

# Ecophon Hygiene Clinic™ A

Ecophon Hygiene Clinic<sup>™</sup> A has an exposed grid, suitable for dry areas. The absorbers have low emission levels, ensuring high indoor air quality. They are resistant to mould and bacteria growth and withstand HPV cleaning.





Size, mm	600x600	1200x600
T24	•	•
Thickness	15	15
Inst. Diagr.	M338	M338







Section of Hygiene Clinic A system

Hygiene Clinic A tile

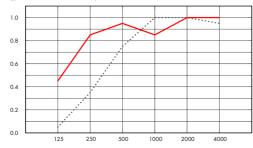
Hygiene Clinic A system



## **Sound Absorption:**

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

 $\alpha_{\mbox{\scriptsize n}\mbox{\scriptsize r}}$  Practical sound absorption coefficient



- Hygiene Clinic A 15 mm, 50 mm o.d.s.Hygiene Clinic A 15 mm, 200 mm o.d.s
- Hygiene Clinic A 15 mm, 200 mm o.d.s.
   o.d.s = overall depth of system

Frequency Hz

THK	ods mm	$lpha_{p}$ , Practical sound absorption coefficient			α <sub>w</sub>	Sound absorption class			
mm	O.d.s. IIIIII	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	o. <sub>w</sub>	Journal absorption class
15	50	0.05	0.35	0.75	1.00	1.00	0.95	0.65	С
15	200	0.45	0.85	0.95	0.85	1.00	1.00	0.95	А

THK mm	o.d.s. mm	NRC	SAA
15	50	0.80	0. <i>7</i> 9
15	200	0.90	0.91



## **Indoor Air Quality**

Certificate / Label			
Eurofins Indoor Air Comfort®	IAC		
French VOC	А		
Finnish M 1	•		









#### **Environmental Footprint**

	kg CO2 equiv/m²
Hygiene Clinic A	2,60

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



## **Circularity**

Minimum post-consumer recycled content	46%
Recyclability	Fully recyclable



#### Fire safety

	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**

Can withstand use of hydrogen peroxide vapour.



#### **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 4
NF S 90-351	Microbiological class	M1/area 4
NF S 90-351	Particle elimination kinetics	CP(0,5) 5



#### **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.



#### System weight

The weight of the system (including suspension grid) should be approximately 2,5 kg/m².



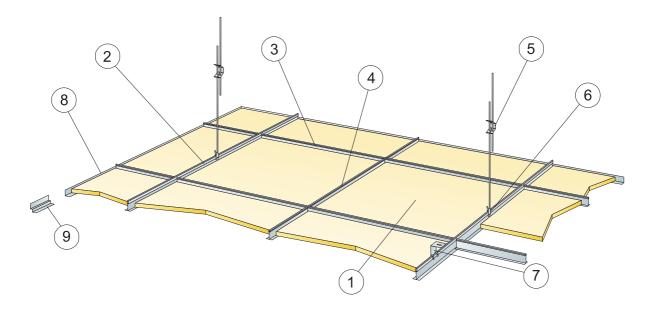
#### **Mechanical properties**

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

#### CE



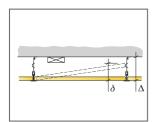
Ecophon ceiling systems are CE marked according to the European harmonized standard EN 13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



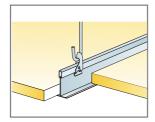
## © Ecophon Group

## QUANTITY SPECIFICATION (EXCL. WASTAGE)

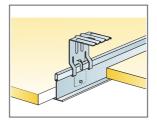
		Size, mm	
		600×600	1200×600
1	Hygiene Clinic A	2,8/m²	1,4/m²
2	Connect T24 Main Runner, installed at 1200 mm centres (max distance from wall 300 mm)	0,9m/m²	0,9m/m²
3	Connect T24 Cross Tee, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²
4	Connect T24 Cross Tee, L=600 mm	0,9m/m²	-
5	Connect Adjustable 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	For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m²	0,7/m²
8	Connect Angle Trim, fixed at 300 mm centres	as required	as required
9	Connect Shadow-line Trim, fixed at 300 mm centres	as required	as required
	$\Delta$ Min. overall depth of system, with adjustable hanger: 100 mm, with direct bracket: 50 mm	-	-
	δ Min. demounting depth: 120 mm	-	



See Quantity Specification



Suspension with Connect Adjustable Hanger and Connect Hanger Clip



Suspension with Connect Direct Bracket

Size, mm	Max live load (N)	Min load bearing capacity (N)
600x600x15	50	160
1200x600x15	50	160

Live load/load bearing capacity



# Ecophon Hygiene Clinic™ E

Ecophon Hygiene Clinic™ E has a recessed visible grid and a tegular edge design, suitable for dry areas. The absorbers have low emission levels, ensuring high indoor air quality. They are resistant to mould and bacteria growth and withstand HPV cleaning.





Size, mm		
	600x600	1200x600
T24	•	•
Thickness	15	15
Inst. Diagr.	M339	M339







Section of Hygiene Clinic E system



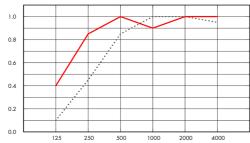
Hygiene Clinic E system



## **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.

 $\alpha_{\mbox{\scriptsize n}}$ , Practical sound absorption coefficient



Frequency Hz

- ···· Hygiene Clinic E 15 mm, 60 mm o.d.s.
- Hygiene Clinic E 15 mm, 200 mm o.d.s.
- o.d.s = overall depth of system

THK	o.d.s. mm		$lpha_{p'}$ Pr	actical sound	d absorption c	oefficient		$\alpha_{\scriptscriptstyle{ ext{W}}}$	Sound absorption class
mm	O.d.s. IIIIII	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	~ <sub>₩</sub>	
15	60	0.10	0.45	0.85	1.00	1.00	0.95	0.75	С
15	200	0.40	0.85	1.00	0.90	1.00	1.00	1.00	А



## **Indoor Air Quality**

Eurofins Indoor Air Comfort®	IAC			
French VOC	Α			
Finnish M1	•			









#### **Environmental Footprint**

kg CO2 equiv/m²
Hygiene Clinic E 2,20

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



## Circularity

Minimum post-consumer recycled content	45%
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**

Can withstand use of hydrogen peroxide vapour.



#### **Mould and Bacterial Resistance**

Standard/Method	
ISO 846 A	0
ISO 846 C	0



#### **Clean Room**

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



#### 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.



## System weight

The weight of the system (including suspension grid) should be approximately 2,5 kg/m<sup>2</sup>.



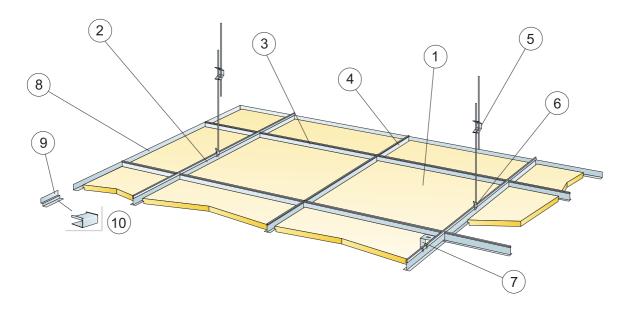
## **Mechanical properties**

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



#### CE

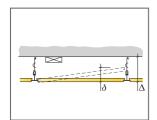
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



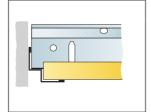
## © Ecophon Group

## QUANTITY SPECIFICATION (EXCL. WASTAGE)

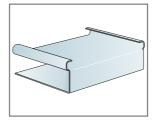
		Size, mm	
		600×600	1200×600
1	Hygiene Clinic E	2,8/m²	1,4/m²
2	Connect T24 Main Runner, installed at 1200 mm centres [max distance from wall 300 mm]	0,9m/m²	0,9m/m²
3	Connect T24 Cross Tee, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²
4	Connect T24 Cross Tee, L=600 mm	0,9m/m²	-
5	Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²
5	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²
7	For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m²	0,7/m²
3	Connect Angle Trim, fixed at 300 mm centres	as required	as required
7	Connect Shadow-line Trim, fixed at 300 mm centres	as required	as required
10	Connect E-plug 0158/0154 (for Connect Shadow-line Trim)	as required	as required
	$\Delta$ Min. overall depth of system, with adjustable hanger: 110 mm, with direct bracket: 60 mm.	-	-
	$\delta$ Min. demounting depth: T15: 110 mm, T24: 90 mm	-	



See Quantity Specification



Straight cut and T-profile on top of Connect Shadow-line Trim



Connect E-plug

load (N) 50	Min load bearing capacity (N) 160
50	160
	50

Live load/load bearing capacity



# Ecophon Hygiene Meditec™

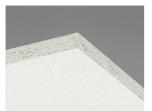
A

Ecophon Hygiene Meditec™ A has an exposed grid, suitable for dry areas where disinfection and/or cleaning is required on a regular basis. The surface is resistant to mould and bacteria growth and common detergents and disinfectants. The absorbers have low emission levels, ensuring high indoor air quality.





Size, mm	600x600	1200x600
T24	•	•
Thickness	15	15
Inst. Diagr.	M255	M255



Hygiene Meditec A tile



Hygiene Meditec A C1 section with Connect Universal clip



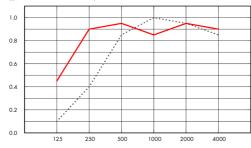
Hygiene Meditec A C1 system



## **Sound Absorption:**

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

 $\alpha_{\mbox{\scriptsize n}}$ , Practical sound absorption coefficient



Frequency Hz

- ···· Hygiene Meditec A 15 mm, 50 mm o.d.s.
- Hygiene Meditec A 15 mm, 200 mm o.d.s.
   o.d.s = overall depth of system

THK	o.d.s. mm		$lpha_{p'}$ Pr	actical sound	d absorption c	coefficient		$\alpha_{_{\!\scriptscriptstyle{ m W}}}$	Sound absorption class
mm	0.0.3. 111111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	o.w	
15	50	0.10	0.40	0.85	1.00	0.95	0.85	0.70	С
15	200	0.45	0.90	0.95	0.85	0.95	0.90	0.95	A

THK mm	o.d.s. mm	NRC	SAA
15	50	0.80	0.83
15	400	0.85	0.89



## **Indoor Air Quality**

Certificate / Label				
Eurofins Indoor Air Comfort®	IAC			
French VOC	А			
Finnish M 1	•			









#### **Environmental Footprint**

	kg CO2 equiv/m²
Hygiene Meditec A	2,70

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	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**

Can withstand use of hydrogen peroxide vapour.



