

# 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.



#### **SYSTEM RANGE**



| Size, mm        | 600x600 | 1200x600 |
|-----------------|---------|----------|
| T24             | •       | •        |
| Thickness (THK) | 15      | 15       |
| Inst. Diagr.    | M338    | M338     |







Section of Hygiene Clinic A system

Hygiene Clinic A tile

Hygiene Clinic A system

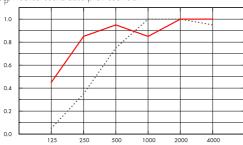
## Acoustic



## **Sound Absorption:**

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

 $\alpha_{_{D^{\prime}}}$  Practical sound absorption coefficient



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

| THK | o.d.s. mm    |        | $lpha_{p'}$ Pr | actical soun | d absorption c | coefficient |         | $\alpha_{_{	ext{W}}}$ | Sound absorption class  |
|-----|--------------|--------|----------------|--------------|----------------|-------------|---------|-----------------------|-------------------------|
| mm  | 0.u.s. IIIII | 125 Hz | 250 Hz         | 500 Hz       | 1000 Hz        | 2000 Hz     | 4000 Hz | <sub>w</sub>          | Journa 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<br>mm | o.d.s. mm | NRC  | SAA  |
|-----------|-----------|------|------|
| 15        | 50        | 0.80 | 0.79 |
| 15        | 200       | 0.90 | 0.91 |

#### **Indoor Air Quality**



| Certificate / Label          |          |
|------------------------------|----------|
| Eurofins Indoor Air Comfort® | IAC Gold |
| French VOC                   | A+       |







#### Cradle to Cradle Certified®



This product is Cradle to Cradle Certified® at Bronze level (version 4.0).



#### **Material Health**

This product has received a C2C Certified Material Health Certificate $^{\text{TM}}$  at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate $^{\text{TM}}$  is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



#### **Carbon footprint**

|                  | kg CO2 equiv/r |
|------------------|----------------|
| Hygiene Clinic A | 2,5            |

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

| Country | Fire standard | Class    | The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. |
|---------|---------------|----------|--|
| Europe  | EN 13501-1    | A2-s1,d0 | non-combostible decorating to ETV 150-1102.  |



#### **Humidity Resistance**

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



## Visual appearance

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



#### Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



## **Advanced Cleanability**

Withstand use of hydrogen peroxide vapor and compatible with UV-C disinfection, BIFMA HCF 8.1-2019.



## **Mould and Bacterial Resistance**

| Standard/Method                        | Class                              |
|--|------------------------------------|
| ISO 846 :2019 method A (for fungi)     | O (No growth under the microscope) |
| ISO 846 :2019 method C (for bacterium) | O (No growth under the microscope) |
| ASTM D3273-16 (for fungi)              | 10 (0% growth on the surface)      |





|             | 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

|  | kg/m² | Weight information is indicative and subject to variation. |
|--|-------|--|
| Hygiene Clinic A                       | 1,3   |  |
| Hygiene Clinic A + Connect grid system | 2,3   |  |



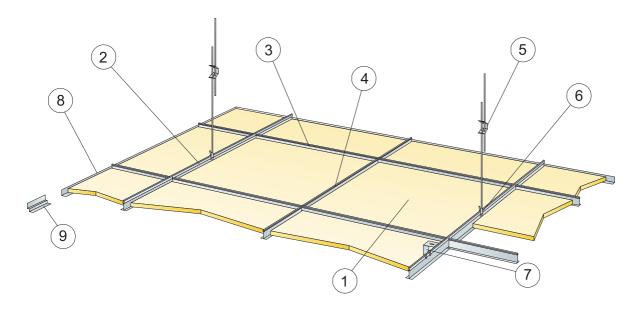
## **Mechanical properties**

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



#### CE

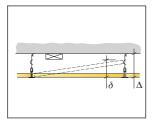
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



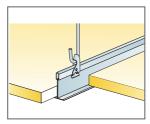
## ©Saint-Gobain Ecophon AB

## QUANTITY SPECIFICATION (EXCL. WASTAGE)

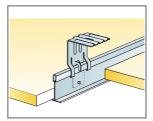
|     |  | Size, mm    |             |
|-----|--|-------------|-------------|
|     |  | 600×600     | 1200×600    |
| 1 ⊢ | dygiene Clinic A   | 2,8/m²      | 1,4/m²      |
| 2 ( | Connect T24 Main Runner, installed at 1200 mm centres (max distance from wall 300 mm)      | 0,9m/m²     | 0,9m/m²     |
| 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 C | Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)   | 0,7/m²      | 0,7/m²      |
| 5 C | Connect Hanger Clip (not to be used in swimming hall environments)                         | 0,7/m²      | 0,7/m²      |
| 7 F | or direct installation: Connect Direct Bracket, installed at 1 200 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 |
| Δ   | ı 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<br>600x600x15 | Max live<br>load (N)<br>50 | Min load bearing<br>capacity [N]<br>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.



## **SYSTEM RANGE**



| Size, mm        | 600x600 | 1200×600 |
|-----------------|---------|----------|
| T24             | •       | •        |
| Thickness (THK) | 15      | 15       |
| Inst. Diagr.    | M339    | M339     |







Section of Hygiene Clinic E system



Hygiene Clinic E system

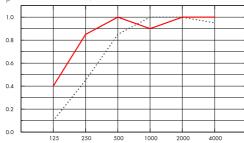
## ~///~

#### **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.

#### $lpha_{_{D'}}$ 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 soun | d absorption c | coefficient |         | $\alpha_{_{\scriptscriptstyle{W}}}$ | Sound absorption class |  |
|-----|---------------|--------|----------------|--------------|----------------|-------------|---------|-------------------------------------|------------------------|--|
| mm  | 0.u.s. IIIIII | 125 Hz | 250 Hz         | 500 Hz       | 1000 Hz        | 2000 Hz     | 4000 Hz | o.w                                 |                        |  |
| 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                                | A                      |  |



#### **Indoor Air Quality**

| Certificate / Label          |          |
|------------------------------|----------|
| Eurofins Indoor Air Comfort® | IAC Gold |
| French VOC                   | A+       |







## Cradle to Cradle Certified®



This product is Cradle to Cradle Certified® at Bronze level (version 4.0).



#### **Material Health**

This product has received a C2C Certified Material Health Certificate<sup>TM</sup> at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate<sup>TM</sup> is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



#### **Carbon footprint**

|                  | kg CO2 equiv/m² | Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804 |
|------------------|-----------------|--|
| Hygiene Clinic E | 2,19            | 14020 / LIN 13004  |



#### Circularity

| Minimum post-consumer recycled content | 45%              |
|--|------------------|
| Recyclability                          | Fully recyclable |



## Fire safety

| Country | Fire standard | Class    | The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. |
|---------|---------------|----------|--|
| Europe  | EN 13501-1    | A2-s1,d0 | non-combosiisie decoranig io El Vio el 1102.   |



## **Humidity Resistance**

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



## Visual appearance

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



## Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



#### **Advanced Cleanability**

Withstand use of hydrogen peroxide vapor and compatible with UV-C disinfection, BIFMA HCF 8.1-2019.



## **Mould and Bacterial Resistance**

| Standard/Method                        | Class                              |
|--|------------------------------------|
| ISO 846 :2019 method A (for fungi)     | O (No growth under the microscope) |
| ISO 846 :2019 method C (for bacterium) | O (No growth under the microscope) |
| ASTM D3273-16 (for fungi)              | 10 (0% growth on the surface)      |





|             | 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

|  | kg/m² | Weight information is indicative and subject to variation. |
|--|-------|--|
| Hygiene Clinic E                       | 1,3   |  |
| Hygiene Clinic E + Connect grid system | 2,3   |  |



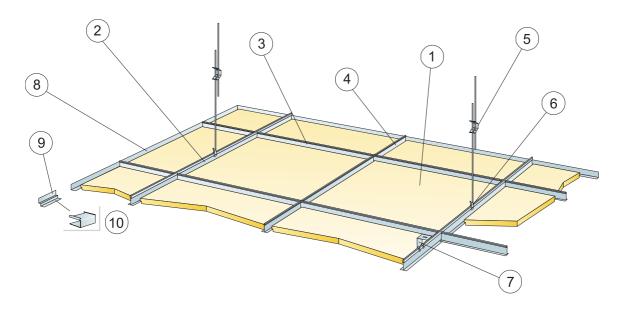
## **Mechanical properties**

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



## CE

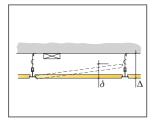
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



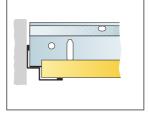
## © Saint-Gobain Ecophon AB

## QUANTITY SPECIFICATION (EXCL. WASTAGE)

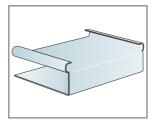
|    |   | Size, mm    |             |
|----|---|-------------|-------------|
|    |   | 600×600     | 1200×600    |
| 1  | Hygiene Clinic E  | 2,8/m²      | 1,4/m²      |
| 2  | Connect T24 Main Runner, installed at 1200 mm centres (max distance from wall 300 mm)             | 0,9m/m²     | 0,9m/m²     |
| 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      |
| 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 |
| 10 | Connect E-plug (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

| Size, mm<br>600x600x15 | Max live<br>load (N)<br>50 |     |
|------------------------|----------------------------|-----|
| 1200x600x15            | 50                         | 160 |
|                        |                            |     |
|                        |                            |     |

Live load/load bearing capacity



# Ecophon Hygiene Meditec™

A

Ecophon Hygiene Meditec<sup>™</sup> 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.



#### **SYSTEM RANGE**



| Size, mm        | 600x600 | 1200x600 |
|-----------------|---------|----------|
| T24             | •       | •        |
| Thickness (THK) | 15      | 15       |
| Inst. Diagr.    | M255    | M255     |



Hygiene Meditec A tile



Hygiene Meditec A C1 section with Connect Universal clip



Hygiene Meditec A C1 system

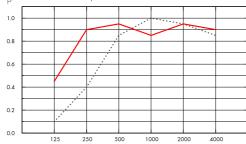
#### Acoustic



## **Sound Absorption:**

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

 $lpha_{_{\mathrm{D}^{\prime}}}$  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     | $lpha_{ m p}$ , Practical sound absorption coefficient |        |        |         | $\alpha_{_{\scriptscriptstyle{\mathrm{W}}}}$ | Sound absorption class |                 |                         |
|-----|---------------|--|--------|--------|---------|--|------------------------|-----------------|-------------------------|
| mm  | 0.0.3. 111111 | 125 Hz   | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz                                      | 4000 Hz                | 0. <sub>W</sub> | Journa absorption class |
| 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            | А                       |

| THK<br>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 Gold |
| French VOC                   | A+       |







#### Cradle to Cradle Certified®



This product is Cradle to Cradle Certified® at Bronze level (version 4.0).



#### **Material Health**

This product has received a C2C Certified Material Health Certificate<sup>TM</sup> at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate<sup>TM</sup> is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



#### **Carbon footprint**

|                   | kg CO2 equiv/m² |
|-------------------|-----------------|
| Hygiene Meditec A | 2,71            |

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 | Fire standard | Class    | The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. |
|---------|---------------|----------|--|
| Europe  | EN 13501-1    | A2-s1,d0 | Horreomboshble decorating to ETV 150 TT02.   |



## **Humidity Resistance**

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



#### Visual appearance

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



## Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



## **Advanced Cleanability**

Withstand use of hydrogen peroxide vapor. Occasional steam cleaning (1/year).



## **Surface Endurance**

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



## **Chemical resistance/Disinfection**

| Chemical    | Active Substance                                  | Concentration |
|-------------|---|---------------|
| Ethanol     | Ethanol   | 70%           |
| Chlorine    | Sodium Hypochlorite solution                      | 2,5%          |
| Virkon S    | Dipotassium peroxodisulphate;<br>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                        | Class                              |  |
|--|------------------------------------|--|
| ISO 846 :2019 method C (for bacterium) | O (No growth under the microscope) |  |
| ASTM D3273-16 (for fungi)              | 10 (0% growth on the surface)      |  |

## **Clean Room**



|             | 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 clips to allow for effective cleaning. The clips are easily removable from above the ceiling. An easy-to-open Connect Inspection hatch is available to simplify access to the ceiling void.



#### 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.



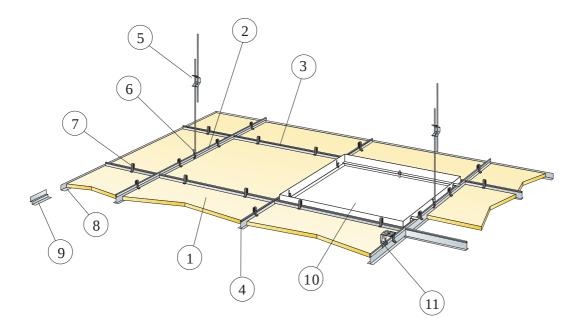
## System weight

|   | kg/m² | Weight information is indicative and subject to variation. |
|---|-------|--|
| Hygiene Meditec A                       | 1,3   |  |
| Hygiene Meditec A + Connect grid system | 2,3   |  |



#### CE

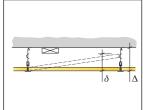
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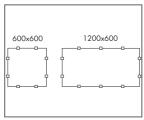
## © Saint-Gobain Ecophon AB

## QUANTITY SPECIFICATION (EXCL. WASTAGE)

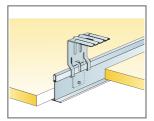
|    |   | Size, mm    |             |
|----|---|-------------|-------------|
|    |   | 600×600     | 1200×600    |
| 1  | Hygiene Meditec A   | 2,8/m²      | 1,4/m²      |
| 2  | Connect T24 Main Runner, installed at 1200 mm centres (max distance from wall 300 mm)                                   | 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      |
| 6  | Connect Hanger Clip (not to be used in swimming hall environments)  | 0,7/m²      | 0,7/m²      |
| 7  | Connect Universal Clip  | 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 without clip: 50 mm. | -           | -           |
|    | $\delta$ Min. demounting depth; With clip; 150 mm, Without clip; 100 mm.  | -           | -           |







Arrangement of clips



Suspension with Connect Direct Bracket

| Size, mm<br>600x600x15 | Max live<br>load (N)<br>50 | Min load bearing<br>capacity [N]<br>160 |
|------------------------|----------------------------|---|
| 1200x600x15            | 50                         | 160                                     |

Live load/load bearing capacity



# Ecophon Hygiene Meditec™ E

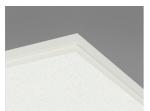
Ecophon Hygiene Meditec™ E has a recessed visible grid and a tegular edge design, suitable for dry areas where disinfection and/or cleaning is required on a regular basis. The surface is resistant to mould and bacteria growth and to common detergents and disinfectants.



