# Ecophon Hygiene Advance™ ∧

Ecophon Hygiene Advance™ A is a soundabsorbing ceiling with an exposed grid that sustains daily advanced cleaning and disinfection with strong chemicals. Suitable for the most demanding conditions. Available with corrosion class C3 grids for humid areas and C4 grids for constantly wet areas. Hygiene Advance Technical tiles should be used where there are penetrations in the ceiling.



SYSTEM RANGE

Size, mm	600x600	600x600	1200x600	1200x600
T24	•	•	•	•
Thickness	20	40	20	40
Inst. Diagr.	M246C4, M252C3	M246C4, M252C3	M246C4, M252C3	M246C4, M252C3







#### Hygiene Advance A tile

-1/1/~

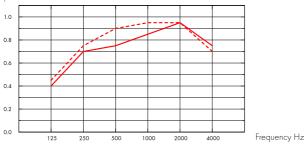
#### Acoustic

Hygiene Advance Technical tile has no performance determined (n.p.d.) for sound absorption.

#### 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.

 $lpha_{_{
m D'}}$  Practical sound absorption coefficient



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

--- Hygiene Advance A 40 mm, 200 mm o.d.s. o.d.s = overall depth of system

ТНК	o.d.s. mm	$lpha_{ m p\prime}$ Practical sound absorption coefficient				- α <sub>w</sub>	Sound absorption class		
mm		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
20	200	0.40	0.70	0.75	0.85	0.95	0.75	0.85	В
40	200	0.45	0.75	0.90	0.95	0.95	0.70	0.90	A

THK mm	o.d.s. mm	NRC	SAA
20	200	0.80	0.76
20	400	0.80	0.79
40	200	0.75	0.76
40	400	0.75	0.76



#### **Indoor Air Quality**

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



### **Environmental Footprint**

$\sum_{i=1}^{n}$		kg CO2 equiv/m²	Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804
	Advance A 420mm	9,32	14023 / LIN 13804
	Advance A 40mm	16,23	



### Circularity

)	Minimum post-consumer recycled content	59%
	Recyclability	Fully recyclable

# Fire safety

I	Country		Class	The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182.
	Europe	EN 13501-1	A2-s1,d0	hori-composible according to LTA ISO TT 82.



# **Humidity Resistance**

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



# Visual appearance

White 141, nearest NCS colour sample S 1000-N, 73% light reflectance. Please note: There is a small difference in gloss and appearance between the Hygiene Advance tile and the Hygiene Advance technical tile.



# Cleanability

Daily dusting, vacuum cleaning and wet wiping.



# **Advanced Cleanability**

High and low pressure cleaning with water and steam cleaning. Withstand use of hydrogen peroxide vapor and compatible with UV-C disinfection, BIFMA HCF 8.1-2019.



# **Chemical resistance/Disinfection**

Chemical	Concentration
Formalin	37%
Ammoniac	25%
Hydrogen peroxide	30%
Sulfuric acid	5%
Phosphoric acid	30%
Peracetic acid	15%
Hydrochloric acid	5%
Isopropanol	100%
Sodium hydroxide	5%
Sodium hypochlorite	5%

Tested according to ISO 2812-1 and classified according to ISO 4628-1 with excellent result for the following chemicals.



### **Mould and Bacterial Resistance**

Standard/Method	
ISO 846 A	1
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



#### Air permeability

Product	Q50, positive (m3/m2/h)	Q50, positive (I/s/m2)	Q50, negative (m3/m2/h)	Q50, negative (I/s/m2)
Hygiene Advance A 20mm	38,8	10,8	28,6	7,9
Hygiene Advance A 40mm	10,3	2,9	10,0	2,8

Measured at positive respective negative room pressure at 50 Pa (Q50) EN ISO 9972 :2015



# Accessibility

The tiles are demountable. Minimum demounting depth according to installation diagram. The tiles are secured using Connect Hygiene Clip to allow for effective cleaning. The clips are easily removable from above the ceiling. Connect Democlips 20 C4 are available to simplify access to the ceiling void.



### Installation

Installed according to installation diagrams, installation guides and drawing aid. Cut tiles must be sealed with Connect Hygiene Advance Tape. Penetrations must be sealed with a suitable sealant.



### System weight

The weight of the system (including suspension grid) should be approximately 3 kg/m<sup>2</sup> for 20 mm thickness and 4,5 kg/m<sup>2</sup> for 40 mm thickness.



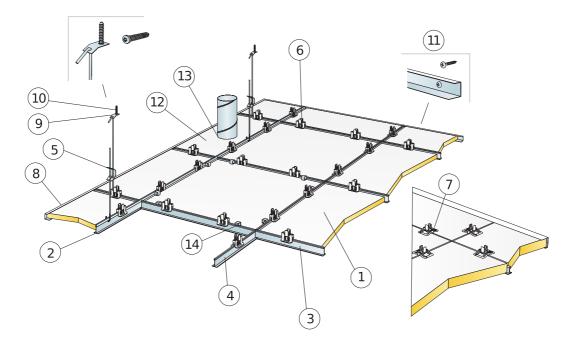
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### **Mechanical properties**

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

# CE

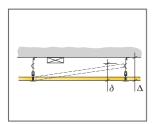
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



