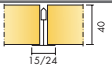
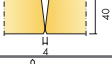

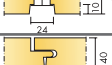


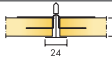
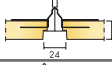
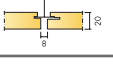



# Ecophon Master™

## Taking care of demanding conditions

Always at the forefront of acoustic innovation Ecophon Master is unrivalled in terms of solutions for acoustically challenging environments, providing excellent sound absorption and speech intelligibility.

- Performance
- Superior acoustics
- Robust

Product		Edge
<b>Ecophon Master™ A</b>	Visible grid. Easily demountable tiles.	
<b>Ecophon Master™ B</b>	For direct fixing with glue.	
<b>Ecophon Master™ Ds</b>	Concealed grid. Easily demountable tiles.	
<b>Ecophon Master™ E</b>	Recessed visible grid. Easily demountable tiles.	
<b>Ecophon Master™ F</b>	For direct fixing with screws.	
<b>Ecophon Master™ SQ</b>	For direct fixing with glue.	
<b>Ecophon Master™ Matrix</b>	Semi-concealed grid. Easily demountable panels.	
<b>Ecophon Master™ Rigid A</b>	Visible grid. Demountable tiles	
<b>Ecophon Master™ Rigid E</b>	Recessed visible grid. Demountable tiles	
<b>Ecophon Master™ Rigid Dp</b>	Semi-concealed grid system. Demountable tiles	

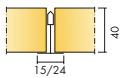
# Ecophon Master™ A

*Ecophon Master™ A has an exposed grid system. Each tile is easily demountable. Suitable for open plan offices or other premises where strict demands are made on good acoustics and speech intelligibility, and where demountability is vital.*

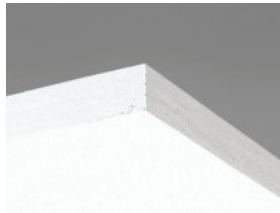


Gdynia, Poland

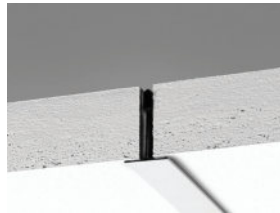
## SYSTEM RANGE



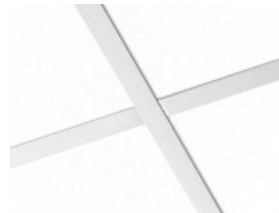
Size, mm	600x600	1200x600	1200x1200
T24	•	•	•
Thickness (THK)	40	40	40
Inst. Diag.	M56	M56	M56



Master A tile



Section of Master A system



Master A system

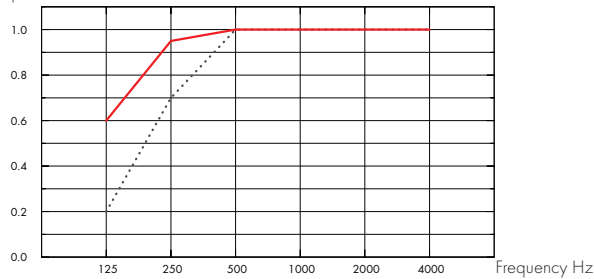


## Acoustics

### 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 A 40 mm, 50 mm o.d.s.

— Master A 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	50	0.20	0.70	1.00	1.00	1.00	1.00	1.00	A
40	200	0.60	0.95	1.00	1.00	1.00	1.00	1.00	A

THK mm	o.d.s. mm	NRC	SAA
40	50	1.00	1.00
40	400	0.95	0.93

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	28	30



## Indoor Air Quality

Certificate / Label

Finnish M1

French VOC, A+



## Environmental Footprint

Kg CO<sub>2</sub> equiv/m<sup>2</sup>: 4,50

From EPD in conformity with ISO 14025 / EN 15804



## Circularity

Fully recyclable.



### 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.



### Humidity Resistance

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



### Visual appearance

White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.



### Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



### Accessibility

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



### Installation

Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification.



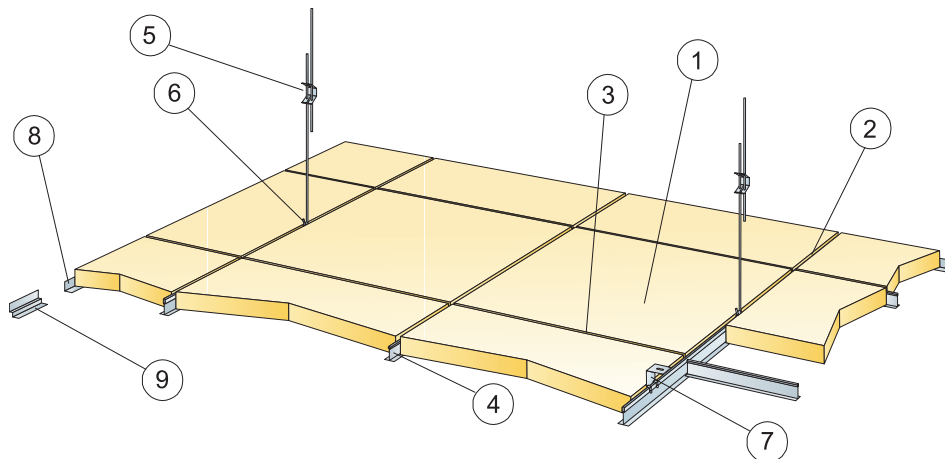
### Mechanical properties

See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at [www.ecophon.com](http://www.ecophon.com).



### CE

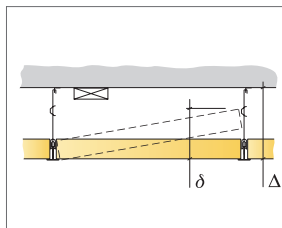
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



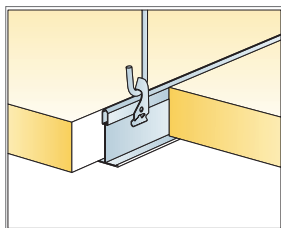
© Ecophon Group

### QUANTITY SPECIFICATION (EXCL. WASTAGE)

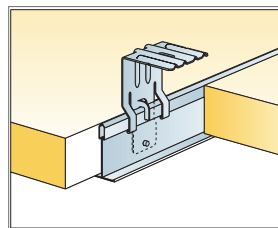
		Size, mm		
		600x600	1200x600	1200x1200
1	Master A	2,8/m <sup>2</sup>	1,4/m <sup>2</sup>	0,7/m <sup>2</sup>
2	Connect T24 Main runner, installed at 1200 mm centres (max. distance from wall 600 mm, can be extended up to 1200 mm if no live load between Main runner and wall).	0,9m/m <sup>2</sup>	0,9m/m <sup>2</sup>	0,9m/m <sup>2</sup>
3	Connect T24 Cross tee, L=1200 mm, installed at 600 mm centres	1,7m/m <sup>2</sup>	1,7m/m <sup>2</sup>	0,9m/m <sup>2</sup>
4	Connect T24 Cross tee, L=600 mm	0,9m/m <sup>2</sup>	-	-
5	Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
6	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
7	For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
8	Connect Angle trim, fixed at 300 mm centres	as required	as required	as required
9	Connect Shadow-line trim, fixed at 300 mm centres	as required	as required	as required
Δ Min. overall depth of system, with adjustable hanger: 100 mm, with direct bracket: 50 mm		-	-	-
δ Min. demounting depth: 170 mm, 200 mm with 1200x1200 mm		-	-	-



See Quantity specification



Suspension with adjustable hanger and clip



Suspension with direct bracket

Size, mm	Max live load [N]	Min load bearing capacity [N]
600x600	40	160
1200x600	40	160
1200x1200	40	160

Live load/load bearing capacity

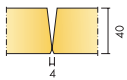
# Ecophon Master™ B

*Ecophon Master™ B tiles are bonded edge-to-edge directly to the soffit surface, creating a ceiling with a smooth appearance. The bevelled edge creates a narrow groove between each tile. For applications where the minimum possible overall depth of system is required.*

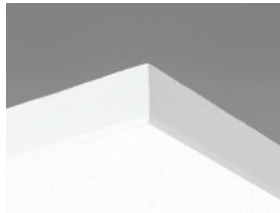


Navigator, Malmö, Sweden

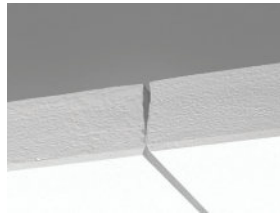
## SYSTEM RANGE



Size, mm	600x600
Direct	•
Thickness (THK)	40
Inst. Diag.	M113



Master B tile



Section of Master B system



Master B system

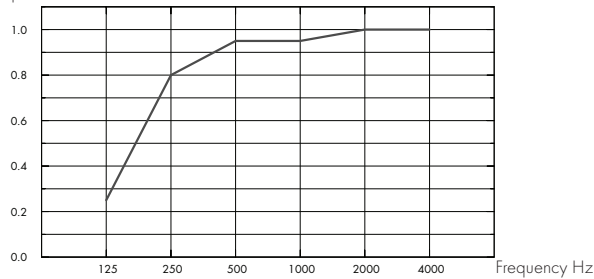


## Acoustics

### 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 B 40 mm, 43 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	43	0.25	0.80	0.95	0.95	1.00	1.00	1.00	A

THK mm	o.d.s. mm	NRC	SAA
40	43	0.95	0.95



## Indoor Air Quality

Certificate / Label

Finnish M1

French VOC, A+



## Environmental Footprint

Kg CO<sub>2</sub> equiv/m<sup>2</sup>: 6,98

From EPD in conformity with ISO 14025 / EN 15804



## Circularity

Fully recyclable.



## 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.



### Humidity Resistance

---

Class A, relative humidity 70% and 25°C, according to EN 13964:2014



### Visual appearance

---

White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.



### Cleanability

---

Daily dusting and vacuum cleaning. Weekly wet wiping.



### Accessibility

---

The tiles are not demountable.



### Installation

---

Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification. Rendered surfaces must have sufficient strength to be able to carry the load imposed by the tiles. If doubts, test gluing should be carried out. The surface should always be dry and clean. For best result the surface should be even.



### Mechanical properties

---

Additional live load has to be fixed to the soffit.

