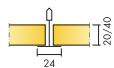


ECOPHON HYGIENE PROTEC™ AIR A

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

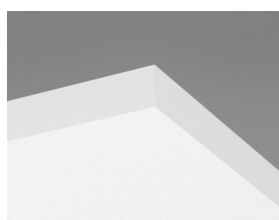


Ecophon Hygiene Protec™ Air A

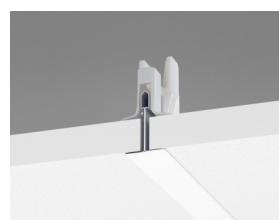


SYSTEM RANGE

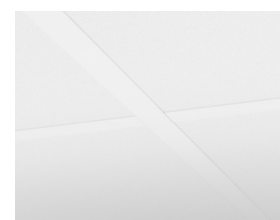
| Size, mm | 600x600 | 600x600 | 1200x600 | 1200x600 |
|--------------|---------|---------|----------|----------|
| T24 | • | • | • | • |
| Thickness | 20 | 40 | 20 | 40 |
| Inst. Diagr. | M469 | M469 | M469 | M469 |



Hygiene Protec Air A tile



Hygiene Protec Air A C1 section with Connect Hygiene Clip 20



Hygiene Protec Air A C1 system

TYPE OF APPLICATION

- Healthcare

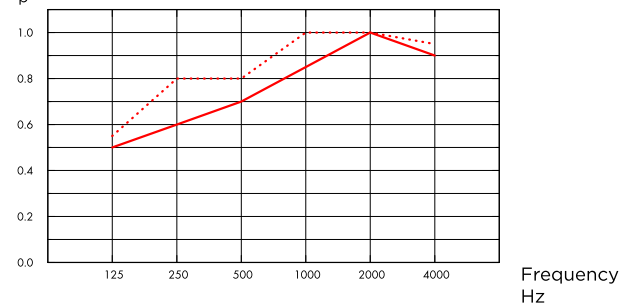


ACOUSTIC

Sound Absorption

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

α_p , Practical sound absorption coefficient



- 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 mm | o.d.s. mm | α_p , Practical sound absorption coefficient | | | | | | α_w | Sound absorption class |
|--------|-----------|---|--------|--------|---------|---------|---------|------------|------------------------|
| | | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | | |
| 20 | 200 | 0.50 | 0.60 | 0.70 | 0.85 | 1.00 | 0.90 | 0.80 | B |
| 40 | 200 | 0.55 | 0.80 | 0.80 | 1.00 | 1.00 | 0.95 | 0.90 | A |

| THK 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

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

| | kg CO ₂ equiv/m ² |
|----------------------|---|
| Hygiene Protec Air A | 4,45 |



CIRCULARITY

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



FIRE SAFETY

The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182.

| Country | Fire standard | Class |
|---------|---------------|----------|
| 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

| Standard/Method | Frequency |
|-------------------------|-----------|
| Dusting | Daily |
| Wet wiping | Weekly |
| Steam cleaning | 4/year |
| Hydrogen peroxide vapor | • |



SURFACE ENDURANCE

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



CHEMICAL RESISTANCE/DISINFECTION

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

| Chemical | Active Substance | Concentration |
|-------------|--|---------------|
| Ethanol | Ethanol | 70% |
| Chlorine | Sodium Hypochlorite solution | 2,5% |
| Virkon S | Dipotassium peroxodisulphate; Sulphamidic acid | 1% |
| Isopropanol | Isopropyl Alcohol | 70% |



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

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

| Protec Air A 20 mm | Positive pressure m ³ /(h x m ²) | Negative pressure m ³ /(h x m ²) | Positive pressure L/s/m ² | Negative pressure L/s/m ² |
|--------------------|---|---|--------------------------------------|--------------------------------------|
| 10 (Pa) | 16,1 | 15,0 | 4,0 | 4,2 |
| 20 (Pa) | 27,9 | 22,1 | 7,8 | 6,1 |
| 30 (Pa) | 38,5 | 27,7 | 10,7 | 7,7 |
| 40 (Pa) | 48,4 | 32,5 | 13,4 | 9,0 |
| 50 (Pa) /Q50 | 57,8 | 36,8 | 16,1 | 10,2 |

| Protec Air A 40 mm | Positive pressure m ³ /(h x m ²) | Negative pressure m ³ /(h x m ²) | Positive pressure L/s/m ² | Negative pressure L/s/m ² |
|--------------------|---|---|--------------------------------------|--------------------------------------|
| 10 (Pa) | 14,6 | 16,9 | 4,0 | 4,7 |
| 20 (Pa) | 25,7 | 26,5 | 7,1 | 7,4 |
| 30 (Pa) | 35,8 | 34,4 | 9,9 | 9,6 |
| 40 (Pa) | 45,2 | 41,4 | 12,6 | 11,5 |
| 50 (Pa) /Q50 | 54,3 | 47,8 | 15,1 | 13,3 |



ACCESSIBILITY

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



INSTALLATION

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



PACKAGING INFORMATION

Information is indicative and subject to change.

