

# 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.



#### SYSTEM RANGE

40 0	Size, mm	600x600	1200x600	1200x1200
15/24	Connect T15	•	•	•
	Connect T24	•	•	•
	Thickness	40	40	40
	Inst. Diagr.	M56	M56	M56







Master A tile

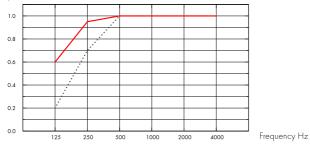
#### Acoustic



#### 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.

 $lpha_{
m p\prime}$  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

ТНК	o.d.s. mm	$\alpha_p$ , Practical sound absorption coefficient					α"	Sound absorption class	
mm		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	0. <sub>W</sub>	Sound absorption class
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	А

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

тнк	AC(1.5)	D <sub>nfw</sub>	CAC dB
mm	Articulation Class, ASTM E1111, ASTM E1110	Weighted normalized flanking level difference, ISO 10848-2	Ceiling Attenuation Class, ASTM 1414, ASTM E413
40	200	28	30



#### **Indoor Air Quality**

Certificate / Label	All Products	SOR AIR COM
Eurofins Indoor Air Comfort®	IAC Gold	
French VOC	A+	
Finnish M1	•	-



#### Cradle to Cradle Certified®

This product is Cradle to Cradle Certified® at Bronze level (version 4.0).

CE



#### **Material Health**

This product has received a C2C Certified Material Health Certificate™ at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate™ is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



#### **Environmental Footprint**

	kg CO2 equiv/m²	Life-cycle stages A1 t 14025 / EN 15804
Master A	3,70	14023 / LIN 13002
Master A/Plant	3,09	-

-cycle stages A1 to C4 from EPD, in conformity with ISO 025 / EN 15804



#### Circularity

Minimum post-consumer recycled content	59%
Recyclability	Fully recyclable



#### Fire safety

Country		Class	The glass wool core of the tiles is tested and classified as
Europe	EN 13501-1	A2-s1,d0	non-combustible according to EN ISO 1182.



#### **Humidity Resistance**

Product		According to EN 13964:2014
Standard	Class C, RH 95% and 30°C	-
Plant	Class A, RH 70% and 25°C	-



#### **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.



#### System weight

The weight of the system (including suspension grid) should be approximately 5 kg/m<sup>2</sup>.



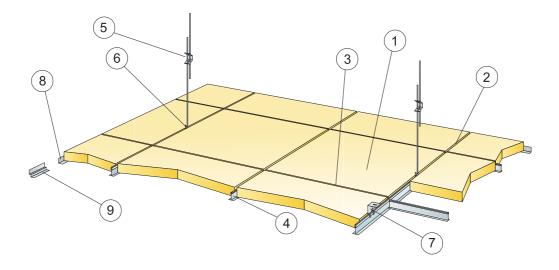
#### **Mechanical properties**

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

## CE

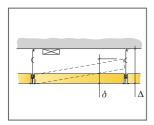
CE

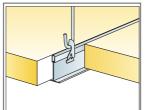
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



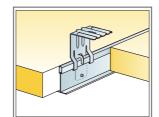
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm		
	600×600	1200x600	1200×1200
1 Master A	2,8/m²	1,4/m²	0,7/m²
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/m²	0,9m/m²	0,9m/m²
3 Connect T24 Cross tee, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²	0,9m/m²
4 Connect T24 Cross tee, L=600 mm	0,9m/m²		
5 Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²	0,7/m²
6 Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²	0,7/m²
7 For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m²	0,7/m²	0,7/m²
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
$\Delta$ Min. overall depth of system, with adjustable hanger: 100 mm, with direct bracket: 50 mm		-	
$\delta$ Min. demounting depth: 170 mm, 200 mm with 1200x1200 mm		-	





Suspension with adjustable hanger and clip



Suspension with direct bracket

600x600x40	Max live load (N) 40	Min load bearing capacity (N) 160
1200x600x40	40	160
1200x1200x40	40	160

Live load/load bearing capacity

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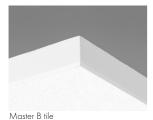
# Ecophon Master<sup>™</sup> B

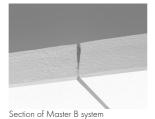
Ecophon Master™ B tiles are bonded edge-to-edge directly to the soffit surface, creating a ceiling with a smooth appearance. The bevelled edge creates a narrow groove between each tile. For applications where the minimum possible overall depth of system is required.





40	Size, mm	600x600	1200x600
	Direct	•	•
	Thickness	40	40
	Inst. Diagr.	M113	M113







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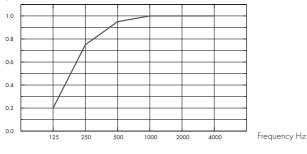
#### Acoustic



#### 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.

 $lpha_{
m p\prime}$  Practical sound absorption coefficient



Master B 40 mm, 43 mm o.d.s.

o.d.s = overall depth of system

ТНК	o.d.s. mm		$lpha_{p'}$ Pr	actical sound	d absorption c	coefficient		α"	Sound absorption class
mm	0.0.3. 11111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	z 4000 Hz		
40	43	0.20	0.75	0.95	1.00	1.00	1.00	1.00	A

THK mm	o.d.s. mm	NRC	SAA
40	43	0.95	0.93



#### **Indoor Air Quality**

Certificate / Label	All Products	EMISSIONS DANS L'AIR INTÉRIEUR
Eurofins Indoor Air Comfort®	IAC Gold	
French VOC	A+	
Finnish M1	•	-



#### **Material Health**

This product has received a C2C Certified Material Health Certificate™ at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate™ is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



#### Cradle to Cradle Certified®

This product is Cradle to Cradle Certified® at Bronze level (version 4.0).

#### **Environmental Footprint**

Master B

kg CO2	equiv/m²
	7,30

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



#### Circularity

)	Minimum post-consumer recycled content	62%
	Recyclability	Fully recyclable

#### Fire safety

Country	Fire standard	Class	The glass wool core of the tiles is tested and classified as
Europe	EN 13501-1	A2-s1,d0	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 non-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.



#### System weight

The weight of the system should be approximately 5 kg/m<sup>2</sup>.



#### **Mechanical properties**

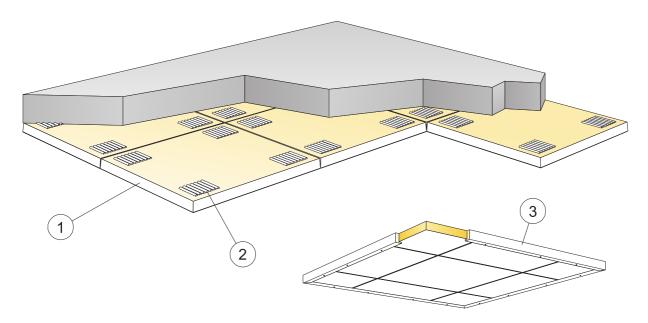
Additional live load has to be fixed to the soffit.