#### **SYSTEM RANGE**



| Size, mm        | 600x600 | 1200x600 |
|-----------------|---------|----------|
| T24             | •       | •        |
| Thickness (THK) | 15      | 15       |
| Inst. Diagr.    | M256    | M256     |



Hygiene Meditec E tile



Hygiene Meditec E C1 section with Connect Universal clip



Hygiene Meditec E C1 system

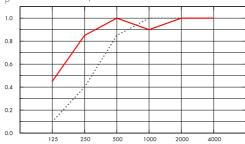
## Acoustic



## **Sound Absorption:**

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

 $\alpha_{_{D^{\prime}}}$  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 | o.d.s. mm     | $lpha_{ m p}$ , Practical sound absorption coefficient |        |        |         |         |         | $\alpha_{_{	ext{W}}}$ | Sound absorption class |
|-----|---------------|--|--------|--------|---------|---------|---------|-----------------------|------------------------|
| mm  | 0.0.5. 111111 | 125 Hz   | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 0. <sub>W</sub>       | 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<br>mm | o.d.s. mm | NRC  | SAA  |
|-----------|-----------|------|------|
| 15        | 60        | 0.90 | 0.87 |
| 15        | 400       | 0.85 | 0.89 |

#### **Indoor Air Quality**



| Certificate / Label          |          |
|------------------------------|----------|
| Eurofins Indoor Air Comfort® | IAC Gold |
| French VOC                   | A+       |







#### **Cradle to Cradle Certified®**



This product is Cradle to Cradle Certified® at Bronze level (version 4.0).



#### **Material Health**

This product has received a C2C Certified Material Health Certificate<sup>TM</sup> at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate<sup>TM</sup> is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



#### **Carbon footprint**

|                   | kg CO2 equiv/m² | Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804 |
|-------------------|-----------------|--|
| Hygiene Meditec E | 2,37            | 140207 ETT 10001   |



## Circularity

| Minimum post-consumer recycled content | 43%              |
|--|------------------|
| Recyclability                          | Fully recyclable |



## Fire safety

| Country | Fire standard | Class    | The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. |
|---------|---------------|----------|--|
| Europe  | EN 13501-1    | A2-s1,d0 | non-combustible according to ETV 150 TT02.   |



#### **Humidity Resistance**

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



## Visual appearance

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



## Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



## **Advanced Cleanability**

Withstand use of hydrogen peroxide vapor. Occasional steam cleaning (1/year).



## **Surface Endurance**

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



## **Chemical resistance/Disinfection**

| Chemical    | Active Substance                                  | Concentration |
|-------------|---|---------------|
| Ethanol     | Ethanol   | 70%           |
| Chlorine    | Sodium Hypochlorite solution                      | 2,5%          |
| Virkon S    | Dipotassium peroxodisulphate;<br>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                       | Class                              |
|---------------------------------------|------------------------------------|
| ISO 846:2019 method C (for bacterium) | O (No growth under the microscope) |
| ASTM D3273-16 (for fungi)             | 10 (0% growth on the surface)      |

## Clean Room



|             | 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 clips to allow for effective cleaning. The clips are easily removable from above the ceiling. An easy-to-open Connect Inspection hatch is available to simplify access to the ceiling void.



#### Installation

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



#### System weight

|   | kg/m² | Weight information is indicative and subject to variation. |
|---|-------|--|
| Hygiene Meditec E                       | 1,4   |  |
| Hygiene Meditec E + Connect grid system | 2,4   |  |



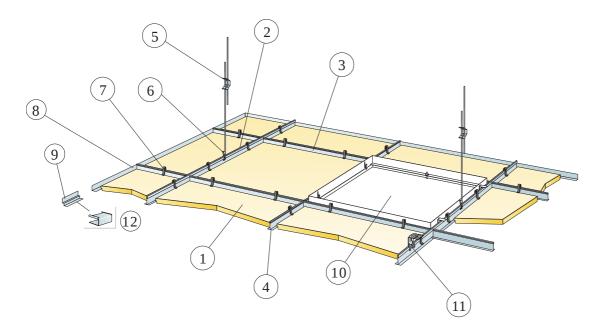
## **Mechanical properties**

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



#### CE

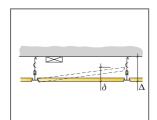
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



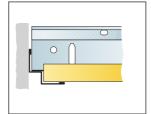
## © Saint-Gobain Ecophon AB

## QUANTITY SPECIFICATION (EXCL. WASTAGE)

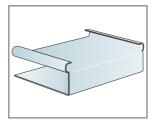
|    |   | Size, mm    |             |
|----|---|-------------|-------------|
|    |   | 600×600     | 1200×600    |
| 1  | Hygiene Meditec E   | 2,8/m²      | 1,4/m²      |
| 2  | Connect T24 Main Runner, installed at 1200 mm centres (max distance from wall 300 mm)                                   | 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      |
| 6  | Connect Hanger Clip (not to be used in swimming hall environments)  | 0,7/m²      | 0,7/m²      |
| 7  | Connect Universal Clip  | 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      |
| 12 | Connect E-plug (for Connect Shadow-line Trim)   | as required | as required |
|    | $\Delta$ Min. overall depth of system, with adjustable hanger and clip: 160 mm, with direct fixing wituout clip: 60 mm. | -           | -           |
|    | $\delta$ Min. demounting depth: With clip: 160 mm. Without clip: 110 mm.  | -           | -           |
|    |   |             |             |



See Quantity Specification



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



Connect E-plug

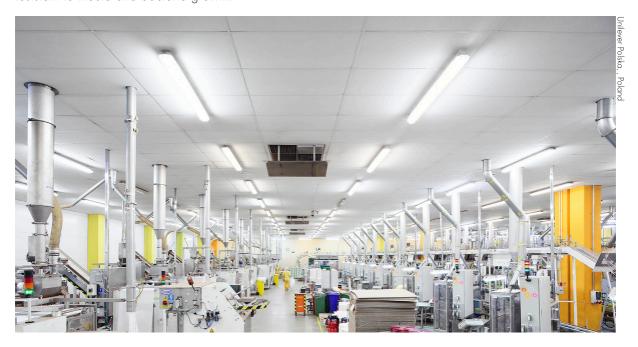
| Size, mm<br>600x600x15 | Max live<br>load (N)<br>50 | Min load bearing<br>capacity [N]<br>160 |
|------------------------|----------------------------|---|
| 1200x600x15            | 50                         | 160                                     |
|                        |                            |   |
|                        |                            |   |
|                        |                            |   |

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.



## SYSTEM RANGE



| Size, mm        | 600x600 | 625x625  | 1200x600 |
|-----------------|---------|----------|----------|
| T24             | •       | •        | •        |
| Thickness (THK) | 20      | 20       | 20       |
| Inst. Diagr.    | M257    | M257 DIN | M257     |







Hygiene Protec A C1 section with Connect Hygiene clip 20



Hygiene Protec A system

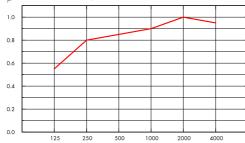
#### Acoustic



#### **Sound Absorption:**

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.

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



Hygiene Protec A 20 mm, 200 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 |         | $\alpha_{_{	ext{W}}}$ | 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 |
| 20  | 200          | 0.55   | 0.80           | 0.85          | 0.90           | 1.00       | 0.95    | 0.90                  | А                      |

| THK<br>mm | o.d.s. mm | NRC  | SAA  |
|-----------|-----------|------|------|
| 20        | 200       | 0.90 | 0.89 |
| 20        | 400       | 0.85 | 0.84 |

# Indoor Air Quality











#### Cradle to Cradle Certified®



This product is Cradle to Cradle Certified® at Bronze level (version 4.0).



## **Material Health**

This product has received a C2C Certified Material Health Certificate<sup>TM</sup> at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate<sup>TM</sup> is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



#### Circularity

| Minimum post-consumer recycled content | 44%              |
|--|------------------|
| Recyclability                          | Fully recyclable |



## Fire safety

| Country | Fire standard | Class    | The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. |
|---------|---------------|----------|--|
| Europe  | EN 13501-1    | A2-s1,d0 | non-compositore according to 21 (100 1102).  |



## **Humidity Resistance**

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



## Visual appearance

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



## Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



#### **Advanced Cleanability**

Steam cleaning. Withstand use of hydrogen peroxide vapor.



## **Surface Endurance**

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



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

| Chemical    | Active Substance                                  | Concentration |
|-------------|---|---------------|
| Ethanol     | Ethanol   | 70%           |
| Chlorine    | Sodium Hypochlorite solution                      | 2,5%          |
| Virkon S    | Dipotassium peroxodisulphate;<br>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                        | Class                              |
|--|------------------------------------|
| ISO 846 :2019 method C (for bacterium) | O (No growth under the microscope) |
| ASTM D3273-16 (for fungi)              | 10 (0% growth on the surface)      |

#### Clean Room



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

#### System weight

|  | kg/m² | ٧ |
|--|-------|---|
| Hygiene Protec A                       | 2,4   |   |
| Hygiene Protec A + Connect grid system | 3,4   |   |

Weight information is indicative and subject to variation.



#### Installation

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



#### Accessibility

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



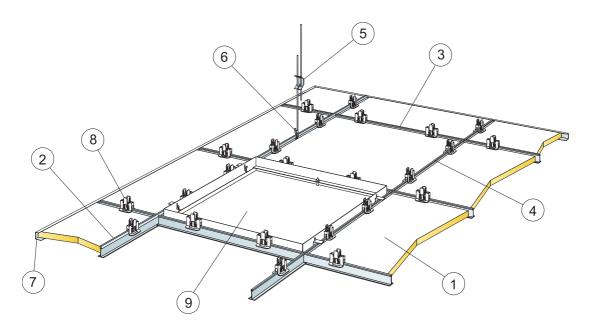
#### **Mechanical properties**

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



#### CE

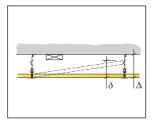
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



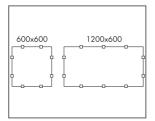
## © Saint-Gobain Ecophon AB

## QUANTITY SPECIFICATION (EXCL. WASTAGE)

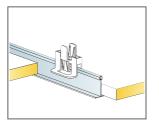
|   |  | Size, mm    |             |
|---|--|-------------|-------------|
|   |  | 600×600     | 1200×600    |
| l | Hygiene Protec A   | 2,8/m²      | 1,4/m²      |
| 2 | Connect T24 Main Runner, installed at 1200 mm centres [max distance from wall 300 mm]    | 0,9m/m²     | 0,9m/m²     |
| 3 | Connect T24 Cross Tee, L=1200 mm, installed at 600 mm centres                            | 1,7m/m²     | 1,7m/m²     |
| 1 | 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 Channel Trim, fixed c300   | as required | as required |
| 3 | Connect Hygiene Clip 20  | 11/m²       | 7/m²        |
| 7 | Connect Inspection Hatch   | as required | as required |
|   | $\Delta$ Min. overall depth of system: 150 mm  | -           | -           |
| _ | $\delta$ Min. demounting depth: 150 mm   | -           | -           |
| _ |  |             |             |



See Quantity Specification



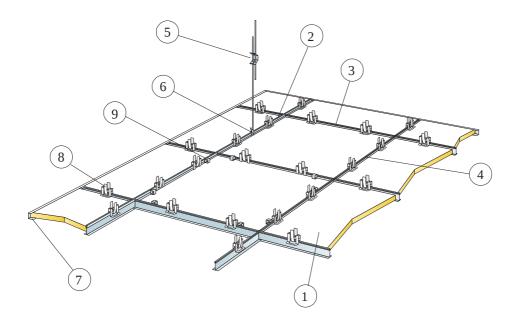
Arrangement of clips



Connect Hygiene Clips for keeping tiles in position

| Size, mm<br>600x600x20 | Max live<br>load (N)<br>50 |     |
|------------------------|----------------------------|-----|
| 1200x600x20            | 50                         | 160 |

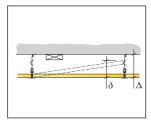
Live load/load bearing capacity



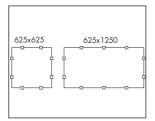
## © Saint-Gobain Ecophon AB

## QUANTITY SPECIFICATION (EXCL. WASTAGE)

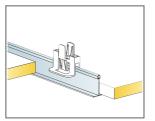
|   |  | Size, mm    |
|---|--|-------------|
|   |  | 625×625     |
| 1 |  | 2,6/m²      |
| 2 | Connect T24 Main Runner, installed at 1250 mm centres for DIN (only white profiles)      | 0,8m/m²     |
| 3 | Connect T24 or T15 Cross Tee, L=1250 mm, installed at 625 mm centres                     | 1,6m/m²     |
| 4 | Connect T24 or T15 Cross Tee, L=625 mm   | 0,8m/m²     |
| 5 | Connect Adjustable Hanger, installed at 1250 mm centres (max. distance from wall 600 mm) | 0,7/m²      |
| 5 | Connect Hanger Clip (not to be used in swimming hall environments)                       | 0,7/m²      |
| 7 | Connect Channel Trim, fixed c300   | as required |
| 3 | Connect Hygiene Clip 20  | 10/m²       |
| ? | Connect Demo Clip 20 C4, (where access is needed)  | as required |
|   | $\Delta$ Min, overall depth of system: 150 mm  | -           |
|   | $\delta$ Min. demounting depth: 150 mm   | -           |



See Quantity Specification



Arrangement of clips



Connect Hygiene Clips for keeping tiles in position



Live load/load bearing capacity



# Ecophon Hygiene Protec™ Ds

Ecophon Hygiene Protec™ Ds has a concealed grid and is 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.



