

# Ecophon Master™ Ds

Suitable for open plan offices or other premises where strict demands are made on good acoustics and speech intelligibility. For applications where a suspended ceiling with a concealed grid is required, but individual tiles must be easily demountable.

Ecophon Master Ds has a concealed grid and symmetrical edge design, allowing easier assembly, integration of light fittings and ventilation. The ceiling has an even appearance, with the bevelled edges forming a discreet groove between the tiles. The tiles are easily demountable. The systems consist of Ecophon Master Ds tiles and Ecophon Connect grid systems, with an approximate weight of 6 kg/m<sup>2</sup>. The tiles are manufactured from high density, 3rd generation glass

wool. The visible surface has an Akutex FT coating and the back of the tile is covered with glass tissue. The edges are painted.

For best performance and system quality, use Ecophon Connect grid and accessories. The grid is manufactured from galvanized steel. The system is patented.

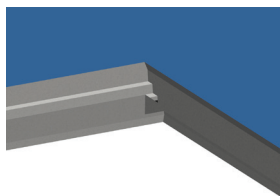


Pharmkon, Denmark

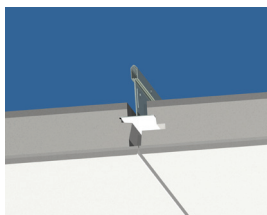
## SYSTEM RANGE



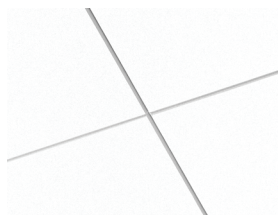
Size, mm	600x600
T24	•
Thickness	40
Inst. Diagr.	M236, M242



Master Ds tile



Section of Master Ds system.



Master Ds system



The individual tiles are easily demountable

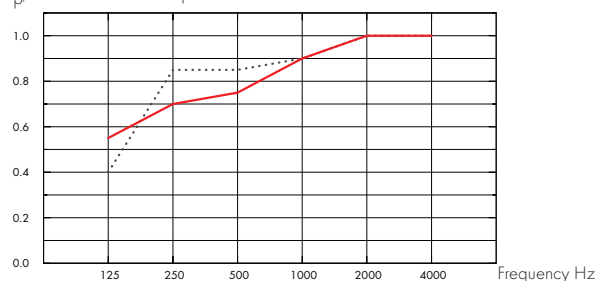


## Acoustic

### 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.

$\alpha_p$  Practical sound absorption coefficient



... Master Ds 40 mm, 95 mm o.d.s.

— Master Ds 40 mm, 200 mm o.d.s.

o.d.s = overall depth of system

THK mm	o.d.s. mm	$\alpha_p$ Practical sound absorption coefficient						$\alpha_w$	Sound absorption class
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
40	95	0,40	0,85	0,85	0,90	1,00	1,00	0,90	A
40	200	0,55	0,70	0,75	0,90	1,00	1,00	0,90	A

THK mm	o.d.s. mm	NRC	SAA
40	95	0,90	0,91

THK mm	AC(1.5) Articulation Class, ASTM E1111, ASTM E1110	$D_{nfw}$ Weighted normalized flanking level difference, ISO 10848-2	CAC dB Ceiling Attenuation Class, ASTM 1414, ASTM E413
40	200	31	33



## Accessibility

The tiles are easily demountable. Minimum demounting depth according to installation diagrams.



## Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



## Visual appearance

White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance (of which more than 99% is diffuse reflection). Retro reflection coefficient 63 mcd/(m²lx). Gloss < 1.



## Influence of climate

The tiles withstand a permanent ambient RH up to 95% at 30°C without sagging, warping or delaminating (ISO 4611).



## Indoor Climate

Certificate / Label

Europe

EN  
13501-1



## Environmental influence

Certificate / Label

Europe

EN  
13501-1

Fully recyclable.