### CE

CE

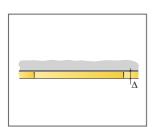
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

#### INSTALLATION DIAGRAM (M113) FOR ECOPHON MASTER B, USING CONNECT ABSORBER GLUE

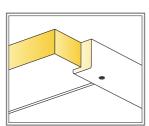


### © Ecophon Group

Q	uantity specification (excl. wastage)		I	
		Size, mm	Size, mm	
		600x600	1200×600	
1	Master B	2,8/m²	1,4/m²	
2	Connect Absorber glue (0,25 l/m² - 0,4 l/m² depending on installation conditions) (10 Litres)	as required	as required	
	Use Connect Notched spatula to apply the glue.	-		
3	For use when installing in islands: Connect Wood trim 2571, L=3000, fixed at 500 mm centres	as required	as required	
	$\Delta$ Min. overall depth of system: 43 mm	-		
	$\delta$ Min. demounting depth: The system is non-demountable	-		
	Cut visible edges should be painted		-	
-				



See Quantity specification



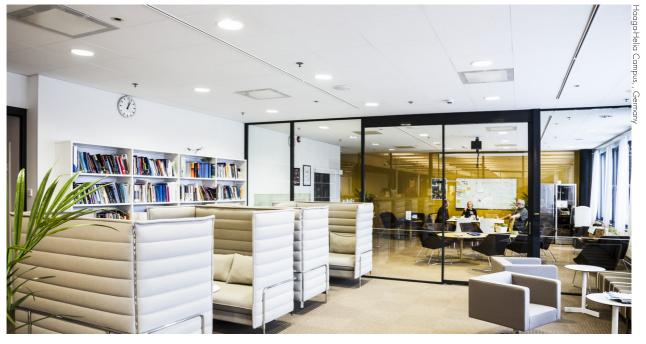
Wood trim for floating installation

Size, mm	Max live load (N)	Min load bearing capacity (N)
600x600x40	-	÷
1200x600x40		



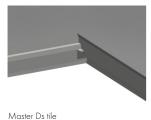
# Ecophon Master<sup>™</sup> Ds

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.



#### SYSTEM RANGE

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







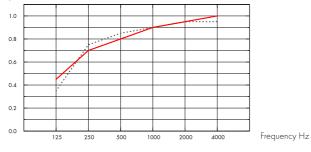
#### Acoustic



#### **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.

 $lpha_{
m p\prime}$  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

ТНК	o.d.s. mm	$lpha_{ m p'}$ Practical sound absorption coefficient						$\alpha_{w}$	Sound absorption class
mm	0.0.3. 1111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	a.w	
40	95	0.35	0.75	0.85	0.90	0.95	0.95	0.90	A
40	200	0.45	0.70	0.80	0.90	0.95	1.00	0.90	A

THK mm	o.d.s. mm	NRC	SAA
40	95	0.90	0.91
40	40 400		0.86

ТЫ	1K	AC(1.5)	D <sub>nfw</sub>	CAC dB
THK mm		Articulation Class, ASTM E1111, ASTM E1110	Weighted normalized flanking level difference, ISO 10848-2	Ceiling Attenuation Class, ASTM 1414, ASTM E413
40	0	200	31	33



#### **Indoor Air Quality**

Certificate / Label	All Products	EMISSIONS DANS L'AIR INTÉRIEUR
Eurofins Indoor Air Comfort®	IAC Gold	
French VOC	A+	
Finnish M1	•	-



#### Cradle to Cradle Certified®

This product is Cradle to Cradle Certified® at Bronze level (version 4.0).

CE



#### **Material Health**

This product has received a C2C Certified Material Health Certificate™ at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate™ is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



#### **Environmental Footprint**

2		kg CO2 equiv/m²	Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804
	Master Ds	7,10	14023 / LIN 13804



#### Circularity

Minimum post-consumer recycled content	63%
Recyclability	Fully recyclable



#### Fire safety

)	Country	Fire standard	Class	The glass wool core of the tiles is tested and classified as
	Europe	EN 13501-1	A2-s1,d0	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 \$ 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 m2). Ceilings with a large amount of integrations require careful planning, design and installation.



#### System weight

The weight of the system (including suspension grid) should be approximately 6 kg/m<sup>2</sup>.



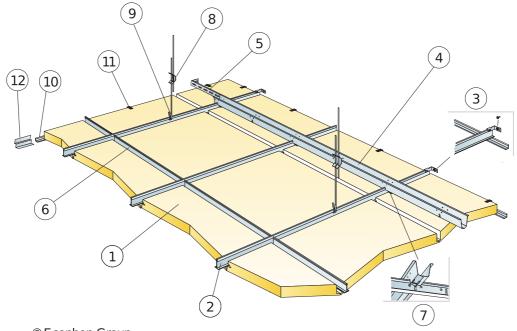
#### **Mechanical properties**

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

## CE

CE

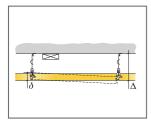
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

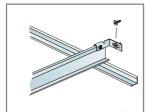


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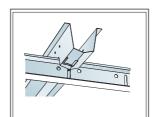
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm
		600×600
1	Master Ds	2,8/m²
2	Connect T24 Main Runner HD, installed at 600 mm centres	1,7m/m²
3	Connect Wall Bracket for T-profiles	1/suspended row of Main runner
4	Connect Space Bar, installed at 1500 mm centres (max. distance from wall 300 mm)	0,7m/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/m²
9	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²
10	Connect Angle Trim, fixed at 300 mm centres	as required
11	Connect Perimeter tile clip 40	1/300-400mm on any cut edge
12	Connect Shadow-line Trim, fixed at 200 mm centres	as required
	$\Delta$ Min. overall depth of system: 140 mm	
	$\delta$ Min. demounting depth: 50 mm	
	For luminaire integration in panels use Connect Bridging	

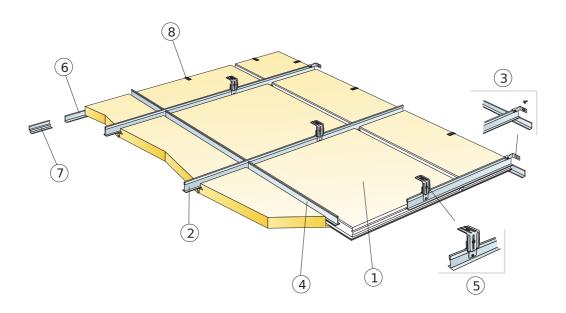




Connect Wall bracket for T-profiles



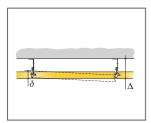
Size, mm Max live Min load bearing load (N) capacity (N) 600x600x40 40 160

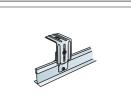


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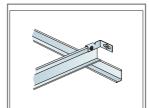
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	
		600x600	
1	Master Ds	2,8/m²	
2	Connect T24 Main Runner HD, installed at 600 mm centres	1,7m/m²	
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		l,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	
	$\Delta$ Min. overall depth of system: 95 mm		
	$\delta$ Min. demounting depth: 50 mm		





Suspension with direct bracket



Profiles are fixed against the wall

Size, mm Max live Min load bearing load (N) capacity (N) 600x600x40 40 160



# Ecophon Master<sup>™</sup> E

Ecophon Master™ E has a recessed visible grid and a tegular 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.