#### **Surface Endurance**

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



## **Chemical resistance/Disinfection**

Chemical		
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		
ISO 14644	Particle cleanliness class	ISO 4
NF S 90-351	Microbiological class	M1/area 4
NF S 90-351	Particle elimination kinetics	CP(0,5) 5



#### Accessibility

The tiles are demountable. Minimum demounting depth according to installation diagram. The tiles are secured using Hygiene Clip 20 to allow for effective in-situ cleaning. The clips are easily removable from above the ceiling. A tightly sealed, easy-to-open Hygiene Inspection hatch is available to simplify access to the ceiling void.



#### 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.



## **Mechanical properties**

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



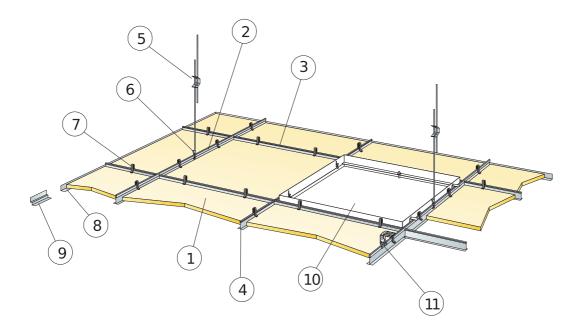
#### System weight

The weight of the system (including suspension grid) should be approximately  $2,5~{\rm kg/m^2}$ .



#### CE

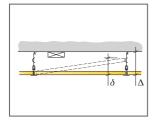
Ecophon ceiling systems are CE marked according to the European harmonized standard EN 13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



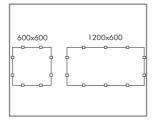
## © Ecophon Group

## QUANTITY SPECIFICATION (EXCL. WASTAGE)

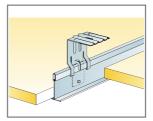
		Size, mm	Size, mm	
		600×600	1200×600	
1	Hygiene Meditec A	2,8/m²	1,4/m²	
2	Connect T24 Main Runner, installed at 1200 mm centres (max distance from wall 300 mm)	0,9m/m²	0,9m/m²	
3	Connect T24 Cross Tee, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²	
4	Connect T24 Cross Tee, L=600 mm	0,9m/m²	-	
5	Connect Adjustable Hanger, installed at 1200 mm centres [max. distance from wall 600 mm]	0,7/m²	0,7/m²	
5	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²	
7	Connect Universal Clip 0083	11/m²	7/m²	
8	Alt. Connect Angle Trim, fixed c300	as required	as required	
9	Alt. Connect Shadow-line Trim, fixed c300	as required	as required	
10	Connect Inspection Hatch	as required	as required	
11	For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m²	0,7/m²	
	$\Delta$ Min. overall depth of system, with adjustable hanger and clip: 150 mm, with direct fixing wituout clip: 50 mm.		-	
	$\delta$ Min. demounting depth: With clip: 150 mm. Without clip: 100 mm.			



See Quantity Specification



Arrangement of clips



Suspension with Connect Direct Bracket

Size, mm 600x600x15	Max live load (N) 50	
1200x600x15	50	160

Live load/load bearing capacity



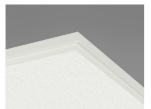
## Ecophon Hygiene Meditec™ E

Ecophon Hygiene Meditec™ E has a recessed visible grid and a tegular edge design, suitable for dry areas where disinfection and/or cleaning is required on a regular basis. The surface is resistant to mould and bacteria growth and to common detergents and disinfectants.





Size, m	m	600x600	1200x600
T24		•	•
Thickne	ess	15	15
Inst. Die	agr.	M256	M256



Hygiene Meditec E tile



Hygiene Meditec E C1 section with Connect Universal clip



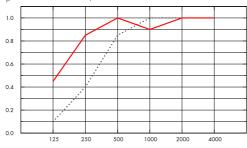
Hygiene Meditec E C1 system



## **Sound Absorption:**

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

#### $lpha_{\scriptscriptstyle D}$ , Practical sound absorption coefficient



Frequency Hz

- ···· Hygiene Meditec E 15 mm, 60 mm o.d.s.
- Hygiene Meditec E 15 mm, 200 mm o.d.s.
   o.d.s = overall depth of system

THK	THK o.d.s. mm $\alpha_{p'}$ Practical sound absorption coefficient					$\alpha_{_{\!\scriptscriptstyle{W}}}$	Sound absorption class		
mm	0.u.s. IIIIII	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	w.	Sound absorption class
15	60	0.10	0.40	0.85	1.00	1.00	1.00	0.70	С
15	200	0.45	0.85	1.00	0.90	1.00	1.00	1.00	А

THK mm	o.d.s. mm	NRC	SAA
15	60	0.90	0.87
15	400	0.85	0.89



## **Indoor Air Quality**

Eurofins Indoor Air Comfort®	IAC
French VOC	А
Finnish M 1	•









#### **Environmental Footprint**

Hygiene Meditec E	2,40

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



## **Circularity**

Minimum post-consumer recycled content	43%
Recyclability	Fully recyclable



#### Fire safety

	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**

Can withstand use of hydrogen peroxide vapour.



#### **Mould and Bacterial Resistance**

Standard/Method	
ISO 846 A	0
ISO 846 C	0



### **Surface Endurance**

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



## **Chemical resistance/Disinfection**

Chemical		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.



#### **Clean Room**

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



#### Accessibility

The tiles are demountable. Minimum demounting depth according to installation diagram. The tiles are secured using Hygiene Clip 20 to allow for effective in-situ cleaning. The clips are easily removable from above the ceiling. A tightly sealed, easy-to-open Hygiene Inspection hatch is available to simplify access to the ceiling void.



#### 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 2,5 kg/m².



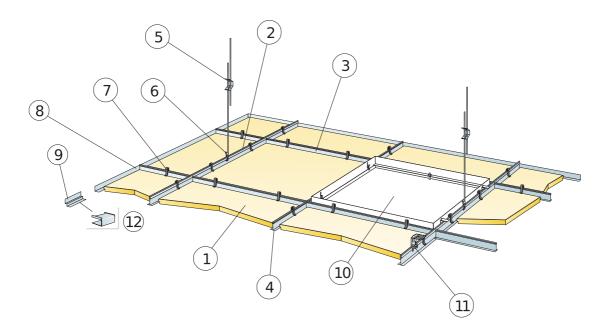
#### **Mechanical properties**

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



#### CE

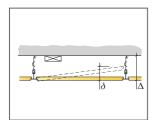
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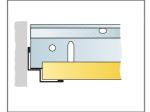
## © Ecophon Group

## QUANTITY SPECIFICATION (EXCL. WASTAGE)

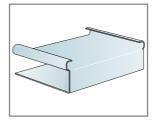
Size, mr	Size, mm	
600×60	0 1200×600	
2,8/m²	1,4/m²	
0,9m/m²	0,9m/m²	
1,7m/m²	1,7m/m²	
0,9m/m²	-	
0,7/m²	0,7/m²	
0,7/m²	0,7/m²	
11/m²	$7/\mathrm{m}^2$	
as require	d as required	
as require	d as required	
as require	d as required	
0,7/m²	0,7/m²	
as require	d as required	
	-	
	-	
	600x60  2,8/m²  0,9m/m²  1,7m/m²  0,9m/m²  0,7/m²  11/m²  as require as require as require as require	



See Quantity Specification



Straight cut and T-profile on top of Connect Shadow-line Trim



Connect E-plug

Size, mm	Max live load (N)	capacity (N)
600x600x15	50	160
1200x600x15	50	160

Live load/load bearing capacity



## 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.





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



Hygiene Protec A tile



Hygiene Protec A C1 section with Connect Hygiene clip 20



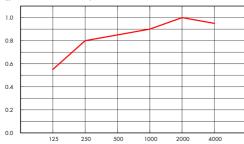
Hygiene Protec A system



## **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.

 $\alpha_{\mbox{\scriptsize n}}$ , 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		$lpha_{p'}$ Pr	actical sound	d absorption c	oefficient		α,,,	Sound absorption class
mm	0.0.3. 111111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	u <sub>w</sub>	
20	200	0.55	0.80	0.85	0.90	1.00	0.95	0.90	А

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



## **Indoor Air Quality**

Eurofins Indoor Air Comfort®	IAC
French VOC	А
Finnish M1	•









## **Environmental Footprint**

Hygiene Protec A	2,21

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

	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**

Steam cleaning. Can withstand use of hydrogen peroxide vapour.



#### **Surface Endurance**

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



## **Chemical resistance/Disinfection**

Chemical		
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		
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 Hygiene Clip 20 to allow for effective in-situ cleaning. The clips are easily removable from above the ceiling. A tightly sealed, easy-to-open Hygiene Inspection hatch is available to simplify access to the ceiling void.