## CO<sub>2</sub>

Kg CO<sub>2</sub> equiv/m<sup>2</sup>

7,01

From EPD in conformity with ISO 14025 / EN 15804



## 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](http://www.ecophon.com).



## Installation

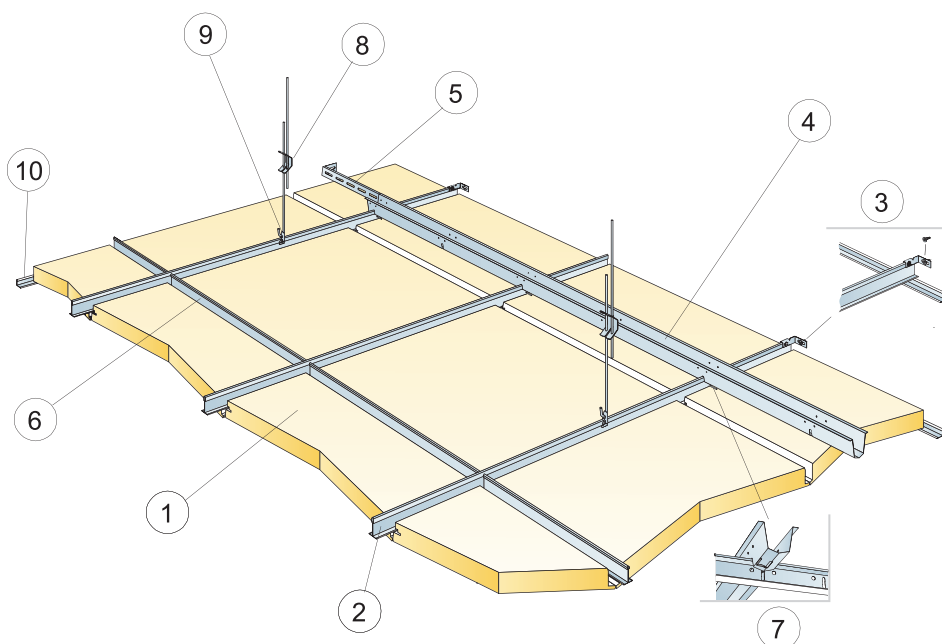
Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification. The systems are not recommended for small rooms (approximately 2x2 m<sup>2</sup>).  
Ceilings with a large amount of integrations require careful planning, design and installation.



## 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.

## INSTALLATION DIAGRAM (M236) FOR ECOPHON MASTER DS, SUSPENDED INSTALLATION



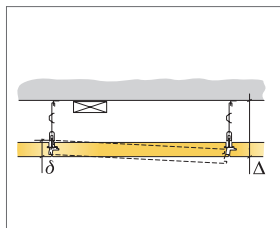
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## QUANTITY SPECIFICATION (EXCL. WASTAGE)

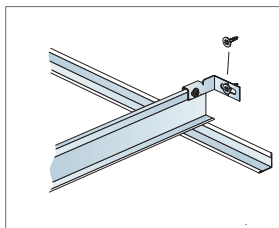
Size, mm		
600x600		
1	Master Ds	2,8/m <sup>2</sup>
2	Connect T24 Main runner HD, installed at 600 mm centres	1,7m/m <sup>2</sup>
3	Connect Wall bracket for T-profiles	1/row of suspended Main runner HD
4	Connect Space bar, installed at 1500 mm centres (max. distance from wall 300 mm)	0,7m/m <sup>2</sup>
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 <sup>2</sup>
8	Connect Adjustable hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m <sup>2</sup>
9	Connect Hanger clip (not to be used in swimming hall environments)	0,7/m <sup>2</sup>
10	Connect Angle trim, fixed at 300 mm centres	as required