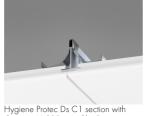
#### **SYSTEM RANGE**



| Size, mm        | 600x600 | 1200x600 |
|-----------------|---------|----------|
| T24             | •       | •        |
| Thickness (THK) | 20      | 20       |
| Inst. Diagr.    | M615    | M615     |



Hygiene Protec Ds tile



Connect Hold Down Clip Ds



Sealed junction with wall



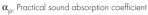
Hygiene Protec Ds C1 system

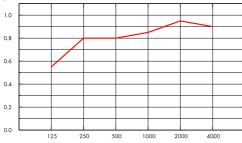
#### **Acoustic**



#### **Sound Absorption:**

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.





o.d.s = overall depth of system

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

Frequency Hz

| THK | o.d.s. mm     |        | $lpha_{p'}$ Pr | actical sound | d absorption c | oefficient |         | $\alpha_{_{\scriptscriptstyle{	ext{W}}}}$ | Sound absorption class |
|-----|---------------|--------|----------------|---------------|----------------|------------|---------|---|------------------------|
| mm  | 0.0.3. 111111 | 125 Hz | 250 Hz         | 500 Hz        | 1000 Hz        | 2000 Hz    | 4000 Hz | o.w                                       | Sound absorption class |
| 20  | 200           | 0.55   | 0.80           | 0.80          | 0.85           | 0.95       | 0.90    | 0.85                                      | В                      |

| THK<br>mm | o.d.s. mm | NRC  | SAA  |
|-----------|-----------|------|------|
| 20        | 200       | 0.85 | 0.85 |

## **Indoor Air Quality**



| Certificate / Label          |          |
|------------------------------|----------|
| Eurofins Indoor Air Comfort® | IAC Gold |
| French VOC                   | A+       |







## Cradle to Cradle Certified®



This product is Cradle to Cradle Certified® at Bronze level (version 4.0).



#### **Material Health**

This product has received a C2C Certified Material Health Certificate™ at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate<sup>TM</sup> is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



#### **Carbon footprint**

|                   | kg CO2 equiv/m² | Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804 |
|-------------------|-----------------|--|
| Hygiene Protec Ds | 7,06            | 11020 / 211 10001  |



## Circularity

| Minimum post-consumer recycled content | 47%              |
|--|------------------|
| Recyclability                          | Fully recyclable |



## Fire safety

| Country | Fire standard | Class    | The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. |
|---------|---------------|----------|--|
| Europe  | EN 13501-1    | A2-s1,d0 | Horreomboshble decorating to ETV 150 TT02.   |



## **Humidity Resistance**

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



## Visual appearance

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



#### Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



## **Advanced Cleanability**

Steam cleaning. Withstand use of hydrogen peroxide vapor.



## **Surface Endurance**

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



## **Chemical resistance/Disinfection**

| Chemical    | Active Substance                                  | Concentration |
|-------------|---|---------------|
| Ethanol     | Ethanol   | 70%           |
| Chlorine    | Sodium Hypochlorite solution                      | 2,5%          |
| Virkon S    | Dipotassium peroxodisulphate;<br>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                        | Class                              |
|--|------------------------------------|
| ISO 846 :2019 method C (for bacterium) | O (No growth under the microscope) |
| ASTM D3273-16 (for fungi)              | 10 (0% growth on the surface)      |

## **Clean Room**



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

## Accessibility



The tiles are demountable.



#### Installation

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



## System weight

|   | kg/m² | Weight information is indicative and subject to variation. |
|---|-------|--|
| Hygiene Protec Ds                       | 2,9   |  |
| Hygiene Protec Ds + Connect grid system | 3,8   |  |



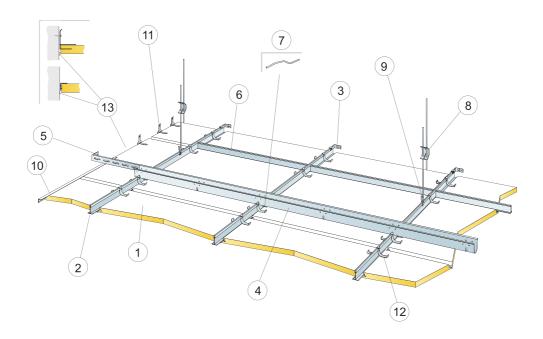
## **Mechanical properties**

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



#### CE

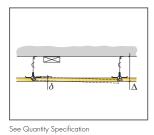
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

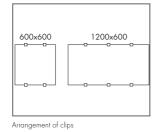


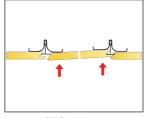
## © Saint-Gobain Ecophon AB

## 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 PL, installed at 600 mm centres                                   | 1,7m/m²                             | 1,7m/m²                             |
| 3  | Connect Wall Bracket for T-profiles   | 1/suspended row o                   | of Main runner                      |
| 4  | Connect Space Bar, installed at 1,500 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 bo                   | ır                                  |
| 6  | Connect T24 Cross Tee, L=600 mm   | 2/row of Main runner                |                                     |
| 7  | Connect Space Bar Winch, installed one per joint Connect Main Runner/Connect Space Bar    | 1,4/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                              |
| 9  | 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, installed at 500 mm centre. Minimum free depth above tile 150 mm. | 2/cut tile with one<br>bearing edge | 3/cut tile with one<br>bearing edge |
| 12 | Connect Hold Down Clip Ds   | 2/tile, 50-100 mm<br>from corners   | 3/tile, 50-100 mm<br>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   | -                                   | -                                   |







| 30 | capacity [N]<br>160 |
|----|---------------------|
| 30 | 160                 |
|    |                     |
|    |                     |
|    |                     |
|    |                     |

Demounting of tile from below

Live load/load bearing capacity



# Ecophon Hygiene Protec™ Air

A

Ecophon Hygiene Protec<sup>™</sup> 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.



#### **SYSTEM RANGE**



| Size, mm        | 600x600 | 600x600 | 1200x600 | 1200×600 |
|-----------------|---------|---------|----------|----------|
| T24             | •       | •       | •        | •        |
| Thickness (THK) | 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 system

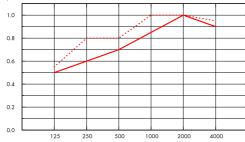
## $M_{\sim}$

#### Acoustic

## **Sound Absorption:**

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

 $\alpha_{\text{p}'}$  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 soun | d absorption c | coefficient |         | $\alpha_{_{	ext{W}}}$ | Sound absorption class  |
|-----|---------------|--------|----------------|--------------|----------------|-------------|---------|-----------------------|-------------------------|
| mm  | 0.0.3. 111111 | 125 Hz | 250 Hz         | 500 Hz       | 1000 Hz        | 2000 Hz     | 4000 Hz | 0. <sub>W</sub>       | Journa absorption class |
| 20  | 200           | 0.50   | 0.60           | 0.70         | 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                  | А                       |

| THK<br>mm | o.d.s. mm | NRC  | SAA  |
|-----------|-----------|------|------|
| 20        | 200       | 0.80 | 0.81 |
| 40        | 200       | 0.90 | 0.92 |

#### **Indoor Air Quality**

| Certificate / Label          |          |
|------------------------------|----------|
| Eurofins Indoor Air Comfort® | IAC Gold |
| French VOC                   | A+       |







## **Carbon footprint**

kg CO<sub>2</sub> equiv/m<sup>2</sup> Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804

Hygiene Protec Air A 4,45



## Circularity

| Minimum post-consumer recycled content | 38%              |
|--|------------------|
| Recyclability                          | Fully recyclable |



#### Fire safety

| Country | Fire standard | Class    | The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. |
|---------|---------------|----------|--|
| Europe  | EN 13501-1    | A2-s1,d0 | Holl composible decording to ET 1100 1102.   |



## **Humidity Resistance**

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



## Visual appearance

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



## Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



## **Advanced Cleanability**

Steam cleaning. Withstand use of hydrogen peroxide vapor.



#### **Surface Endurance**

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



#### Chemical resistance/Disinfection

| Chemical    | Active Substance                                  | Concentration |
|-------------|---|---------------|
| Ethanol     | Ethanol   | 70%           |
| Chlorine    | Sodium Hypochlorite solution                      | 2,5%          |
| Virkon S    | Dipotassium peroxodisulphate;<br>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                        | Class                              |
|--|------------------------------------|
| ISO 846 :2019 method C (for bacterium) | O (No growth under the microscope) |
| ASTM D3273-16 (for fungi)              | 10 (0% growth on the surface)      |



#### **Clean Room**

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



## Air permeability

| Protec<br>Air A<br>20 mm | Positive<br>pressure<br>m3/(h x<br>m2) | Negative<br>pressure<br>m3/(h x<br>m2) | Positive<br>pressure<br>L/s/m2 | Negative<br>pressure<br>L/s/m2 | Protec<br>Air A<br>40 mm | Positive pressure m3/(h x m2) | Negative<br>pressure<br>m3/(h x<br>m2) | Positive<br>pressure<br>L/s/m2 | Negative<br>pressure<br>L/s/m2 | ro<br>m<br>c |
|--------------------------|--|--|--------------------------------|--------------------------------|--------------------------|-------------------------------|--|--------------------------------|--------------------------------|--------------|
| 10<br>(Pa)               | 16,1                                   | 15,0                                   | 4,0                            | 4,2                            | 10<br>(Pa)               | 14,6                          | 16,9                                   | 4,0                            | 4,7                            | re<br>n      |
| 20<br>(Pa)               | 27,9                                   | 22,1                                   | 7,8                            | 6,1                            | 20<br>(Pa)               | 25,7                          | 26,5                                   | 7,1                            | 7,4                            | rc<br>p<br>u |
| 30<br>(Pa)               | 38,5                                   | 27,7                                   | 10,7                           | 7,7                            | 30<br>(Pa)               | 35,8                          | 34,4                                   | 9,9                            | 9,6                            | P.<br>E      |
| 40<br>(Pa)               | 48,4                                   | 32,5                                   | 13,4                           | 9,0                            | 40<br>(Pa)               | 45,2                          | 41,4                                   | 12,6                           | 11,5                           | • 9<br>:2    |
| 50<br>(Pa)<br>/Q50       | 57,8                                   | 36,8                                   | 16,1                           | 10,2                           | 50<br>(Pa)<br>/Q50       | 54,3                          | 47,8                                   | 15,1                           | 13,3                           | -            |

Air leak rate measured at positive respective negative room pressure up to 50 Pa (Q50) EN ISO 9972 :2015

#### Accessibility



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



#### Installation

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



## System weight

|  | kg/m² | W |
|--|-------|---|
| Hygiene Protec Air A 20 mm                       | 2,0   |   |
| Hygiene Protec Air A 20 mm + Connect grid system | 3,0   |   |
| Hygiene Protec Air A 40 mm                       | 3,0   |   |
| Hygiene Protec Air A 40 mm + Connect grid system | 4,0   |   |

Weight information is indicative and subject to variation.



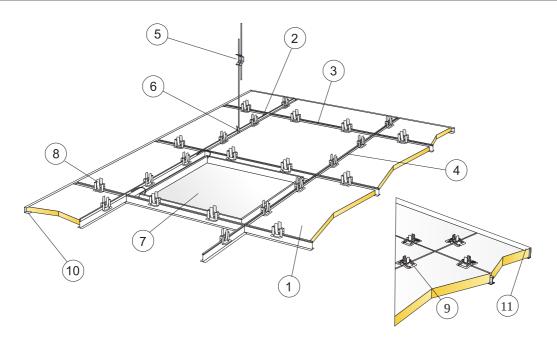
#### **Mechanical properties**

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



## CE

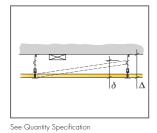
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

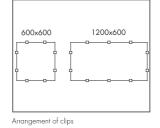


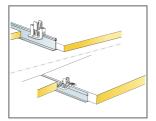
## © Saint-Gobain Ecophon AB

## QUANTITY SPECIFICATION (EXCL. WASTAGE)

|    |   | Size, mm    | Size, mm    |  |
|----|---|-------------|-------------|--|
|    |   | 600×600     | 1200×600    |  |
| 1  | Hygiene Protec Air 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 1 200 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       | 7/m²        |  |
| 9  | Connect Hygiene Clip 40   | 11/m²       | 7/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  | -           | -           |  |







| Size, mm    | Max live<br>load (N) | Min load bearing<br>capacity [N] |
|-------------|----------------------|----------------------------------|
| 600x600x20  | 50                   | 160                              |
| 600x600x40  | 50                   | 160                              |
| 1200x600x20 | 50                   | 160                              |
| 1200x600x40 | 50                   | 160                              |
|             |                      |                                  |
|             |                      |                                  |

Clip for keeping tiles in place for 40 mm tiles

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.