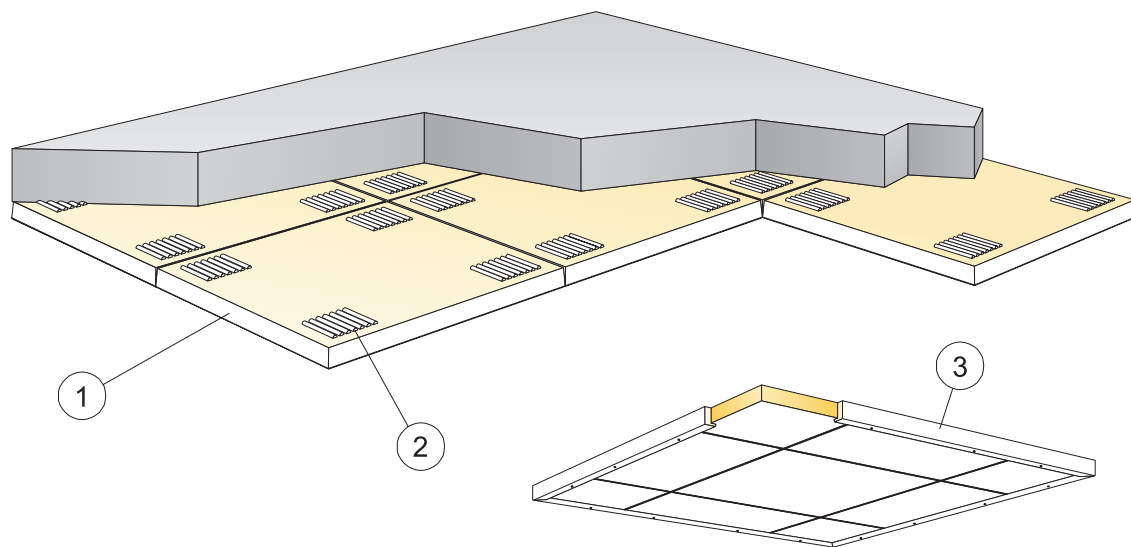


### CE

---

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.

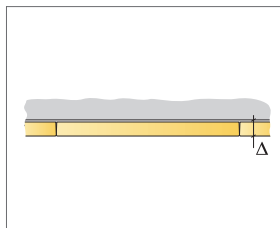




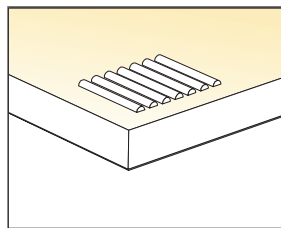
© Ecophon Group

QUANTITY SPECIFICATION (EXCL. WASTAGE)

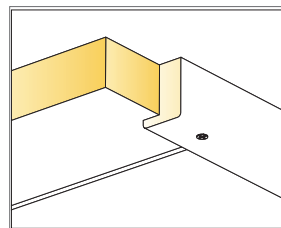
		<b>Size, mm</b>
		<b>600x600</b>
1	Master B	2,8/m <sup>2</sup>
2	Connect Absorber glue (0,25 l/m <sup>2</sup> - 0,4 l/m <sup>2</sup> depending on installation conditions)	as required
3	When installing floating ceilings: Connect Wood trim, L=3000, fixed at 500 mm centres	as required
Δ Min. overall depth of system: 43 mm		-
δ Min. demounting depth: The system is not demountable		-
Visible edges should be painted		-
Use Connect Notched spatula to apply the glue.		-



See Quantity specification



Application of glue



Wood trim for floating installation

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

Live load/load bearing capacity

# Ecophon Master™ Ds

*Ecophon Master™ Ds has a concealed grid and symmetrical edge design, allowing for easy assembly, and integration of light fittings and ventilation. For applications where a suspended ceiling with a concealed grid is required, but individual tiles must be easily demountable.*

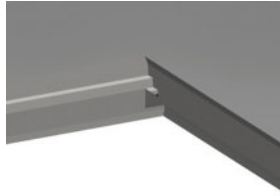


Pharmkon, Denmark

## SYSTEM RANGE



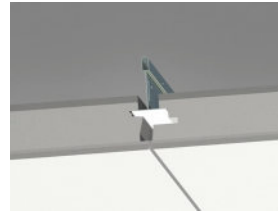
Size, mm	600x600
T24	•
Thickness (THK)	40
Inst. Diagr.	M236, M242



Master Ds tile



Master Ds system



Section of Master Ds system.

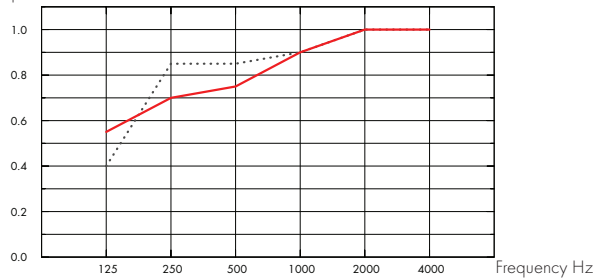


## Acoustics

### 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
40	400	0.85	0.86

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



## Indoor Air Quality

Certificate / Label

Finnish M1

French VOC, A+



## Environmental Footprint

Kg CO<sub>2</sub> equiv/m<sup>2</sup>: 7,06

From EPD in conformity with ISO 14025 / EN 15804



## Circularity

Fully recyclable.



### 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.



### Humidity Resistance

Class A, relative humidity 70% and 25°C, according to EN 13964:2014



### Visual appearance

White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.



### Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



### Accessibility

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



### 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.



### Mechanical properties

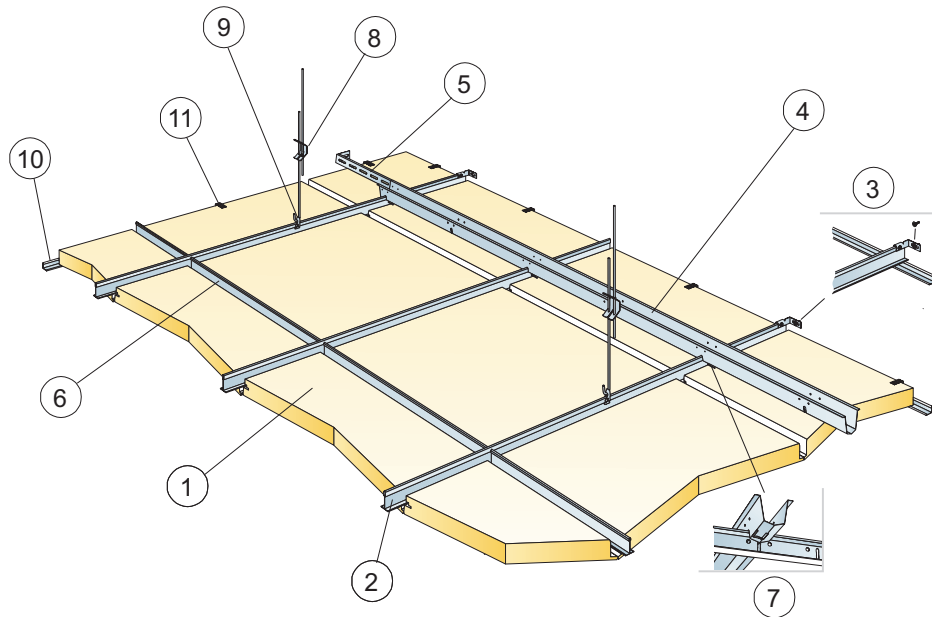
See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at [www.ecophon.com](http://www.ecophon.com).



### 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.

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



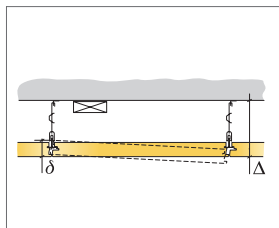
© Ecophon Group

### QUANTITY SPECIFICATION (EXCL. WASTAGE)

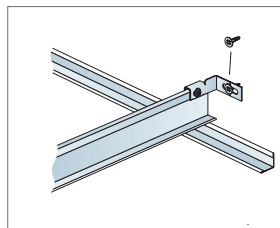
		<b>Size, mm</b>
		<b>600x600</b>
1	Master Ds	2,8/m <sup>2</sup>
2	Connect T24 Main Runner HD, installed at 600 mm centres	1,7m/m <sup>2</sup>
3	Connect Wall Bracket for T-profiles	1/suspended row of Main runner
4	Connect Space Bar, installed at 1500 mm centres (max. distance from wall 300 mm)	0,7m/m <sup>2</sup>
5	Connect Wall Bracket, L=700 mm, for 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/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
11	Connect Perimeter tile clip 40	1/300-400mm on any cut edge

Δ Min. overall depth of system: 140 mm

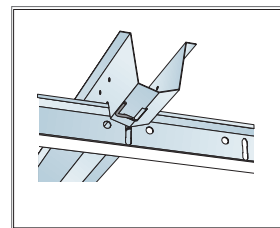
δ Min. demounting depth: 50 mm



See Quantity specification



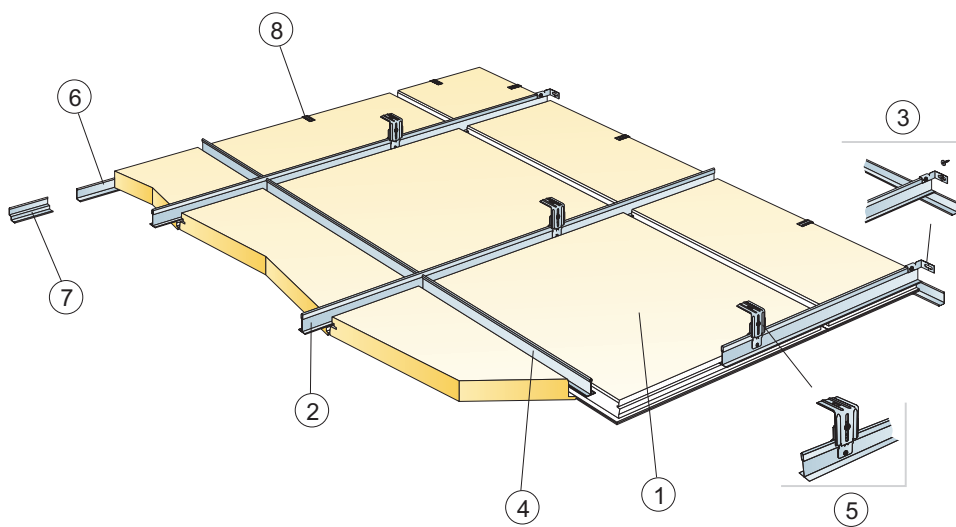
Connect Wall bracket for T-profiles



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



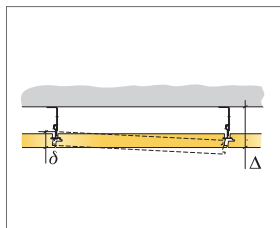
© Ecophon Group

### QUANTITY SPECIFICATION (EXCL. WASTAGE)

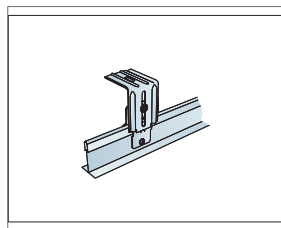
		<b>Size, mm</b>
		<b>600x600</b>
1	Master Ds	2,8/m <sup>2</sup>
2	Connect T24 Main Runner HD, installed at 600 mm centres	1,7m/m <sup>2</sup>
3	Connect Wall Bracket for T-profiles	1/suspended row of Main runner
4	Connect T24 Cross Tee, l=600 mm	2/row of Main runner
5	Connect Adjust direct bracket, installed 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
8	Connect Perimeter tile clip 40	1/300-400mm on any cut edge

