

ECOPHON HYGIENE ADVANCE[™] A

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



Ecophon Hygiene Advance[™] A

SYSTEM RANGE

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





Hygiene Advance A C4 section with Connect

Hygiene clip 20



Hygiene Advance A C4 system

TYPE OF APPLICATION

Additional areas

Healthcare

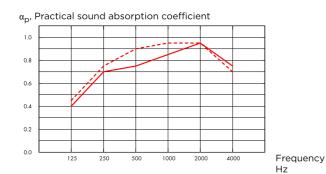


ACOUSTIC

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.



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

| тнк | $\alpha_{ m p}$, Practical sound abs | | rption coefficient | | | ~ | Sound absorption class | | |
|-----|---------------------------------------|--------|--------------------|--------|---------|---------|------------------------|----------------|------------------------|
| mm | 0.0.3. 11111 | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | α _w | South absorption class |
| 20 | 200 | 0.40 | 0.70 | 0.75 | 0.85 | 0.95 | 0.75 | 0.85 | В |
| 40 | 200 | 0.45 | 0.75 | 0.90 | 0.95 | 0.95 | 0.70 | 0.90 | А |

| THK mm | o.d.s. mm | NRC | SAA |
|-----------|-----------|------|------|
| 20 | 200 | 0.80 | 0.76 |
| 20 | 400 | 0.80 | 0.79 |
| 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

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

| | kg CO ₂ equiv/m² |
|-----------------|-----------------------------|
| Advance A 420mm | 9,32 |
| Advance A 40mm | 16,23 |



CIRCULARITY

| Minimum post-consumer recycled content | 59% |
|--|------------------|
| 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 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

| Standard/Method | Frequency |
|--------------------------|-----------|
| Dusting | Daily |
| Wet wiping | Daily |
| Steam cleaning | Daily |
| Low pressure cleaning | Daily |
| High pressure cleaning | Daily |
| Hydrogen peroxide vapor | • |
| UV-C, BIFMA HCF 8.1-2019 | • |



CHEMICAL RESISTANCE/DISINFECTION

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

| chemicals. | | | | |
|---------------------|---------------|--|--|--|
| 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% | | | |





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

| Advance 20 mm | Positive pressure m3/(h x m2) | Negative pressure m3/(h x m2) | Positive pressure L/s/m2 | Negative pressure L/s/m2 |
|---------------|-------------------------------|-------------------------------|--------------------------|--------------------------|
| 10 (Pa) | 13,1 | 12,5 | 3,6 | 3,5 |
| 20 (Pa) | 20,9 | 17,9 | 5,8 | 5,0 |
| 30 (Pa) | 27,5 | 22,0 | 7,6 | 6,1 |
| 40 (Pa) | 33,4 | 25,5 | 9,3 | 7,1 |
| 50 (Pa) /Q50 | 38,8 | 28,6 | 10,8 | 8,0 |

| Advance A 40 mm | Positive pressure m3/(h x m2) | Negative pressure m3/(h x m2) | Positive pressure L/s/m2 | Negative pressure L/s/m2 |
|-----------------|-------------------------------|-------------------------------|--------------------------|--------------------------|
| 10 (Pa) | 4,2 | 4,4 | 1,2 | 1,2 |
| 20 (Pa) | 6,1 | 6,3 | 1,7 | 1,7 |
| 30 (Pa) | 7,7 | 7,7 | 2,1 | 2,1 |
| 40 (Pa) | 9,1 | 8,9 | 2,5 | 2,5 |
| 50 (Pa) /Q50 | 10,3 | 10,0 | 2,9 | 2,8 |



ACCESSIBILITY

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



INSTALLATION

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



SYSTEM WEIGHT

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



MECHANICAL PROPERTIES

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



CE

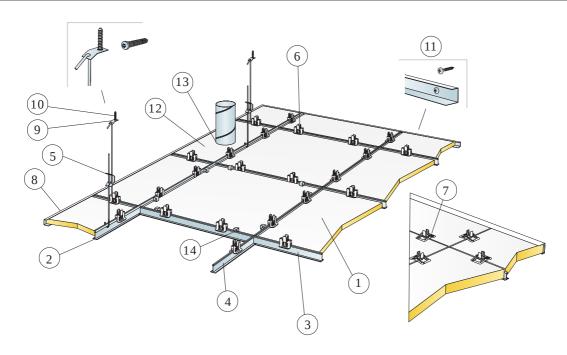
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

COLOURS AND DESIGN

Advance

White 141

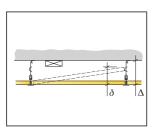




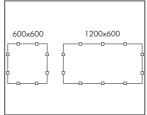
© Saint-Gobain Ecophon AB Installation diagram (M246) for Ecophon Hygiene Advance™ A C4

