

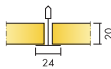
# Ecophon Hygiene Protec™ A

Ecophon Hygiene Protec™ A has an exposed 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.

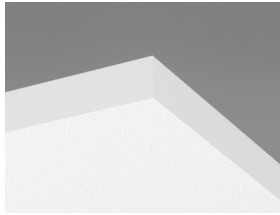


Unilever Polska, Poland

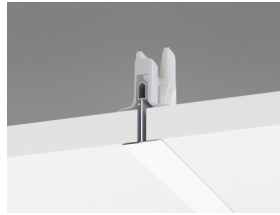
## SYSTEM RANGE



Size, mm	600x600	1200x600
T24	•	•
Thickness (THK)	20	20
Inst. Diag.	M257	M257



Hygiene Protec A tile



Hygiene Protec A C1 section with Connect Hygiene clip 20



Hygiene Protec A system

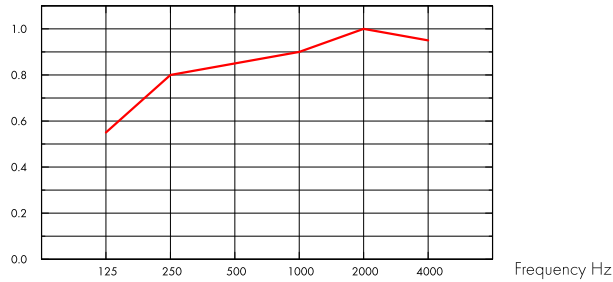


## Acoustic

### 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.

$\alpha_p$ , Practical sound absorption coefficient



— Hygiene Protec A 20 mm, 200 mm o.d.s.

THK mm	o.d.s. mm	$\alpha_p$ , Practical sound absorption coefficient						$\alpha_w$	Sound absorption class
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
20	200	0.55	0.80	0.85	0.90	1.00	0.95	A	

THK mm	o.d.s. mm	NRC	SAA
20	200	0.90	0.89
20	400	0.85	0.84



## Indoor Air Quality

Certificate / Label

Eurofins Indoor Air Comfort®

IAC

French VOC

A

Finnish M1

•



## Environmental Footprint

Kg CO<sub>2</sub> equiv/m<sup>2</sup>: 2,21 From family EPD in conformity with ISO 14025 / EN 15804



## Circularity

Minimum post-consumer recycled content

44%

Recyclability

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



### Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



### Advanced Cleanability

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; Sulphamidic 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	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



### System weight

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The weight of the system (including suspension grid) should be approximately 3-4 kg/m<sup>2</sup>.



### Installation

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



### Accessibility

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The tiles are demountable. Minimum demounting depth according to installation diagram. The tiles are secured using clips to allow for effective cleaning. The clips are easily removable from above the ceiling. An easy-to-open Connect Inspection hatch is available to simplify access to the ceiling void.



### Mechanical properties

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See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at [www.ecophon.com](http://www.ecophon.com).

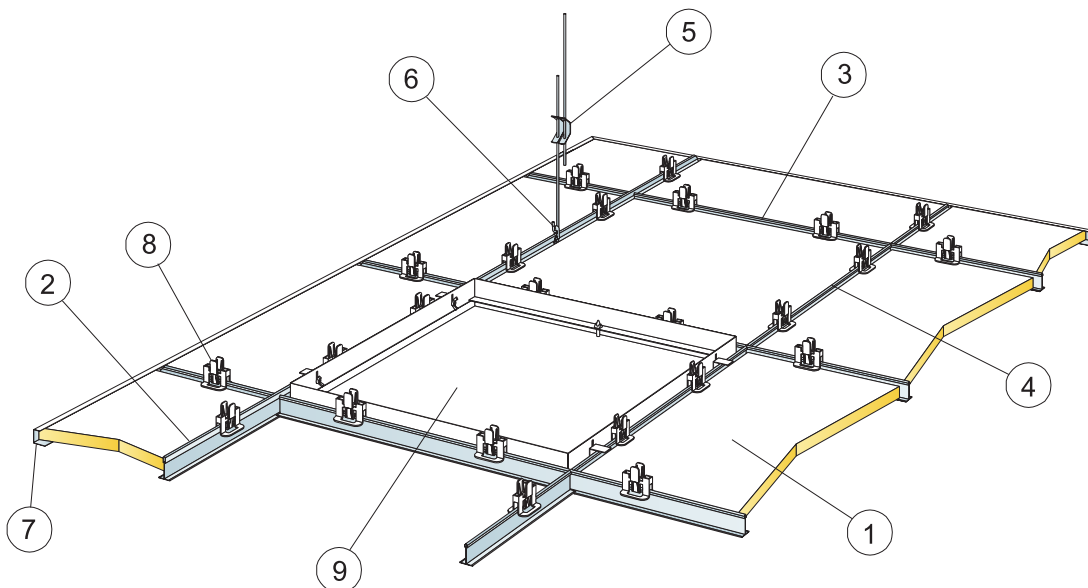


### CE

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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.

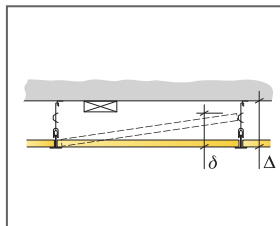
## INSTALLATION DIAGRAM (M257) FOR ECOPHON HYGIENE PROTEC™ A



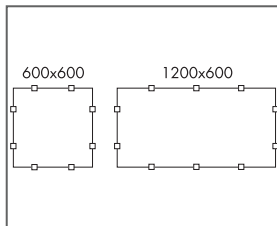
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### QUANTITY SPECIFICATION (EXCL. WASTAGE)

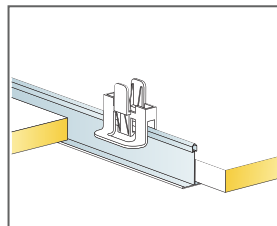
	Size, mm	
	600x600	1200x600
1 Hygiene Protec A	2,8/m <sup>2</sup>	1,4/m <sup>2</sup>
2 Connect T24 Main Runner, installed at 1200 mm centres (max distance from wall 300 mm)	0,9m/m <sup>2</sup>	0,9m/m <sup>2</sup>
3 Connect T24 Cross Tee, L=1200 mm, installed at 600 mm centres	1,7m/m <sup>2</sup>	1,7m/m <sup>2</sup>
4 Connect T24 Cross Tee, L=600 mm	0,9m/m <sup>2</sup>	-
5 Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
6 Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
7 Connect Channel Trim, fixed c300	as required	as required
8 Connect Hygiene Clip 20	11/m <sup>2</sup>	7/m <sup>2</sup>
9 Connect Inspection Hatch	as required	as required
Δ Min. overall depth of system: 150 mm	-	-
δ Min. demounting depth: 150 mm	-	-



See Quantity Specification



Arrangement of clips



Connect Hygiene Clips for keeping tiles in position

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

Live load/load bearing capacity