#### SYSTEM RANGE

40	Size, mm	600x600	1200x600	1200×1200
	Connect T15	•	•	
	Connect T24	•	•	•
	Thickness	40	40	40
	Inst. Diagr.	M58	M58	M567





Master E tile

#### Acoustic

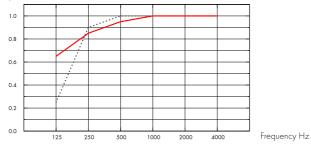


#### Sound Absorption:

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.

Master E system

 $lpha_{
m p\prime}$  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

ТНК	o.d.s. mm			α"	Sound absorption class				
mm	0.0.3. 11111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	a.,	
40	60	0.25	0.90	1.00	1.00	1.00	1.00	1.00	A
40	200	0.65	0.85	0.95	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	0.97
40	400	0.90	0.89

ТНК	AC(1.5)	D <sub>nfw</sub>	CAC dB
mm	Articulation Class, ASTM E1111, ASTM E1110	Weighted normalized flanking level difference, ISO 10848-2	Ceiling Attenuation Class, ASTM 1414, ASTM E413
40	200	29	31



#### **Indoor Air Quality**

Certificate / Label	All Products	EMISSIONS DANS L'AIR INTÉRIEUR
Eurofins Indoor Air Comfort®	IAC Gold	
French VOC	A+	
Finnish M1	•	-



#### Cradle to Cradle Certified®

This product is Cradle to Cradle Certified® at Bronze level (version 4.0).

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#### **Material Health**

This product has received a C2C Certified Material Health Certificate™ at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate<sup>TM</sup> is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



#### **Environmental Footprint**

	kg CO2 equiv/m²	Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804
Master E	6,10	14023 / LIN 13604
Master E/Plant	4,15	-



#### Circularity

	-
Minimum post-consumer recycled content	61%
Recyclability	Fully recyclable





#### **Fire safety**

Country	Fire standard	Class	The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182.
Europe	EN 13501-1	A2-s1,d0	



#### **Humidity Resistance**

Product		According to EN 13964:2014
Standard	Class C, RH 95% and 30°C	
Plant	Class A, RH 70% and 25°C	



#### **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.



#### System weight

The weight of the system (including suspension grid) should be approximately 5 kg/m<sup>2</sup>.



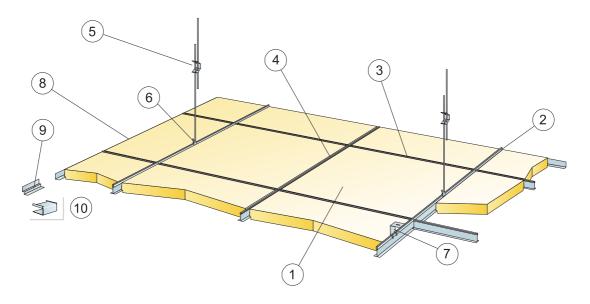
#### **Mechanical properties**

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

## CE

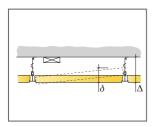
CE

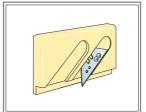
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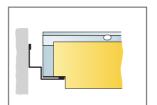
#### © Ecophon Group

QUANTITY SPECIFICATION (EXCL. WASTAGE)			
	Size, mm	Size, mm	
	600×600	1200×600	
1 Master E	2,8/m²	1,4/m²	
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/m²	0,9m/m²	
3 Connect T24 or T15 Cross tee, L=1200 mm	1,7m/m²	1,7m/m²	
4 Connect T24 or T15 Cross tee, L=600 mm	0,9m/m²		
5 Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²	
5 Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²	
7 For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m²	0,7/m²	
3 Connect Angle trim, fixed at 300 mm centres	as required	as required	
P Connect Shadow-line trim, fixed at 300 mm centres	as required	as required	
10 Connect E-plug (for Shadow-line trim)	as required	as required	
$\Delta$ Min. overall depth of system, with adjustable hanger: 110 mm, with direct bracket: 60 mm.	-	-	
$\delta$ Min. demounting depth: 170 mm			



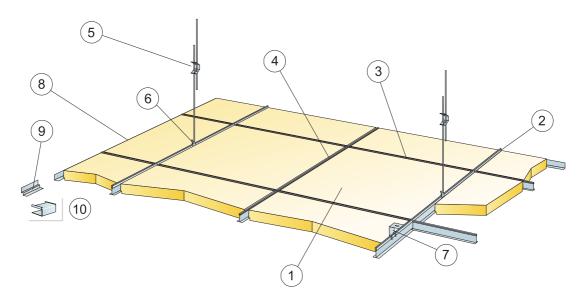


Cutting tool E



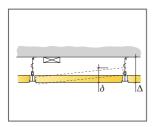
Tegular rebate with shadow-line trim.

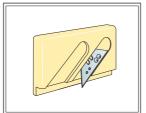




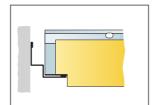
#### © Ecophon Group

	Size, mm
	1200×1200
Master E	0,7/m²
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/m²
3 Connect T24 Cross tee, L=1200 mm, installed at 600 mm centres	0,9m/m²
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/m²
5 Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²
7 For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m²
3 Connect Angle trim, fixed at 300 mm centres	as required
P Connect Shadow-line trim, fixed at 300 mm centres	as required
10 Connect Eplug (for Shadow-line trim)	as required
$\Delta$ Min. overall depth of system, with adjustable hanger: 110 mm, with direct bracket: 60 mm.	
$\delta$ Min. demounting depth: 170 mm	





Cutting tool E



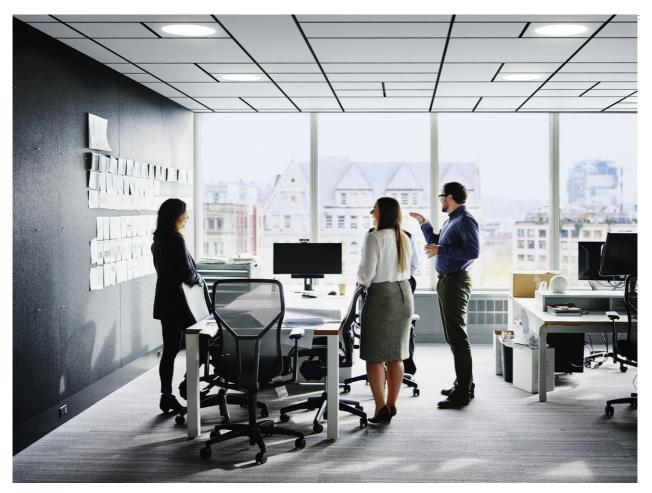
Size, mm Max live Min load bearing load (N) capacity (N) 1200x1200x40 40 160

Tegular rebate with shadow-line trim.