#### **SYSTEM RANGE**



| Size, mm        | 600x600        | 600x600        | 1200x600       | 1200x600       |
|-----------------|----------------|----------------|----------------|----------------|
| T24             | •              | •              | •              | •              |
| Thickness (THK) | 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

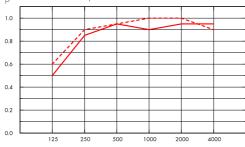
#### **Acoustic**



#### **Sound Absorption:**

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





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          | ods mm |        | $lpha_{p'}$ Pr | actical sound | d absorption c | coefficient |                | $ lpha_{_{ m W}}$ Sound absorption class |   |  |
|--------------|--------|--------|----------------|---------------|----------------|-------------|----------------|--|---|--|
| mm O.d.s. mm | 125 Hz | 250 Hz | 500 Hz         | 1000 Hz       | 2000 Hz        | 4000 Hz     | w <sub>w</sub> | Journal 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 |  |

| THK<br>mm | o.d.s. mm | NRC  | SAA  |
|-----------|-----------|------|------|
| 20        | 200       | 0.90 | 0.92 |
| 40        | 200       | 0.95 | 0.96 |

#### **Indoor Air Quality**



| Certificate / Label          |          |
|------------------------------|----------|
| Eurofins Indoor Air Comfort® | IAC Gold |
| French VOC                   | A+       |







#### Cradle to Cradle Certified®



This product is Cradle to Cradle Certified® at Bronze level (version 4.0).



#### **Material Health**

This product has received a C2C Certified Material Health Certificate<sup>TM</sup> at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate<sup>TM</sup> is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



#### **Carbon footprint**

|                             | kg CO2 equiv/m² |
|-----------------------------|-----------------|
| Hygiene Performance A 20 mm | 2,43            |
| Hygiene Performance A 40 mm | 4,22            |

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 | Fire standard | Class    | The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. |
|---------|---------------|----------|--|
| Europe  | EN 13501-1    | A2-s1,d0 | non-composition decorating to ETT to CTT 02.   |



#### **Humidity Resistance**

Class D, relative humidity 97% and 50°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 vapor.



#### **Surface Endurance**

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



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

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

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



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

| Standard/Method                        | Class                              |
|--|------------------------------------|
| ISO 846 :2019 method C (for bacterium) | O (No growth under the microscope) |
| ASTM D3273-16 (for fungi)              | 10 (0% growth on the surface)      |

#### **Clean Room**



|             | 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 clips to allow for effective cleaning. The clips are easily removable from above the ceiling. An easy-to-open Connect Inspection hatch is available to simplify access to the ceiling void.



#### 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

|   | kg/m² |
|---|-------|
| Hygiene Performance A 20 mm                       | 1,6   |
| Hygiene Performance A 20 mm + Connect grid system | 2,6   |
| Hygiene Performance A 40 mm                       | 2,6   |
| Hygiene Performance A 40 mm + Connect grid system | 3,6   |

Weight information is indicative and subject to variation.



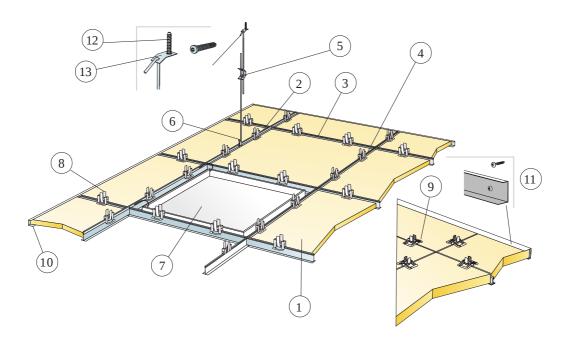
#### **Mechanical properties**

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



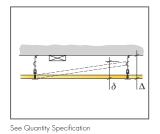
#### CE

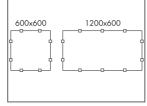
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

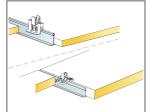


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|   |   | Size, mm    | Size, mm    |  |
|---|---|-------------|-------------|--|
|   |   | 600×600     | 1200×600    |  |
| 1 | Hygiene Performance A   | 2,8/m²      | 1,4/m²      |  |
| 2 | Connect T24 Main Runner C3, installed at 1200 mm centres            | 0,9m/m²     | 0,9m/m²     |  |
|   | Connect T24 Cross Tee C3, L=600 mm                                  | 0,9m/m²     | -           |  |
| 1 | Connect T24 Cross Tee C3, L=1200 mm, installed at 600 mm centres    | 1,7m/m²     | 1,7m/m²     |  |
| 5 | Connect Adjustable Hanger C3, c1200 (max distance from wall 600 mm) | 0,7/m²      | 0,7/m²      |  |
| ) | Connect Hanger Clip (not to be used in swimming hall environments)  | 0,7/m²      | 0,7/m²      |  |
|   | Connect Inspection Hatch C3   | as required | as required |  |
|   | Connect Hygiene Clip 20   | 11/m²       | 7/m²        |  |
|   | Connect Hygiene Clip 40   | 11/m²       | 7/m²        |  |
| 0 | Connect Channel Trim C3, fixed c300 (for 20 mm thickness)           | as required | as required |  |
| 1 | Connect Channel Trim C3, fixed c300 (for 40 mm thickness)           | as required | as required |  |
| 2 | Connect Anchor Screw C4   | 0,7/m²      | 0,7/m²      |  |
| 3 | 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                        | -           | -           |  |



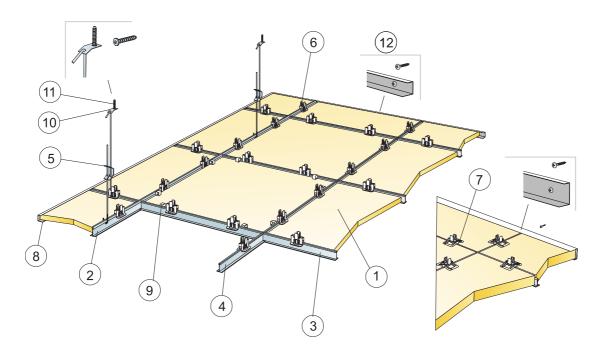




| 600x600x20  | 50 | 160 |
|-------------|----|-----|
|             |    |     |
| 600x600x40  | 50 | 160 |
| 1200x600x20 | 50 | 160 |
| 1200x600x40 | 50 | 160 |

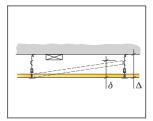
Arrangement of clips Clip for keeping tiles in place for 40 mm tiles

Live load/load bearing capacity

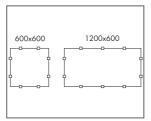


### © Saint-Gobain Ecophon AB

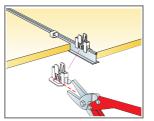
|    |  | Size, mm       |             |
|----|--|----------------|-------------|
|    |  | 600x600        | 1200×600    |
| 1  | Hygiene Performance A  | 2,8/m²         | 1,4/m²      |
| 2  | Connect T24 Main Runner C4, c1200                                    | 0,9m/m²        | 0,9m/m²     |
| 3  | Connect T24 Cross Tee C4, L=1 200, c600                              | 1,7m/m²        | 1,7m/m²     |
| 4  | Connect T24 Cross Tee C4, L=600                                      | 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          | 7/m²        |
| 7  | Connect Hygiene Clip 40 C4   | 11/m²          | 7/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                         | -              | -           |







Arrangement of clips



Cutting of Connect Hygiene Clip 20 at the inspection tile

| Size, mm    | Max live<br>load (N) | Min load bearing<br>capacity [N] |
|-------------|----------------------|----------------------------------|
| 600x600x20  | 50                   | 160                              |
| 600x600x40  | 50                   | 160                              |
| 1200x600x20 | 50                   | 160                              |
| 1200x600x40 | 50                   | 160                              |

Live load/load bearing capacity



# Ecophon Hygiene Performance™ B

Ecophon Hygiene Performance<sup>TM</sup> B is bonded edge-to-edge to the soffit surface, creating a ceiling with a smooth appearance. The bevelled edge creates a narrow groove between each tile. For applications where the minimum possible overall depth of system is required. Product endure abrasive wet wiping and advanced cleaning such as steam cleaning on a regular basis.



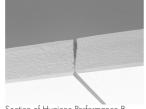
#### **SYSTEM RANGE**



| Size, mm        | 600x600 | 1200x600 |
|-----------------|---------|----------|
| Direct          | •       | •        |
| Thickness (THK) | 40      | 40       |
| Inst. Diagr.    | M638    | M638     |



Hygiene Performance B tile



Section of Hygiene Performance B system



Hygiene Performance B system

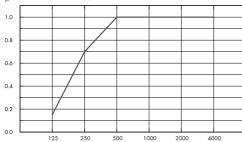
#### Acoustic



#### **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.





Performance B, 43mm o.d.s.o.d.s = overall depth of system

Frequency Hz

| THK | o.d.s. mm     | $lpha_{ m p}$ , Practical sound absorption coefficient |        |        |         |         | $\alpha_{_{ m W}}$ | Sound absorption class |                        |
|-----|---------------|--|--------|--------|---------|---------|--------------------|------------------------|------------------------|
| mm  | 0.0.3. 111111 | 125 Hz   | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz            | u <sub>w</sub>         | Sound absorption class |
| 40  | 43            | 0.15   | 0.70   | 1.00   | 1.00    | 1.00    | 1.00               | 1.00                   | А                      |

|  | THK<br>mm | o.d.s. mm | NRC  | SAA  |
|--|-----------|-----------|------|------|
|  | 40        | 43        | 0.95 | 0.95 |



#### **Indoor Air Quality**

| Certificate / Label          |          |
|------------------------------|----------|
| Eurofins Indoor Air Comfort® | IAC Gold |
| French VOC                   | A+       |







#### Circularity

| Minimum post-consumer recycled content | 57%              |
|--|------------------|
| Recyclability                          | Fully recyclable |



#### Fire safety

| Country | Fire standard | Class    | The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. |
|---------|---------------|----------|--|
| Europe  | EN 13501-1    | A2-s1,d0 | non-combostible according to ETV 130-1102.   |

## $\bigcirc \, [\![$

#### **Humidity Resistance**

#### Classification

Class C, RH 95% and 30°C



### Visual appearance

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



#### Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



#### **Advanced Cleanability**

Steam cleaning. Withstand use of hydrogen peroxide vapor.



#### **Surface Endurance**

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



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

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

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



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

| Standard/Method                        | Class                              |
|--|------------------------------------|
| ISO 846 :2019 method C (for bacterium) | O (No growth under the microscope) |
| ASTM D3273-16 (for fungi)              | 10 (0% growth on the surface)      |

#### **Clean Room**



|             | 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.



#### 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

|                       | kg/m² | Weight information is indicative and subject to variation. |
|-----------------------|-------|--|
| Hygiene Performance B | 3,7   |  |



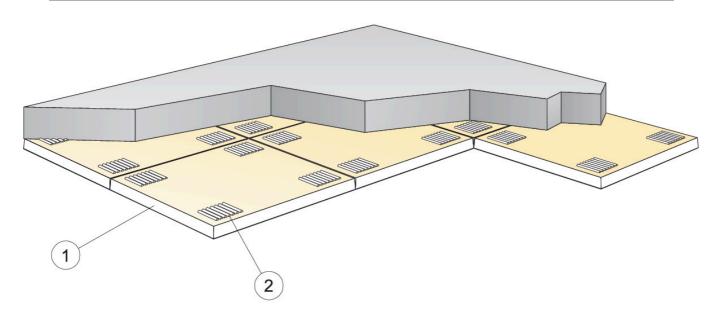
#### **Mechanical properties**

Additional live load has to be fixed to the soffit.



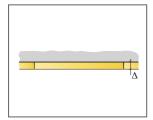
#### CE

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.

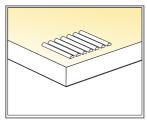


## © Saint-Gobain Ecophon AB

|   |   | Size, mm    |             |
|---|---|-------------|-------------|
|   |   | 600×600     | 1200×600    |
| 1 | Hygiene Performance™ B  | 2,8/m²      | 1,4/m²      |
| 2 | Connect Absorber glue (0,25 l/m² - 0,4 l/m² depending on installation conditions) | as required | as required |
|   | Use Connect Notched spatula to apply the glue.                                    |             | -           |
|   | $\Delta$ Min. overall depth of system: 43 mm                                      |             | -           |
|   | $\delta$ Min. demounting depth: The system is not demountable                     |             | -           |
|   | Visible edges should be painted   | -           | -           |



See Quantity specification



Application of glue



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 (THK) | 20      | 20       |
| Inst. Diagr.    | M616C4  | M616C4   |







Section of Performance Ds system with Connect T24 Main Runner C4





The individual tiles are easily demountable

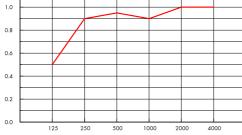
### **Acoustic**



#### **Sound Absorption:**

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.





Frequency Hz

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

| THK | o.d.s. mm     |        | α <sub>p</sub> , Pr | actical sound | d absorption c | oefficient |         | $\alpha_{_{ m W}}$ | Sound absorption class |
|-----|---------------|--------|---------------------|---------------|----------------|------------|---------|--------------------|------------------------|
| mm  | 0.0.3. 111111 | 125 Hz | 250 Hz              | 500 Hz        | 1000 Hz        | 2000 Hz    | 4000 Hz | $\alpha_{\rm w}$   | Sound absorption class |
| 20  | 200           | 0.50   | 0.90                | 0.95          | 0.90           | 1.00       | 1.00    | 0.95               | А                      |

| THK<br>mm | o.d.s. mm | NRC  | SAA  |
|-----------|-----------|------|------|
| 20        | 200       | 0.95 | 0.95 |



#### **Indoor Air Quality**

| Certificate / Label          |          |
|------------------------------|----------|
| Eurofins Indoor Air Comfort® | IAC Gold |
| French VOC                   | A+       |







#### **Carbon footprint**

| kg CO <sub>2</sub><br>equiv/m²          |      | Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804 |  |
|---|------|--|--|
| Hygiene Performance Ds (EN<br>15804+A2) | 3,46 |  |  |



#### Circularity

| Minimum post-consumer recycled content | 51%              |
|--|------------------|
| Recyclability                          | Fully recyclable |



#### Fire safety

| Country | Fire standard | Class    | The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. |
|---------|---------------|----------|--|
| Europe  | EN 13501-1    | A2-s1,d0 | Their combostible decorating to ETV 100 TT02.  |



#### **Humidity Resistance**

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



#### Visual appearance

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



#### Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



#### **Advanced Cleanability**

Steam cleaning. Withstand use of hydrogen peroxide vapor.