| | Edge | Panels / crt | m ² / crt |
|-------------|------|--------------|----------------------|
| 600x600x20 | A | 20 | 7.20 |
| 1200x600x20 | A | 10 | 7.20 |
| 600x600x40 | A | 10 | 3.60 |
| 1200x600x40 | A | 6 | 4.32 |



SYSTEM WEIGHT

Weight information is indicative and subject to variation.

| | kg/m ² |
|--|-------------------|
| 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 |



MECHANICAL PROPERTIES

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



CE

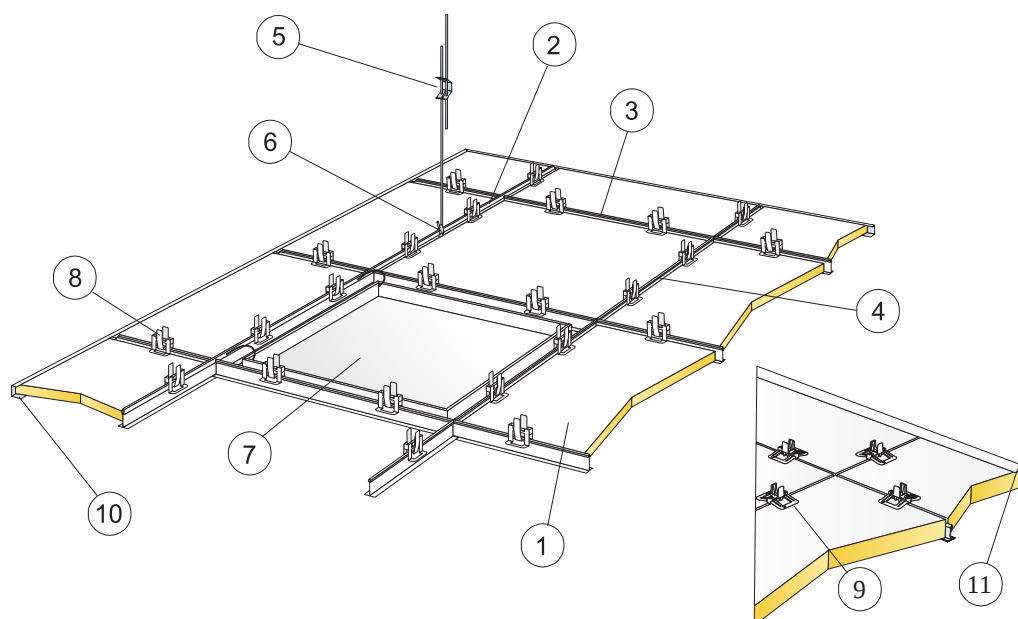
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

COLOURS AND DESIGN

Akutex™ HP



Suspended ceiling

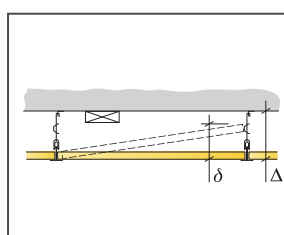


© Saint-Gobain Ecophon AB

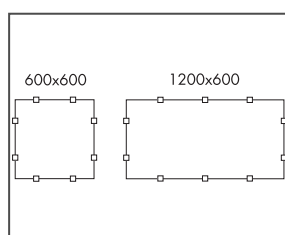
Installation diagram (M469) for Ecophon Hygiene Protec™ Air A

Quantity specification (excl. wastage)

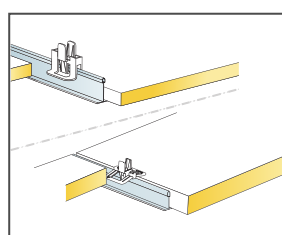
| | Size, mm | |
|--|---------------------|---------------------|
| | 600x600 | 1200x600 |
| 1 Hygiene Protec Air A | 2,8/m ² | 1,4/m ² |
| 2 Connect T24 Main Runner, installed at 1200 mm centres | 0,9m/m ² | 0,9m/m ² |
| 3 Connect T24 Cross Tee, L=1200 mm, installed at 600 mm centres | 1,7m/m ² | 1,7m/m ² |
| 4 Connect T24 Cross Tee, L=600 mm | 0,9m/m ² | - |
| 5 Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm) | 0,7/m ² | 0,7/m ² |
| 6 Connect Hanger Clip (not to be used in swimming hall environments) | 0,7/m ² | 0,7/m ² |
| 7 Connect Inspection Hatch C3 | as required | as required |
| 8 Connect Hygiene Clip 20 | 11/m ² | 7/m ² |
| 9 Connect Hygiene Clip 40 3254 | 11/m ² | 7/m ² |
| 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 |
| Δ Min. overall depth of system: 150 mm | - | - |
| δ Min. demounting depth 20 mm: 150 mm | - | - |
| δ Min. demounting depth 40 mm: 170 mm | - | - |



See Quantity Specification



Arrangement of clips

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

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

Live load/load bearing capacity