

Ecophon Hygiene Labotec™ Ds C1

Ecophon Hygiene Labotec Ds C1 is a wall to wall, sound-absorbing ceiling system intended for environments where there are demands on low particle emission and where occasional wet wiping and/or disinfection is required. The Ds system has only vertical joints which minimise dirt traps. Examples of applications: laboratories, the pharmaceutical and electronics industries and in healthcare premises. The system is classified B1, B5 and B10 for zone 4 according to standard NF S 90-351 and clean room classified according ISO 5.

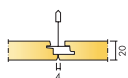
The system consists of Ecophon Hygiene Labotec Ds tiles, which have a core of high density, 3rd generation glass wool and a painted particle-repellent Akutex™ HP surface.

The back and the edges are painted. The supporting structure is a concealed Connect grid of galvanised steel. The weight of the system is 3-4 kg/m². The tiles should be secured to the grid with Connect Hold down clip Ds in order to withstand pressure during cleaning and still make them demountable from below. The grid system is patented.



Pharma Labor-Vorbereitung, Gießen, Germany

SYSTEM RANGE



Size, mm	600x600	1200x600
T24	•	•
Thickness (THK)	20	20
Inst. Diagr.	M251	M251



Hygiene Labotec Ds tile



Sealed junction with wall



Hygiene Labotec Ds C1 system



Hygiene Labotec Ds C1 section with Connect Hold down clip Ds

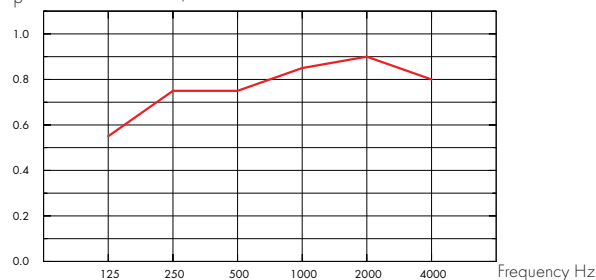


Acoustic

Sound Absorption:

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

α_p Practical sound absorption coefficient



— Hygiene Labotec 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	0,75	0,75	0,85	0,90	0,80	0,85	B



Accessibility

The tiles are demountable.



Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping. Can withstand the use of common disinfecting chemicals. Withstand the use of hydrogen peroxide vapor.



Visual appearance

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



Influence of climate

The tiles withstand a permanent ambient RH up to 95% at 30°C without sagging, warping or delaminating (ISO 4611). A higher temperature/moisture is permissible during washing as stated above. Microbiological growth class 0 according to ASTM G 21-96. Fulfills the requirements B1,B5 and B10 of zone 4 according to NF S90-351. The grid and accessories meet the demands of corrosion class C1 according to EN ISO 12944-2.



Indoor Climate

Certificate / Label

Finish M1	•
French VOC, A+	•
Swedish Asthma and Allergy Association	•
Danish Indoor Climate Label	•
California Emission Regulation, CDPH	•

Can be used in rooms classified as ISO class 5 according to ISO 14644-1.



Environmental influence

Certificate / Label

The Nordic Ecolabel	•
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Fully recycable.



Fire safety

Country	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. The systems are classified as fire protective covering according to NT FIRE 003.



Mechanical properties

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



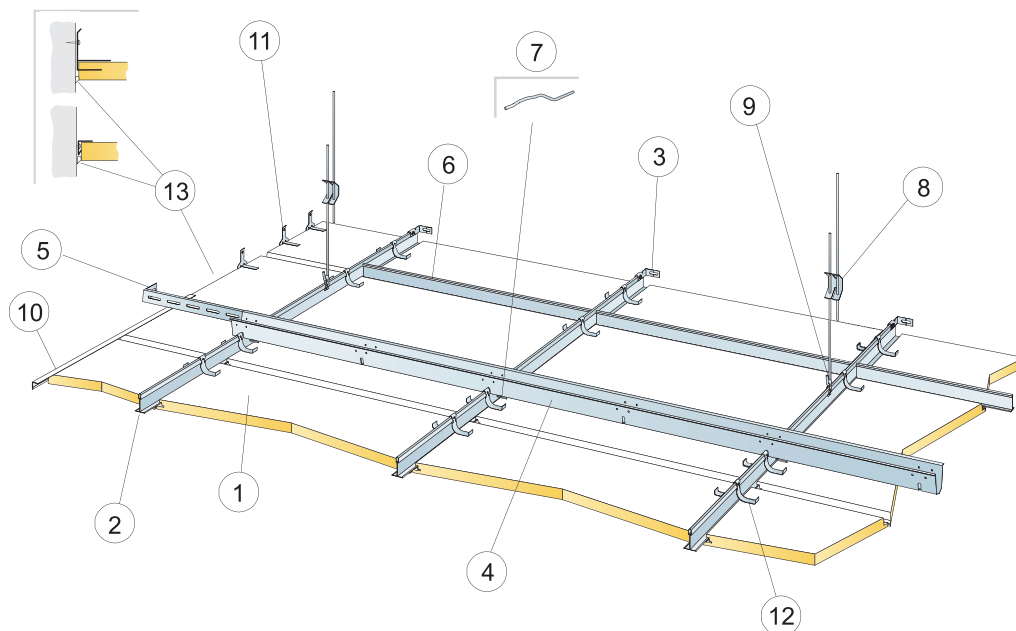
Installation

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



CE

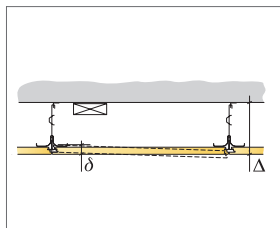
The CE marking confirms important product performance such as sound absorption, emissions, fire safety and load bearing capacity. All Ecophon ceiling products are CE marked according to European standard EN13964, and individual product performance is declared in Declaration of Performance (DoP) documents.



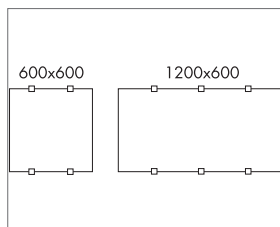
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QUANTITY SPECIFICATION (EXCL. WASTAGE)

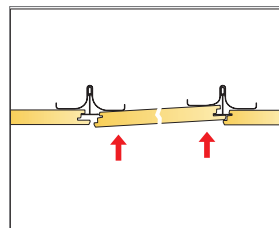
		Size, mm	
		600x600	1200x600
1	Hygiene Labotec Ds	2,8/m ²	1,4/m ²
2	Connect T24 Main runner HD, installed at 600 mm centres	1,7m/m ²	1,7m/m ²
3	Connect Wall bracket for T-profiles	1/row of suspended Main runner HD	
4	Connect Space bar, installed at 1500 mm centres (max. distance from wall 300 mm)	0,7m/m ²	0,7m/m ²
5	Connect Wall bracket, L=700 mm, for 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 Main runner/Space bar	1,4/m ²	1,4/m ²
8	Connect Adjustable hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m ²	0,7/m ²
9	Connect Hanger clip (not to be used in swimming hall environments)	0,7/m ²	0,7/m ²
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 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]
600x600	50	160
1200x600	50	160

Live load/load bearing capacity