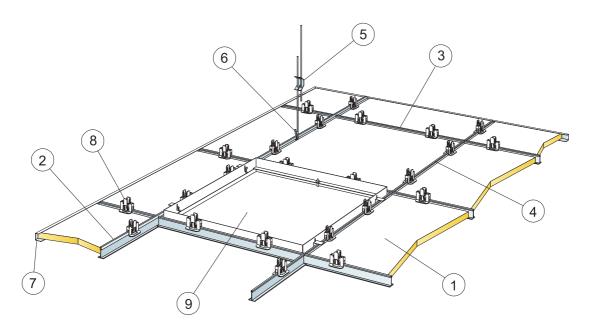
#### **Mechanical properties**

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



#### CE

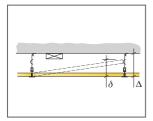
Ecophon ceiling systems are CE marked according to the European harmonized standard EN 13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



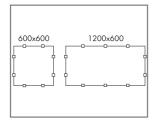
## © Ecophon Group

## QUANTITY SPECIFICATION (EXCL. WASTAGE)

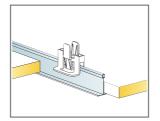
		Size, mm	
		600×600	1200×600
1	Hygiene Protec A	2,8/m²	1,4/m²
2	Connect T24 Main Runner, installed at 1200 mm centres (max distance from wall 300 mm)	0,9m/m²	0,9m/m²
3	Connect T24 Cross Tee, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²
4	Connect T24 Cross Tee, L=600 mm	0,9m/m²	-
5	Connect Adjustable 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 0172	11/m²	7/m²
9	Connect Inspection Hatch	as required	as required
	$\Delta$ Min. overall depth of system: 150 mm		-
	δ Min. demounting depth: 150 mm		







Arrangement of clips



Clips for keeping tiles in position

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

Live load/load bearing capacity



# 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 cealed absorbers have low emission levels, ensuring high indoor air quality. They are resistant to mould and bacteria growth.





Size, mm	600x600	1200x600
Т24	•	•
Thickness	20	20
Inst. Diagr.	M468	M468



Hygiene Protec Ds tile



Hygiene Protec Ds C1 section with Connect Hold down clip Ds



Sealed junction with wall



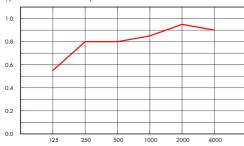
Hygiene Protec Ds C1 system



## **Sound Absorption:**

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

 $\alpha_{\mbox{\scriptsize n}}$ , Practical sound absorption coefficient



Hygiene Protec Ds 20 mm, 200 mm o.d.s.o.d.s = overall depth of system

Frequency Hz

THK	o.d.s. mm		α <sub>p′</sub> Pi	actical soun	d absorption c	oefficient		α,,,	Sound absorption class
mm	0.0.3. 111111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	₩.	Sound absorption class
20	200	0.55	0.80	0.80	0.85	0.95	0.90	0.85	В



## **Indoor Air Quality**

Certificate / Label	
Eurofins Indoor Air Comfort®	IAC
French VOC	Α
Finnish M 1	









## **Environmental Footprint**

kg CO<sub>2</sub> equiv/m<sup>2</sup>
Hygiene Protec Ds 7,10

life-cycle stages A1 to C4 from EPD, in conformity with ISO  $14025 \slash$  15804



#### **Circularity**

Minimum post-consumer recycled content	47%
Recyclability	Fully recyclable



## Fire safety

Country	Standard	Class
Europe	ENL13501-1	Δ2-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. Can withstand use of hydrogen peroxide vapour.



#### **Surface Endurance**

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



#### **Chemical resistance/Disinfection**

Chemical		
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**

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  $3-4\ kg/m^2$ .



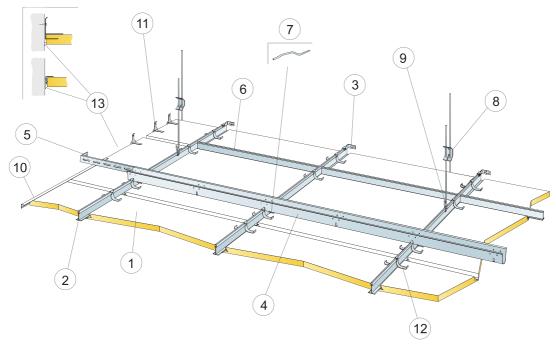
## **Mechanical properties**

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



## CE

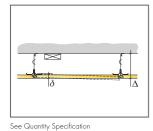
Ecophon ceiling systems are CE marked according to the European harmonized standard EN 13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

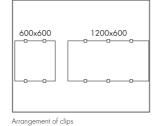


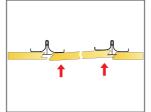
© Ecophon Group

## QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	
		600×600	1200×600
1	Hygiene Protec Ds	2,8/m²	1,4/m²
2	Connect T24 Main Runner HD, installed at 600 mm centres	1,7m/m²	1,7m/m²
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/m²	0,7m/m²
5	Connect Wall Bracket, L=700 mm, for Connect Space Bar	1/row of Space bar	
5	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/m²	1,4/m²
8	Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²
7	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²
10	Alt. Connect Frieze Trim, fixed c300 mm	as required	as required
11	Connect Frieze Bracket 0043, 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
	$\Delta$ Min. overall depth of system: 170 mm		
	$\delta$ Min. demounting depth: 30 mm		







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

Demounting of tile from below

Live load/load bearing capacity



## Ecophon Hygiene Protec™ Air

A

Ecophon Hygiene Protec™ Air A has an exposed grid and are particle repellent for clean rooms, where disinfection and/or cleaning is required on a regular basis. Suitable for areas requiring airpressure control. They are resistant to mould and bacteria growth and withstand HPV cleaning.





Size, mm				
	600x600	600x600	1200x600	1200x600
T24	•	•	•	•
Thickness	20	40	20	40
Inst. Diagr.	M469	M469	M469	M469



Hygiene Protec Air A tile



Hygiene Protec Air A C1 section with Connect Hygiene Clip 20



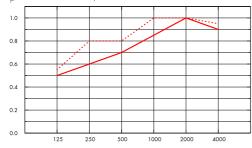
Hygiene Protec Air A C1 system



## **Sound Absorption:**

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

 $lpha_{\scriptscriptstyle D}$ , Practical sound absorption coefficient



Frequency Hz

- Hygiene Protec Air A 20 mm, 200 mm o.d.s.
- ···· Hygiene Protec Air A 40 mm, 200 mm o.d.s. o.d.s = overall depth of system

THK	o.d.s. mm		$lpha_{p'}$ Pr	actical sound	d absorption c	oefficient		$\alpha_{\scriptscriptstyle \!$	Sound absorption class
mm	O.G.3. IIIIII	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	o.,	Sound absorption class
20	200	0.50	0.60	0. <i>7</i> 0	0.85	1.00	0.90	0.80	В
40	200	0.55	0.80	0.80	1.00	1.00	0.95	0.90	A



## **Indoor Air Quality**

Certificate / Label	
Eurofins Indoor Air Comfort®	IAC
French VOC	А
Finnish M 1	









#### **Environmental Footprint**

	kg CO2 equiv/m²
Hvaiene Protec Air A	2.21

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



## **Circularity**

Minimum post-consumer recycled content	38%
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**

Steam cleaning. Can withstand use of hydrogen peroxide vapour.



#### **Surface Endurance**

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



#### **Chemical resistance/Disinfection**

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



## **Air permeability**

When mounted according to installation diagram M469: Hygiene Protec Air A: 20 mm:  $0.3 \text{ m}^3/(\text{h} \times \text{m}^2 \times \text{Pa})$  Hygiene Protec Air A: 40 mm:  $0.2 \text{ m}^3/(\text{h} \times \text{m}^2 \times \text{Pa})$ 



#### Accessibility

The tiles are demountable. Minimum demounting depth according to installation diagram. The tiles are secured using Hygiene Clip 20 to allow for effective in-situ cleaning. The clips are easily removable from above the ceiling. A tightly sealed, easy-to-open Hygiene Inspection hatch is available to simplify access to the ceiling void.



#### 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/m $^2$  for 20mm thickness and 4.5 kg/m $^2$  for 40mm thickness.



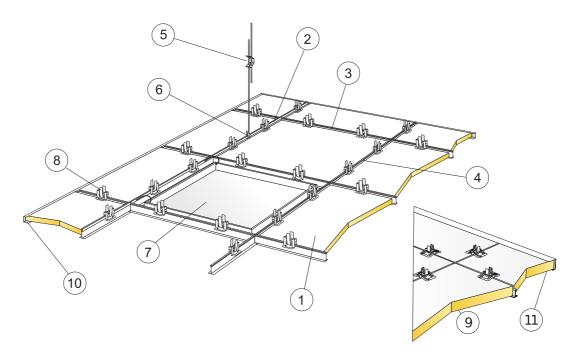
#### **Mechanical properties**

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



#### CE

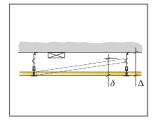
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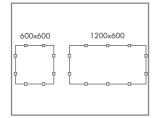
## © Ecophon Group

## QUANTITY SPECIFICATION (EXCL. WASTAGE)

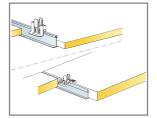
		Size, mm	Size, mm	
		600×600	1200×600	
1	Hygiene Protec Air A	2,8/m²	2,8/m²	
2	Connect T24 Main Runner, installed at 1200 mm centres (max distance from wall 300 mm)	0,9m/m²	0,9m/m²	
3	Connect T24 Cross Tee, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²	
4	Connect T24 Cross Tee, L=600 mm	0,9m/m²	0,9m/m²	
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 Inspection Hatch C3	as required	as required	
8	Connect Hygiene Clip 20	11/m²	11/m²	
9	Connect Hygiene Clip 40 3254	11/m²	11/m²	
10	Connect Channel Trim, fixed c300 (for 20 mm thickness)	as required	as required	
11	Connect Channel Trim, fixed c300 (for 40 mm thickness)	as required	as required	
	Connect Edge Sealant	as required	as required	
	$\Delta$ Min. overall depth of system: 150 mm			
	$\delta$ Min. demounting depth 20 mm: 150 mm			
	$\delta$ Min. demounting depth 40 mm: 170 mm			



See Quantity Specification



Arrangement of clips



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

Size, mm	Max live load (N)	Min load bearing capacity (N)
600x600x20	50	160
600x600x40	50	160
1200x600x20	50	160
1200x600x40	50	160

Live load/load bearing capacity



## Ecophon Hygiene Performance™ A

Ecophon Hygiene Performance<sup>TM</sup> A is suitable for humid areas and withstands advanced cleaning, such as steam and high/low pressure washing on a regular basis. The surface is resistant to common detergents and disinfectants.