Δ Min. overall depth of system: 95 mm

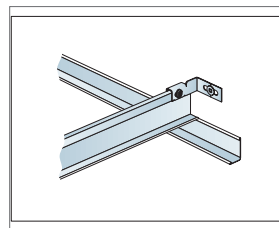
δ Min. demounting depth: 50 mm



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

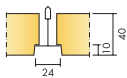
# Ecophon Master™ E

*Ecophon Master™ E has a recessed visible grid and a regular edge design, creating a ceiling with a shadow effect that accentuates each tile and partially conceals the grid system. Suitable for open plan offices or other premises where strict demands are made on good acoustics.*

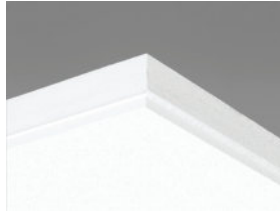


Cracow, Poland

## SYSTEM RANGE



Size, mm	600x600	1200x600	1200x1200
T24	•	•	•
Thickness (THK)	40	40	40
Inst. Diag.	M58	M58	M58



Master E tile



Section of Master E system



Master E system

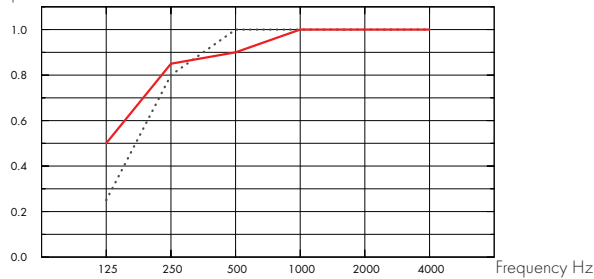


## Acoustics

### 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 E 40 mm, 60 mm o.d.s.

— Master E 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	60	0.25	0.80	1.00	1.00	1.00	1.00	1.00	A
40	200	0.50	0.85	0.90	1.00	1.00	1.00	1.00	A

THK mm	o.d.s. mm	NRC	SAA
40	60	1.00	0.98
40	200	0.95	0.93
40	400	0.90	0.89

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	29	31



## Indoor Air Quality

Certificate / Label

Finnish M1

French VOC, A+



## Environmental Footprint

Kg CO<sub>2</sub> equiv/m<sup>2</sup>: 5,94

From EPD in conformity with ISO 14025 / EN 15804



## Circularity

Fully recyclable.





### 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.



### Humidity Resistance

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



### Visual appearance

White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.



### Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



### Accessibility

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



### Installation

Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification.



### Mechanical properties

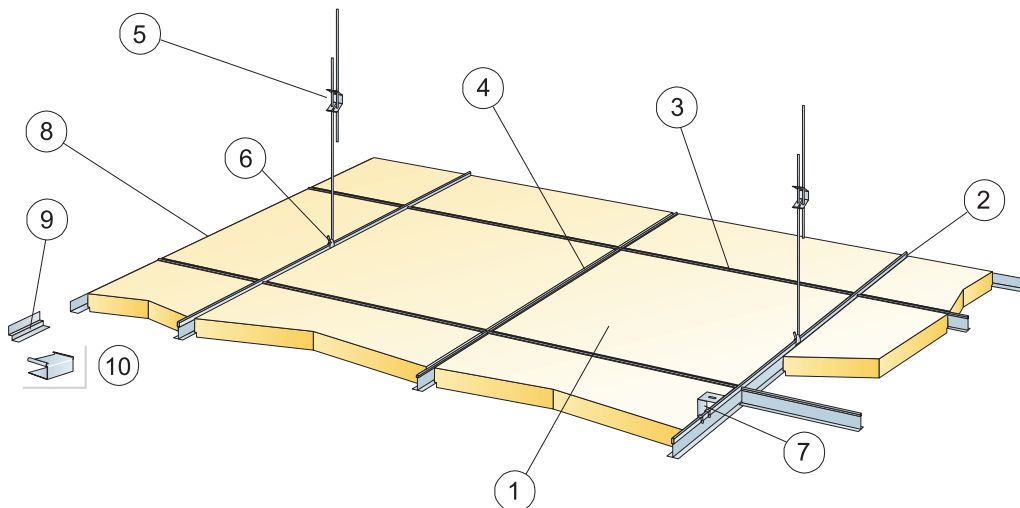
See table about Max live load and Min load bearing capacity and Functional demands, Mechanical properties at [www.ecophon.com](http://www.ecophon.com).



### 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.

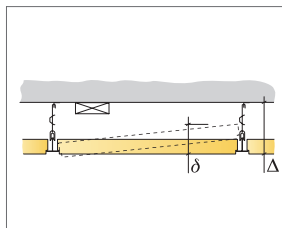
## INSTALLATION DIAGRAM (M58) FOR ECOPHON MASTER E



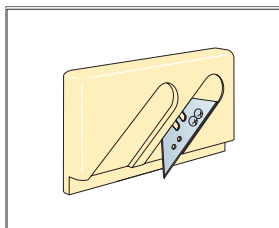
© Ecophon Group

### QUANTITY SPECIFICATION (EXCL. WASTAGE)

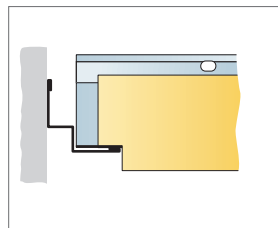
		Size, mm		
		600x600	1200x600	1200x1200
1	Master E	2,8/m <sup>2</sup>	1,4/m <sup>2</sup>	0,7/m <sup>2</sup>
2	Connect T24 or T15 Main runner, installed at 1200 mm centres (max. distance from wall 600 mm, can be extended up to 1200 mm if no live load between Main runner and wall).	0,9m/m <sup>2</sup>	0,9m/m <sup>2</sup>	0,9m/m <sup>2</sup>
3	Connect T24 or T15 Cross tee, L=1200 mm	1,7m/m <sup>2</sup>	1,7m/m <sup>2</sup>	0,9m/m <sup>2</sup>
4	Connect T24 or T15 Cross tee, L=600 mm	0,9m/m <sup>2</sup>	-	-
5	Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
6	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
7	For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
8	Connect Angle trim, fixed at 300 mm centres	as required	as required	as required
9	Connect Shadow-line trim, fixed at 300 mm centres	as required	as required	as required
10	Connect E-plug (for Shadow-line trim)	as required	as required	as required
Δ Min. overall depth of system, with adjustable hanger: 110 mm, with direct bracket: 60 mm		-	-	-
δ Min. demounting depth: 170 mm		-	-	-



See Quantity specification



Cutting tool E



Regular rebate with shadow-line trim.

Size, mm	Max live load [N]	Min load bearing capacity [N]
600x600	40	160
1200x600	40	160
1200x1200	40	160

Live load/load bearing capacity

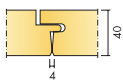
# Ecophon Master™ F

Ecophon Master™ F is installed directly to an existing plaster ceiling, boarding, battens or concrete to create a ceiling with a smooth appearance. Suitable for schools, open plan offices or other premises where strict demands are made on good acoustics.

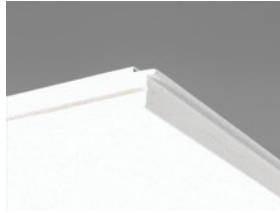


Wolkentried Kindergarten, Wolkentried, Germany

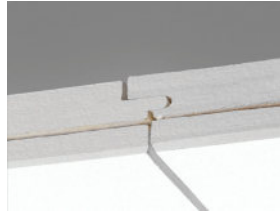
## SYSTEM RANGE



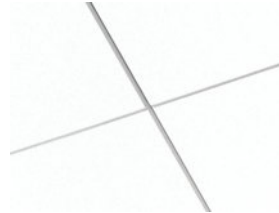
Size, mm	600x600	1200x600
Direct	•	•
Thickness (THK)	40	40
Inst. Diag.	M52	M52



Master F tile



Section of Master F system with tongue and groove



Master F system



Master F is installed by screw fixing

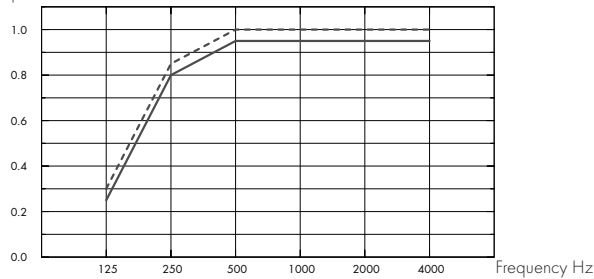


## Acoustics

### 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 F 40 mm, 40 mm o.d.s.

--- Master F 40 mm, 60 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	40	0.25	0.80	0.95	0.95	0.95	0.95	0.95	A
40	60	0.30	0.85	1.00	1.00	1.00	1.00	1.00	A



## Indoor Air Quality

Certificate / Label

Finnish M1

French VOC, A+



## Environmental Footprint

Kg CO<sub>2</sub> equiv/m<sup>2</sup>: 7,04

From EPD in conformity with ISO 14025 / EN 15804



## Circularity

Fully recyclable.