Δ Min. overall depth of system: 140 mm

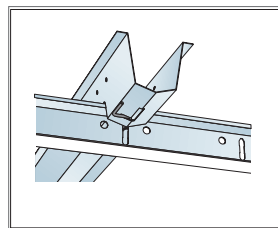
δ Min. demounting depth: 50 mm



See Quantity specification



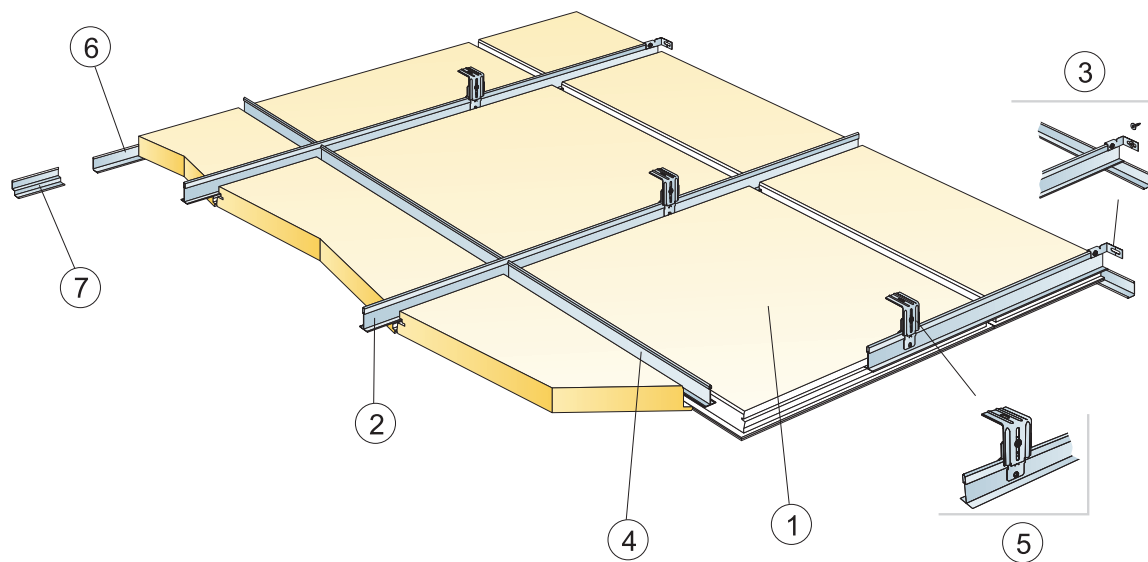
Connect Wall bracket for T-profiles



Connection between profiles with space bar winch

Size, mm	Max live load [N]	Min load bearing capacity [N]
600x600	40	160

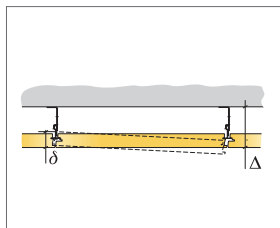
Live load/load bearing capacity



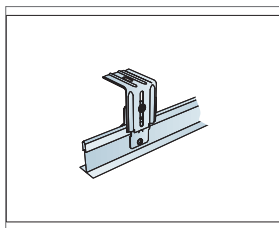
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## QUANTITY SPECIFICATION (EXCL. WASTAGE)

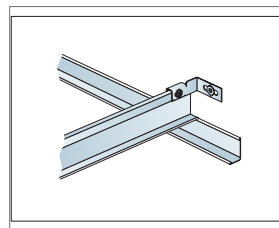
Size, mm		
600x600		
1	Master Ds	2,8/m <sup>2</sup>
2	Connect T24 Main runner HD, installed at 600 mm centres	1,7m/m <sup>2</sup>
3	Connect Wall bracket for T-profiles	1 /every row of suspended Main runner HD
4	Connect T24 Cross tee, L=600 mm	2/row of Main runner
5	Connect Adjust direct bracket, installed at 1500 mm centres	1,1/m <sup>2</sup>
6	Connect Angle trim, fixed at 300 mm centres	as required
7	Connect Shadow-line trim, fixed at 300 mm centres	as required
Δ Min. overall depth of system: 95 mm		
δ Min. demounting depth: 50 mm		



See Quantity specification



Suspension with direct bracket



Profiles are fixed against the wall

Size, mm	Max live load [N]	Min load bearing capacity [N]
600x600	40	160

Live load/load bearing capacity