Size, mm				
	600×600	600×600	1200x600	1200x600
T24	•	•	•	•
Thickness	20	40	20	40
Inst. Diagr.	M395C3, M266C4	M395C3, M266C4	M395C3, M266C4	M395C3, M266C4



Hygiene Performance A tile



Hygiene Performance A C3 section with Connect Hygiene clip 20



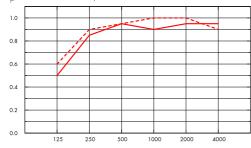
Hygiene Performance A system



## **Sound Absorption:**

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

 $lpha_{\scriptscriptstyle D}$ , Practical sound absorption coefficient



Frequency Hz

- Hygiene Performance A 20 mm, 200 mm o.d.s.
- --- Hygiene Performance A 40 mm, 200 mm o.d.s. o.d.s = overall depth of system

THK	o.d.s. mm	$lpha_{ m pr}$ Practical sound absorption coefficient					$\alpha_{\scriptscriptstyle  ext{w}}$	Sound absorption class	
mm	mm O.G.S. IIIIII	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	₩.	ootila absorption class
20	200	0.50	0.85	0.95	0.90	0.95	0.95	0.95	А
40	200	0.60	0.90	0.95	1.00	1.00	0.90	1.00	А



## **Indoor Air Quality**

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









#### **Environmental Footprint**

	kg CO2 equiv/m²
Hygiene Performance A 20 mm	2,4
Hygiene Performance A 40 mm	4,2

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



## Circularity

Minimum post-consumer recycled content	47%
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 D, relative humidity 97% and 50  $^{\circ}$ 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**

High and low pressure cleaning with water and steam cleaning. Withstand use of hydrogen peroxide vapour.



## **Surface Endurance**

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



# **Chemical resistance/Disinfection**

Chemical		Concentration
Actichlor plus	NaDCC (Sodium Dichloroisocyanurate)	1%
LifeClean	Chlorine dioxide	Undiluted
Ethanol	Ethanol	70%
Chlorine	Sodium Hypochlorite solution	2,5%
Virkon S	Dipotassium peroxodisulphate; Sulphamidic acid	1%
Isopropanol	Isopropyl Alcohol	70%
Oxivir Excel	Hydrogen peroxide	0,5%
Sumabac D10	Quaternary ammonium compound, Sodium carbonate	1%
Suredis VT1	n-(3-aminopropyl)-n- dodecylpropan-1,3-diamin	1%
Enduro Chlor VE5	Potassium hydroxide	1,5%
Aciplusfoam VF59	Nitric Acid	5%

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 4
NF S 90-351	Microbiological class	M1/area 4
NF S 90-351	Particle elimination kinetics	CP(0,5) 5



## **Accessibility**

The tiles are demountable. Minimum demounting depth according to installation diagram. The tiles are secured using Hygiene Clip 20 to allow for effective in-situ cleaning. The clips are easily removable from above the ceiling. A tightly sealed, easy-to-open Hygiene Inspection hatch is available to simplify access to the ceiling void.



#### 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.



## System weight

The weight of the system (including suspension grid) should be approximately 3-4 kg/m $^2$  for 20mm thickness and 5 kg/m $^2$  for 40mm thickness.



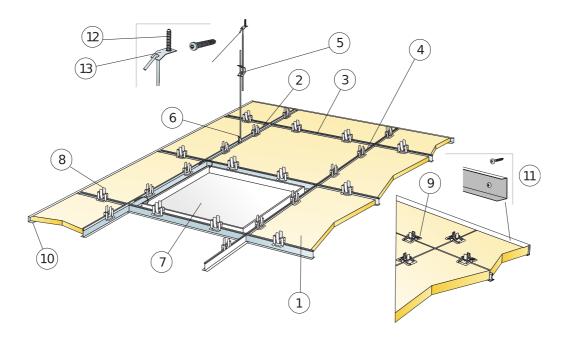
# **Mechanical properties**

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



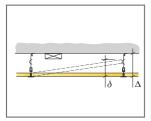
## CE

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.

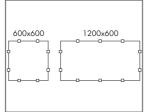


# © Ecophon Group

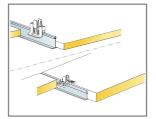
		Size, mm	
		600×600	1200×600
1	Hygiene Performance A	2,8/m²	2,8/m²
2	Connect T24 Main Runner C3, installed at 1200 mm centres	0,9m/m²	0,9m/m²
3	Connect T24 Cross Tee C3 9102, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²
4	Connect T24 Cross Tee C3 9103, L=600 mm	0,9m/m²	0,9m/m²
5	Connect Adjustable 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/m²	11/m²
7	Connect Hygiene Clip 40 3254	11/m²	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 Anchor Screw C4	0,7/m²	0,7/m²
13	Connect Fixing Plate C4	0,7/m²	0,7/m²
	$\Delta$ Min. overall depth of system: 1.50 mm		
	$\delta$ Min. demounting depth 20 mm: 150 mm		
	$\delta$ Min. demounting depth 40 mm: 170 mm		







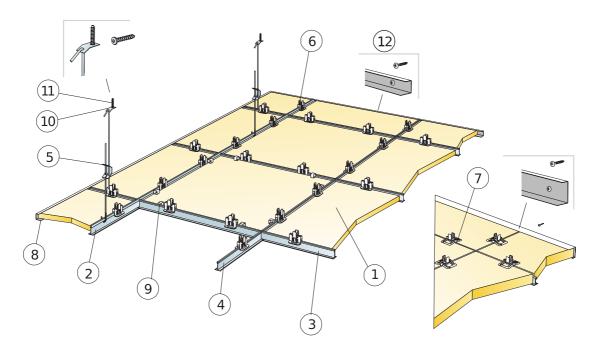
Arrangement of clips



Clip for keeping tiles in place for 20/40 mm tiles

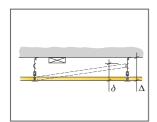
Size, mm	Max live load (N)	Min load bearing capacity (N)
600x600x20	50	160
600x600x40	50	160
1200x600x20	50	160
1200x600x40	50	160

Live load/load bearing capacity

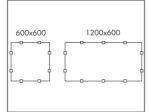


# © Ecophon Group

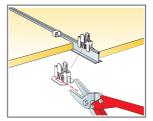
		Size, mm	
		600x600	1200×600
1	Hygiene Performance A	2,8/m²	2,8/m²
2	Connect T24 Main Runner C4, c1200	0,9m/m²	0,9m/m²
3	Connect T24 Cross Tee C4, L=1200, c600	1,7m/m²	1,7m/m²
4	Connect T24 Cross Tee C4, L=600	0,9m/m²	0,9m/m²
5	Connect Adjustable Hanger C4, c1200, (max 600 mm distance from wall)	0,7/m²	0,7/m²
6	Connect Hygiene Clip 20	11/m²	11/m²
7	Connect Hygiene Clip 40 C4	11/m²	11/m²
8	Connect Channel Trim C4, fixed at c300 mm	as required	as required
9	Connect Demo Clip 20 C4, (where access is needed)	as required	as required
10	Connect Fixing Plate C4	0,7/m²	0,7/m²
11	Connect Anchor Screw C4	0,7/m²	0,7/m²
12	Connect Installation Screw C4	3,4/lm Channel	trim C4
	$\Delta$ Min. overall depth of system: 150 mm	-	-
	$\delta$ Min. demounting depth: 150 mm		
	$\delta$ Min. demounting depth 40 mm: 170 mm		-



See Quantity Specification



Arrangement of clips



Cutting of Connect Hygiene Clip 20 at the inspection tile

Max live load (N)	Min load bearing capacity (N)
50	160
50	160
50	160
50	160
	load (N) 50 50 50

Live load/load bearing capacity



# Ecophon Hygiene Performance™ Ds

Ecophon Hygiene Performance<sup>TM</sup> Ds is a suspended ceiling with a concealed grid, where individual tiles must be easily demountable. Suitable for swimming pool areas, it's compatible in areas with high humidity, corrosivity and occasional direct water.



## **SYSTEM RANGE**



Size, mm	600x600	1200x600
T24	•	•
Thickness	20	20
Inst. Diagr.	M439C4	M439C4



Performance Ds tile



Section of Performance Ds system with Connect T24 Main Runner C4





The individual tiles are easily demountable

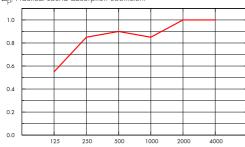


## **Acoustic**

# **Sound Absorption:**

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

 $lpha_{\scriptscriptstyle D}$ , Practical sound absorption coefficient



Hygiene Performance Ds 20 mm, 200 mm o.d.s.

o.d.s = overall depth of system

Frequency Hz

THK mm	o.d.s. mm	α <sub>p</sub> , Practical sound absorption coefficient		α <sub>w</sub>	Sound absorption class				
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	o.w	Sound absorption class
20	200	0.55	0.85	0.90	0.85	1.00	1.00	0.90	A



# **Indoor Air Quality**

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









# **Environmental Footprint**

 $\begin{tabular}{lll} $kg\ CO_2\ equiv/m^2$ \\ \end{tabular}$  Hygiene Performance Ds  $\begin{tabular}{lll} $4,5$ \\ \end{tabular}$ 

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



## **Circularity**

Minimum post-consumer recycled content	54%
Recyclability	Fully recyclable



# Fire safety

	Standard	Class	
Europe	EN 13501-1	A2-s1,d0	non-

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. Can withstand use of hydrogen peroxide vapour.