## 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.



## Humidity Resistance

Class A, relative humidity 70% and 25°C, according to EN 13964:2014



### Visual appearance

---

White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.



### Cleanability

---

Daily dusting and vacuum cleaning. Weekly wet wiping.



### Accessibility

---

The tiles are not demountable.



### Installation

---

Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification. For best result the surface should be even, however an acceptable result could be achieved on slightly uneven surfaces. If very uneven surfaces - installation of furring (evenly spaced timber battens) as the substrate for the tiles is recommended.



### Mechanical properties

---

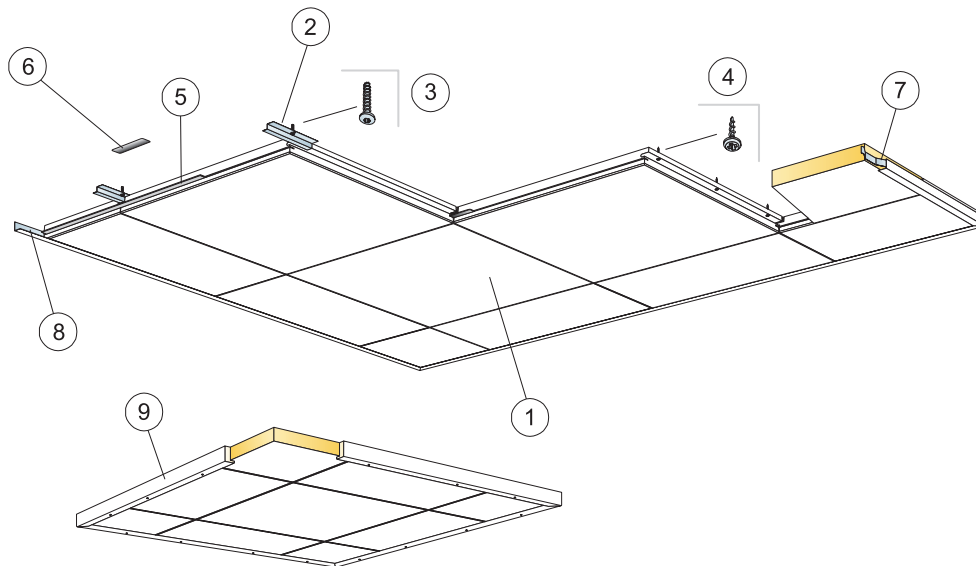
Additional live load has to be fixed to the soffit.



### CE

---

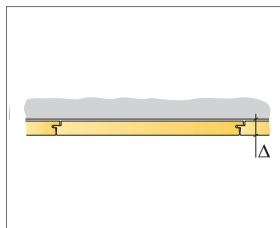
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



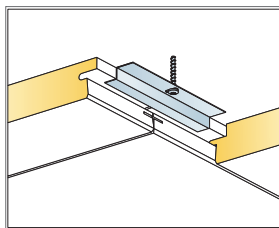
© Ecophon Group

QUANTITY SPECIFICATION (EXCL. WASTAGE)

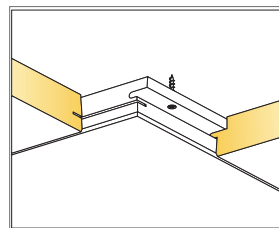
		Size, mm	
		600x600	1200x600
1	Master F	2,8/m <sup>2</sup>	1,4/m <sup>2</sup>
2	Connect Direct fixing plate F 0152, installed at 600 mm centres (for use in concrete)	2,8/m <sup>2</sup>	2,8/m <sup>2</sup>
3	Connect Anchor screw, installed at 600 mm centres (for use in concrete)	2,8/m <sup>2</sup>	2,8/m <sup>2</sup>
4	Connect Installation screw MVL (for use in plasterboard or timber)	8,3/m <sup>2</sup>	7/m <sup>2</sup>
5	Connect Spline F, L=600 mm. Must be used in Sweden, Denmark, Norway and Finland at fireclass 'Tändskyddande beklädnad'	2,8/m <sup>2</sup>	1,4/m <sup>2</sup>
6	Connect Spline, L=150 mm	2,8/m <sup>2</sup>	1,4/m <sup>2</sup>
7	Connect Wall spring spacer	1/panel in the last row	2/panel in the last row
8	Connect Angle trim, fixed at 300 mm centres	as required	as required
9	When installing floating ceilings: Connect Wood trim, L=3000, fixed at 500 mm centres	as required	as required
Δ Min. overall depth of system: 40 mm		-	-
δ Min. demounting depth: The system is not demountable		-	-



See Quantity specification



Installation in concrete



Installation in plasterboard or timber

Size, mm	Max live load [N]	Min load bearing capacity [N]
600x600	-	-
1200x600	-	-

Live load/load bearing capacity

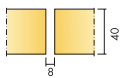
# Ecophon Master™ SQ

Ecophon Master™ SQ has bonded tiles directly to the soffit surface. Installed with a gap between each tile the result is a ceiling with a smooth appearance. Suitable for schools, open plan offices or other premises where strict demands are made on good acoustics.

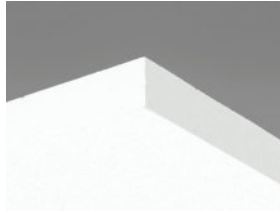


AWO Seniorenzentrum, Wiefel, Germany

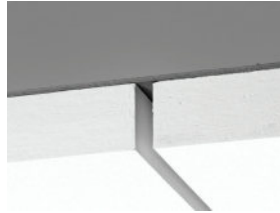
## SYSTEM RANGE



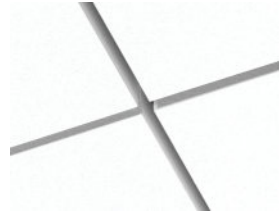
Size, mm	600x600	1200x600
Direct	•	•
Thickness (THK)	40	40
Inst. Diagr.	M106	M106



Master SQ tile



Section of Master SQ system



Master SQ system

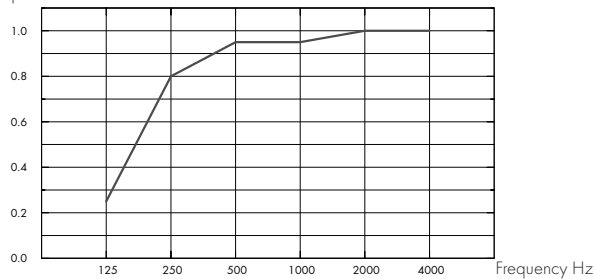


## Acoustics

### Sound Absorption:

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

$\alpha_p$  Practical sound absorption coefficient



– Master SQ 40 mm, 43 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	43	0.25	0.80	0.95	0.95	1.00	1.00	1.00	A



## Indoor Air Quality

Certificate / Label

Finnish M1

French VOC, A+



## Environmental Footprint

Kg CO<sub>2</sub> equiv/m<sup>2</sup>: 7,04

From EPD in conformity with ISO 14025 / EN 15804



## Circularity

Fully recyclable.



## 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.



## Humidity Resistance

Class A, relative humidity 70% and 25°C, according to EN 13964:2014





### Visual appearance

---

White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.



### Cleanability

---

Daily dusting and vacuum cleaning. Weekly wet wiping.



### Accessibility

---

The tiles are not demountable.



### Installation

---

Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification. Rendered surfaces must have sufficient strength to be able to carry the load imposed by the tiles. If doubts, test gluing should be carried out. The surface should always be dry and clean. For best result the surface should be even, however an acceptable result could be achieved on slightly uneven surfaces.



### Mechanical properties

---

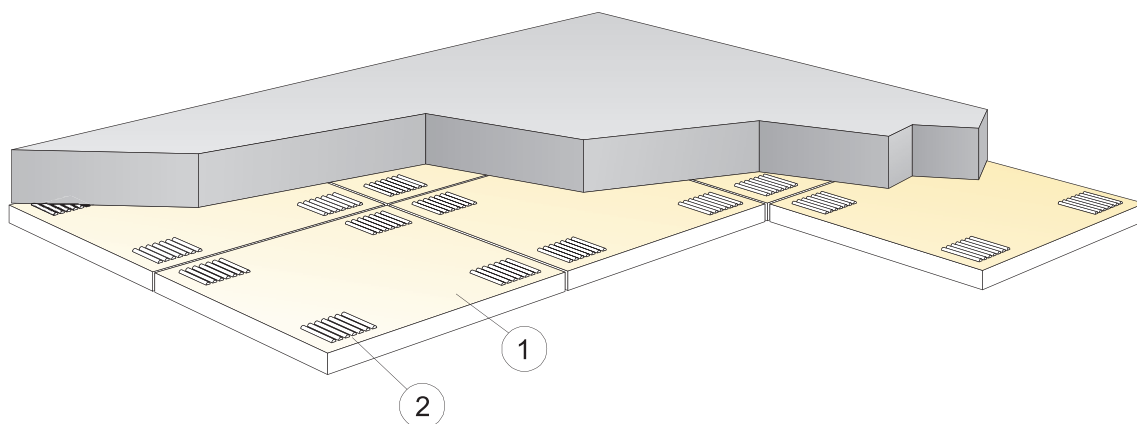
Additional live load has to be fixed to the soffit.



