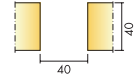




Ecophon Master™ Matrix



Ecophon Master Matrix is a patent pending acoustic ceiling system for larger areas where high coverage is required but a wall to wall solution not possible or wanted. The system provides quick and easy installation with high levels of accuracy, thanks to pre-installed fixing devices and "click-in" connection to the grid system. Each panel has a built in hatch function, and can easily be demounted. The system can either be installed with high coverage ratio, (approx. 95%), in modules of 1200 mm with a 40 mm gap between the panels giving a floating appearance (M344), or in rows of 1040 mm modules (M345). The latter is mainly designed for TABS solutions giving a coverage ratio of approx. 60%, (at building module 1350 mm). Panels are available in different formats and sizes giving a vast range of design possibilities. Master Matrix is priced on its modular size, meaning that for a 1200x1200mm panel you will be charged for 1,44m² even if the panel is only 1160x1160mm, 1,35m².

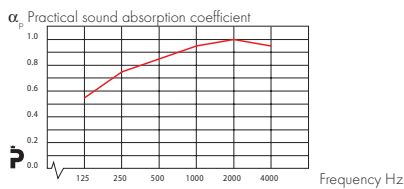
The system consists of Ecophon Master Matrix panels and Ecophon Connect grid system with an approximate weight of 5-6 kg/m². The panels are manufactured from high density glass wool utilizing 3RD Technology. The visible surface of the panel has an Akutex FT coating and the back of the tile a glass tissue. Edges are straight cut and painted. The Connect grid and suspension system are manufactured from galvanized steel and aluminum.

TECHNICAL PROPERTIES

ACOUSTIC The first diagram refers to clusters >10 m². The second diagram to a cluster of four panels (1200x1040 mm) in a row with a distance of 40 mm. If the clusters are arranged with distances between the clusters <0,5 meters, the Aeq per cluster will be slightly reduced.

Sound Absorption: Test results according to EN ISO 354.

Classification according to EN ISO 11654.

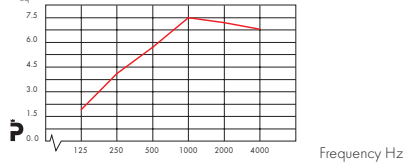


— Ecophon Master Matrix 300 mm o.d.s.

o.d.s = overall depth of system

Product	Master Matrix
o.d.s mm	300
absorption class	A
α_w	0,95

A_{eq} Equivalent absorption area per cluster (m² sabin)



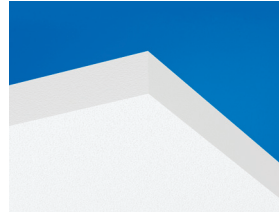
— Ecophon Master Matrix 300 mm o.d.s.

o.d.s = overall depth of system

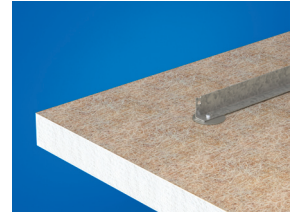
Sound Insulation: Not applicable.

ACCESSIBILITY Each panel is individually demountable from below. Panels are equipped with hatch function.

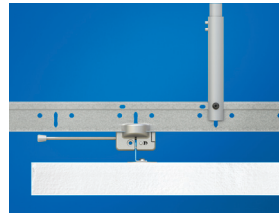
CLEANABILITY Daily dusting and vacuum cleaning. Weekly wet wiping.



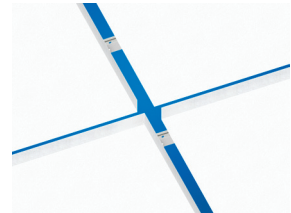
Master Matrix panel



Connect Panel cross bar on rear side of Master Matrix panel



Section of Master Matrix system



Master Matrix system

SYSTEM RANGE

Size, mm	600 x 1040	600 x 1200	600 x 2400	1200 x 1040	1200 x 1200	2400 x 1040	2400 x 1200
T24	•	•	•	•	•	•	•
Thickness	40	40	40	40	40	40	40
Inst. Diag.	M345	M344	M344	M345	M344	M345	M344

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). Glass < 1.

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

The units should however not be installed in areas/premises where the ambient relative humidity (RH) and the temperature exceed 70% and 30 °C respectively.

INDOOR CLIMATE Certified by the Indoor Climate Labelling, emission class M1 for building materials and recommended by the Swedish Asthma and Allergy Association.

ENVIRONMENTAL INFLUENCE Glass wool core utilising 3RD Technology. Granted the Nordic Swan eco-label. Fully recyclable.