#### **Surface Endurance**

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



#### Chemical resistance/Disinfection

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

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



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

| Standard/Method                        | Class                              |
|--|------------------------------------|
| ISO 846 :2019 method C (for bacterium) | O (No growth under the microscope) |
| ASTM D3273-16 (for fungi)              | 10 (0% growth on the surface)      |

#### **Clean Room**



|             | 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

|  | kg/m² | Weight information is indicative and subject to variation. |
|--|-------|--|
| Hygiene Performance Ds                       | 2,5   |  |
| Hygiene Performance Ds + Connect grid system | 3,4   |  |



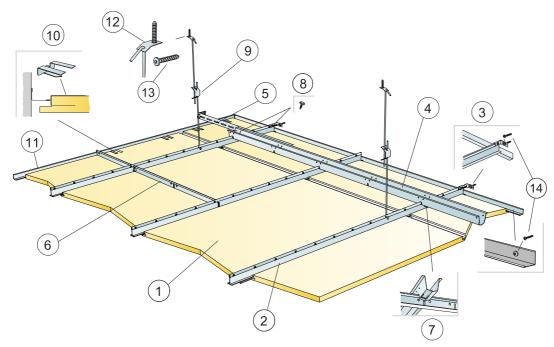
#### **Mechanical properties**

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



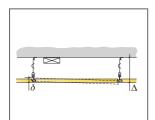
#### CE

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.

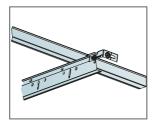


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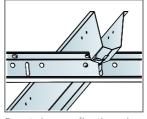
|    |   | Size, mm                             |   |
|----|---|--------------------------------------|---|
|    |   | 600×600                              | 1200×600                                  |
| 1  | Hygiene Performance Ds  | 2,8/m²                               | 1,4/m²                                    |
| 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 rov                      | v of Main runner                          |
| 4  | Connect Space Bar C4, installed at 1500 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                       | bar                                       |
| 6  | Connect T24 Cross Tee C4, L=600 mm  | 2/row of Main ru                     | unner                                     |
| 7  | Connect Space Bar Winch C4, installed one per joint Connect Main Runner/Connect 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  | 1pc/300-400 m<br>tile with only 1 su | m on every cut perimeter<br>pporting 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                       | rim C4                                    |
|    | $\Delta$ Min. overall depth of system: 385 mm   | -                                    | -   |
|    | $\delta$ Min. demounting depth: 30 mm   | -                                    | -   |



See Quantity Specification



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



Connection between profiles with space bar

| Size, mm<br>600x600x20 | Max live<br>load [N]<br>40 | Min load bearing<br>capacity [N]<br>160 |
|------------------------|----------------------------|---|
| 1200x600x20            | 40                         | 160                                     |
|                        |                            |   |
|                        |                            |   |
|                        |                            |   |

Live load/load bearing capacity



# Ecophon Hygiene Performance™ Plus A

Ecophon Hygiene Performance<sup>TM</sup> Plus A has an exposed grid with fully sealed robust Hygiene Performance<sup>TM</sup> 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 (THK) | 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

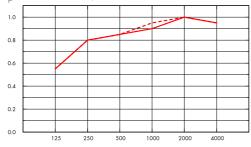
#### **Acoustic**



#### **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.

 $lpha_{_{D'}}$  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     | $lpha_{p'}$ Practical sound absorption coefficient |        |        |         |         |         | $\alpha_{_{	ext{W}}}$ | Sound absorption class |
|-----|---------------|--|--------|--------|---------|---------|---------|-----------------------|------------------------|
| mm  | 0.0.3. 111111 | 125 Hz   | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 0. <sub>W</sub>       | Sound 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<br>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 Gold |
| French VOC                   | A+       |







#### Cradle to Cradle Certified®



This product is Cradle to Cradle Certified® at Bronze level (version 4.0).

#### **Material Health**

This product has received a C2C Certified Material Health Certificate<sup>TM</sup> at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate<sup>TM</sup> is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



#### **Carbon footprint**

|                                  | kg CO2 equiv/m² |
|----------------------------------|-----------------|
| Hygiene Performance Plus A, 20mm | 3,22            |
| Hygiene Performance Plus A, 40mm | 5,19            |

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 | Fire standard | Class    | The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. |
|---------|---------------|----------|--|
| Europe  | EN 13501-1    | A2-s1,d0 | Holl composible according to ETT 100 TT02.   |



#### **Humidity Resistance**

Class D, relative humidity 97% and 50°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 vapor.



#### **Surface Endurance**

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



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

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

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



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

| Standard/Method                        | Class                              |
|--|------------------------------------|
| ISO 846 :2019 method C (for bacterium) | O (No growth under the microscope) |
| ASTM D3273-16 (for fungi)              | 10 (0% growth on the surface)      |

#### **Clean Room**



|             | 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 |



#### Installation

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



#### Accessibility

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



#### System weight

|  | kg/m² |
|--|-------|
| Hygiene Performance Plus A 20 mm                       | 2,0   |
| Hygiene Performance Plus A 20 mm + Connect grid system | 3,0   |
| Hygiene Performance Plus A 40 mm                       | 3,0   |
| Hygiene Performance Plus A 40 mm+ Connect grid system  | 4,0   |

Weight information is indicative and subject to variation.



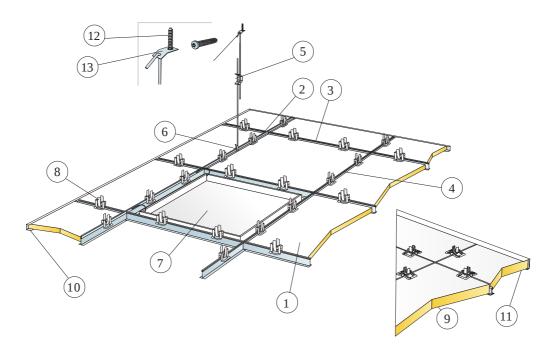
#### **Mechanical properties**

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



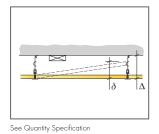
#### CE

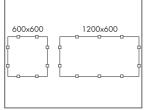
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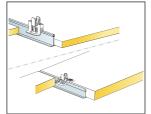


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|   |   | Size, mm    | Size, mm    |  |
|---|---|-------------|-------------|--|
|   |   | 600×600     | 1200×600    |  |
| 1 | Hygiene Performance Plus A  | 2,8/m²      | 1,4/m²      |  |
| 2 | Connect T24 Main Runner C3, installed at 1200 mm centres            | 0,9m/m²     | 0,9m/m²     |  |
|   | Connect T24 Cross Tee C3, L=1200 mm, installed at 600 mm centres    | 1,7m/m²     | 1,7m/m²     |  |
| ļ | Connect T24 Cross Tee C3, L=600 mm                                  | 0,9m/m²     | -           |  |
| 5 | Connect Adjustable Hanger C3, c1200 (max distance from wall 600 mm) | 0,7/m²      | 0,7/m²      |  |
| , | Connect Hanger Clip (not to be used in swimming hall environments)  | 0,7/m²      | 0,7/m²      |  |
|   | Connect Inspection Hatch C3   | as required | as required |  |
|   | Connect Hygiene Clip 20   | 11/m²       | 7/m²        |  |
|   | Connect Hygiene Clip 40   | 11/m²       | 7/m²        |  |
| 0 | Connect Channel Trim C3, fixed c300 (for 20 mm thickness)           | as required | as required |  |
| 1 | Connect Channel Trim C3, fixed c300 (for 40 mm thickness)           | as required | as required |  |
| 2 | Connect Anchor Screw C4   | 0,7/m²      | 0,7/m²      |  |
| 3 | 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                        | -           | -           |  |







| Size, mm    | Max live<br>load (N) | Min load bearing<br>capacity [N] |
|-------------|----------------------|----------------------------------|
| 600x600x20  | 50                   | 160                              |
| 600x600x40  | 50                   | 160                              |
| 1200x600x20 | 50                   | 160                              |
| 1200x600x40 | 50                   | 160                              |
|             |                      |                                  |

Arrangement of clips Clip for keeping tiles in place for 40 mm tiles

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.

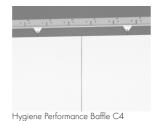


#### **SYSTEM RANGE**



| Size, mm        | 1200x600               |
|-----------------|------------------------|
| T24             | •                      |
| Thickness (THK) | 50                     |
| Inst. Diagr.    | M492C3, M493C3, M494C4 |







Hygiene Performance Baffle C4 installation

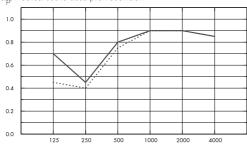
#### Acoustic



#### **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.





- ····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 ~1,3 baffles/m2 ceiling area, 600 mm o.d.s.
- o.d.s = overall depth of system

| Frequen |
|---------|
| Hz      |

|               | THK | o.d.s. mm     |        | $lpha_{p_r}$ Practical sound absorption coefficient |        |         |         |         | $\alpha_{_{ m W}}$ | Sound absorption class |
|---------------|-----|---------------|--------|---|--------|---------|---------|---------|--------------------|------------------------|
| mm O.d.s. I   |     | 0.0.3. 111111 | 125 Hz | 250 Hz  | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | ∞ <sub>w</sub>     | 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                      |

|               | THK<br>mm | o.d.s. mm | NRC  | SAA  |
|---------------|-----------|-----------|------|------|
| in rows       | 50        | 600       | 0.75 | 0.73 |
| in rectangles | 50        | 600       | 0.75 | 0.77 |

## Indoor Air Quality



| Certificate / Label          |          |
|------------------------------|----------|
| Eurofins Indoor Air Comfort® | IAC Gold |
| French VOC                   | A+       |







#### Cradle to Cradle Certified®



This product is Cradle to Cradle Certified® at Bronze level (version 4.0).

#### **Material Health**

This product has received a C2C Certified Material Health Certificate<sup>TM</sup> at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate<sup>TM</sup> is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



#### **Carbon footprint**

|                            | kg CO2 equiv/m² | Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804 |
|----------------------------|-----------------|--|
| Hygiene Performance Baffle | 8,30            | 11023 / 21110001   |



#### Circularity

| Minimum post-consumer recycled content | 57%              |
|--|------------------|
| Recyclability                          | Fully recyclable |



#### Fire safety

| Country | Fire standard | Class    | The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. |
|---------|---------------|----------|--|
| Europe  | EN 13501-1    | A2-s1,d0 | non-composible according to 214 to 0 1 102.  |



#### **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. Withstand use of hydrogen peroxide vapor.



#### **Surface Endurance**

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



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

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

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



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

| Standard/Method                        | Class                              |
|--|------------------------------------|
| ISO 846 :2019 method C (for bacterium) | O (No growth under the microscope) |
| ASTM D3273-16 (for fungi)              | 10 (0% growth on the surface)      |

#### **Clean Room**



|             | 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

|                            | kg/m² | Weight information is indicative and subject to variation. |
|----------------------------|-------|--|
| Hygiene Performance Baffle | 4,8   |  |



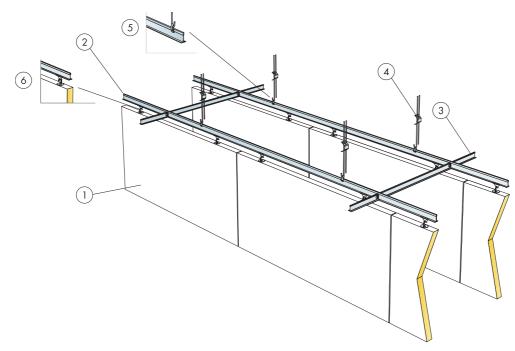
#### **Mechanical properties**

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



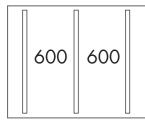
#### CE

Ecophon ceiling systems are CE marked according to the European harmonized standard 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.