# © Ecophon Group

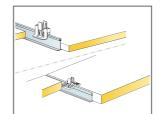
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm	Size, mm	
	600×600	1200×600	
Hygiene Advance A	2,8/m²	2,8/m²	
Connect T24 Main Runner C4, c1200	0,9m/m²	0,9m/m²	
Connect T24 Cross Tee C4, L=1200, c600	1,7m/m²	1,7m/m²	
Connect T24 Cross Tee C4, L=600	0,9m/m²	0,9m/m²	
Connect Adjustable Hanger C4, c1200, (max 600 mm distance from wall)	0,7/m²	0,7/m²	
Connect Hygiene Clip 20	11/m²	11/m²	
Connect Hygiene Clip 40 C4	11/m²	11/m²	
Connect Channel Trim C4, fixed at c300 mm	as required	as required	
Connect Fixing Plate C4	0,7/m <sup>2</sup>	0,7/m²	
Connect Anchor Screw C4	0,7/m <sup>2</sup>	0,7/m²	
Connect Installation Screw C4	3,4/Im Channel	trim C4	
Hygiene Advance Technical Tile	as required	as required	
Joint sealant (not supplied by Ecophon)	as required	as required	
Connect Demo Clip 20 C4, {where access is needed}	as required	as required	
Connect Hygiene Advance Tape	as required	as required	
$\Delta$ Min. overall depth of system: 1.50 mm			
$\delta$ Min. demounting depth: 150 mm			
	Connect T24 Main Runner C4, c1200         Connect T24 Cross Tee C4, L=1200, c600         Connect T24 Cross Tee C4, L=600         Connect Adjustable Hanger C4, c1200, (max 600 mm distance from wall)         Connect Hygiene Clip 20         Connect Hygiene Clip 40 C4         Connect Fixing Plate C4         Connect Fixing Plate C4         Connect Installation Screw C4         Hygiene Advance Technical Tile         Joint sealant (not supplied by Ecophon)         Connect Hygiene Advance Tape         Δ Min. overall depth of system: 150 mm	Hygiene Advance A         2,8/m²           Connect T24 Main Runner C4, c1200         0,9m/m²           Connect T24 Cross Tee C4, L=1200, c600         1,7m/m²           Connect T24 Cross Tee C4, L=1200, c600         0,9m/m²           Connect T24 Cross Tee C4, L=600         0,9m/m²           Connect T24 Cross Tee C4, L=600         0,7m²           Connect Hygiene Clip 20         11/m²           Connect Hygiene Clip 40 C4         11/m²           Connect Fixing Plate C4         0,7/m²           Connect Isolallation Screw C4         3,4/in Channel           Hygiene Advance Technical Tile         as required           Joint sealant (not supplied by Ecophon)         as required           Connect Hygiene Advance Tape         as required           Connect Hygiene Advance Tape         as required	



See Quantity Specification

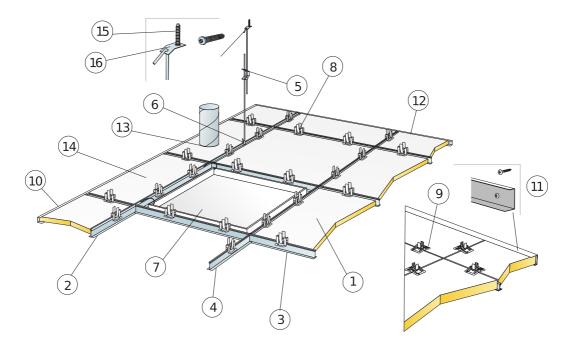
Arrangement of clips



Clip for keeping tiles in place for 20/40  $\ensuremath{\mathsf{mm}}$  tiles

Size, mm	Max live load (N)	Min load bearing capacity (N)
600x600x20	40	160
600x600x40	40	160
1200x600x20	40	160
1200x600x40	40	160

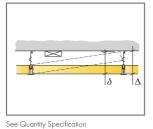
Live load/load bearing capacity

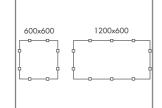


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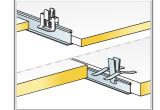
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	
		600×600	1200×600
1	Hygiene Advance A	2,8/m²	2,8/m²
2	Connect T24 Main Runner C3, installed at 1200 mm centres	0,9m/m²	0,9m/m²
3	Connect T24 Cross Tee C3 9102, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²
4	Connect T24 Cross Tee C3 9103, L=600 mm	0,9m/m²	0,9m/m²
5	Connect Adjustable Hanger C3, c1200 (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 Inspection Hatch C3	as required	as required
8	Connect Hygiene Clip 20 0172	11/m <sup>2</sup>	11/m²
9	Connect Hygiene Clip 40 3254	11/m <sup>2</sup>	11/m²
10	Connect Channel Trim C3 (for 20 mm thickness)	as required	as required
11	Connect Channel Trim C3 3465 (for 40 mm thickness)	as required	as required
12	Connect Hygiene Advance Tape	as required	as required
13	Joint sealant (not supplied by Ecophon)	as required	as required
14	Hygiene Advance Technical Tile	as required	as required
15	Connect Anchor Screw C4	0,7/m²	0,7/m²
16	Connect Fixing Plate C4	0,7/m²	0,7/m²
	$\Delta$ Min. overall depth of system: 150 mm		
	$\delta$ Min. demounting depth 20 mm: 150 mm		
	$\delta$ Min. demounting depth 40 mm: 170 mm	-	





Arrangement of clips



 
 Size, mm
 Max live load (N)
 Min load bearing capacity (N)

 600x600x20
 40
 160

 600x600x40
 40
 160

 1200x600x20
 40
 160

 1200x600x40
 40
 160

Clips for keeping tiles in place