# Ecophon Master<sup>™</sup> Eg

Ecophon Master™ Eg is a unique system that conceals the supporting tile edges, creating a distinctive floating appearance. Make an individual design with different panel sizes. Four supporting edges, makes it easy to install and demount. Suitable for open-plan offices or other premises where strict demands are made on good acoustics. Patent-pending system.



#### SYSTEM RANGE

-20 25	Size, mm	600x600	1200x600	1200x1200	XL 2400x600
	T24	•	•	•	•
	Thickness	40	40	40	40
	Inst. Diagr.	M498, M500	M498, M499, M500	M498	M500





Section of Master Eg system



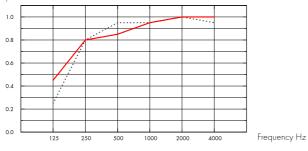
#### Acoustic

~///~

#### **Sound Absorption:**

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

 $lpha_{_{D'}}$  Practical sound absorption coefficient



- ···· Master Eg 40 mm, 80 mm o.d.s.
- Master Eg 40 mm, 200 mm o.d.s.
- o.d.s = overall depth of system

ТНК	o.d.s. mm	$\alpha_{\rm p}$ , Practical sound absorption coefficient $\alpha_{\rm w}$ Sound absorption		Sound absorption class					
mm	0.0.3. 11111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	~~ <sub>W</sub>	
40	80	0.25	0.80	0.95	0.95	1.00	0.95	1.00	A
40	200	0.45	0.80	0.85	0.95	1.00	1.00	0.95	A

THK	AC(1.5)
mm	Articulation Class, ASTM E1111, ASTM E1110
40	200



#### **Indoor Air Quality**

Certificate / Label	All Products	EMISSIONS DANS L'AIR INTÉRIEUR
Eurofins Indoor Air Comfort®	IAC Gold	
French VOC	A+	
Finnish M1	•	-



#### Cradle to Cradle Certified®

This product is Cradle to Cradle Certified® at Bronze level (version 4.0). CERTIFIED



#### **Material Health**

This product has received a C2C Certified Material Health Certificate™ at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate<sup>TM</sup> is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.

Environmental Footprint	Envir	onme	ntal Fo	ootprint
-------------------------	-------	------	---------	----------

$\mathcal{P}$		kg CO2 equiv/m²	Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804
•	Master Eg	6,10	- 14023 / EIN 13804



#### Circularity

Minimum post-consumer recycled content	61%
Recyclability	Fully recyclable



#### **Fire safety**

Country	Fire standard	Class	The glass wool core of the tiles is tested and classified a
Europe	EN 13501-1	A2-s1,d0	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.



#### System weight

The weight of the system (including suspension grid) should be approximately 5 kg/m<sup>2</sup>.



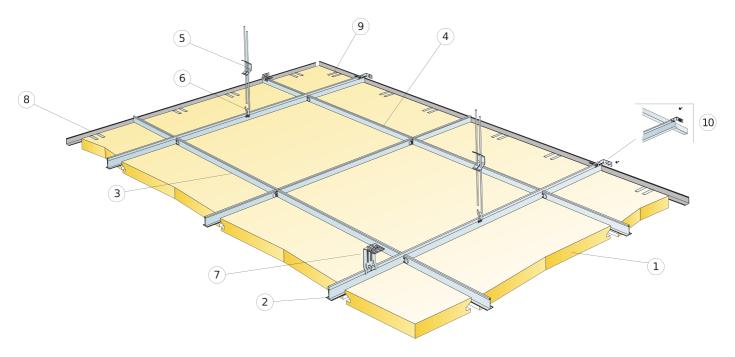
#### **Mechanical properties**

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



#### CE

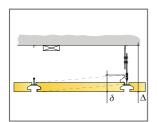
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



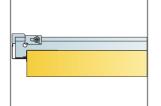
© Ecophon Group

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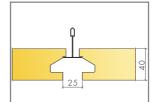
		Size, mm	Size, mm	
		600×600	1200×600	1200×1200
1	Master Eg	2,8/m²	1,4/m²	0,7/m²
2	Connect T24 Main runner, installed at 1200 mm centres (max. distance from wall 600 mm)	0,9m/m²	0,9m/m²	0,9m/m²
3	Connect T24 Cross tee, L=1200 mm	1,7m/m²	1,7m/m²	0,9m/m²
4	Connect T24 Cross tee, L=600 mm	0,9m/m²		
5	Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²	0,7/m²
6	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²	0,7/m²
7	For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m²	0,7/m²	0,7/m²
8	Connect Angle trim, fixed at 300 mm centres	as required	as required	as required
7	Connect Support clip DG25	1/300-400mm	on any cut edge	
10	Connect Wall Bracket for T-profiles	1/suspended ro	w of Main runner	
	$\Delta$ Min. overall depth of system, with adjustable hanger: 130 mm, with direct bracket: 80 mm			
	$\delta$ Min. demounting depth: 170 mm, 180mm with 1200x1200			
	For luminaire integration in panels use Connect Bridging		-	
_				



See Quantity specification



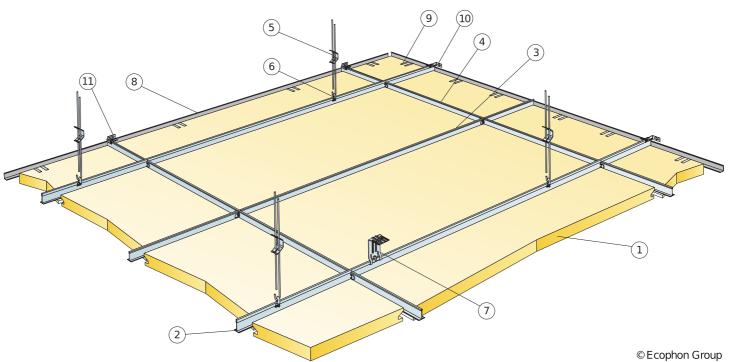
Straight cut edge with support clip. T-profiles resting on Angle trim.