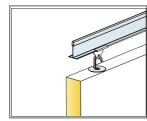


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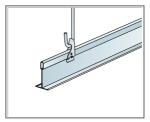
|  | Size, mm |
|--|----------|
|  | 1200×600 |
| Hygiene Performance Baffle                                       | 1,4/m²   |
| Connect T24 Main Runner C3, installed at 600 mm centres          | 1,7m/m²  |
| Connect T24 Cross Tee C3, L=600 mm, installed at 1800 mm centres | 0,6m/m²  |
| Connect Adjustable Hanger C3 c1200                               | 1,4/m²   |
| Connect Hanger Clip  | 1,4/m²   |
| Connect Baffle Clip C3   | 2,8/m²   |



Installation in rows



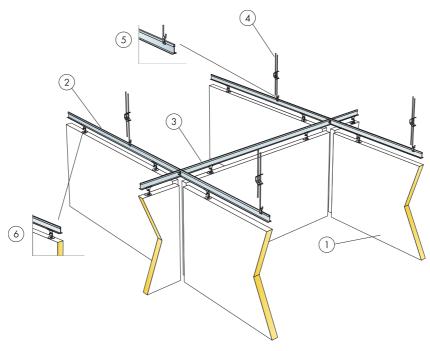
Detail of suspension



Suspension with Connect Adjustable Hanger and Connect Hanger Clip

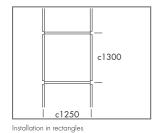


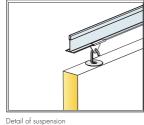
Live load/load bearing capacity

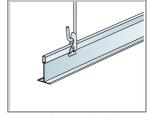


© Saint-Gobain Ecophon AB

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



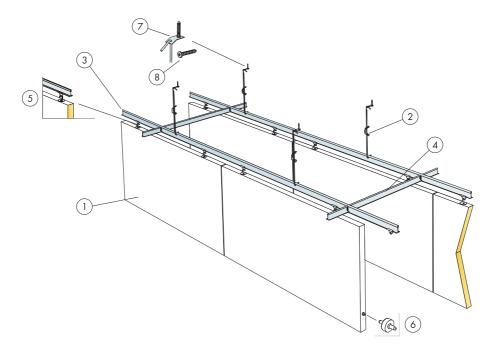






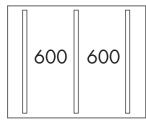
Suspension with Connect Adjustable Hanger and Connect Hanger Clip

Live load/load bearing capacity

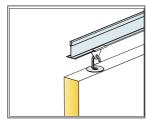


© Saint-Gobain Ecophon AB

|  | 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 1200/1800 mm centres           | 2,8/m²   |
| Connect Fixing Plate C4  | 1,4/m²   |
| Connect Anchor Screw C4  | 1,4/m²   |
|  | Connect Adjustable Hanger C4 c1200  Connect T24 Main Runner C4, installed at 600 mm centres  Connect T24 Cross Tee C4, L=600 mm, installed at 1800 mm centres  Connect Baffle Clip C4  Connect Guiding Pin, installed at 1200/1800 mm centres  Connect Fixing Plate C4 |



Installation in rows



Detail of suspension





Live load/load bearing capacity



# Ecophon Hygiene Performance™ Wall

Ecophon Hygiene Performance<sup>TM</sup> 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 (THK) | 40       |
| Inst. Diagr.    | M467     |









/all C3 system Connect Wall Fixing C3

## ۸.

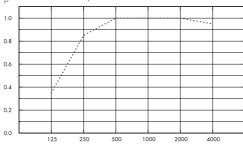
#### Acoustic

### -√\//\-

#### **Sound Absorption:**

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

 $lpha_{_{\mathrm{D}^{\prime}}}$  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 | coefficient |         | $\alpha_{_{\!\scriptscriptstyle{\mathrm{W}}}}$ | Sound absorption class  |
|-----|---------------|--------|----------------|---------------|----------------|-------------|---------|--|-------------------------|
| mm  | 0.0.5. 111111 | 125 Hz | 250 Hz         | 500 Hz        | 1000 Hz        | 2000 Hz     | 4000 Hz | o.w  | Journa absorption class |
| 40  | 80            | 0.35   | 0.85           | 1.00          | 1.00           | 1.00        | 0.95    | 1.00   | А                       |

| THK<br>mm | o.d.s. mm | NRC  | SAA  |
|-----------|-----------|------|------|
| 40        | 80        | 0.95 | 0.95 |



#### **Indoor Air Quality**









#### Cradle to Cradle Certified®



This product is Cradle to Cradle Certified 8 at Bronze level (version 4.0).



#### **Material Health**

This product has received a C2C Certified Material Health Certificate<sup>TM</sup> at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate<sup>TM</sup> is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



#### **Carbon footprint**

|                          | kg CO2 equiv/m² | Life-cycle stages A1 to C4 from EPD, in conformity with ISC |
|--------------------------|-----------------|---|
| Hygiene Performance Wall | <i>7</i> ,13    | - 14020 / LIN 13004   |



#### Circularity

| Minimum post-consumer recycled content | 54%              |
|--|------------------|
| Recyclability                          | Fully recyclable |



#### Fire safety

| Country | Fire standard | Class    | The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. |
|---------|---------------|----------|--|
| Europe  | EN 13501-1    | A2-s1,d0 |  |



#### **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**

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



#### **Surface Endurance**

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



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

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

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



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

| Standard/Method                        | Class                              |
|--|------------------------------------|
| ISO 846 :2019 method C (for bacterium) | O (No growth under the microscope) |
| ASTM D3273-16 (for fungi)              | 10 (0% growth on the surface)      |



#### **Clean Room**

|             | 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

|                          | kg/m² | Weight information is indicative and subject to variation. |
|--------------------------|-------|--|
| Hygiene Performance Wall | 4,0   |  |



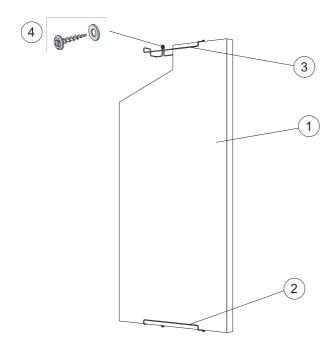
#### **Mechanical properties**

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



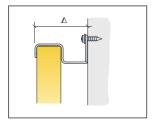
#### CE

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.

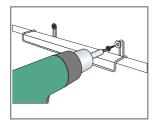


#### © Saint-Gobain Ecophon AB

|    |   | 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       |
| ļ. | 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™ 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**

| 40 | Size, mm         | 2700×1200<br>•<br>40 |  |  |
|----|------------------|----------------------|--|--|
|    | Thinline Profile | •                    |  |  |
|    | Thickness (THK)  | 40                   |  |  |
|    | Inst. Diagr.     | M610                 |  |  |



Hugiana Parformanca Cara Wall

Hygiene Performance Care Wall

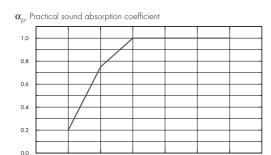
Hygiene Performance Care Wall system with Connect Thinline profiles

### Acoustic



#### **Sound Absorption:**

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



 Hygiene Performance Care Wall 40 mm, 50 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 | coefficient |         | $\alpha_{_{\scriptscriptstyle{ m W}}}$ | Sound absorption class |
|-----|-----------|--------|----------------|---------------|----------------|-------------|---------|--|------------------------|
| mm  |           | 125 Hz | 250 Hz         | 500 Hz        | 1000 Hz        | 2000 Hz     | 4000 Hz |  | Sound absorption class |
| 40  | 50        | 0.20   | 0.75           | 1.00          | 1.00           | 1.00        | 1.00    | 1.00                                   | А                      |

| THK<br>mm | o.d.s. mm |      | SAA  |
|-----------|-----------|------|------|
| 40        | 50        | 0.95 | 0.96 |

#### **Indoor Air Quality**









#### Cradle to Cradle Certified®



This product is Cradle to Cradle Certified® at Bronze level (version 4.0).



#### **Material Health**

This product has received a C2C Certified Material Health Certificate<sup>TM</sup> at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate<sup>TM</sup> is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



#### Circularity

| Minimum post-consumer recycled content | 58%              |
|--|------------------|
| Recyclability                          | Fully recyclable |



#### Fire safety

| Country | Fire standard | Class    | The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. |
|---------|---------------|----------|--|
| Europe  | EN 13501-1    | A2-s1,d0 | non comboshble decording to ETT 100 TT02.  |



#### **Humidity Resistance**

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



#### Visual appearance

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



#### Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



#### **Advanced Cleanability**

Steam cleaning. Withstand use of hydrogen peroxide vapor.



#### **Surface Endurance**

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



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

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

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



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

| Standard/Method                        | Class                              |
|--|------------------------------------|
| ISO 846 :2019 method C (for bacterium) | O (No growth under the microscope) |
| ASTM D3273-16 (for fungi)              | 10 (0% growth on the surface)      |

### Clean Room



|             | 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.



#### System weight

|                               | kg/m² | Weight information is indicative and subject to variation. |
|-------------------------------|-------|--|
| Hygiene Performance Care Wall | 3,7   |  |



#### Installation

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



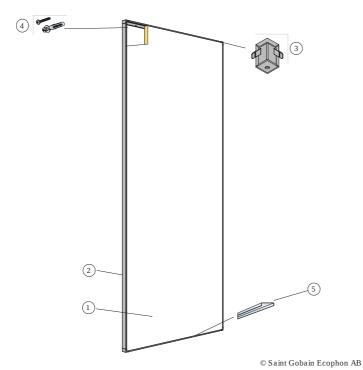
#### **Mechanical properties**

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

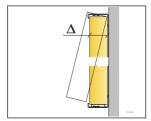


#### CE

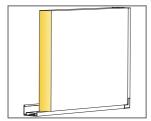
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



|   |  | Size, mm    |
|---|--|-------------|
|   |  | 2700×1200   |
| 1 | Hygiene Performance Care Wall  | 0,31/m²     |
| 2 | Connect Thinline Profile, L=2658 mm  | as required |
| 3 | Connect Thinline Corner  | as required |
| 4 | Installation screw, installed at 200 mm centres (select fastener according to wall material) | as required |
| 5 | Connect Thinline Space Bar   | as required |
|   | Δ Overall depth of system: 45 mm   |             |



See Quantity specification

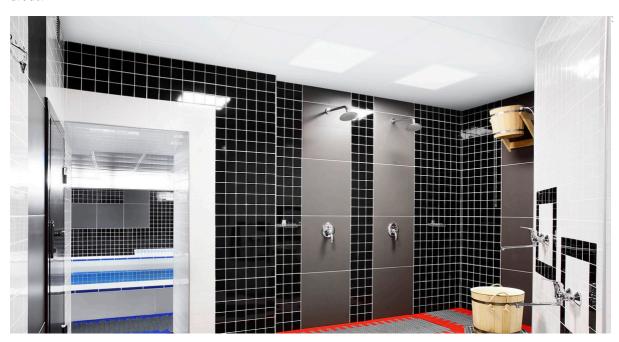


Detail of panel with Thinline system

## Ecophon Hygiene Advance™

## A

Ecophon Hygiene Advance™ A is a soundabsorbing ceiling with an exposed grid that sustains daily advanced cleaning and disinfection with strong chemicals. Suitable for the most demanding conditions. Available with corrosion class C3 grids for humid areas and C4 grids for constantly wet areas.



#### **SYSTEM RANGE**



| Size, mm        | 600x600        | 600x600        | 1200x600       | 1200x600       |
|-----------------|----------------|----------------|----------------|----------------|
| T24             | •              | •              | •              | •              |
| Thickness (THK) | 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

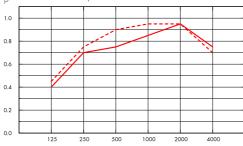


Hygiene Advance Technical tile has no performance determined (n.p.d.) for sound absorption.

#### **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.





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     |        | $lpha_{p'}$ Pr | actical soun | d absorption c | coefficient |         | $\alpha_{_{	ext{W}}}$ | Sound absorption class  |
|-----|---------------|--------|----------------|--------------|----------------|-------------|---------|-----------------------|-------------------------|
| mm  | O.G.S. IIIIII | 125 Hz | 250 Hz         | 500 Hz       | 1000 Hz        | 2000 Hz     | 4000 Hz | u <sub>w</sub>        | Souria 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<br>mm | o.d.s. mm | NRC  | SAA  |
|-----------|-----------|------|------|
| 20        | 200       | 0.80 | 0.76 |
| 20        | 400       | 0.80 | 0.79 |
| 40        | 200       | 0.75 | 0.76 |
| 40        | 400       | 0.75 | 0.76 |

## Indoor Air Quality



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







#### **Carbon footprint**



|                | kg CO2 equiv/m² |
|----------------|-----------------|
| Advance A 20mm | 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 | Fire standard | Class    | The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. |
|---------|---------------|----------|--|
| Europe  | EN 13501-1    | A2-s1,d0 | Holl composible decording to 21 violo 1102.  |



#### **Humidity Resistance**

Class D, relative humidity 97% and 50°C, according to EN 13964:2014



#### Visual appearance

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



#### Cleanability

Daily dusting, vacuum cleaning and wet wiping.



#### **Advanced Cleanability**

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



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

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

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



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

| Standard/Method                        | Class                              |
|--|------------------------------------|
| ISO 846 :2019 method C (for bacterium) | 0 (No growth under the microscope) |
| ASTM D3273-16 (for fungi)              | 10 (0% growth on the surface)      |

#### **Clean Room**



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

#### Air permeability

| Advance<br>20 mm | Positive<br>pressure<br>m3/(h x<br>m2) | Negative<br>pressure<br>m3/(h x<br>m2) | Positive<br>pressure<br>L/s/m2 | Negative<br>pressure<br>L/s/m2 | Advance<br>A 40 mm | Positive<br>pressure<br>m3/(h x<br>m2) | Negative<br>pressure<br>m3/(h x<br>m2) | Positive<br>pressure<br>L/s/m2 | Negative<br>pressure<br>L/s/m2 | Air leak<br>rate<br>measured<br>at<br>positive |
|------------------|--|--|--------------------------------|--------------------------------|--------------------|--|--|--------------------------------|--------------------------------|--|
| 10 (Pa)          | 13,1                                   | 12,5                                   | 3,6                            | 3,5                            | 10 (Pa)            | 4,2                                    | 4,4                                    | 1,2                            | 1,2                            | respective                                     |
| 20 (Pa)          | 20,9                                   | 1 <i>7</i> ,9                          | 5,8                            | 5,0                            | 20 (Pa)            | 6,1                                    | 6,3                                    | 1,7                            | 1,7                            | negative<br>room                               |
| 30 (Pa)          | 27,5                                   | 22,0                                   | 7,6                            | 6,1                            | 30 (Pa)            | 7,7                                    | 7,7                                    | 2,1                            | 2,1                            | pressure<br>up to 50                           |
| 40 (Pa)          | 33,4                                   | 25,5                                   | 9,3                            | <i>7</i> ,1                    | 40 (Pa)            | 9,1                                    | 8,9                                    | 2,5                            | 2,5                            | Pa (Q50)                                       |
| 50 (Pa)<br>/Q50  | 38,8                                   | 28,6                                   | 10,8                           | 8,0                            | 50 (Pa)<br>/Q50    | 10,3                                   | 10,0                                   | 2,9                            | 2,8                            | EN ISO<br>9972<br>:2015                        |

#### Accessibility



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



#### Installation

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



#### System weight

The weight of the system (including suspension grid) should be approximately  $3 \text{ kg/m}^2$  for 20 mm thickness and  $4.5 \text{ kg/m}^2$  for 40 mm thickness.



