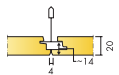# ECOPHON HYGIENE PROTEC™ DS

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.
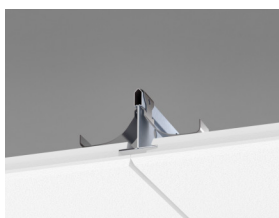
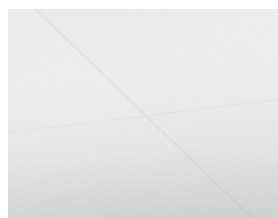# Ecophon Hygiene Protec™ Ds

SYSTEM RANGE

Size, mm	600x600	1200x600
T24	•	•
Thickness	20	20
Inst. Diagr.	M615	M615

Hygiene Protec Ds tile

Hygiene Protec Ds C1 section with Connect Hold down clip Ds

Hygiene Protec Ds C1 system
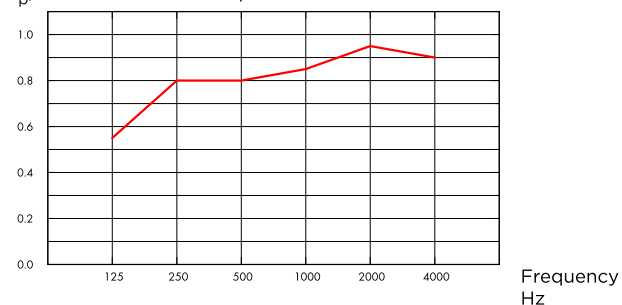
TYPE OF APPLICATION

- Healthcare

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.

α_p, Practical sound absorption coefficient

— Hygiene Protec Ds 20 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	0.55	0.80	0.80	0.85	0.95	0.90	0.85	B

THK 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™ 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

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

	kg CO_2 equiv/m^2
Hygiene Protec Ds	7,06

CIRCULARITY

Minimum post-consumer recycled content	47%
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

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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

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.

PACKAGING INFORMATION

Information is indicative and subject to change.

	Edge	Panels / crt	m² / crt
600x600x20	Ds	20	7.20
1200x600x20	Ds	10	7.20

SYSTEM WEIGHT

Weight information is indicative and subject to variation.

	kg/m²
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.
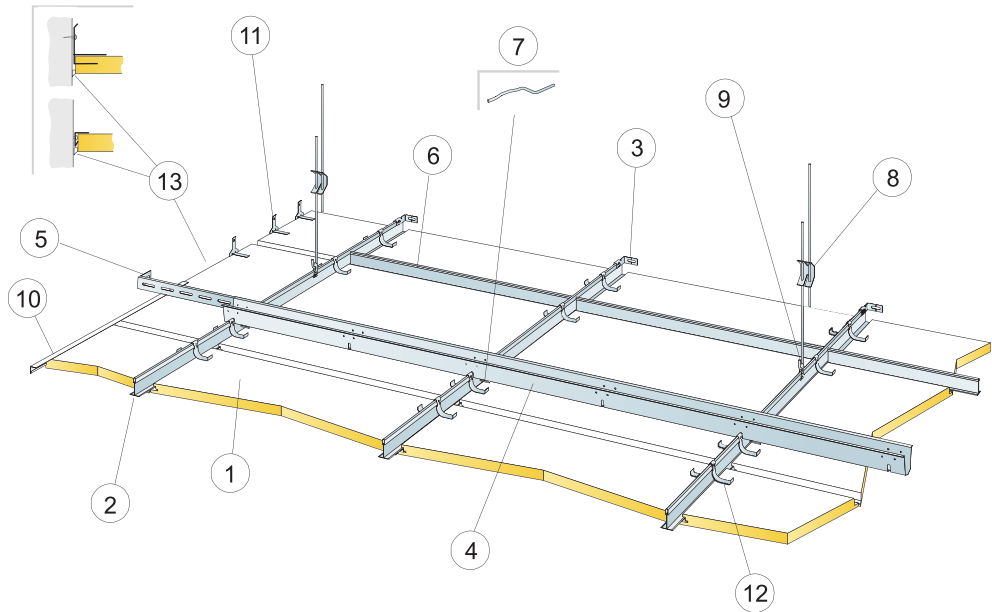
CE

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.

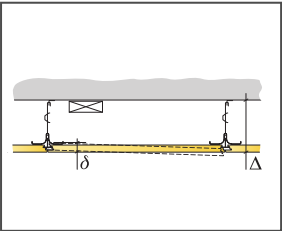## COLOURS AND DESIGN

Akutex™ HP

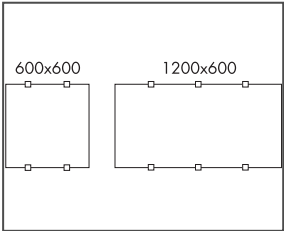White 500

Suspended ceiling

© Saint-Gobain Ecophon AB

Installation diagram (M615) for Ecophon Hygiene Protec™ Ds. Suspended installation

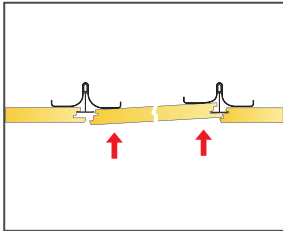## Quantity specification (excl. wastage)

		Size, mm	
		600x600	**1200x600**
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 of Main runner	
4	Connect Space Bar, installed at 1500 mm centres (max. distance from wall 300 mm)	0,7m/m²	0,7m/m²
5	Connect Wall Bracket, L=700 mm, for Connect Space Bar	1/row of Space bar	
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 0043, installed at 500 mm centre. Minimum free depth above tile 150 mm.	2/cut tile with one bearing edge	3/cut tile with one bearing edge
12	Connect Hold Down Clip Ds	2/tile, 50-100 mm from corners	3/tile, 50-100 mm from corners
13	Joint sealant (not supplied by Ecophon)	as required	as required
	Δ Min. overall depth of system: 170 mm	-	-
	δ Min. demounting depth: 30 mm	-	-

See Quantity Specification

Arrangement of clips

Demounting of tile from below

Size, mm	Max live load (N)	Min load bearing capacity (N)
600x600x20	30	160
1200x600x20	30	160

Live load/load bearing capacity

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