Lay in panel with edge design for floating ceiling appearance

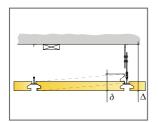
	load (N)	capacity (N)
600x600x40	40	160
1200x600x40	40	160
1200x1200x40	40	160

INSTALLATION DIAGRAM (M499) FOR ECOPHON MASTER EG

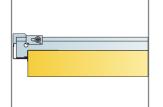


QUANTITY SPECIFICATION (EXCL. WASTAGE)

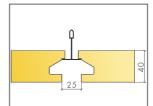
		Size, mm
		1200×600
1	Master Eg	1,4/m <sup>2</sup>
2	Connect T24 Main runner, installed at 1200 mm centres (max. distance from wall 600 mm)	0,9m/m²
3	Connect T24 Cross tee, L=1 200 mm	0,85m/m <sup>2</sup>
4	Connect T24 Cross tee, L=1 200 mm	0,85m/m <sup>2</sup>
5	Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²
6	Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²
7	For direct installation: Connect Direct Bracket, installed at 1200 mm centres	0,7/m²
8	Connect Angle trim, fixed at 300 mm centres	as required
9	Connect Support clip DG25	1/300-400mm on any cut edge
10	Connect Wall Bracket for Main runners	1/suspended row of Main runner
11	Connect Wall Bracket for Cross tees	1/row of cross tee
	$\Delta$ Min. overall depth of system, with adjustable hanger: 130 mm, with direct bracket: 80 mm	
	$\delta$ Min. demounting depth: 170 mm	
	For luminaire integration in panels use Connect Bridging	



See Quantity specification

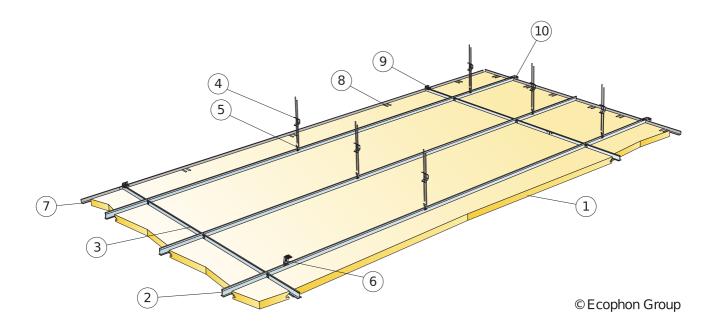


Straight cut edge with support clip. T-profiles resting on Angle trim.



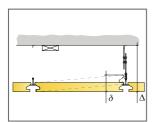
Lay in panel with edge design for floating ceiling appearance

Size, mm Max live Min load bearing load (N) capacity (N) 1200x600x40 40 160

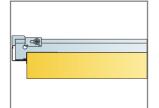


#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

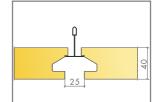
Size, mm		
600×600	1200×600	2400×600
2,8/m²	1,4/m²	0,7/m²
1,7m/m²	1,7m/m²	1,7m/m²
1,7m/m²	0,9m/m²	0,45m/m²
1,1/m <sup>2</sup>	1,1/m <sup>2</sup>	1,1/m <sup>2</sup>
1,1/m <sup>2</sup>	1,1/m <sup>2</sup>	
1,1/m²	1,1/m <sup>2</sup>	1,1/m <sup>2</sup>
as required	as required	as required
2/500-600mm on any cut edge	2/500-600mm on any cut edge	1/500-600mm on any cut edge
0,25/row of cross tee	0,5/row of cross tee	1/row of cross tee
1/second row of Main runner		
-		
	-	
	600×600           2,8/m²           1,7m/m²           1,7m/m²           1,1/m²           1,1/m²           2/500-600mm on any cut edge           0,25/row of cross tee           1/second row of Main runner	600x600         1200x600           2,8/m²         1,4/m²           1,7m/m²         1,7m/m²           1,7m/m²         0,9m/m²           1,1/m²         1,1/m²           1,1/m²         1,1/m²           1,1/m²         1,1/m²           1,1/m²         0,5/cow of cross tee           0,25/row of cross tee         0,5/row of cross tee           1/second row of Main runner         -



See Quantity specification



Straight cut edge with support clip. T-profiles resting on Angle trim.



Lay in panel with edge design for floating ceiling appearance

600x600x40 40 160				
1200-600-40 40 160		160	40	600x600x40
1200x000x40 40 100	)	160	40	1200x600x40
2400x600x40 40 160	)	160	40	2400x600x40



# Ecophon Master<sup>™</sup> F

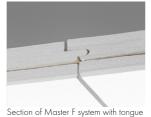
Ecophon Master™ F is installed directly to an existing plaster ceiling, boarding, battens or concrete to create a ceiling with a smooth appearance. Suitable for schools, open plan offices or other premises where strict demands are made on good acoustics.



#### SYSTEM RANGE

	Size, mm	600x600	1200x600
4	Direct	•	•
	Thickness	40	40
	Inst. Diagr.	M52	M52





Masler F system



Master F is installed by screw fixing

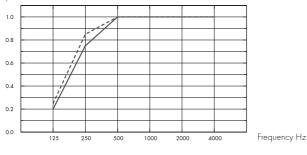
#### Acoustic



#### 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.

 $lpha_{_{D'}}$  Practical sound absorption coefficient



and groove

- 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

ТНК	o.d.s. mm	$lpha_{ m p'}$ Practical sound absorption coefficient					αw	Sound absorption class	
mm	0.0.5. 11111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
40	40	0.20	0.75	1.00	1.00	1.00	1.00	1.00	A
40	60	0.25	0.85	1.00	1.00	1.00	1.00	1.00	A

THK mm	o.d.s. mm	NRC	SAA
40	40	0.95	0.96
40	60	0.95	0.98



#### **Indoor Air Quality**

Certificate / Label	All Products	EMISSIONS DANS L'AIR INTÉRIEUR
Eurofins Indoor Air Comfort®	IAC Gold	
French VOC	A+	
Finnish M1	•	-

### CJ

#### Cradle to Cradle Certified®

This product is Cradle to Cradle Certified® at Bronze level (version 4.0).



#### **Material Health**

This product has received a C2C Certified Material Health Certificate<sup>TM</sup> at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate<sup>TM</sup> is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.

( )		kg CO2 equiv/m²	Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804
$\checkmark$	Master F	7,30	- 14023 / EIN 13604



#### Circularity

Minimum post-consumer recycled content	63%
Recyclability	Fully recyclable



#### **Fire safety**

Country	Fire standard	Class	The glass wool core of the tiles is tested and classified as
Europe	EN 13501-1	A2-s1,d0	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 non-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.



#### System weight

The weight of the system should be approximately  $5 \text{ kg/m}^2$ .



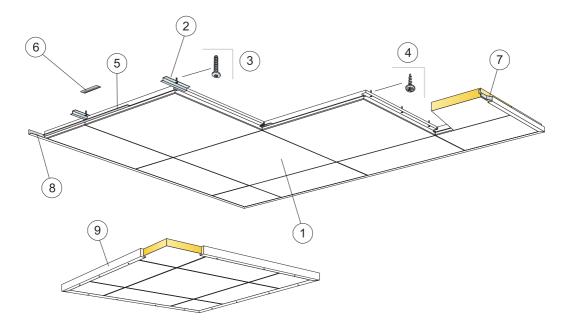
#### **Mechanical properties**

Additional live load has to be fixed to the soffit.