# **Surface Endurance**

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



## **Mould and Bacterial Resistance**

Standard/Method	
ISO 846 A	0
ISO 846 C	0



# **Chemical resistance/Disinfection**

Chemical		Concentration
Actichlor plus	NaDCC (Sodium Dichloroisocyanurate)	1%
LifeClean	Chlorine dioxide	Undiluted
Ethanol	Ethanol	70%
Chlorine	Sodium Hypochlorite solution	2,5%
Virkon S	Dipotassium peroxodisulphate; Sulphamidic acid	1%
Isopropanol	Isopropyl Alcohol	70%
Oxivir Excel	Hydrogen peroxide	0,5%
Sumabac D10	Quaternary ammonium compound, Sodium carbonate	1%
Suredis VT1	n-(3-aminopropyl)-n- dodecylpropan-1,3-diamin	1%
Enduro Chlor VE5	Potassium hydroxide	1,5%
Aciplusfoam VF59	Nitric Acid	5%

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



#### **Clean Room**

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



## 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. Penetrations must be sealed with a suitable sealant.



# System weight

The weight of the system (including suspension grid) should be approximately 3-4  ${\rm kg/m^2}$ .



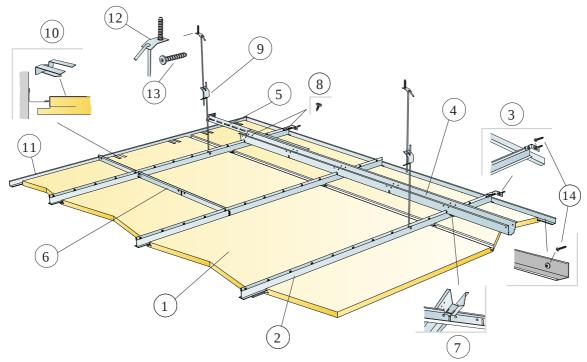
## **Mechanical properties**

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

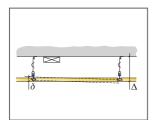


## CE

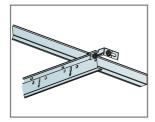
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



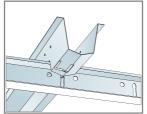
		Size, mm	
		600×600	1200×600
1	Hygiene Performance Ds	2,8/m²	1,4/m²
2	Connect T24 Main Runner C4, installed at 600 mm centres	1,7m/m²	1,7m/m²
3	Connect Wall Bracket C4 for T-profiles C4	1/suspended ro	w of Main runner
4	Connect Space Bar C4, installed at 1,500 mm centres (max. distance from wall 300 mm) for winch	0,7m/m²	0,7m/m²
5	Connect Wall Bracket C4, L=700 mm, for Connect Space Bar	1/row of Space	e bar
6	Connect T24 Cross Tee C4, L=600 mm	2/row of Main	runner
7	Connect Space Bar Winch C4, installed one per joint Connect Main Runner/Space Bar	1,4/m²	1,4/m²
8	C4 screw for wall brackets(included in products)		-
9	Connect Adjustable Hanger C4, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²
10	Connect Support Clip Dg20 C4	1 pc/300-400 r tile with only 1 s	nm on every cut perimeter upporting edge
11	Connect Angle Trim 15/22 C4, fixed at 300 mm centres	as required	as required
12	Connect Fixing Plate C4	0,7/m²	0,7/m²
13	Connect Anchor Screw C4	0,7/m²	0,7/m²
14	Connect Installation Screw C4	3,4/lm Channel	trim C4
	$\Delta$ Min. overall depth of system: 385 mm		-
	δ Min. demounting depth: 30 mm		-



See Quantity Specification



Secured Connect Main Runner C4 at wall with Connect Wall Bracket C4



Connection between profiles and Connect Space Bar Winch C4

Max live load (N)	Min load bearing capacity (N)
50	160
50	160
	load (N) 50

Live load/load bearing capacity



# Ecophon Hygiene Performance™ Plus A

Ecophon Hygiene Performance™ Plus A has an exposed grid with fully sealed robust Hygiene Performance™ Plus A tiles and suitable for humid areas. The ceiling withstands advanced cleaning, such as steam and high/low pressure washing on a regular basis. The surface is resistant to common detergents and disinfectants.



## **SYSTEM RANGE**



Size, mm				
	600x600	600x600	1200x600	1200x600
T24	•	•	•	•
Thickness	20	40	20	40
Inst. Diagr.	M466	M466	M466	M466



Hygiene Performance Plus A tile



Hygiene Performance Plus A C3 section with Connect Hygiene Clip 20



Hygiene Performance Plus A system

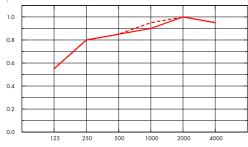


## Acoustic

## **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.

## $lpha_{\scriptscriptstyle D}$ , Practical sound absorption coefficient



- Hygiene Performance Plus A 20 mm, 200 mm o.d.s.
- --- Hygiene Performance Plus A 40 mm, 200 mm

o.d.s = overall depth of system

Frequency Hz

THK	o.d.s. mm	$lpha_{ m p'}$ Practical sound absorption coefficient					$\alpha_{_{\!\scriptscriptstyle{W}}}$	Sound absorption class	
mm	O.d.s. IIIIII	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	o. <sub>w</sub>	Journal absorption class
20	200	0.55	0.80	0.85	0.90	1.00	0.95	0.90	А
40	200	0.55	0.80	0.85	0.95	1.00	0.95	0.95	А

THK mm	o.d.s. mm	NRC	SAA
20	200	0.90	0.89
40	200	0.90	0.90



# **Indoor Air Quality**

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









# **Environmental Footprint**

Hygiene Performance Plus A	4,20

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

	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 D, relative humidity 97% and 50  $^{\circ}$  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**

High and low pressure cleaning with water and steam cleaning. Withstand use of hydrogen peroxide vapour.



## **Surface Endurance**

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



# **Chemical resistance/Disinfection**

Chemical		Concentration
Actichlor plus	NaDCC (Sodium Dichloroisocyanurate)	1%
LifeClean	Chlorine dioxide	Undiluted
Ethanol	Ethanol	70%
Chlorine	Sodium Hypochlorite solution	2,5%
Virkon S	Dipotassium peroxodisulphate; Sulphamidic acid	1%
Isopropanol	Isopropyl Alcohol	70%
Oxivir Excel	Hydrogen peroxide	0,5%
Sumabac D10	Quaternary ammonium compound, Sodium carbonate	1%
Suredis VT1	n-(3-aminopropyl)-n- dodecylpropan-1,3-diamin	1%
Enduro Chlor VE5	Potassium hydroxide	1,5%
Aciplusfoam VF59	Nitric Acid	5%

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

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#### **Mould and Bacterial Resistance**

Standard/Method	
ISO 846 A	0
ISO 846 C	0



## **Clean Room**

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



# **Accessibility**

The tiles are demountable. Minimum demounting depth according to installation diagram. The tiles are secured using Hygiene Clip 20 to allow for effective in-situ cleaning. The clips are easily removable from above the ceiling. A tightly sealed, easy-to-open Hygiene Inspection hatch is available to simplify access to the ceiling void.



## System weight

The weight of the system (including suspension grid) should be approximately  $3.5 \text{ kg/m}^2$  for 20 mm thickness and  $5 \text{ kg/m}^2$  for 40 mm thickness.



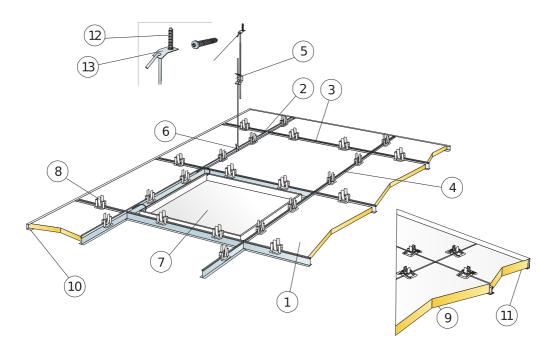
# **Mechanical properties**

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



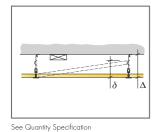
## CE

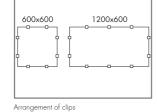
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

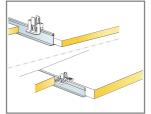


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		Size, mm	
		600×600	1200×600
1	Hygiene Performance Plus A	2,8/m²	2,8/m²
2	Connect T24 Main Runner C3, installed at 1200 mm centres	0,9m/m²	0,9m/m²
3	Connect T24 Cross Tee C3 9102, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²
4	Connect T24 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	11/m²	11/m²
9	Connect Hygiene Clip 40	11/m²	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 Anchor Screw C4	0,7/m²	0,7/m²
13	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		







Clip	for	keeping	tiles	in	place	for	20/40	mm
tiles								

Size, mm	Max live load (N)	Min load bearing capacity (N)
600x600x20	50	160
600x600x40	50	160
1200x600x20	50	160
1200x600x40	50	160

Live load/load bearing capacity



# Ecophon Hygiene Performance™ Baffle

Ecophon Hygiene Performance™ Baffle is an easy to clean, sound absorbing system with vertical baffles suitable for humid areas. The baffles withstand advanced cleaning, such as steam and high/low pressure washing on a regular basis.

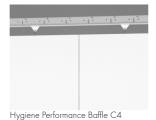


## **SYSTEM RANGE**



Size, mm	
	1200x600
T24	•
Thickness	50
Inst. Diagr.	M494C4, M492C3, M493C3







Hygiene Performance Baffle C4

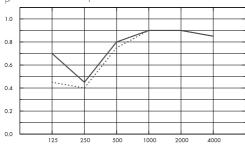


## Acoustic

# **Sound Absorption:**

Test results according to EN ISO 354:2003 NOTE: Results shown are not comparable with results according to older versions of this standard due to discrepancies in test method. 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.