### CE

---

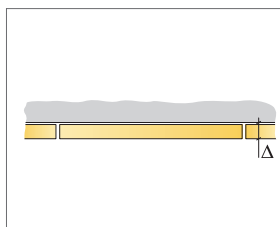
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



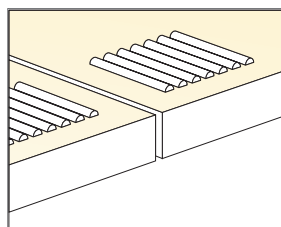
© Ecophon Group

QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	
		600x600	1200x600
1	Master SQ	2,8/m <sup>2</sup>	1,4/m <sup>2</sup>
2	Connect Absorber glue (0,25 l/m <sup>2</sup> - 0,4 l/m <sup>2</sup> depending on installation conditions)	as required	as required
Δ Min. overall depth of system: 43 mm		-	-
δ Min. demounting depth: The system is not demountable		-	-
Visible edges should be painted		-	-
Use Connect Notched spatula to apply the glue.		-	-
* Panel Module size 600x600 (592x592), 1200x600 (1192x592)		-	-



See Quantity specification



Application of glue



Size, mm	Max live load [N]	Min load bearing capacity [N]
600x600	-	-
1200x600	-	-

Live load/load bearing capacity

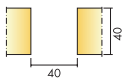
# Ecophon Master™ Matrix

The system provides quick and easy installation with highest accuracy and a vast range of design possibilities. Each panel has a built in hatch function, and can easily be demounted. Suitable for larger areas where high coverage is required but a wall to wall solution not possible.

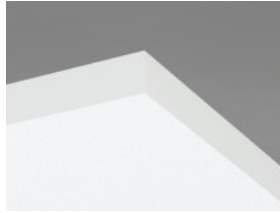


Nowy Styl Group, Kraków, Poland

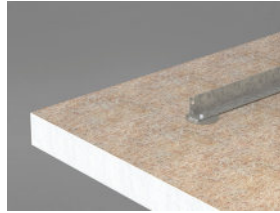
## SYSTEM RANGE



Size, mm	600x1040	600x1200	600x2400	1200x1040	1200x1200	2400x1040	2400x1200
T24	•	•	•	•	•	•	•
Thickness (THK)	40	40	40	40	40	40	40
Inst. Diag.	M345	M344	M344	M345	M344	M345	M344



Solo Matrix panel



Connect Panel Cross Bar on rear side of Solo Matrix panel



Solo Matrix system



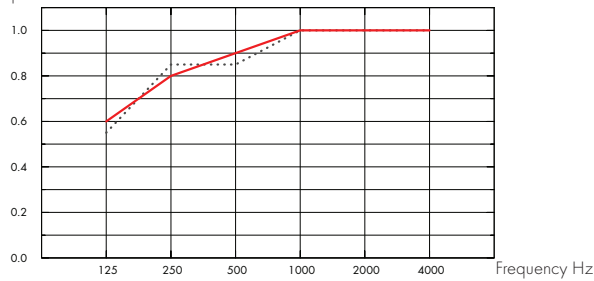
## Acoustics

The first diagram refers to clusters >10 m<sup>2</sup>. 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.

$\alpha_p$  Practical sound absorption coefficient

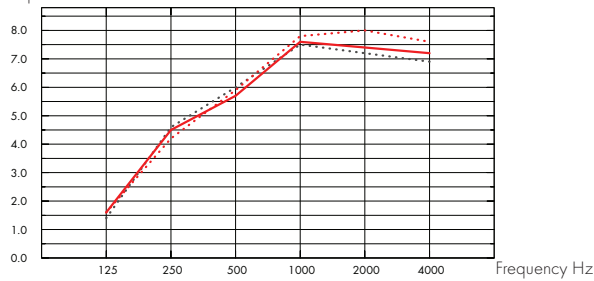


... Master Matrix 40 mm, 255 mm o.d.s.

— Master Matrix 40 mm, 300 mm o.d.s.

o.d.s = overall depth of system

A<sub>eq</sub> Equivalent absorption area per unit (m<sup>2</sup> sabin)



... Master Matrix 40 mm, 255 mm o.d.s.

— Master Matrix 40 mm, 300 mm o.d.s.

- - - Master Matrix 40 mm, 400 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	255	0.55	0.85	0.85	1.00	1.00	1.00	0.95	A
40	300	0.60	0.80	0.90	1.00	1.00	1.00	1.00	A

THK mm	o.d.s. mm	A <sub>eq</sub> Equivalent absorption area per unit (m <sup>2</sup> sabin)					
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
40	255	1.40	4.60	6.00	7.50	7.20	6.90
40	300	1.60	4.50	5.70	7.60	7.40	7.20
40	400	1.60	4.20	5.90	7.80	8.00	7.60



## Indoor Air Quality

Certificate / Label

Finnish M1

French VOC, A+





### Environmental Footprint

Kg CO<sub>2</sub> equiv/m<sup>2</sup>: 5,79

From EPD in conformity with ISO 14025 / EN 15804



### Circularity

Fully recyclable.



### 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.



### Humidity Resistance

Class A, relative humidity 70% and 25°C, according to EN 13964:2014



### Visual appearance

White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.



### Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



### Accessibility

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



### 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.



### Mechanical properties

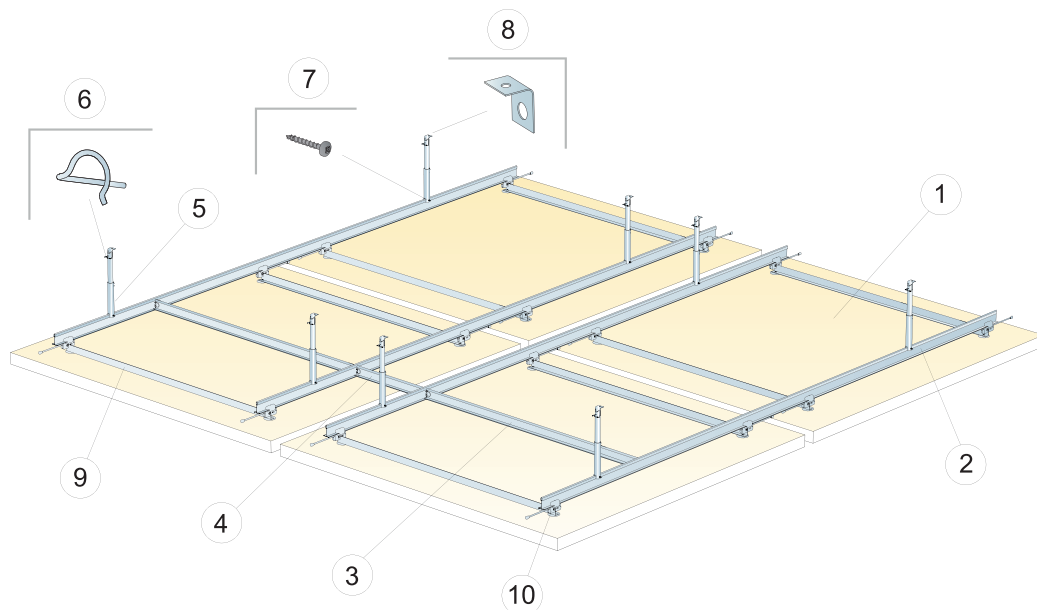
The panels can take small loads with largest aperture diameter of 100 mm. The load is restricted to maximum 250g between two Panel cross bars. For heavier loads see Installation guide.



### 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.

## INSTALLATION DIAGRAM (M344) FOR ECOPHON MASTER MATRIX



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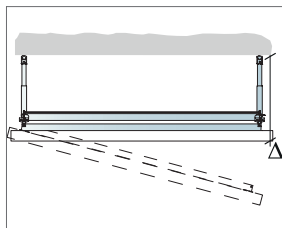
### QUANTITY SPECIFICATION (EXCL. WASTAGE)

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

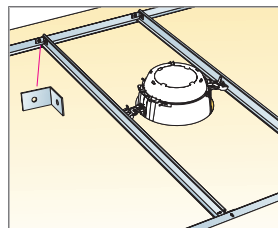
Stabilization could be required, see installation guide for more details



See Quantity specification

Modular size	Exact size
600x1200	560x1160
600x2400	560x2360
1200x1200	1160x1160
2400x1200	2360x1160

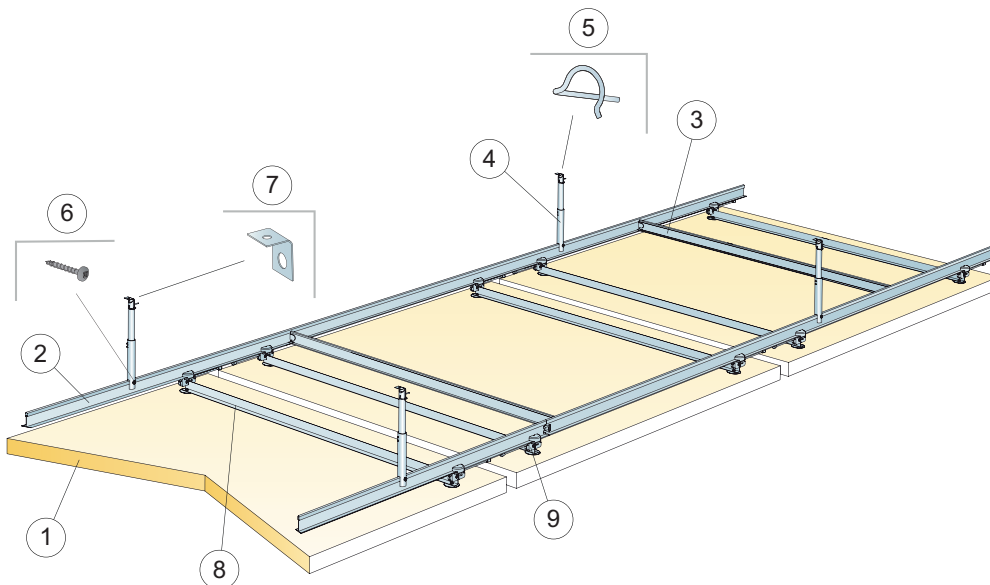
The left column shows modular sizes and the right exact panel sizes.



For heavier integrations use Connect Cross tee and Connect Angle bracket.