### CE

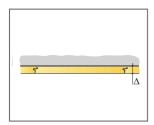
CE

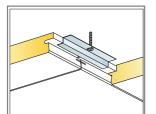
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



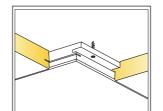
#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, mm	
	600×600	1200×600
1 Master F	2,8/m²	1,4/m²
2 Connect Direct fixing plate F, installed at 600 mm centres (for use in concrete)	2,8/m²	2,8/m²
3 Connect Anchor screw, installed at 600 mm centres (for use in concrete)	2,8/m²	2,8/m²
4 Connect Installation screw MVL (for use in plasterboard or timber) (1000 pcs)	8,3/m²	7/m²
5 Not required in the United Kingdom	2,8/m²	1,4/m²
5 Connect Spline, L=150 mm	2,8/m²	1,4/m²
7 Connect Wall spring spacer	1/panel in the last row	2/panel in the last row
3 Connect Angle trim, fixed at 300 mm centres	as required	as required
For use when installing in islands: Connect Wood trim 2571, L=3000, fixed at 500 mm centres	as required	as required
$\Delta$ Min. overall depth of system: 40 mm		-
$\delta$ Min. demounting depth: The system is non-demountable		





Installation in concrete



Installation in plasterboard or timber



Live load/load bearing capacity

© Ecophon Group



# Ecophon Master<sup>™</sup> SQ

Ecophon Master<sup>™</sup> 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.



#### SYSTEM RANGE

40 4	Size, mm	600x600	1200x600	
8	Direct	•	•	
	Thickness	40	40	
	Inst. Diagr.	M106	M106	







Master SQ tile

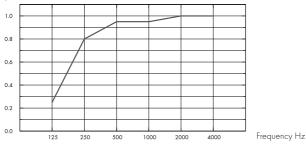
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#### Acoustic

#### **Sound Absorption:**

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

 $lpha_{
m p}$ , 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	$lpha_{ m p^{\prime}}$ Practical sound absorption coefficient					α	Sound absorption class	
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	a. w	oound absorption class
40	43	0.25	0.80	0.95	0.95	1.00	1.00	1.00	A



#### **Indoor Air Quality**

Certificate / Label	All Products	EMISSIONS DANS L'AR INTÉRIEUR A L
Eurofins Indoor Air Comfort®	IAC Gold	
French VOC	A+	-
Finnish M1	•	-



#### Cradle to Cradle Certified®

This product is Cradle to Cradle Certified® at Bronze level (version 4.0).



#### **Material Health**

This product has received a C2C Certified Material Health Certificate™ at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate™ is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



#### **Environmental Footprint**

 kg CO2 equiv/m<sup>2</sup>
 Life-cycle stages A1 to C4 from EPD, in conformity with ISO

 Master SQ
 7,20



#### Circularity

)	Minimum post-consumer recycled content	62%	
	Recyclability	Fully recyclable	

#### Fire safety

	Country	Fire standard	Class	The glass wool core of the tiles is tested and classified as
	Europe	EN 13501-1	A2-s1,d0	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 non-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.



#### System weight

The weight of the system should be approximately 5 kg/m<sup>2</sup>.



#### **Mechanical properties**

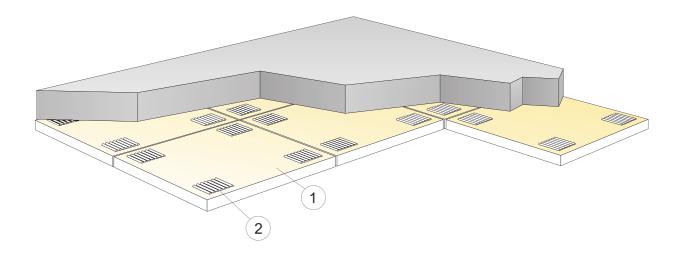
Additional live load has to be fixed to the soffit.

### CE

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.

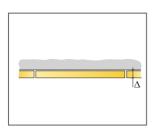
INSTALLATION DIAGRAM (M106) FOR ECOPHON MASTER SQ, USING CONNECT ABSORBER GLUE

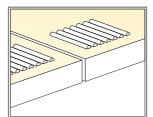


### © Ecophon Group

#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

	Size, m	m
	600x60	00 1200×600
1 Master SQ	2,8/m²	1,4/m²
Connect Absorber glue {0,25 l/m² - 0,4 l/m² depending on installation conditions} {10 Litres}	as requir	ed as required
Use Connect Natched spatula to apply the glue.	-	-
$\Delta$ Min. overall depth of system: 43 mm		-
$\delta$ Min. demounting depth: The system is non-demountable		-
Cut visible edges should be painted		-
* Panel Module size 600x600 (592x592), 1200x600 (1192x592)	-	





Application of glue

Max live load (N)	Min load bearing capacity (N)
-	÷
	-
	load (N) -



# Ecophon Master<sup>™</sup> 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.





 Size, mm	600x600	1200x600	XL 1600x600	XL 1 800x600	XL 2000x600	XL 2400x600
Extra Bass	•	•				
T24	•	•	•	•	•	•
Thickness	20	20	20	20	20	20
Inst. Diagr.	M316EB	M316EB	M333	M333	M333	M333





Section of Master Rigid A system with Connect T24



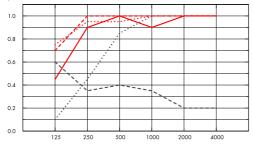
Acoustic

-~~

#### Sound Absorption:

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

 $lpha_{
m p\prime}$  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.

 $F_{requency Hz}$  o.d.s = overall depth of system

	тнк	o.d.s. mm	$lpha_{ m p'}$ Practical sound absorption coefficient				$\alpha_{w}$	Sound absorption class			
	mm	0.0.5. 11111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	u.,		
-	20	50	0.10	0.45	0.85	1.00	1.00	1.00	0.75	С	
-	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	0.60	0.35	0.40	0.35	0.20	0.20	0.30	D	

THK mm	o.d.s. mm	NRC	SAA
20	50	0.80	0.83
20	200	0.95	0.93
70	200	1.00	1.00
20	200	0.35	0.33



#### **Indoor Air Quality**

Certificate / Label	All Products
Eurofins Indoor Air Comfort®	IAC Gold
French VOC	A+
Finnish M 1	•





#### Environmental Footprint

•		kg CO2 equiv/m²		.ife-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804
	Master Rigid A	2,95	_	14023 / EIN 13804

© Saint-Gobain Ecophon AB



#### Circularity

)	Minimum post-consumer recycled content	46%
	Recyclability	Fully recyclable

# Fire safety

<b>)</b> )	Country	Fire standard	Class	The glass wool core of the tiles is tested and classified as
	Europe	EN 13501-1	A2-s1,d0	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.



### System weight

The weight of the system (including suspension grid and Extra Bass) should be approximately 3,5 kg/m<sup>2</sup>.