 $lpha_{\scriptscriptstyle D}$ , Practical sound absorption coefficient



- ···· Performance Baffle oriented in rows, c600 mm, with ~1,4 baffles/m2 ceiling area, 600 mm o.d.s.
- Performance Baffle oriented in rectangels, with  $^{\sim}$  1,3 baffles/m2 ceiling area, 600 mm o.d.s.
- o.d.s = overall depth of system

Frequency Hz

	THK	o.d.s. mm		$lpha_{p}$ , Practical sound absorption coefficient $lpha_{w}$ Sou						
	mm	0.d.s. IIIIII	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	· · · · ·	Sound absorption class
in rows	50	600	0.45	0.40	0.75	0.90	0.90	0.85	0.70	С
in rectangles	50	600	0.70	0.45	0.80	0.90	0.90	0.85	0.75	С



# **Indoor Air Quality**

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









## **Environmental Footprint**

	kg CO2 equiv/m²
Hygiene Performance Baffle	8.30

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



# **Circularity**

Minimum post-consumer recycled content	57%
Recyclability	Fully recyclable



# Fire safety

Country	Standard	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**

Low pressure cleaning with water and steam cleaning. Products, once demounted, can be high pressure cleaned according to Ecophon high pressure cleaning protocol. Can withstand use of hydrogen peroxide vapour.



## **Surface Endurance**

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



# **Chemical resistance/Disinfection**

Chemical		Concentration
Actichlor plus	NaDCC (Sodium Dichloroisocyanurate)	1%
LifeClean	Chlorine dioxide	Undiluted
Ethanol	Ethanol	70%
Chlorine	Sodium Hypochlorite solution	2,5%
Virkon S	Dipotassium peroxodisulphate; Sulphamidic acid	1%
Isopropanol	Isopropyl Alcohol	70%
Oxivir Excel	Hydrogen peroxide	0,5%
Sumabac D10	Quaternary ammonium compound, Sodium carbonate	1%
Suredis VT1	n-(3-aminopropyl)-n- dodecylpropan-1,3-diamin	1%
Enduro Chlor VE5	Potassium hydroxide	1,5%
Aciplusfoam VF59	Nitric Acid	5%

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 4
NF S 90-351	Microbiological class	M1/area 4
NF S 90-351	Particle elimination kinetics	CP(0,5) 5



## 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  $5~{\rm kg/m^2}$ .



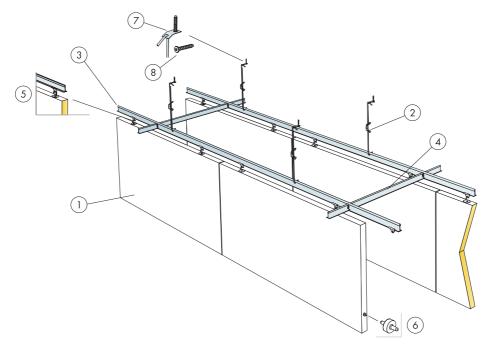
## **Mechanical properties**

Please observe that vibrations, airflow and other types of mechanical impact can affect the mechanical properties of the fixings.



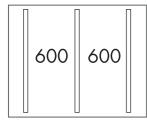
#### CE

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.

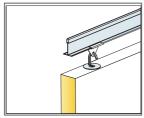


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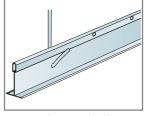
	Size, mm
	1200×600
Hygiene Performance Baffle	1,4/m²
Connect Adjustable Hanger C4 c1200	1,4/m²
Connect T24 Main Runner C4, installed at 600 mm centres	1,7m/m²
Connect T24 Cross Tee C4, L=600 mm, installed at 1800 mm centres	0,6m/m²
Connect Baffle Clip C4	2,8/m²
Connect Guiding pin, installed at 1200 mm centres	2,8/m²
Connect Fixing Plate C4	1,4/m²
Connect Anchor Screw C4	1,4/m²



Installation in rows



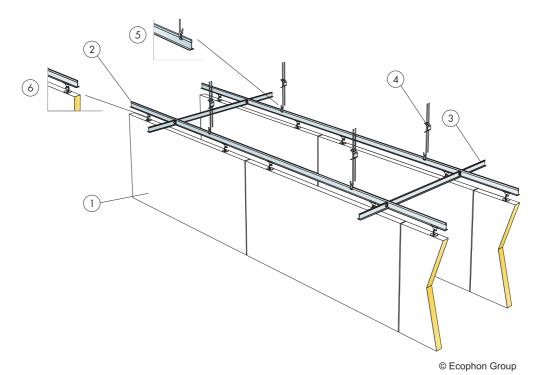
Detail of suspension



Suspension with Connect Adjustable Hanger C4

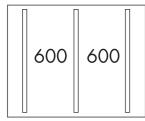


Live load/load bearing capacity

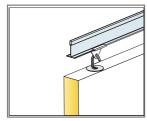


QUANTITY SPECIFICATION (EXCL. WASTAGE)

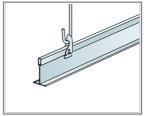
		Size, mm
		1200×600
1	Hygiene Performance Baffle	1,4/m²
2	Connect T24 Main Runner C3, installed at 600 mm centres	1,7m/m²
3	Connect T24 Cross Tee C3 9103, L=600 mm, installed at 1800 mm centres	0,6m/m <sup>2</sup>
4	Connect Adjustable Hanger C3	1,4/m²
5	Connect Hanger Clip	1,4/m²
6	Connect Baffle Clip C3	2,8/m²







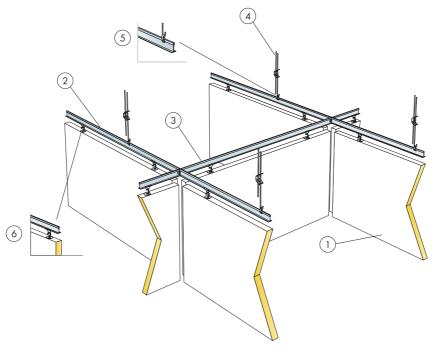
Detail of suspension



Suspension with adjustable hanger and clip



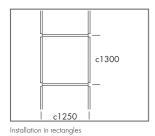
Live load/load bearing capacity

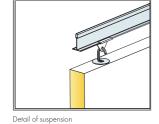


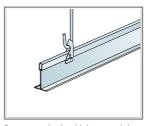
QUANTITY SPECIFICATION (EXCL. WASTAGE)

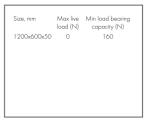
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		Size, mm
		1200×600
1	Hygiene Performance Baffle	1,3/m²
2	Connect T24 Main Runner C3, installed at 1250 mm centres	0,8m/m <sup>2</sup>
3	Connect T24 Cross Tee C3, L=1250 mm, installed at 1300 mm centres	0,8m/m <sup>2</sup>
1	Connect Adjustable Hanger C3	0,7/m²
j	Connect Hanger Clip	0,7/m²
)	Connect Baffle Clip C3	2,5/m²









Suspension with adjustable hanger and clip

Live load/load bearing capacity



# Ecophon Hygiene Performance™ Wall

Ecophon Hygiene Performance™ Wall is an easy to clean, sound absorbing wall panel system suitable for humid areas. The panels withstand advanced cleaning, such as steam and high/low pressure washing on a regular basis.



## **SYSTEM RANGE**



Size, mm	
	1200x600
Special Fixing	•
Thickness	40
Inst. Diagr.	M467









Hygiene Performance Wall

Connect Wall Fixing C3

Hygiene Performance Wall C3 system

Connect Wall Fixing C3

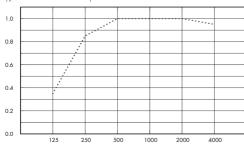


## **Acoustic**

# **Sound Absorption:**

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

 $\alpha_{\mbox{\scriptsize n}}$ , Practical sound absorption coefficient



.... Hygiene Performance Wall, 80 mm o.d.s. o.d.s = overall depth of system

Frequency Hz

THK	o.d.s. mm		$lpha_{p'}$ Pr	actical sound	d absorption c	oefficient		$\alpha_{\scriptscriptstyle{M}}$	Sound absorption class
mm	0.0.3. 111111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	0. <sub>W</sub>	
40	80	0.35	0.85	1.00	1.00	1.00	0.95	1.00	А



# **Indoor Air Quality**

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









# **Environmental Footprint**

	kg CO2 equiv/m²
Hygiene Performance Wall	7 10

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



## **Circularity**

Minimum post-consumer recycled content	54%
Recyclability	Fully recyclable



# Fire safety

Country	Standard	Class	The glass wool core of the tiles is tested and class
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





# Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



## **Advanced Cleanability**

High and low pressure cleaning with water and steam cleaning. Withstand use of hydrogen peroxide vapour.



# **Surface Endurance**

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



## **Chemical resistance/Disinfection**

Chemical		Concentration
Actichlor plus	NaDCC (Sodium Dichloroisocyanurate)	1%
LifeClean	Chlorine dioxide	Undiluted
Ethanol	Ethanol	70%
Chlorine	Sodium Hypochlorite solution	2,5%
Virkon S	Dipotassium peroxodisulphate; Sulphamidic acid	1%
Isopropanol	Isopropyl Alcohol	70%
Oxivir Excel	Hydrogen peroxide	0,5%
Sumabac D10	Quaternary ammonium compound, Sodium carbonate	1%
Suredis VT1	n-(3-aminopropyl)-n- dodecylpropan-1,3-diamin	1%
Enduro Chlor VE5	Potassium hydroxide	1,5%
Aciplusfoam VF59	Nitric Acid	5%

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 4
NF S 90-351	Microbiological class	M1/area 4
NF S 90-351	Particle elimination kinetics	CP(0,5) 5



## Accessibility

The tiles are demountable.



## Installation

Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification.



# System weight

The weight of the system (including profile system) should be approximately 3 kg/pcs.



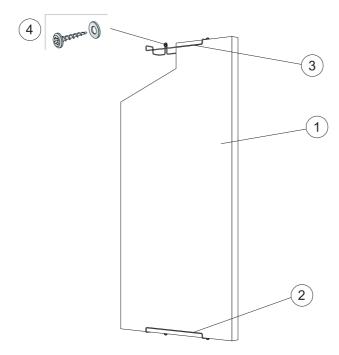
## **Mechanical properties**

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



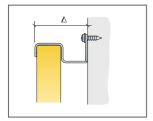
## CE

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.