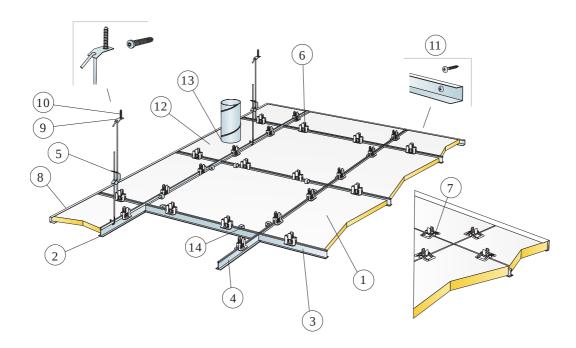
#### **Mechanical properties**

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



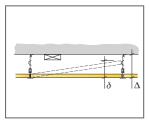
#### CE

Ecophon ceiling systems are CE marked according to the European harmonized standard 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.

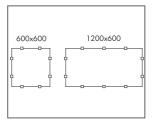


#### © Saint-Gobain Ecophon AB

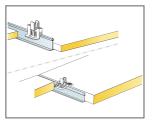
|    |  | Size, mm      |             |
|----|--|---------------|-------------|
|    |  | 600×600       | 1200×600    |
| 1  | Hygiene Advance A  | 2,8/m²        | 1,4/m²      |
| 2  | Connect T24 Main Runner C4, c1200                                    | 0,9m/m²       | 0,9m/m²     |
| 3  | Connect T24 Cross Tee C4, L=1200, c600                               | 1,7m/m²       | 1,7m/m²     |
| 4  | Connect T24 Cross Tee C4, L=600                                      | 0,9m/m²       | -           |
| 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         | 7/m²        |
| 7  | Connect Hygiene Clip 40 C4   | 11/m²         | 7/m²        |
| 8  | Connect Channel Trim C4, fixed at c300 mm                            | as required   | as required |
| 9  | 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 Channe | 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                               | -             | -           |







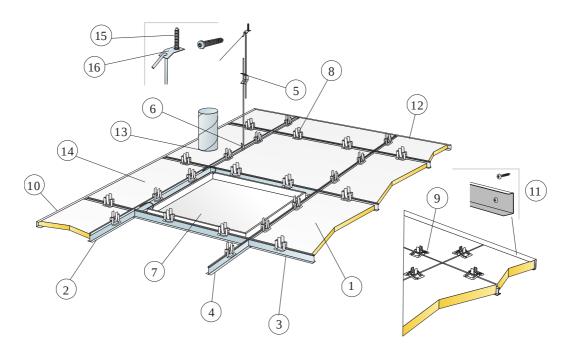
Arrangement of clips



Clip for keeping tiles in place for 40 mm tiles

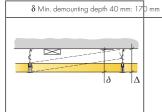
| 600x600x20 40 160<br>600x600x40 40 160<br>1200x600x20 40 160<br>1200x600x40 40 160 | Size, mm    | Max live<br>load (N) | Min load bearing<br>capacity [N] |
|--|-------------|----------------------|----------------------------------|
| 1200x600x20 40 160   | 600x600x20  | 40                   | 160                              |
|  | 600x600x40  | 40                   | 160                              |
| 1200x600x40 40 160   | 1200x600x20 | 40                   | 160                              |
|  | 1200x600x40 | 40                   | 160                              |

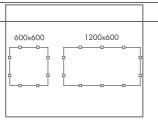
Live load/load bearing capacity

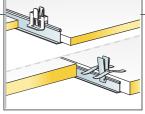


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|    |   | Size, mm    | Size, mm    |  |
|----|---|-------------|-------------|--|
|    |   | 600×600     | 1200×600    |  |
| 1  | Hygiene Advance A   | 2,8/m²      | 1,4/m²      |  |
| 2  | Connect T24 Main Runner C3, installed at 1200 mm centres            | 0,9m/m²     | 0,9m/m²     |  |
| 3  | Connect T24 Cross Tee C3, L=1 200 mm, installed at 600 mm centres   | 1,7m/m²     | 1,7m/m²     |  |
| 4  | Connect T24 Cross Tee C3, L=600 mm                                  | 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       | 7/m²        |  |
| 9  | Connect Hygiene Clip 40   | 11/m²       | 7/m²        |  |
| 10 | Connect Channel Trim C3, fixed c300 (for 20 mm thickness)           | as required | as required |  |
| 11 | Connect Channel Trim C3, fixed c300 (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: 1.50 mm                      | -           | -           |  |
|    | δ Min, demounting depth 20 mm: 150 mm                               | -           | -           |  |







| Size, mm    | Max live | Min load bearing |
|-------------|----------|------------------|
|             | load (N) | capacity [N]     |
| 600x600x20  | 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

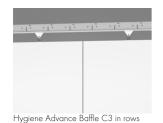
Ecophon Hygiene Advance™ Baffle is a vertical baffle that withstands daily advanced cleaning and disinfection with strong chemicals. Suitable for the most demanding conditions, including airborne grease and dirt particles.



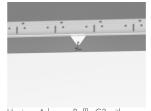
#### **SYSTEM RANGE**



| Size, mm        | 1200x600   |
|-----------------|------------|
| T24             | •          |
| Thickness (THK) | 40         |
| Inst. Diagr.    | M259, M260 |









Hygiene Advance Baffle C3 with Connect Baffle clip

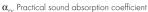
Hygiene Advance Baffle

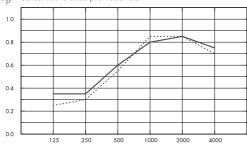
#### **Acoustic**



#### **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.





- $\cdots$ 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

| Frequenc |  |
|----------|--|
| Hz       |  |

|               | THK o.d.s. mm |               | $lpha_{ m p}$ , Practical sound absorption coefficient |                      |         |         |         |                                      | α                      | Sound absorption class |
|---------------|---------------|---------------|--|----------------------|---------|---------|---------|--------------------------------------|------------------------|------------------------|
|               | mm            | 0.0.5. 111111 | 125 Hz   | Hz 250 Hz 500 Hz 100 | 1000 Hz | 2000 Hz | 4000 Hz | $\alpha_{\scriptscriptstyle{\sf W}}$ | Sound absolption 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<br>mm | o.d.s. mm | NRC  | SAA  |
|---------------|-----------|-----------|------|------|
| in rows       | 40        | 600       | 1.00 | 1.00 |
| in rectangles | 40        | 600       | 1.00 | 1.00 |

## Indoor Air Quality



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







#### **Carbon footprint**



|                | kg CO2 equiv/m² | Life-cycle sta<br>14025 / EN |
|----------------|-----------------|------------------------------|
| Advance Baffle | 16,23           | 14023 / LI                   |

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 | Fire standard | Class    | The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. |
|---------|---------------|----------|--|
| Europe  | EN 13501-1    | A2-s1,d0 | Horreonissoniste decoranig to El Viola 1702.   |



#### **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 vapor and compatible with UV-C disinfection, BIFMA HCF 8.1-2019.



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

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

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



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

| Standard/Method                       | Class                              |
|---------------------------------------|------------------------------------|
| ISO 846:2019 method C (for bacterium) | O (No growth under the microscope) |
| ASTM D3273-16 (for fungi)             | 10 (0% growth on the surface)      |

#### **Clean Room**



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



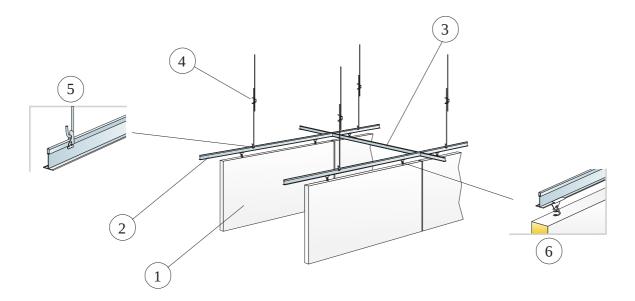
#### **Mechanical properties**

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



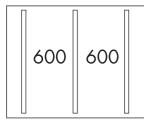
#### CE

Ecophon ceiling systems are CE marked according to the European harmonized standard 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.

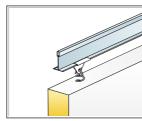


### © Saint-Gobain Ecophon AB

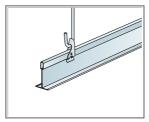
|   |  | Size, mm            |
|---|--|---------------------|
|   |  | 1200×600            |
| 1 | Hygiene Advance Baffle   | 1,4/m²              |
| 2 | Connect T24 Main Runner C3, installed at 600 mm centres          | 1,7m/m²             |
| 3 | Connect T24 Cross Tee C3, L=600 mm, installed at 1800 mm centres | 0,6m/m <sup>2</sup> |
| 4 | Connect Adjustable Hanger C3 c1200                               | 1,4/m²              |
| 5 | Connect Hanger Clip  | 1,4/m²              |
| 6 | Connect Baffle Clip C3   | 2,8/m²              |



Installation in rows



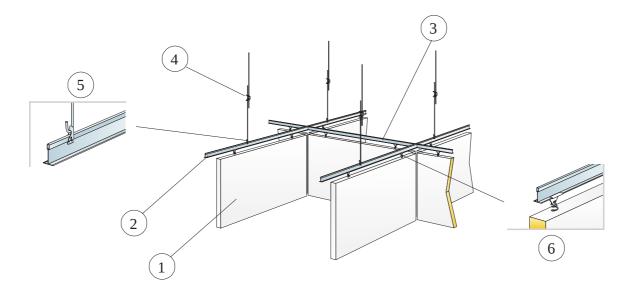
Detail of suspension



Suspension with Connect Adjustable Hanger and Connect Hanger Clip

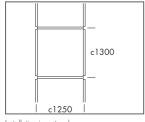


Live load/load bearing capacity

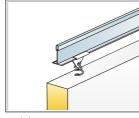


### © Saint-Gobain Ecophon AB

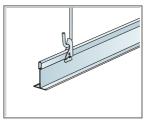
|   | Size, mm |
|---|----------|
|   | 1200×600 |
| Hygiene Advance Baffle  | 1,3/m²   |
| Connect T24 Main Runner C3, installed at 1250 mm centres          | 0,8m/m²  |
| Connect T24 Cross Tee C3, L=1250 mm, installed at 1300 mm centres | 0,8m/m²  |
| Connect Adjustable Hanger C3                  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



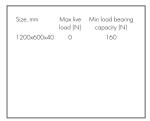




Detail of suspension



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 (THK) | 40       |
| Inst. Diagr.    | M258     |









Hygiene Advance Wall C3 system

Connect Wall Fixing C3

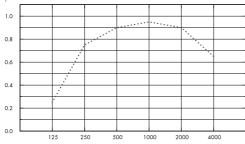
## MM-

#### **Acoustic**

#### Sound Absorption:

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

 $\alpha_{_{D^{\prime}}}$  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 | $lpha_{ ho'}$ Practical sound absorption coefficient |        |         |         |         | $\alpha_{_{ m W}}$ | Sound absorption class |   |
|----|---------------|-----------|--|--------|---------|---------|---------|--------------------|------------------------|---|
| mm | O.d.s. IIIIII | 125 Hz    | 250 Hz   | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | o.w                | 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          | Blank    |  |
|------------------------------|----------|--|
| Eurofins Indoor Air Comfort® | IAC Gold |  |
| French VOC                   | A+       |  |
| Finnish M1                   | •        |  |









#### **Carbon footprint**

kg CO2 equiv/m²
Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804

Advance Wall



#### Circularity

| Minimum post-consumer recycled content | 64%              |
|--|------------------|
| Recyclability                          | Fully recyclable |



#### Fire safety

| Country | Fire standard | Class    | The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. |
|---------|---------------|----------|--|
| Europe  | EN 13501-1    | A2-s1,d0 | noncombusible according to Et vido 1102.   |

#### **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 vapor and compatible with UV-C disinfection, BIFMA HCF 8.1-2019.



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

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

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



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

| Standard/Method                        | Class                              |
|--|------------------------------------|
| ISO 846 :2019 method C (for bacterium) | O (No growth under the microscope) |
| ASTM D3273-16 (for fungi)              | 10 (0% growth on the surface)      |

#### **Clean Room**



|                                      | 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.



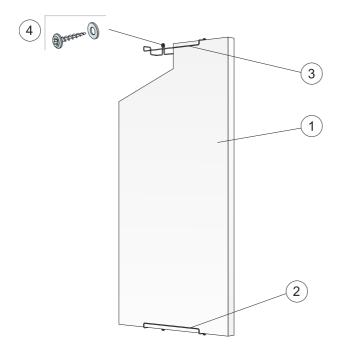
#### **Mechanical properties**

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



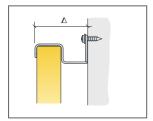
#### CE

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.

