

# 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.



#### **SYSTEM RANGE**



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



Hygiene Protec A tile



Hygiene Protec A C1 section with Connect Hygiene clip 20



Hygiene Protec A system

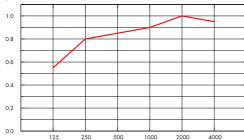
#### Acoustic



#### **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.

 $\alpha_{\text{p}}\text{,}$  Practical sound absorption coefficient



o.d.s = overall depth of system

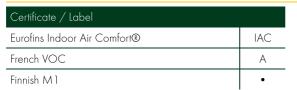
- Hygiene Protec A 20 mm, 200 mm o.d.s.

Frequency Hz

THK	o.d.s. mm	$lpha_{ m p}$ , Practical sound absorption coefficient				$\alpha_{\scriptscriptstyle{W}}$	Sound absorption class		
mm	0.d.s. IIIIII	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz		Sound absorption class	
20	200	0.55	0.80	0.85	0.90	1.00	0.95	0.90	A

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

### **Indoor Air Quality**









#### **Environmental Footprint**



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



#### Circularity

Minimum post-consumer recycled content	44%
Recyclability	Fully recyclable



#### Fire safety

Country		Class	The glass wool core of the tiles is tested and classified as
Europe	EN 13501-1	A2-s1,d0	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; 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/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

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



#### Installation

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

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.



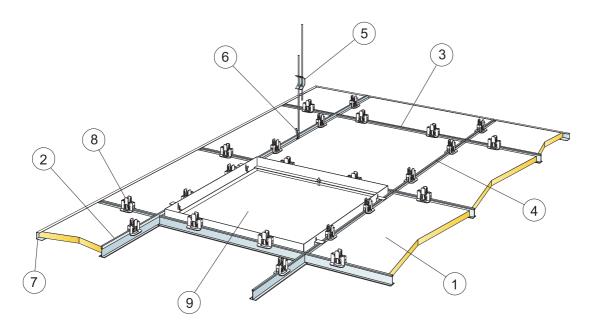
#### **Mechanical properties**

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



#### CE

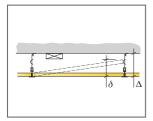
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



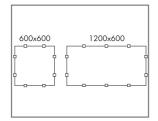
## © Ecophon Group

#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

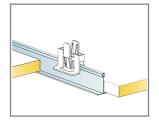
		Size, mm	
		600×600	1200×600
1	Hygiene Protec A	2,8/m²	1,4/m²
2	Connect T24 Main Runner, installed at 1200 mm centres (max distance from wall 300 mm)	0,9m/m <sup>2</sup>	0,9m/m²
3	Connect T24 Cross Tee, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²
4	Connect T24 Cross Tee, L=600 mm	0,9m/m <sup>2</sup>	-
5	Connect Adjustable Hanger, installed at 1200 mm centres [max. distance from wall 600 mm]	0,7/m²	0,7/m²
6	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²
7	Connect Channel Trim, fixed c300	as required	as required
8	Connect Hygiene Clip 20	11/m²	7/m²
9	Connect Inspection Hatch	as required	as required
	$\Delta$ Min. overall depth of system: 150 mm		-
	$\delta$ 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)	
600x600x20	50	160
1200x600x20	50	160

Live load/load bearing capacity