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

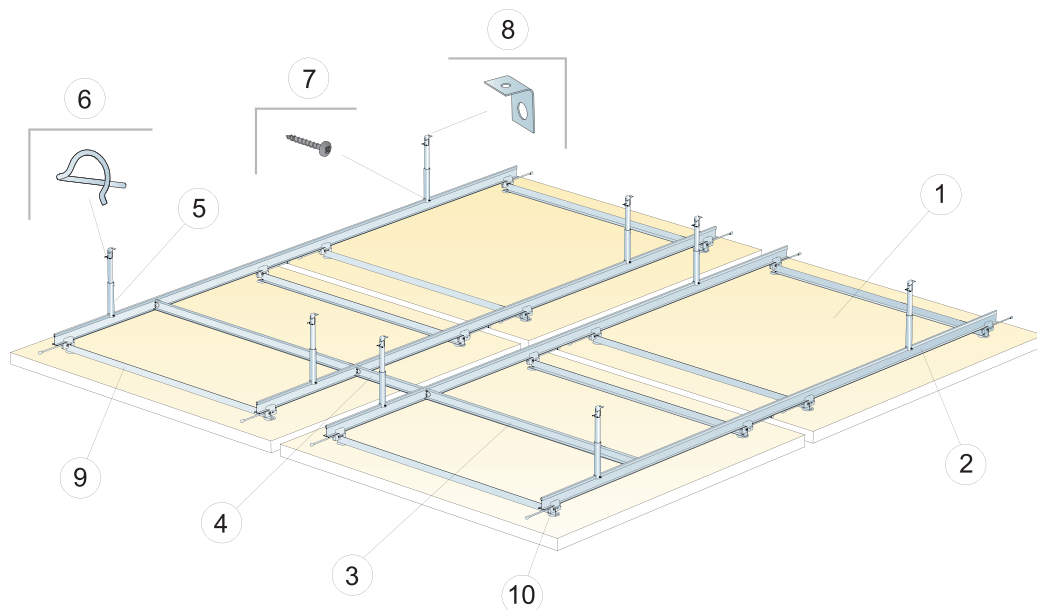
Reaction-to-fire classification

Country	Standard	Class
Europe	EN 13501-1	A2-s1,d0

MECHANICAL PROPERTIES The panels can take small loads with largest aperture diameter of 100 mm. The load is restricted to maximum 250g between two Panel cross bars. For heavier loads see Installation guide.

INSTALLATION For design possibilities including installation direction and integrations, see installation guides, installation diagrams and drawing aid. For information regarding minimum overall depth of system see quantity specification.

INSTALLATION DIAGRAM (M344) FOR ECOPHON MASTER MATRIX



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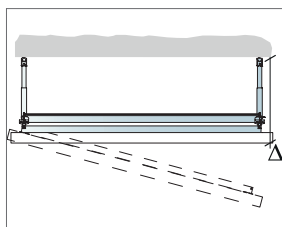
QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm			
		600x1200	600x2400	1200x1200	2400x1200
1	Master Matrix	1,39/m ²	0,70/m ²	0,70/m ²	0,35/m ²
2	Connect T24 Main runner, installed with spacing 900 mm and 300 mm	1,67m/m ²	1,67m/m ²	1,67m/m ²	1,67m/m ²
3	Connect T24 Cross tee, L=900 mm, installed with spacing 1800 mm	0,42m/m ²	0,42m/m ²	0,42m/m ²	0,42m/m ²
4	Connect T24 Cross tee, L=300 mm, installed with spacing 2400 mm	0,11m/m ²	0,11m/m ²	0,11m/m ²	0,11m/m ²
5	Connect Tube hanger, installed with spacing 1800 mm	0,95/m ²	0,95/m ²	0,95/m ²	0,95/m ²
6	Pin, included in Connect Tube hanger				
7	Connect Installation screw MVL	0,95/m ²	0,95/m ²	0,95/m ²	0,95/m ²
8	Connect Fixing plate C3, installed with spacing 1800 mm	0,95/m ²	0,95/m ²	0,95/m ²	0,95/m ²
9	Connect Panel cross bar	2/panel	4/panel	2/panel	3/panel
10	Connect Panel connector	4/panel	6/panel	4/panel	6/panel

Δ Min. overall depth of system: 255 mm

Quantity specification based on 40 mm gap between all panels

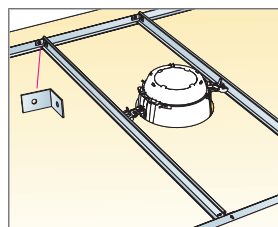
Stabilization could be required, see installation guide for more details