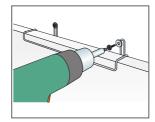


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|   |   | Size, mm      |
|---|---|---------------|
|   |   | 1200×600      |
| 1 | Hygiene Advance Wall                              | 1,4/m²        |
| 2 | Connect Wall Fixing C3, vertical installation     | 2/panel       |
| 3 | Connect Wall Fixing C3, horisontal installation   | 4/panel       |
| 1 | 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



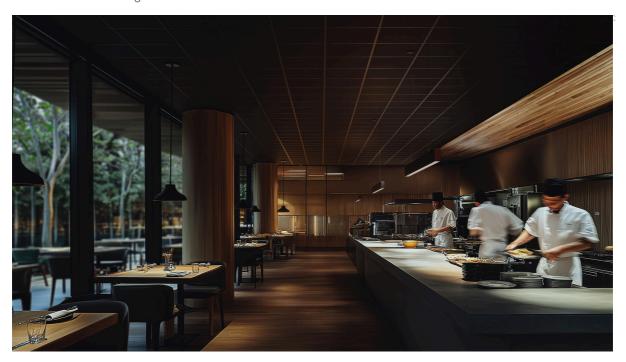
Horisontal installation of Advance Wall C3



Live load/load bearing capacity

# Ecophon Hygiene™ Black A

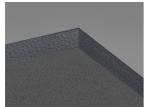
Ecophon Hygiene™ Black A offers a sleek, washable black surface that is ideal for humid environments. Its durable surface and primed edges ensure that the panels withstands regular advanced cleaning such as high pressure washing, along with various common detergents and disinfectants.



#### **SYSTEM RANGE**



| Size, mm        | 600x600 | 1200x600 |
|-----------------|---------|----------|
| T24             | •       | •        |
| Thickness (THK) | 20      | 20       |
| Inst. Diagr.    | M675C4  | M675C4   |



Hygiene Black A tile



Hygiene Black A section with Connect Hygiene clip 20



Hygiene Black A system

## MM-

#### Acoustic

0.2

**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.



Hygiene Black A 20 mm, 200 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 | coefficient |         | $\alpha_{_{	ext{W}}}$ | Sound absorption class |
|-----|-----------|--------|----------------|---------------|----------------|-------------|---------|-----------------------|------------------------|
| mm  |           | 125 Hz | 250 Hz         | 500 Hz        | 1000 Hz        | 2000 Hz     | 4000 Hz | o.w                   | Sound absorption class |
| 20  | 200       | 0.35   | 0.85           | 1.00          | 0.90           | 1.00        | 1.00    | 1.00                  | А                      |

|  | THK<br>mm | o.d.s. mm | NRC  | SAA  |
|--|-----------|-----------|------|------|
|  | 20        | 200       | 0.95 | 0.95 |



#### **Indoor Air Quality**

| Certificate / Label          |          |
|------------------------------|----------|
| Eurofins Indoor Air Comfort® | IAC Gold |
| French VOC                   | A+       |







#### **Carbon footprint**

|  | kg CO <sub>2</sub><br>equiv/m <sup>2</sup> | Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804 |
|--|--|--|
| Hygiene Black A 20 mm (EN<br>15804+A2) | 3,43                                       |  |



#### Circularity

| Minimum post-consumer recycled content | 51%              |
|--|------------------|
| Recyclability                          | Fully recyclable |



#### Fire safety

| Country | Fire standard | Class    | The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. |
|---------|---------------|----------|--|
| Europe  | EN 13501-1    | A2-s1,d0 | non-composible decorating to ETT to CTT 02.  |



#### **Humidity Resistance**

Class D, relative humidity 97% and 50°C, according to EN 13964:2014



#### Visual appearance

Hygiene Black , nearest NCS colour sample S-8500-N, 4,43% light reflectance.



#### Cleanability

| Standard/Method           | Frequency |
|---------------------------|-----------|
| Dusting & vaccum cleaning | Daily     |
| Wet wiping                | Weekly    |
| Low pressure cleaning     | 2/year    |
| High pressure washing     | 2/year    |
| UV-C, BIFMA HCF 8.1-2019  | •         |



#### **Surface Endurance**

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



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

| Chemical    | Active Substance                               | Concentration | Tested accord following cher |
|-------------|--|---------------|------------------------------|
| Virkon S    | Dipotassium peroxodisulphate;<br>Sulfamic acid | 1%            | lollowing cher               |
| Isopropanol | Isopropyl Alcohol                              | 70%           |                              |

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



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

| Standard/Method                        | Class                              |
|--|------------------------------------|
| ISO 846 :2019 method A (for fungi)     | O (No growth under the microscope) |
| ISO 846 :2019 method C (for bacterium) | 0 (No growth under the microscope) |



#### **Clean Room**

|             | 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 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 panels must be sealed with Connect Edge sealant. Penetrations must be sealed with a suitable sealant.



#### System weight

|   | kg/m² | Weight information is indicative and subject to variation. |
|---|-------|--|
| Hygiene Black A 20 mm                       | 1,5   |  |
| Hygiene Black A 20 mm + Connect grid system | 2,5   |  |



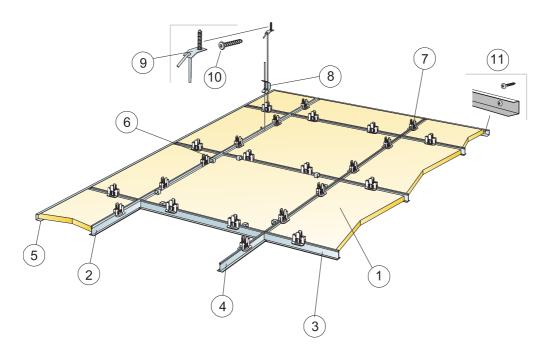
#### **Mechanical properties**

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



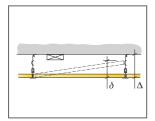
#### CE

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.

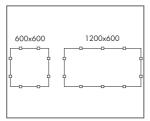


### © Saint-Gobain Ecophon AB

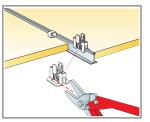
|    |  | Size, mm       | Size, mm    |  |
|----|--|----------------|-------------|--|
|    |  | 600×600        | 1200×600    |  |
| l  | Hygiene Black A  | 2,8/m²         | 1,4/m²      |  |
| 2  | Connect T24 Main Runner C4, c1200                                    | 0,9m/m²        | 0,9m/m²     |  |
| 3  | Connect T24 Cross Tee C4, L=1 200, c600                              | 1,7m/m²        | 1,7m/m²     |  |
| 1  | Connect T24 Cross Tee C4, L=600                                      | 0,9m/m²        | -           |  |
| 5  | Connect Channel Trim C4, fixed at c300 mm                            | as required    | as required |  |
| 5  | Connect Demo Clip 20 C4, (where access is needed)                    | as required    | as required |  |
| ,  | Connect Hygiene Clip 20  | 11/m²          | 7/m²        |  |
| 3  | Connect Adjustable Hanger C4, c1200, (max 600 mm distance from wall) | 0,7/m²         | 0,7/m²      |  |
| )  | 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 | trim C4     |  |
|    | $\Delta$ Min. overall depth of system: 1.50 mm                       | -              | -           |  |
|    | δ Min. demounting depth: 150 mm                                      | -              | =           |  |



See Quantity Specification



Arrangement of clips



Cutting of Connect Hygiene Clip 20 at the inspection tile

| Max live<br>load (N)<br>50 |                |
|----------------------------|----------------|
| 50                         | 160            |
|                            |                |
|                            |                |
|                            | load (N)<br>50 |

Live load/load bearing capacity

## Ecophon Hygiene™ Black Ds

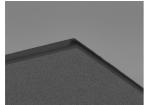
Ecophon Hygiene™ Black Ds is a suspended ceiling with a concealed grid that offers a sleek, washable black surface ideal for humid environments. Its durable surface and painted edges ensure that the panels withstand regular cleaning, such as wet wiping, along with various common detergents and disinfectants.



#### **SYSTEM RANGE**



| Size, mm        | 600x600 | 1200×600 |
|-----------------|---------|----------|
| T24             | •       | •        |
| Thickness (THK) | 20      | 20       |
| Inst. Diagr.    | M676C4  | M676C4   |



Hygiene Black Ds tile



Section of Performance Ds system with Connect T24 Main Runner C4



Performance Ds system



The individual tiles are easily demountable

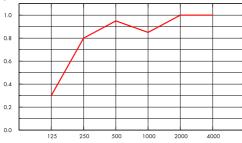
## -√//

#### 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.





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

Frequency Hz

| THK | o.d.s. mm |        | $lpha_{ m p}$ , Practical sound absorption coefficient | $\alpha_{_{\!\scriptscriptstyle{\mathrm{W}}}}$ | Sound absorption class |         |         |      |                        |
|-----|-----------|--------|--|--|------------------------|---------|---------|------|------------------------|
| mm  |           | 125 Hz | 250 Hz   | 500 Hz   | 1000 Hz                | 2000 Hz | 4000 Hz | o.w  | Sound absorption class |
| 20  | 200       | 0.30   | 0.80   | 0.95   | 0.85                   | 1.00    | 1.00    | 0.95 | А                      |

|  |  | THK<br>mm | o.d.s. mm | NRC  | SAA  |
|--|--|-----------|-----------|------|------|
|  |  | 20        | 200       | 0.90 | 0.90 |



#### **Indoor Air Quality**

| Certificate / Label          |          |
|------------------------------|----------|
| Eurofins Indoor Air Comfort® | IAC Gold |
| French VOC                   | A+       |







#### **Carbon footprint**

|                                       | kg CO2<br>equiv/m² | Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804 |
|---------------------------------------|--------------------|--|
| Hygiene Black Ds 20 mm (EN 1.5804+A2) | 3,95               | -  |



#### Circularity

| Minimum post-consumer recycled content | 54%              |
|--|------------------|
| Recyclability                          | Fully recyclable |



#### Fire safety

| Country | Fire standard | Class    | The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. |
|---------|---------------|----------|--|
| Europe  | EN 13501-1    | A2-s1,d0 | Holl composible decording to ET 1100 1102.   |



#### **Humidity Resistance**

Class D, relative humidity 97% and 50°C, according to EN 13964:2014



#### Visual appearance

Hygiene Black , nearest NCS colour sample S-8500-N, 4,43% light reflectance.



#### Cleanability

| Standard/Method           | Frequency |
|---------------------------|-----------|
| Dusting & vaccum cleaning | Daily     |
| Wet wiping                | Weekly    |
| UV-C, BIFMA HCF 8.1-2019  | •         |



#### **Surface Endurance**

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



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

| Chemical    | Active Substance                               | Concentration | Tested according to ISO 11998 and withstand the following chemicals or disinfectants. |
|-------------|--|---------------|---|
| Virkon S    | Dipotassium peroxodisulphate;<br>Sulfamic acid | 1%            | reliewing chemicals of distributions.   |
| Isopropanol | Isopropyl Alcohol                              | 70%           |   |



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

| Standard/Method                        | Class                              |
|--|------------------------------------|
| ISO 846 :2019 method A (for fungi)     | O (No growth under the microscope) |
| ISO 846 :2019 method C (for bacterium) | O (No growth under the microscope) |





|             | 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

|  | kg/m² | Weight information is indicative and subject to variation. |
|--|-------|--|
| Hygiene Black Ds 20 mm                       | 1,9   |  |
| Hygiene Black Ds 20 mm + Connect grid system | 2,9   |  |



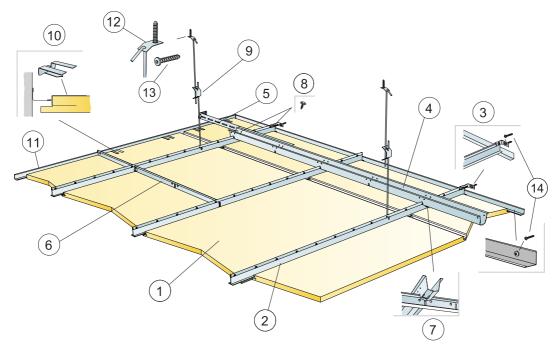
#### **Mechanical properties**

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



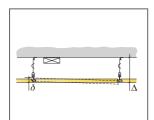
#### CE

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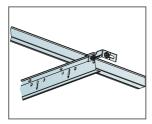


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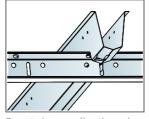
|    |   | Size, mm        | Size, mm   |  |
|----|---|-----------------|--|--|
|    |   | 600×600         | 1200×600   |  |
| 1  | Hygiene Black Ds  | 2,8/m²          | 1,4/m²   |  |
| 2  | Connect T24 Main Runner C4, installed at 600 mm centres                                       | 1,7m/m²         | 1,7m/m²  |  |
| 3  | Connect Wall Bracket C4 for T-profiles C4   | 1/suspended rov | 1/suspended row of Main runner   |  |
| 4  | Connect Space Bar C4, installed at 1500 mm centres (max. distance from wall 300 mm) for winch | 0,7m/m²         | 0,7m/m <sup>2</sup>  |  |
| 5  | Connect Wall Bracket C4, L=700 mm, for Connect Space Bar                                      | 1/row of Space  | bar  |  |
| 6  | Connect T24 Cross Tee C4, L=600 mm  | 2/row of Main r | 2/row of Main runner   |  |
| 7  | Connect Space Bar Winch C4, installed one per joint Connect Main Runner/Connect 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  |                 | 1pc/300-400 mm on every cut perimeter tile with only 1 supporting 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  | 3,4/lm Channel trim C4   |  |
|    | $\Delta$ Min. overall depth of system: 385 mm   | -               | -  |  |
|    | $\delta$ Min. demounting depth: 30 mm   | -               | -  |  |



See Quantity Specification



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



Connection between profiles with space bar winch

| Size, mm<br>600x600x20 | Max live<br>load (N)<br>40 | Min load bearing<br>capacity [N]<br>160 |
|------------------------|----------------------------|---|
| 1200x600x20            | 40                         | 160                                     |
|                        |                            |   |
|                        |                            |   |
|                        |                            |   |

Live load/load bearing capacity