochlorite solution	2,5%
Virkon S	Dipotassium peroxodisulphate; Sulphamic acid	1%
Isopropanol	Isopropyl Alcohol	70%

Tested according to ISO 11998 and withstand the following chemicals or disinfectants.



Mould and Bacterial Resistance

Standard/Method	
ISO 846 A	0
ISO 846 C	0



Clean Room

	Standard/Method	Class
ISO 14644	Particle cleanliness class	ISO 3
NF S 90-351	Microbiological class	M1/area 4
NF S 90-351	Particle elimination kinetics	CP(0,5) 1



Accessibility

The tiles are demountable.



Installation

Installed according to installation diagrams, installation guides and drawing aid. Cut panels must be sealed with Connect Edge sealant.



System weight

The weight of the system (including suspension grid) should be approximately 3-4 kg/m².



Mechanical properties

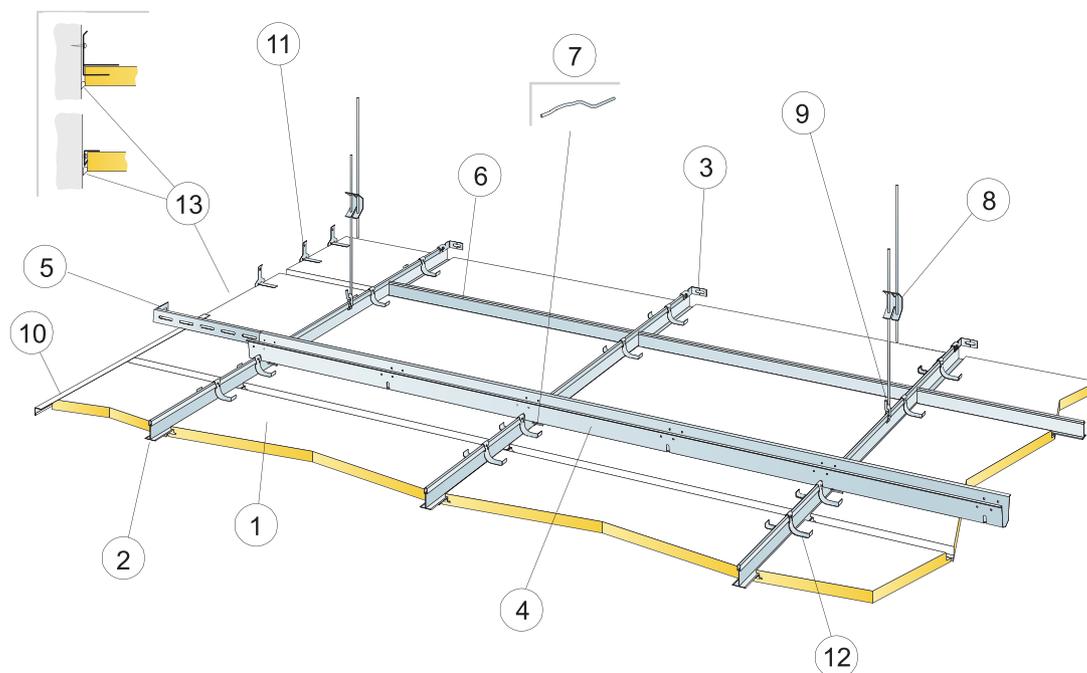
See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at www.ecophon.com.



CE

Ecophon ceiling systems are CE marked according to the European harmonized standard EN 13964:2014. 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.

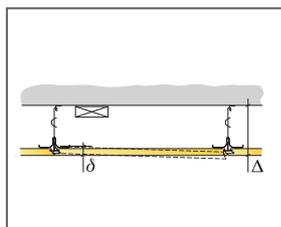
INSTALLATION DIAGRAM (M468) FOR ECOPHON HYGIENE PROTEC™ DS



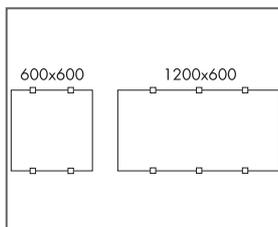
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QUANTITY SPECIFICATION (EXCL. WASTAGE)

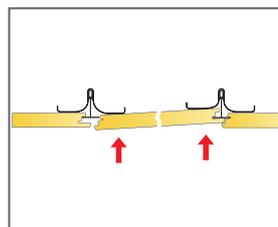
	Size, mm	
	600x600	1200x600
1 Hygiene Protec Ds	2,8/m ²	1,4/m ²
2 Connect T24 Main Runner HD, installed at 600 mm centres	1,7m/m ²	1,7m/m ²
3 Connect Wall Bracket for T-profiles	1/suspended row of Main runner	
4 Connect Space Bar, installed at 1500 mm centres (max. distance from wall 300 mm)	0,7m/m ²	0,7m/m ²
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/m ²	1,4/m ²
8 Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m ²	0,7/m ²
9 Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m ²	0,7/m ²
10 Alt. Connect Frieze Trim, fixed c300 mm	as required	as required
11 Connect Frieze Bracket, installed at 500 mm centre. Minimum free depth above tile 150 mm.	2/cut tile with one bearing edge	3/cut tile with one bearing edge
12 Connect Hold Down Clip Ds	2/tile, 50-100 mm from corners	3/tile, 50-100 mm from corners
13 Joint sealant (not supplied by Ecophon)	as required	as required
Δ Min. overall depth of system: 170 mm	-	-
δ Min. demounting depth: 30 mm	-	-



See Quantity Specification



Arrangement of clips



Demounting of tile from below

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

Live load/load bearing capacity