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

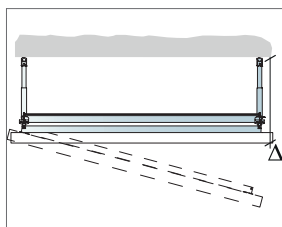
Live load/load bearing capacity



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### QUANTITY SPECIFICATION (EXCL. WASTAGE)

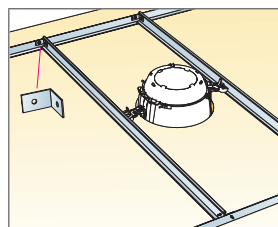
	Size, mm		
	600x1040	1200x1040	2400x1040
1 Ecophon Master Matrix in rows	1,60/m <sup>2</sup>	0,80/m <sup>2</sup>	0,40/m <sup>2</sup>
2 Connect T24 Main runner, installed with spacing 900 mm	1,93m/m <sup>2</sup>	1,93m/m <sup>2</sup>	1,93m/m <sup>2</sup>
3 Connect T24 Cross tee, L=900 mm, installed with spacing 1800 mm	0,49m/m <sup>2</sup>	0,49m/m <sup>2</sup>	0,49m/m <sup>2</sup>
4 Connect Tube hanger, installed with spacing 1800 mm	1,07/m <sup>2</sup>	1,07/m <sup>2</sup>	1,07/m <sup>2</sup>
5 Pin, included in Connect Tube hanger			
6 Connect Installation screw MVL	1,07/m <sup>2</sup>	1,07/m <sup>2</sup>	1,07/m <sup>2</sup>
7 Connect Fixing plate, installed with spacing 1800 mm	1,07/m <sup>2</sup>	1,07/m <sup>2</sup>	1,07/m <sup>2</sup>
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

Modular size	Exact size
600x1040	560x1000
1200x1040	1160x1000
2400x1040	2360x1000

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



For heavier integrations use Connect Cross tee and Connect Angle bracket.

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

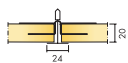
# Ecophon Master™ Rigid A

Ecophon Master™ Rigid A has an exposed grid system. Each tile is secured in the grid by clips and is fully demountable. The surface is a reinforced sandwich construction. Used together with Ecophon Extra Bass, optimal acoustics are achieved.



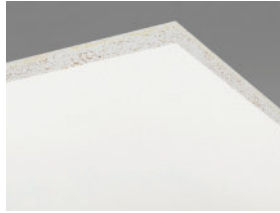
Bewley School, West Hunslet, United Kingdom

## SYSTEM RANGE

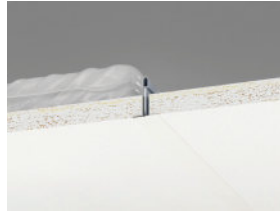


Size, mm	600x600	1200x600	XL 1600x600	XL 1800x600	XL 2000x600	XL 2400x600
Extra Bass	•	•				
T24	•	•	•	•	•	•
Thickness (THK)	20	20	20	20	20	20
Inst. Diagr.	M316EB	M316EB	M333	M333	M333	M333





Master Rigid A tile



Section of Master Rigid A system with Connect T24



Master Rigid A system with Connect T24

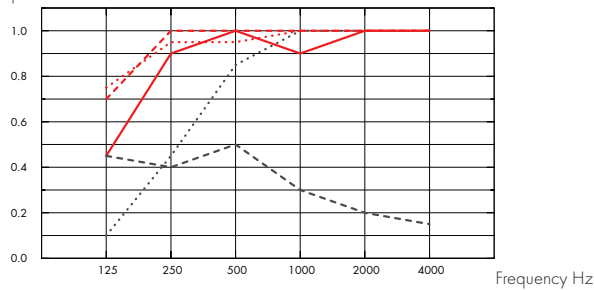


## Acoustics

### Sound Absorption:

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

$\alpha_p$  Practical sound absorption coefficient



- ... Master Rigid A 20 mm, 50 mm o.d.s.
  - Master Rigid A 20 mm, 200 mm o.d.s.
  - - - Master Rigid A 20 mm + Extra Bass 50 mm, 200 mm o.d.s.
  - ... Master Rigid A 20 mm + 2xExtra Bass 100 mm, 200 mm o.d.s.
  - - - Master Rigid A gamma 20 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		
	20	50	0.10	0.45	0.85	1.00	1.00	1.00	0.75	C
	20	200	0.45	0.90	1.00	0.90	1.00	1.00	1.00	A
+ Extra Bass	70	200	0.70	1.00	1.00	1.00	1.00	1.00	1.00	A
+ 2xExtra Bass,	120	200	0.75	0.95	0.95	1.00	1.00	1.00	1.00	A
gamma	20	200	0.45	0.40	0.50	0.30	0.20	0.15	0.25	D

	THK mm	o.d.s. mm	NRC	SAA
+ Extra Bass	70	200	1.00	1.00



## Indoor Air Quality

Certificate / Label

Finnish M1

French VOC, A+



## Environmental Footprint

Kg CO<sub>2</sub> equiv/m<sup>2</sup>: 3,31

From EPD in conformity with ISO 14025 / EN 15804



## Circularity

Fully recyclable.



### 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.



### Humidity Resistance

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



### Visual appearance

White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.



### Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



### Accessibility

The tiles are secured in the grid, but demountable. Minimum demounting depth according to installation diagrams.



### Installation

Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification.



### Mechanical properties

See table regarding the min- and max- load bearing capacities and functional demands.



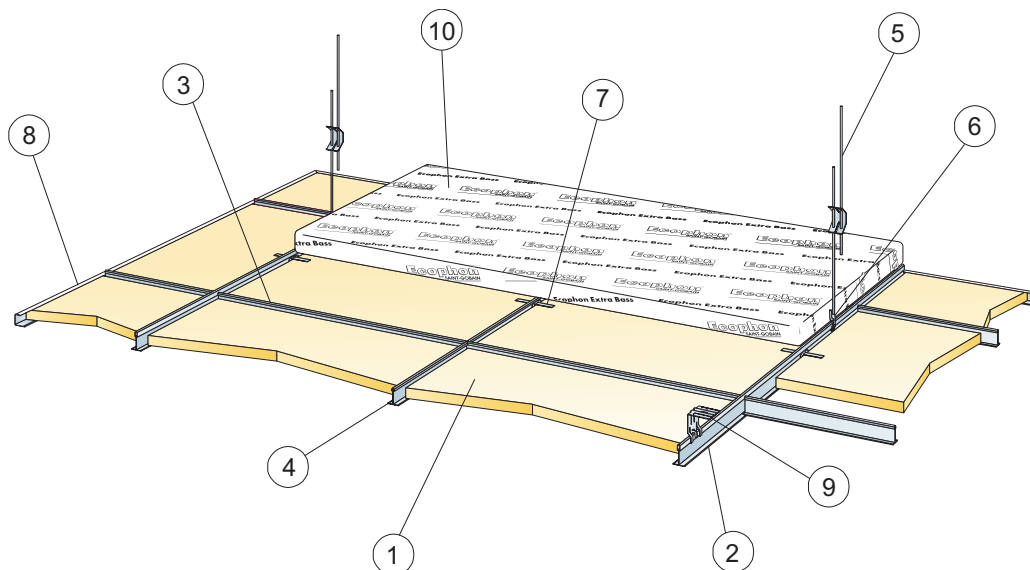
### Impact Resistance

M-sketch	Class
M316	3A



### 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.

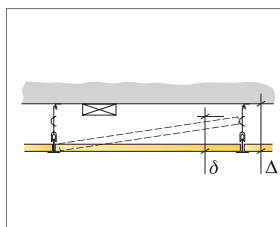


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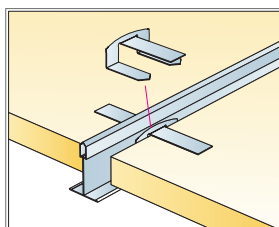
### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	
		600x600	1200x600
1	Master Rigid A	2,8/m <sup>2</sup>	1,4/m <sup>2</sup>
2	Connect T24 Main runner, installed at 1200 mm centres (max. distance from wall 600 mm, can be extended up to 1200 mm if no live load between Main runner and wall).	0,9m/m <sup>2</sup>	0,9m/m <sup>2</sup>
3	Connect T24 Cross tee, L=1200 mm, installed at 600 mm centres	1,7m/m <sup>2</sup>	1,7m/m <sup>2</sup>
4	Connect T24 Cross tee, L=600 mm	0,9m/m <sup>2</sup>	-
5	Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
6	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
7	Connect Hold down clip A	2pcs/panel	2pcs/panel
8	Connect Channel trim, fixed at c300 mm (1200x1200, c200 mm)	as required	as required
9	For direct installation: Connect Direct bracket, installed at 1200 mm centres	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
10	Extra Bass (1200x600x50 mm)	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
Δ Min. overall depth of system: 100 mm		-	-
δ Min. demounting depth: 120 mm (tiles without Extra Bass above)		-	-

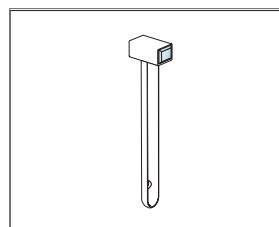
For luminaire integration in panels use Connect Bridging



See Quantity specification



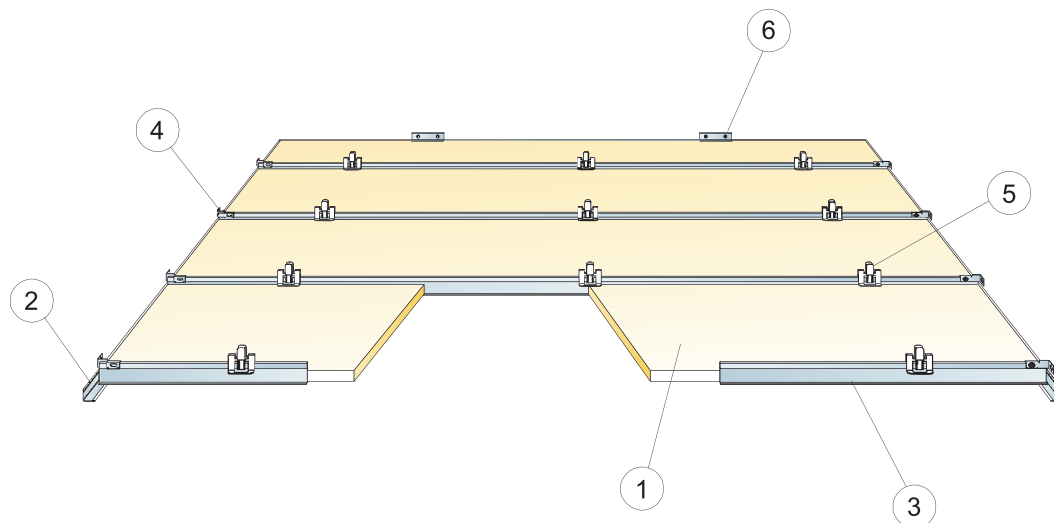
Connect Hold down clip A (patented)