Quantity specification (excl. wastage)

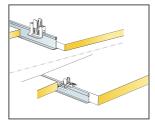
| | | Size, mm | | |
|----|--|----------------|------------------------|--|
| | | 600x600 | 1200x600 | |
| 1 | Hygiene Advance A | 2,8/m² | 1,4/m² | |
| 2 | Connect T24 Main Runner C4, c1200 | 0,9m/m² | 0,9m/m² | |
| 3 | Connect T24 Cross Tee C4, L=1200, c600 | 1,7m/m² | 1,7m/m² | |
| 4 | Connect T24 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 | |
| ŝ | Connect Hygiene Clip 20 | 11/m² | 7/m² | |
| 7 | Connect Hygiene Clip 40 C4 | 11/m² | 7/m² | |
| 3 | Connect Channel Trim C4, fixed at c300 mm | as required | as required | |
| 9 | Connect Fixing Plate C4 | 0,7/m² | 0,7/m² | |
| 0 | Connect Anchor Screw C4 | 0,7/m² | 0,7/m² | |
| 1 | Connect Installation Screw C4 | 3,4/Im Channel | 3,4/Im Channel trim C4 | |
| 2 | Hygiene Advance Technical Tile | as required | as required | |
| 3 | Joint sealant (not supplied by Ecophon) | as required | as required | |
| 4 | Connect Demo Clip 20 C4, (where access is needed) | as required | as required | |
| 15 | Connect Hygiene Advance Tape | as required | as required | |
| | Δ Min. overall depth of system: 150 mm | - | - | |
| | δ Min. demounting depth: 150 mm | - | - | |



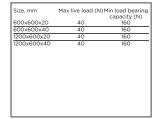
See Quantity Specification



Arrangement of clips

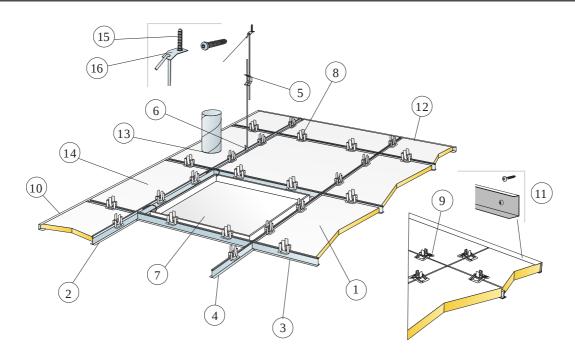


Clip for keeping tiles in place for 20/40 mm tiles



Live load/load bearing capacity

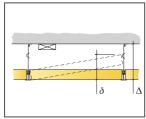




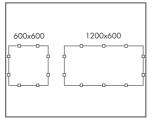
 $@ \ Saint-Gobain \ Ecophon \ AB \\ \ Installation \ diagram \ (M252) \ for \ Ecophon \ Hygiene \ Advance $^{\text{\tiny M}}$ A C3$

Quantity specification (excl. wastage)

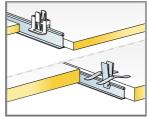
| | | Size, mm | |
|----|---|-------------|-------------|
| | | 600x600 | 1200x600 |
| 1 | Hygiene Advance A | 2,8/m² | 1,4/m² |
| 2 | Connect T24 Main Runner C3, installed at 1200 mm centres | 0,9m/m² | 0,9m/m² |
| 3 | Connect T24 Cross Tee C3 9102, L=1200 mm, installed at 600 mm centres | 1,7m/m² | 1,7m/m² |
| 4 | Connect T24 Cross Tee C3 9103, L=600 mm | 0,9m/m² | - |
| 5 | Connect Adjustable Hanger C3, c1200 (max distance from wall 600 mm) | 0,7/m² | 0,7/m² |
| 6 | Connect Hanger Clip (not to be used in swimming hall environments) | 0,7/m² | 0,7/m² |
| 7 | Connect Inspection Hatch C3 | as required | as required |
| 8 | Connect Hygiene Clip 20 0172 | 11/m² | 7/m² |
| 9 | Connect Hygiene Clip 40 3254 | 11/m² | 7/m² |
| 10 | Connect Channel Trim C3 (for 20 mm thickness) | as required | as required |
| 11 | Connect Channel Trim C3 3465 (for 40 mm thickness) | as required | as required |
| 12 | Connect Hygiene Advance Tape | as required | as required |
| 13 | Joint sealant (not supplied by Ecophon) | as required | as required |
| 14 | Hygiene Advance Technical Tile | as required | as required |
| 15 | Connect Anchor Screw C4 | 0,7/m² | 0,7/m² |
| 16 | Connect Fixing Plate C4 | 0,7/m² | 0,7/m² |
| | 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



Clips for keeping tiles in place

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

Live load/load bearing capacity