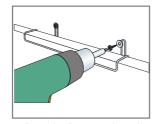


© Ecophon Group

		Size, mm
		1200×600
1	Hygiene Performance Wall	1,4/m²
2	Connect Wall Fixing C3, vertical installation	2/panel
3	Connect Wall Fixing C3, horisontal installation	4/panel
4	Wall screw, A2 material (not supplied by Ecophon)	2/wall fixing
	$\Delta$ Min. overall depth of system: 90 mm	



See Quantity Specification



Installation with wall screw in stainless steel (A2) material



Horisontal installation of Performance Wall C3

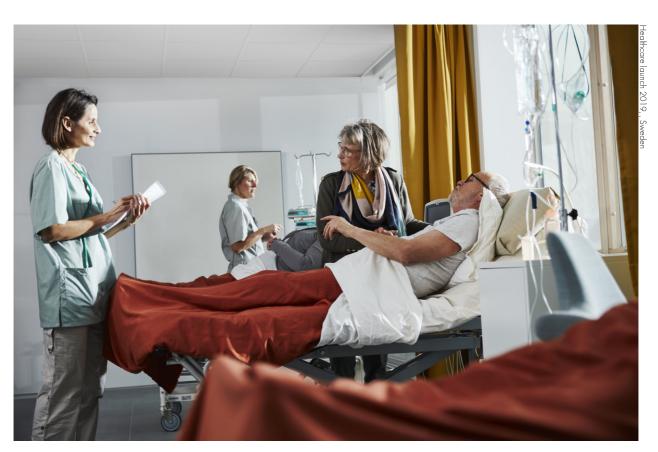


Live load/load bearing capacity



# Ecophon Hygiene Performance<sup>™</sup> Care Wall

Ecophon Hygiene Performance<sup>TM</sup> Care Wall is an easy to clean, sound absorbing wall panel system for healthcare applications or other areas with elevated hygiene standards. The surface is resistant to common detergents and disinfectants. The panels withstand steam cleaning.



# **SYSTEM RANGE**

04	Size, mm	2700x1200
	Thinline Profile	•
	Thickness	40
	Inst. Diagr.	M525



Hygiene Performance Care Wall

Hygiene Performance Care Wall system with Connect Thinline profiles

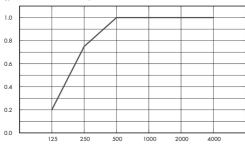


## **Acoustic**

# **Sound Absorption:**

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

 $\alpha_{\mbox{\scriptsize n}}$ , Practical sound absorption coefficient



- Hygiene Performance Care Wall 40 mm, 50 mm

o.d.s = overall depth of system

Frequency Hz

THK	ods mm		α <sub>p</sub> , Pr	actical sound	d absorption c	oefficient		α,,,	Sound absorption class
mm		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	o.w	Sound absorption class
40	50	0.20	0.75	1.00	1.00	1.00	1.00	1.00	A



# **Indoor Air Quality**

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









# Circularity

Minimum post-consumer recycled content	58%
Recyclability	Fully recyclable



# Fire safety

Country	Standard	Class	The glass wool core of non-combustible accord
Europe	EN 13501-1	A2-s1,d0	non-compustible accord

the tiles is tested and classified as rding 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. Can withstand use of hydrogen peroxide vapour.



## **Surface Endurance**

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



# **Chemical resistance/Disinfection**

Chemical	Active Substance	Concentration
Actichlor plus	NaDCC (Sodium Dichloroisocyanurate)	1%
LifeClean	Chlorine dioxide	Undiluted
Ethanol	Ethanol	70%
Chlorine	Sodium Hypochlorite solution	2,5%
Virkon S	Dipotassium peroxodisulphate; Sulphamidic acid	1%
Isopropanol Isopropyl Alcohol		70%
Oxivir Excel Hydrogen peroxide		0,5%
Sumabac D10	Quaternary ammonium compound, Sodium carbonate	1%
Suredis VT1	n-(3-aminopropyl)-n- dodecylpropan-1,3-diamin	1%
Enduro Chlor VE5 Potassium hydroxide		1,5%
Aciplusfoam VF59	Nitric Acid	5%

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 4
NF S 90-351	Microbiological class	M1/area 4
NF S 90-351	Particle elimination kinetics	CP(0.5).5



## Accessibility

The tiles are not demountable except in selected installation diagrams. See quantity specification for more information.



## Installation

Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification.



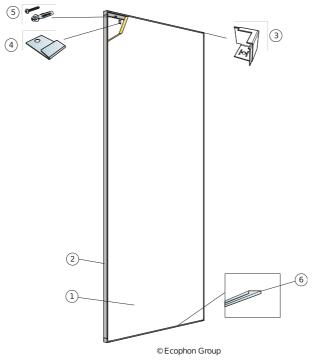
## **Mechanical properties**

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

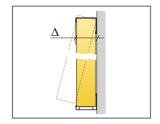


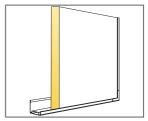
## CE

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.



		Size, mm
		2700×1200
1	Hygiene Performance Care Wall	0,31/m²
2	Connect Thinline Profile, L=2644 mm	as required
	Connect Thinline Corner	as required
	Connect Thinline Locking Clip	as required
	Installation screw, installed at 200 mm centres (select fastener according to wall material)	as required
	Connect Thinline Space Bar	as required
	Δ Overall depth of system: 45 mm	



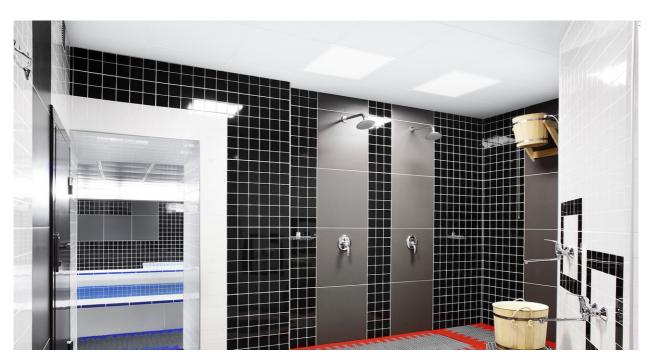


Detail of panel with Thinline frame

# Ecophon Hygiene Advance™

A

Ecophon Hygiene Advance™ A is a sound-absorbing 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



Hygiene Advance A C4 section with Connect Hygiene clip 20



Hygiene Advance A C4 system



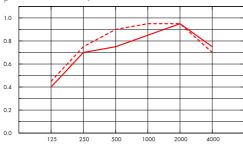
## **Acoustic**

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.

## $lpha_{\scriptscriptstyle D}$ , Practical sound absorption coefficient



Frequency Hz

- 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

THK	o.d.s. mm		$lpha_{ m p'}$ Practical sound absorption coefficient						Sound absorption class
mm	0.0.3. 111111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	$\alpha_{\scriptscriptstyle \sf W}$	Sound absorption class
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	А

THK mm	o.d.s. mm	NRC	SAA
20	200	0.80	0.76
20	400	0.80	0 <i>.7</i> 9
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	<b>A</b> +
Finnish M1	•









# **Environmental Footprint**

	kg CO2 equiv/m²
Advance A 420mm	9,32
Advance A 40mm	16,23

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



## Circularity

Minimum post-consumer recycled content	59%
Recyclability	Fully recyclable



## Fire safety

Country	Standard	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 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 vapour.



# **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	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**

When mounted according to installation diagram M252: Hygiene Advance A: 20 mm: 1,1 m $^3$ /(h x m $^2$  x Pa) Hygiene Advance A: 40 mm: 0,3 m $^3$ /(h x m $^2$  x Pa)



## **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  $3 \text{ kg/m}^2$  for 20 mm thickness and  $4.5 \text{ kg/m}^2$  for 40 mm thickness.



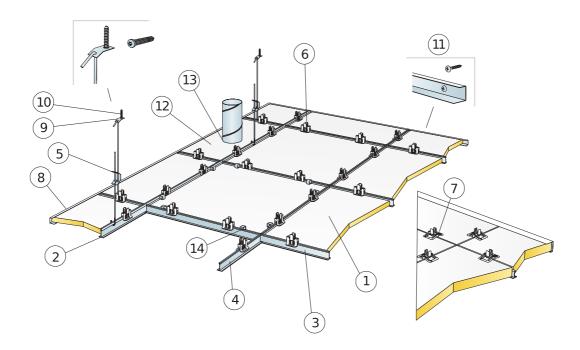
# **Mechanical properties**

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



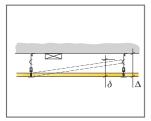
## CE

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.