Connect Demounting tool

Size, mm	Max live load [N]	Min load bearing capacity [N]
600x600	50	160
1200x600	50	160

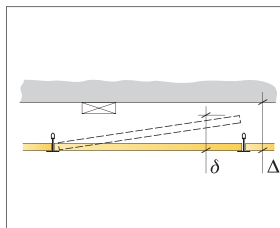
Live load/load bearing capacity



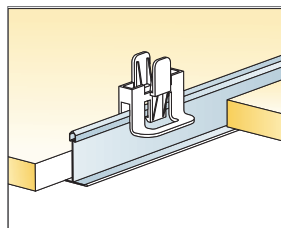
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### QUANTITY SPECIFICATION (EXCL. WASTAGE)

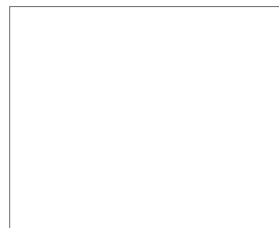
		Size, mm			
		1600x600	1800x600	2000x600	2400x600
1	Master Rigid A XL	1,05/m <sup>2</sup>	0,95/m <sup>2</sup>	0,85/m <sup>2</sup>	0,7/m <sup>2</sup>
2	Connect Angle trim, fixed at 200 mm centres	as required	as required	as required	as required
3	Connect T24 Corridor profile, installed at 600 mm centres	1,05/m <sup>2</sup>	0,95/m <sup>2</sup>	0,85/m <sup>2</sup>	0,7/m <sup>2</sup>
4	Connect Wall bracket for T-profiles	2 for every row of corridor profile			
5	Connect Hygiene clip 20	3,15/m <sup>2</sup> (3/tile)	2,8/m <sup>2</sup> (3/tile)	2,5/m <sup>2</sup> (3/tile)	2,1/m <sup>2</sup> (3/tile)
6	Connect Angle trim	as required	as required	as required	as required
Δ Min. overall depth of system: 150 mm		-	-	-	-
δ Min. demounting depth: 150 mm		-	-	-	-



See Quantity specification



Clip for keeping tiles in place



Size, mm	Max live load [N]	Min load bearing capacity [N]
1600x600	40	-
1800x600	20	-
2000x600	10	-
2400x600	0	-

Live load/load bearing capacity

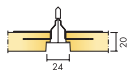
# Ecophon Master™ Rigid E

*Ecophon Master™ Rigid E has a recessed visible grid and regular edge to create a shadow effect ceiling, accentuating each tile and partially concealing the grid system. Secured by clips, each tile is fully demountable. Together with Ecophon Extra Bass optimal acoustics are achieved.*



Kubikolan, Helsingborg, Sweden

## SYSTEM RANGE



Size, mm	600x600	1200x600
Extra Bass	•	•
T24	•	•
Thickness (THK)	20	20
Inst. Diagr.	M317EB	M317EB



Master Rigid E tile



Section of Master Rigid E system with Connect T24



Master Rigid E system with Connect T24

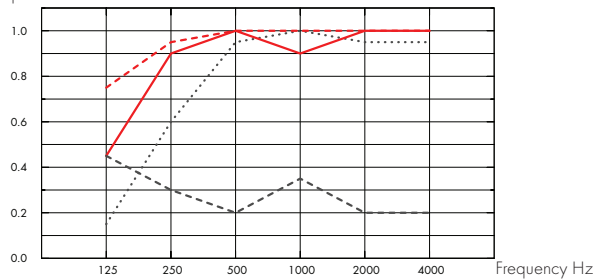


## Acoustics

### Sound Absorption:

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

$\alpha_p$  Practical sound absorption coefficient



- ... Master Rigid E 20 mm, 60 mm o.d.s.
  - Master Rigid E 20 mm, 200 mm o.d.s.
  - - Master Rigid E 20 mm + Extra Bass 50 mm, 200 mm o.d.s.
  - - - Master Rigid E gamma 20 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		
	20	60	0.15	0.60	0.95	1.00	0.95	0.95	0.90	A
-	20	200	0.45	0.90	1.00	0.90	1.00	1.00	1.00	A
+ Extra Bass	70	200	0.75	0.95	1.00	1.00	1.00	1.00	1.00	A
gamma	20	200	0.45	0.30	0.20	0.35	0.20	0.20	0.25	E



## Indoor Air Quality

Certificate / Label

Finnish M1

French VOC, A+



## Environmental Footprint

Kg CO<sub>2</sub> equiv/m<sup>2</sup>: 4,08

From EPD in conformity with ISO 14025 / EN 15804



## Circularity

Fully recyclable.



## 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.



## Humidity Resistance

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



### Visual appearance

White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.



### Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



### Accessibility

The tiles are secured in the grid, but demountable. Minimum demounting depth according to installation diagrams.



### Installation

Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification.



### Mechanical properties

See table regarding the min- and max- load bearing capacities and functional demands.



### Impact Resistance

M-sketch  
M317

M-sketch	Class
M317	3A

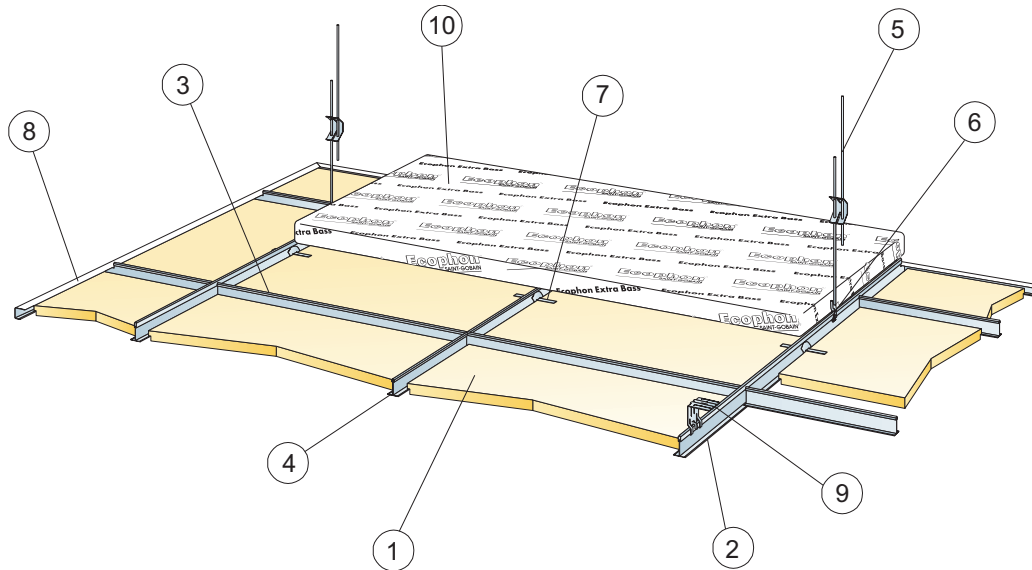
Tested and classified according to EN 13964 annex D.



### 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.

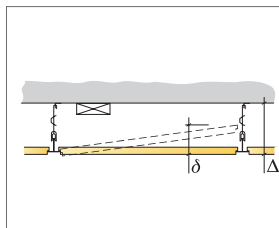
## INSTALLATION DIAGRAM (M317EB) FOR ECOPHON MASTER RIGID E



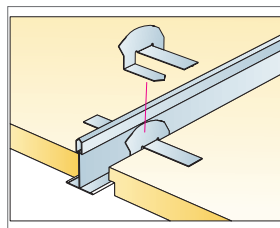
© Ecophon Group

### QUANTITY SPECIFICATION (EXCL. WASTAGE)

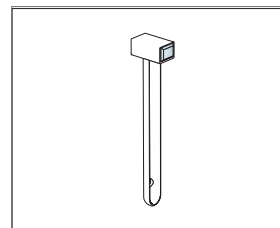
		Size, mm	
		1200x600	1200x1200
1	Master Rigid E	1,4/m <sup>2</sup>	0,7/m <sup>2</sup>
2	Connect T24 Main runner, installed at 1200 mm centres (max. distance from wall 600 mm, can be extended up to 1200 mm if no live load between Main runner and wall).	0,9m/m <sup>2</sup>	0,9m/m <sup>2</sup>
3	Connect T24 Cross tee, L=1200 mm, installed at 600 mm centres	1,7m/m <sup>2</sup>	0,9m/m <sup>2</sup>
4	Connect T24 Cross tee, L=600 mm	-	-
5	Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
6	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
7	Connect Hold down clip E	2pcs/panel	2pcs/panel
8	Connect Channel trim, fixed at c300 mm (1200x1200, c200 mm)	as required	as required
9	For direct installation: Connect Direct bracket, installed at 1200 mm centres	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
10	Extra Bass (1200x600x50 mm)	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
Δ Min. overall depth of system: 110 mm		-	-
δ Min. demounting depth: 120 mm (tiles without Extra Bass above)		-	-
For luminaire integration in panels use Connect Bridging			



See Quantity specification



Connect Hold down clip E (patented)



Connect Demounting tool

Size, mm	Max live load [N]	Min load bearing capacity [N]
1200x600	50	160
1200x1200	50	160

Live load/load bearing capacity



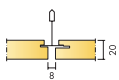
# Ecophon Master™ Rigid Dp

Ecophon Master™ Rigid Dp is a patented, semi-concealed grid system for use when a lockable, impact resistant system is required. Features a reinforced sandwich construction. For classrooms or other spaces that require good acoustics and speech intelligibility, and can also be demounted.