#### **Mechanical properties**

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

ЗA

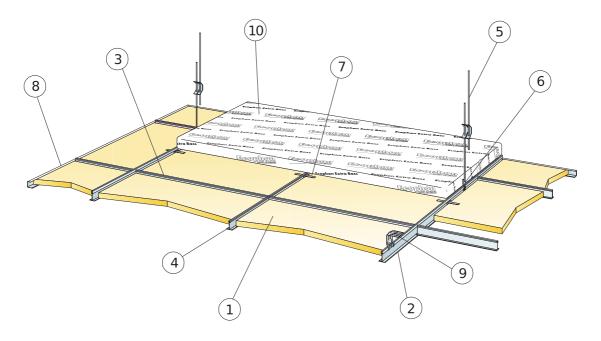


#### Impact Resistance

M-sketch M316 Tested and classified according to EN 13964 annex D.

# CE

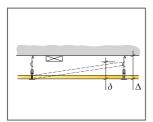
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



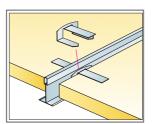
# ${}^{\textcircled{C}}\mathsf{Ecophon}\,\mathsf{Group}$

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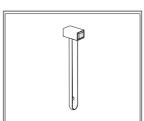
	Size, mm	
	600×600	1200×600
1 Master Rigid A	2,8/m²	1,4/m²
2 Connect T24 Main runner, installed at 1200 mm centres (max, distance from wall 600 mm, can be extended up to 1200 mm if no live load between Main runner and wall).	0,9m/m²	0,9m/m²
3 Connect T24 Cross tee, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²
4 Connect T24 Cross tee, L=600 mm	0,9m/m²	
5 Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²
6 Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²
7 Connect Hold down clip A	2pcs/panel	2pcs/panel
B 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/m²	0,7/m²
10 Extra Bass (1200x600x50 mm)	0,7/m²	0,7/m²
11 Connect Demounting tool		
$\Delta$ Min. overall depth of system: 100 mm		
$\delta$ 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 (patent pending)



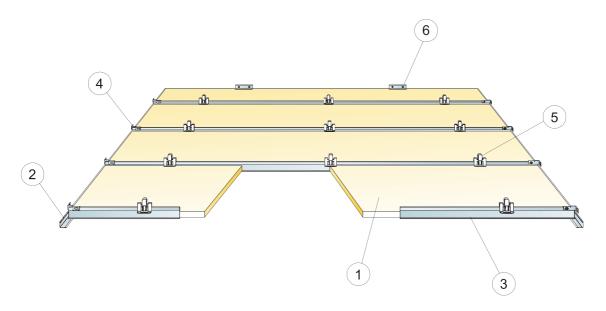
 
 Size, mm
 Max live
 Min load bearing capacity (N)

 600x600x20
 50
 160

 1200x600x20
 50
 160

Connect Demounting tool

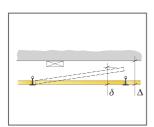




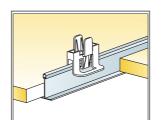
# © Ecophon Group

#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

		Size, mm	Size, mm				
		1600×600	1800×600	2000×600	2400×600		
1	Master Rigid A XL	1,05/m²	0,95/m²	0,85/m²	0,7/m²		
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/m²	0,95/m²	0,85/m²	0,7/m²		
4	Connect Wall bracket for T-profiles	2 for every row of	corridor profile				
5	Connect Hygiene clip 20 0172	3,15/m² (3/tile)	2,8/m² (3/tile)	2,5/m² (3/tile)	2,1/m² (3/tile)		
6	Connect Angle trim	as required	as required	as required	as required		
	$\Delta$ Min. overall depth of system: 150 mm	-	-	-			
	$\delta$ 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)
1600x600x20	40	÷
1800x600x20	20	-
2000x600x20	10	-
2400x600x20	0	

Live load/load bearing capacity



# Ecophon Master<sup>™</sup> Rigid Dp

Ecophon Master™ Rigid Dp is a patented, semiconcealed 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.



#### SYSTEM RANGE

×	Size, mm	600x600	1200x600
~14    8	Extra Bass	•	•
	T24	•	•
	Thickness	20	20
	Inst. Diagr.	M318EB, M319	M318EB, M319





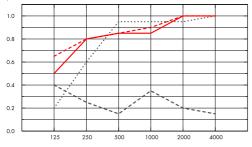


#### Acoustic

#### **Sound Absorption:**

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

 $lpha_{
m p\prime}$  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

	тнк	o.d.s. mm		$lpha_{p'}$ Pra	ctical sound	d absorption	coefficient		α	Sound absorption class	
	mm	0.0.3. 11111	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	

Frequency Hz



### Indoor Air Quality

Certificate / Label	All Products	EMISSIONS DANS L'AIR INTÉRIEUR
Eurofins Indoor Air Comfort®	IAC Gold	
French VOC	A+	
Finnish M1	•	



# **Environmental Footprint**

	kg CO2 equiv/m²	Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804
Master Rigid Dp	4,95	- 14023 / EIN 13804
Extra Bass	1,62	_



#### Circularity

Minimum post-consumer recycled content	55%
Recyclability	Fully recyclable



#### **Fire safety**

$\geq$				
	Country	Fire standard	Class	The glass wool core of the tiles is tested and classified as
	Europe	EN 13501-1	A2-s1,d0	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.



#### System weight

The weight of the system (including suspension grid and Extra Bass) should be approximately 4 kg/m<sup>2</sup>.



#### **Mechanical properties**

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

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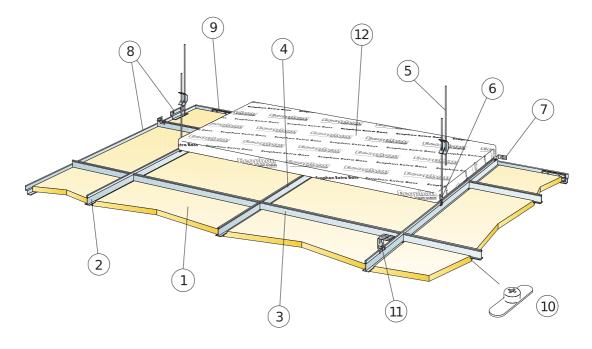
#### **Impact Resistance**



Tested and classified according to EN 13964 annex D.