See Quantity specification

600x1200	560x1160
600x2400	560x2360
1200x1200	1160x1160
2400x1200	2360x1160

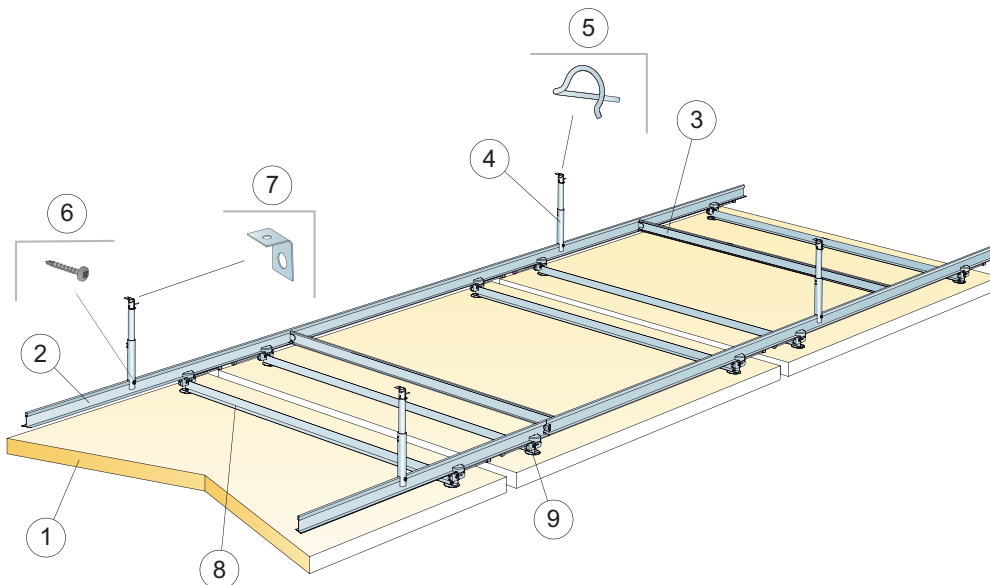
The left column shows modular sizes and the right exact panel sizes.



Size, mm	Max live load [N]	Min load bearing capacity [N]
600x1200	5	160
600x2400	5	160
1200x1200	5	160
2400x1200	5	160

Live load/load bearing capacity

INSTALLATION DIAGRAM (M345) FOR ECOPHON MASTER MATRIX IN ROWS

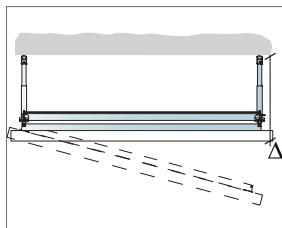


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QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm		
	600x1040	1200x1040	2400x1040
1 Ecophon Master Matrix in rows	1,60/m ²	0,80/m ²	0,40/m ²
2 Connect T24 Main runner, installed with spacing 900 mm	1,93m/m ²	1,93m/m ²	1,93m/m ²
3 Connect T24 Cross tee, L=900 mm, installed with spacing 1800 mm	0,49m/m ²	0,49m/m ²	0,49m/m ²
4 Connect Tube hanger, installed with spacing 1800 mm	1,07/m ²	1,07/m ²	1,07/m ²
5 Pin, included in Connect Tube hanger			
6 Connect Installation screw MVL	1,07/m ²	1,07/m ²	1,07/m ²
7 Connect Fixing plate C3, installed with spacing 1800 mm	1,07/m ²	1,07/m ²	1,07/m ²
8 Connect Panel cross bar	2/panel	2/panel	3/panel
9 Connect Panel connector	4/panel	4/panel	6/panel
Δ Min. overall depth of system: 255 mm			
Quantity specification based on 40 mm gap between panels in installation direction			

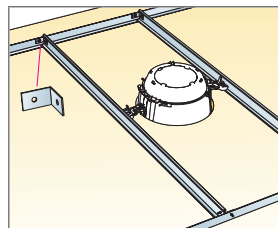
Stabilization could be required, see installation guide for more details



See Quantity specification

600x1040	560x1000
1200x1040	1160x1000
2400x1040	2360x1000

The left column shows modular sizes and the right exact panel sizes.



Size, mm	Max live load [N]	Min load bearing capacity [N]
600x1040	5	160
1200x1040	5	160
2400x1040	5	160

Live load/load bearing capacity