Albert-Schweitzer-Schule, St. Ingbert, Germany

## SYSTEM RANGE



Size, mm	600x600	1200x600
Extra Bass	•	•
T24	•	•
Thickness (THK)	20	20
Inst. Diagr.	M318EB, M319	M318EB, M319



Master Rigid Dp tile



Section of Master Rigid Dp system with Connect T24



Master Rigid Dp system with Connect T24

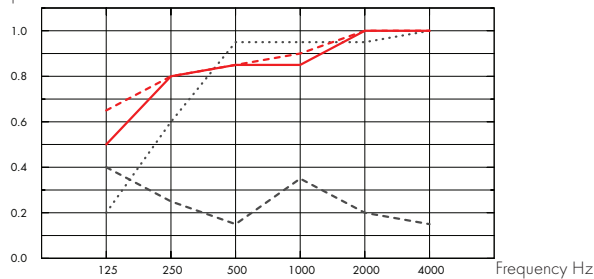


## Acoustics

### Sound Absorption:

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

$\alpha_p$  Practical sound absorption coefficient



- ... Master Rigid Dp 20 mm, 65 mm o.d.s.
  - Master Rigid Dp 20 mm, 200 mm o.d.s.
  - - Master Rigid Dp 20 mm + Extra Bass 50 mm, 200 mm o.d.s.
  - - - Master Rigid Dp gamma 20 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		
	20	65	0.20	0.60	0.95	0.95	0.95	1.00	0.90	A
	20	200	0.50	0.80	0.85	0.85	1.00	1.00	0.90	A
+ Extra Bass	70	200	0.65	0.80	0.85	0.90	1.00	1.00	0.90	A
gamma	20	200	0.40	0.25	0.15	0.35	0.20	0.15	0.20	E



## Indoor Air Quality

Certificate / Label

Finnish M1

French VOC, A+



## Environmental Footprint

Kg CO<sub>2</sub> equiv/m<sup>2</sup>: 4,58

From EPD in conformity with ISO 14025 / EN 15804



## Circularity

Fully recyclable.



## 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.



## Humidity Resistance

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



### Visual appearance

White Frost, nearest NCS colour sample S 0500-N, 85% light reflectance. Gloss < 1.



### Cleanability

Daily dusting and vacuum cleaning. Weekly wet wiping.



### Accessibility

The tiles are secured in the grid, but demountable. Minimum demounting depth according to installation diagrams.



### Installation

Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification.



### Mechanical properties

See table regarding the min- and max- load bearing capacities and functional demands.



### Impact Resistance

M-sketch  
M318

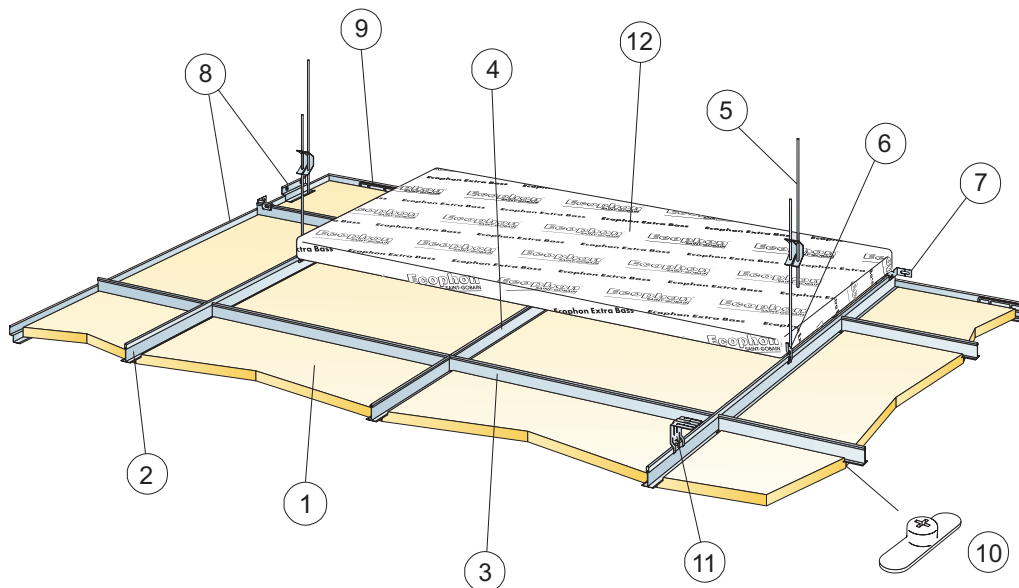
Class  
3A

Tested and classified according to EN 13964 annex D.



### 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.

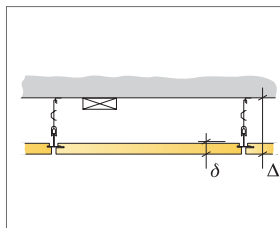


© Ecophon Group

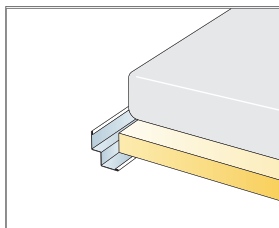
### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	
		600x600	1200x600
1	Master Rigid Dp	2,8/m <sup>2</sup>	1,4/m <sup>2</sup>
2	Connect T24 Main runner, installed at 1200 mm centres (max. distance from wall 600 mm, can be extended up to 1200 mm if no live load between Main runner and wall).	0,9m/m <sup>2</sup>	0,9m/m <sup>2</sup>
3	Connect T24 Cross tee, L=1200 mm, installed at 600 mm centres	1,7m/m <sup>2</sup>	1,7m/m <sup>2</sup>
4	Connect T24 Cross tee, L=600 mm	0,9m/m <sup>2</sup>	-
5	Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
6	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
7	Connect Wall bracket for T-profiles (For every suspended row of main runner and every second row of cross tee)	as required	as required
8	Connect Shadow-line trim, fixed at 300 mm centres	as required	as required
9	Connect Wall spacer 5	1/cut tile with one bearing edge	2/cut tile with one bearing edge
10	Connect Panel lock Dp	1/panel	2/panel
11	For direct installation: Connect Direct bracket, installed at 1200 mm centres	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
12	Extra Bass (1200x600x50 mm)	0,7/m <sup>2</sup>	0,7/m <sup>2</sup>
Δ Min. overall depth of system: 115 mm		-	-
δ Min. demounting depth: 20 mm (tiles without Extra Bass above)		-	-

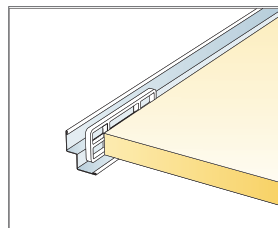
For luminaire integration in panels use Connect Bridging



See Quantity specification



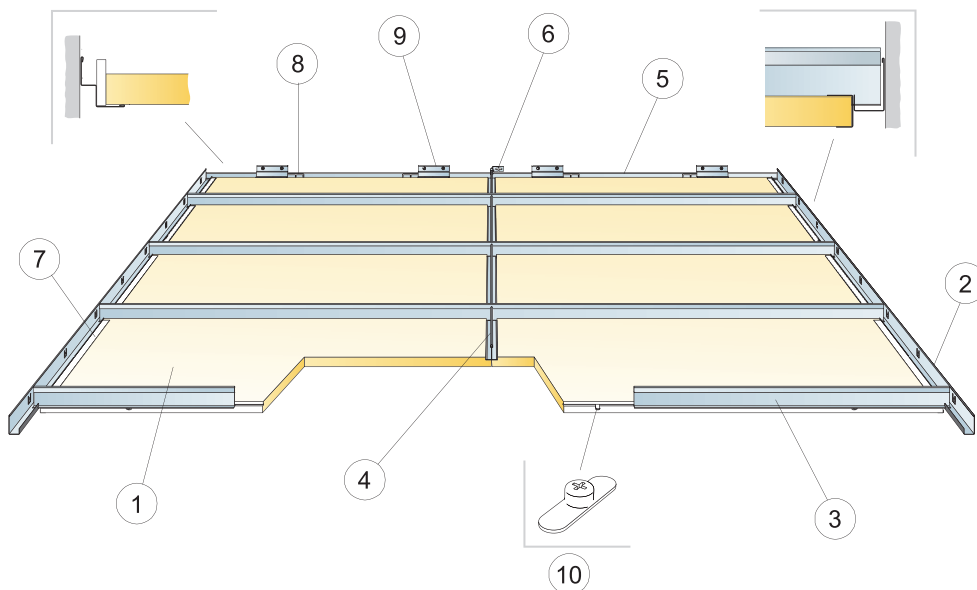
Wall connection with Connect Shadow-line trim



Connect Wall spacer 5 for locking of the perimeter tile

Size, mm	Max live load [N]	Min load bearing capacity [N]
600x600	50	160
1200x600	50	160

Live load/load bearing capacity

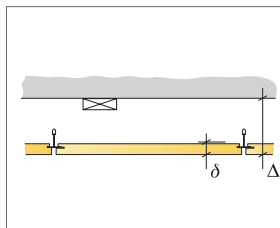


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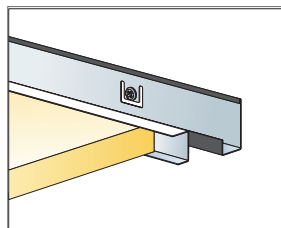
### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	
		600x600	1200x600
1	Master Rigid Dp	2,8/m <sup>2</sup>	1,4/m <sup>2</sup>
2	Connect Modular Wall trim	as required	as required
3	Connect T24 Corridor profile	as required	as required
4	Connect T24 Cross tee, L=600 mm	0,9m/m <sup>2</sup>	-
5	Connect Shadow-line trim, fixed at 300 mm centres	as required	as required
6	Connect Wall bracket for T-profiles	2 / row of cross tee	
7	Connect Cover trim Dp/Dg	as required	as required
8	Connect Wall spacer 5	1/cut tile with one bearing edge	2/cut tile with one bearing edge
9	Connect Shadow-line trim	as required	as required
10	Connect Panel lock Dp	1/panel	2/panel
Δ Min. overall depth of system: 115 mm		-	-
δ Min. demounting depth: 20 mm		-	-

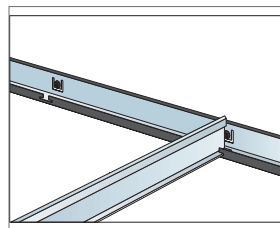
For luminaire integration in panels use Connect Bridging



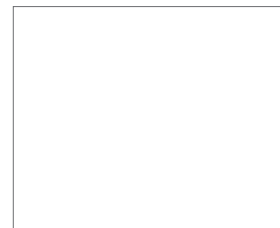
See Quantity specification



Tile and Connect Cover trim Dp/Dg



Corridor profile positioned by Modular wall trim



Live load/load bearing capacity see M334