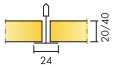# Ecophon Hygiene Protec™ Air A

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.
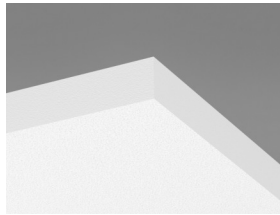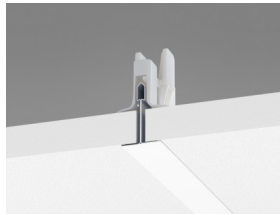

Beiersdorf, Hamburg, Germany

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
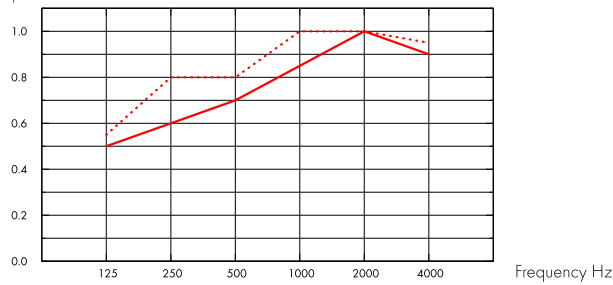

Hygiene Protec Air A C1 system

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+
Finnish M1	•

Carbon footprint

	kg CO₂ equiv/m²
Hygiene Protec Air A	4,45

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

Circularity

Minimum post-consumer recycled content	38%
Recyclability	Fully recyclable

Fire safety

Country	Fire standard	Class
Europe	EN 13501-1	A2-s1,d0

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

Humidity Resistance

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

Visual appearance

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

Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.

Advanced Cleanability

Steam cleaning. Can withstand use of hydrogen peroxide vapour.

Surface Endurance

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

Chemical resistance/Disinfection

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

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

Mould and Bacterial Resistance

Standard/Method	
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

Product	Q50, positive (m3/m2/h)	Q50, positive (l/s/m2)	Q50, negative (m3/m2/h)	Q50, negative (l/s/m2)
Hygiene ProtecAir A 20mm	57,7	16,0	36,7	10,2
Hygiene ProtecAir A 40mm	54,3	15,1	47,8	13,3

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

Accessibility

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

Installation

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

System weight

	kg/m²
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.
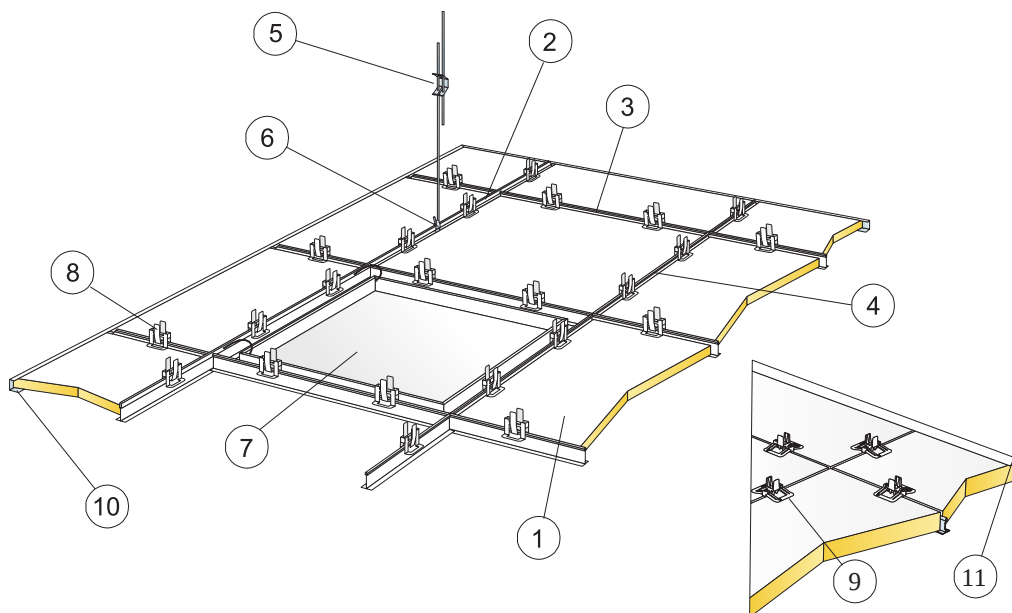
© Saint-Gobain Ecophon AB

QUANTITY SPECIFICATION (EXCL. WASTAGE)
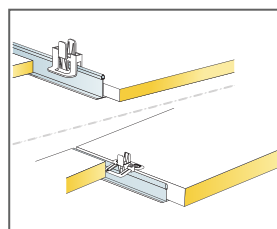
		Size, mm	
		600x600	**1200x600**
1	Hygiene Protec Air A	2,8/m²	2,8/m²
2	Connect T24 Main Runner, installed at 1200 mm centres (max distance from wall 300 mm)	0,9m/m²	0,9m/m²
3	Connect T24 Cross Tee, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²
4	Connect T24 Cross Tee, L=600 mm	0,9m/m²	0,9m/m²
5	Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²
6	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²
7	Connect Inspection Hatch C3	as required	as required
8	Connect Hygiene Clip 20	11/m²	11/m²
9	Connect Hygiene Clip 40 3254	11/m²	11/m²
10	Connect Channel Trim, fixed c300 (for 20 mm thickness)	as required	as required
11	Connect Channel Trim, fixed c300 (for 40 mm thickness)	as required	as required
	Connect Edge Sealant	as required	as required
	Δ Min. overall depth of system: 150 mm	-	-
	δ Min. demounting depth 20 mm: 150 mm	-	-
	δ Min. demounting depth 40 mm: 170 mm	-	-
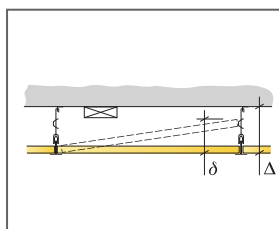
See Quantity Specification
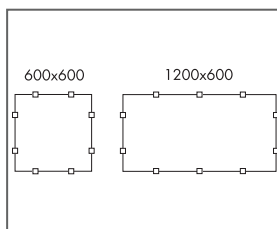
Arrangement of clips

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