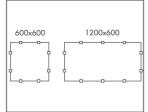


# © Ecophon Group

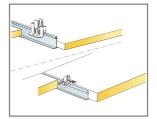
		Size, mm	Size, mm	
		600×600	1200×600	
1	Hygiene Advance A	2,8/m²	2,8/m²	
2	Connect T24 Main Runner C4, c1200	0,9m/m²	0,9m/m <sup>2</sup>	
3	Connect T24 Cross Tee C4, L=1200, c600	1,7m/m²	1,7m/m²	
4	Connect T24 Cross Tee C4, L=600	0,9m/m²	0,9m/m²	
5	Connect Adjustable Hanger C4, c1200, [max 600 mm distance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







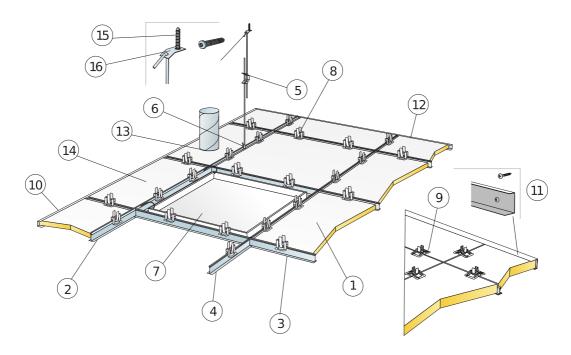
Arrangement of clips



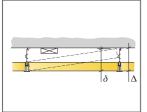
Clip for keeping tiles in place for  $20/40 \ \mathrm{mm}$  tiles

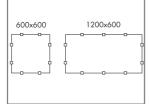
Size, mm	Max live load (N)	Min load bearing capacity (N)
600x600x20	40	160
600x600x40	40	160
1200x600x20	40	160
1200x600x40	40	160

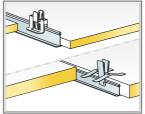
Live load/load bearing capacity



		Size, mm	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/m²	11/m²	
9	Connect Hygiene Clip 40 3254	11/m²	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		-	
	δ Min. demounting depth 40 mm: 170 mm	-		







600x600x20		1/0
	40	160
600x600x40	40	160
1200x600x20	40	160
1200x600x40	40	160

See Quantity Specification Arrangement of clips

Clips for keeping tiles in place

Live load/load bearing capacity

# Ecophon Hygiene Advance™ Baffle

Ecophon Hygiene Advance™ Baffle is a vertical baffle that withstands daily advanced cleaning and disinfection with strong chemicals. Suitable for the most demanding conditions, including airborne grease and dirt particles.



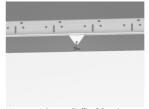
## **SYSTEM RANGE**



Size, mm	
	1200x600
T24	•
Thickness	40
Inst. Diagr.	M259, M260









Hygiene Advance Baffle C3 with Connect Baffle clip

Hygiene Advance Baffle

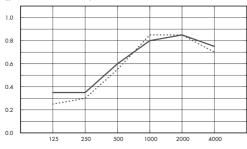


### **Acoustic**

### **Sound Absorption:**

Test results according to EN ISO 354:2003 NOTE: Results shown are not comparable with results according to older versions of this standard due to discrepancies in test method. 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.

 $\alpha_{\mbox{\scriptsize n}}$ , Practical sound absorption coefficient



- $\cdots$  Advance Baffle in rows, c600 mm, with  $^{\sim}$  1,4 baffles/m2 ceiling area, 600 mm o.d.s.
- Advance Baffle in rectangles, with  $^{\sim}$  1,3 baffles/m2 ceiling area, 600 mm o.d.s.
- o.d.s = overall depth of system

Frequency Hz

		THK	o.d.s. mm		$lpha_{p'}$ Pra	ctical sound	d absorption	coefficient		$\alpha_{\scriptscriptstyle  ext{w}}$	Sound absorption class
	mm	0.0.3. 11111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	O.W	Sound absorption class	
	in rows	40	600	0.25	0.30	0.55	0.85	0.85	0.70	0.55	D
	in rectangles	40	600	0.35	0.35	0.60	0.80	0.85	0.75	0.60	С

THK mm	o.d.s. mm	NRC	SAA
40	600	1.00	1.00
40	600	1.00	1.00



### **Indoor Air Quality**

Certificate / Label	
Eurofins Indoor Air Comfort®	IAC Gold
French VOC	A+
Finnish M 1	









## **Environmental Footprint**

Advance Baffle	16,23

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



# **Circularity**

Minimum post-consumer recycled content	64%
Recyclability	Fully recyclable



### Fire safety

	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 141, nearest NCS colour sample S 1000-N, 73% light reflectance.



# Cleanability

Daily dusting, vacuum cleaning and wet wiping.



### **Advanced Cleanability**

Low pressure cleaning with water and steam cleaning. Products, once demounted, can be high pressure cleaned according to Ecophon high pressure cleaning protocol. Can withstand use of hydrogen peroxide vapour.



# **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	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 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  $4 \text{ kg/m}^2$ .



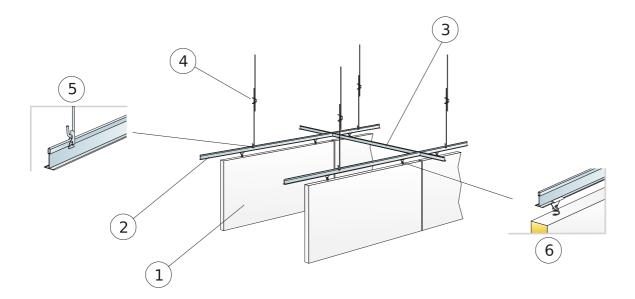
# **Mechanical properties**

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

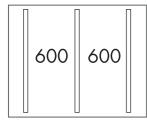


### CE

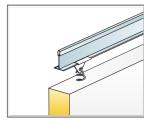
Ecophon ceiling systems are CE marked according to the European harmonized standard EN 13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



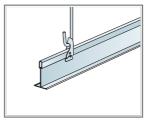
		Size, mm
		1200×600
1	Hygiene Advance Baffle	1,4/m²
	Connect T24 Main Runner C3, installed at 600 mm centres	1,7m/m²
	Connect T24 Cross Tee C3 9103, L=600 mm, installed at 1800 mm centres	0,6m/m²
	Connect Adjustable Hanger C3	1,4/m²
	Connect Hanger Clip	1,4/m²
	Connect Baffle Clip C3	2,8/m²



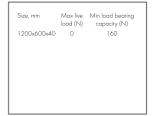
Installation in rows



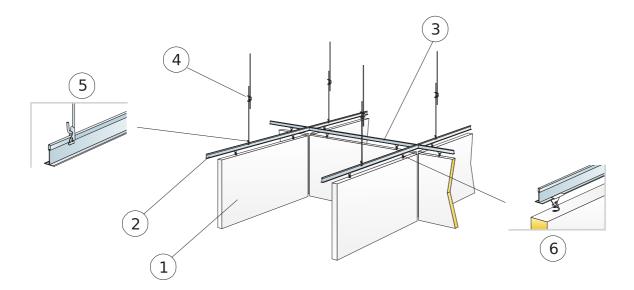
Detail of suspension



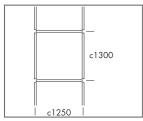
Suspension with Connect Adjustable Hanger and Connect Hanger Clip



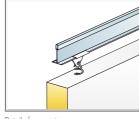
Live load/load bearing capacity



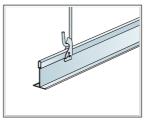
		Size, mm
		1200×600
1	Hygiene Advance Baffle	1,3/m²
2	Connect T24 Main Runner C3, installed at 1250 mm centres	0,8m/m <sup>2</sup>
3	Connect T24 Cross Tee C3, L=1250 mm, installed at 1300 mm centres	0,8m/m <sup>2</sup>
4	Connect Adjustable Hanger C3	0,7/m²
5	Connect Hanger Clip	0,7/m²
6	Connect Boffle Clip C3	2,5/m²







Detail of suspension



Suspension with Connect Adjustable Hanger and Connect Hanger Clip



Live load/load bearing capacity

# Ecophon Hygiene Advance™ Wall

Ecophon Hygiene Advance<sup>TM</sup> Wall is a wall panel that withstands daily advanced cleaning and disinfection with strong chemicals. Suitable for the most demanding conditions, including airborne grease and dirt particles.



# **SYSTEM RANGE**



Size, mm	
	1200x600
Special Fixing	•
Thickness	40
Inst. Diagr.	M258









Hygiene Advance Wall C3 system

Connect Wall Fixing C3

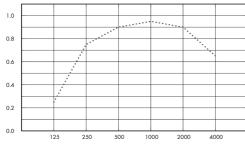


### **Acoustic**

# **Sound Absorption:**

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

 $\alpha_{\mbox{\tiny D}}$  , Practical sound absorption coefficient



···· Hygiene Advance Wall, 80 mm o.d.s. o.d.s = overall depth of system

Frequency Hz

THK	o.d.s. mm	$lpha_{ m p'}$ Practical sound absorption coefficient						α,,,	Sound absorption class
mm		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		Sound absorption class
40	80	0.25	0.75	0.90	0.95	0.90	0.65	0.85	В



# **Indoor Air Quality**

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









# **Environmental Footprint**

kg CO2 equiv/m²
Advance Wall 16,23

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



### **Circularity**

Minimum post-consumer recycled content	64%
Recyclability	Fully recyclable



# Fire safety

Country	Standard	Class	The glass wool core of the tiles is tested and classified
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 141, nearest NCS colour sample S 1000-N, 73% light reflectance.



# 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 vapour.



# **Chemical resistance/Disinfection**

Chemical	
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		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. For information regarding minimum overall depth of system see quantity specification.



# System weight

The weight of the system (including profile system) should be approximately 3 kg/pcs.



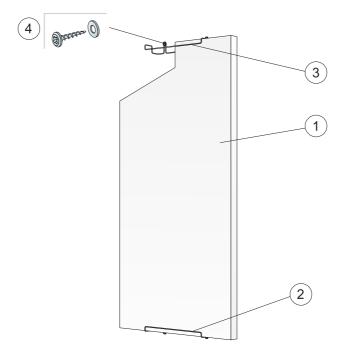
# **Mechanical properties**

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

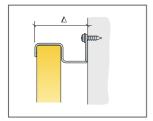


# CE

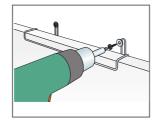
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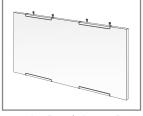
		Size, mm
		1200×600
1	Hygiene Advance Wall	1,4/m²
2	Connect Wall Fixing C3, vertical installation	2/panel
3	Connect Wall Fixing C3, horisontal installation	4/panel
4	Wall screw, A2 material (not supplied by Ecophon)	2/wall fixing
	$\Delta$ Min. overall depth of system: 90 mm	



See Quantity Specification



Installation with wall screw in stainless steel (A2) material



Horisontal installation of Advance Wall  $\operatorname{C3}$ 



Live load/load bearing capacity