# CE

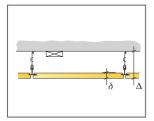
Ecophon ceiling systems are CE marked according to the European harmonized standard EN13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



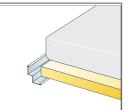
# ${\small {}^{ { \mathbb C} } { \mathsf E } \mathsf { cophon } { \mathsf { Group } } }$

#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

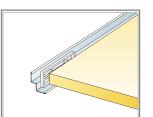
	Size, mm	
	600×600	1200×600
1 Master Rigid Dp	2,8/m²	1,4/m <sup>2</sup>
2 Connect T24 Main runner, installed at 1200 mm centres (max. distance from wall 600 mm, can be extended up to 1200 mm if no live load between Main runner and wall).	0,9m/m²	0,9m/m²
3 Connect T24 Cross tee, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²
4 Connect T24 Cross tee, L=600 mm	0,9m/m²	-
5 Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²
6 Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²
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/m²	0,7/m²
12 Extra Bass (1200x600x50 mm)	0,7/m²	0,7/m²
Δ Min. overall depth of system: 115 mm		
$\delta$ Min. demounting depth: 20 mm (tiles without Extra Bass above)		
For luminaire integration in panels use Connect Bridging	-	



See Quantity specification



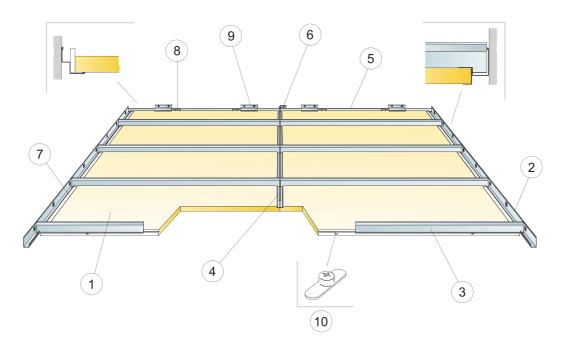
Wall connection with Connect Shadow-line trim



Connect Wall spacer 5 for locking of the perimeter tile

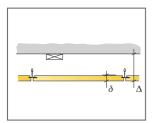
50	160

Live load/load bearing capacity

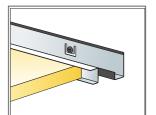


#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

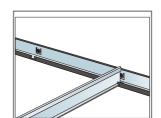
		Size, mm	
		600×600	1200×600
1	Master Rigid Dp	2,8/m²	1,4/m²
2	Connect Modular Wall trim	as required	as required
3	Connect T24 Corridor profile	as required	as required
4	Connect T24 Cross tee, L=600 mm	0,9m/m²	-
5	Connect Shadow-line trim, fixed at 300 mm centres	as required	as required
6	Connect Wall bracket for T-profiles	2 /row of cross tee	
7	Connect Edge cover Dp / Cover trim Dp/Dg	as required	as required
3	Connect Wall spacer 5	1/cut tile with one bearing edge	2/cut tile with one bearing edge
7	Connect Shadow-line trim, fixed at 300 mm centres	as required	as required
10	Connect Panel lock Dp	1/panel	2/panel
	$\Delta$ Min. overall depth of system: 115 mm	-	-
	$\delta$ 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

© Ecophon Group



# Ecophon Master<sup>™</sup> Rigid E

Ecophon Master<sup>™</sup> Rigid E has a recessed visible grid and tegular 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.



SYSTEM RANGE

2	Size, mm	600x600	1200x600	1200x1200
		800x800	1200x800	1200x1200
	Extra Bass	•	•	•
	T24	•	•	•
	Thickness	20	20	20
	Inst. Diagr.	M317EB	M317EB	M317EB





Section of Master Rigid E system with Connect T24



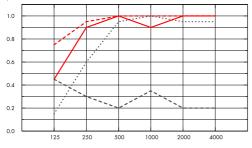
#### Acoustic

-~~

#### Sound Absorption:

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

 $lpha_{
m p}$ , 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

	тнк	o.d.s. mm		$lpha_{p'}$ Pra	ctical sound	d absorption	coefficient		.α.,	$\alpha_{w}$ Sound absorption class
	mm	0.0.3. 11111	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

Frequency Hz



### Indoor Air Quality

Certificate / Label	All Products	EMISSIONS DANS L'AIR INTÉRIEUR
Eurofins Indoor Air Comfort®	IAC Gold	
French VOC	A+	
Finnish M l	•	-



#### **Environmental Footprint**

5	kg CO2 equiv/m <sup>2</sup>		Life-cycle stages A1 to C4 from EPD, in conformity with ISO	
	Master Rigid E	3,27	14025 / EN 15804	



# Circularity

Minimum post-consumer recycled content	45%
Recyclability	Fully recyclable



#### Fire safety

	Country	Fire standard	Class	The glass wool core of the tiles is tested and classified as
	Europe	EN 13501-1	A2-s1,d0	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.



#### System weight

The weight of the system (including suspension grid) should be approximately 5 kg/m<sup>2</sup>.



#### **Mechanical properties**

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

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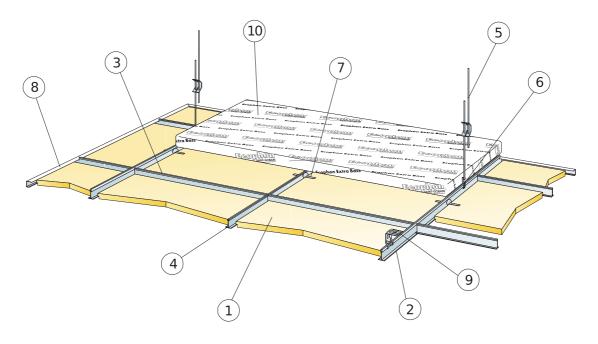
#### **Impact Resistance**



Tested and classified according to EN 13964 annex D.

# CE

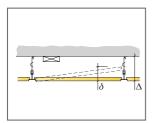
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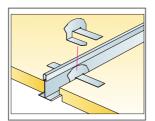
# © Ecophon Group

#### QUANTITY SPECIFICATION (EXCL. WASTAGE)

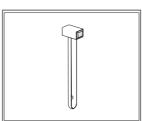
	Size, mm	Size, mm		
	600x600	1200x600	1200×1200	
Master Rigid E	2,8/m²	1,4/m²	0,7/m²	
2 Connect T24 Main runner, installed at 1200 mm centres (max. distance from wall 600 mm, can be extended up to 1200 mm if no between Main runner and wall).	live load 0,9m/m²	0,9m/m²	0,9m/m²	
3 Connect T24 Cross tee, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²	0,9m/m²	
4 Connect T24 Cross tee, L=600 mm	0,9m/m²	-		
5 Connect Adjustable Hanger, installed at 1200 mm centres (max. distance from wall 600 mm)	0,7/m²	0,7/m²	0,7/m²	
6 Connect Hanger Clip (not to be used in swimming hall environments)	0,7/m²	0,7/m²	0,7/m²	
7 Connect Hold down clip E	2pcs/panel	2pcs/panel	2pcs/panel	
3 Connect Channel trim, fixed at c300 mm (1200x1200, c200 mm)	as required	as required	as required	
9 For direct installation: Connect Direct bracket, installed at 1200 mm centres	0,7/m²	0,7/m²	0,7/m²	
10 Extra Bass (1200x600x50 mm)	0,7/m²	0,7/m²	0,7/m²	
11 Connect Demounting tool				
$\Delta$ Min. overall depth of system: 110 mm				
$\delta$ 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 (patent pending)



Connect Demounting tool

 
 Size, mm
 Max live load (N)
 Min load bearing capacity (N)

 600x600x20
 50
 160

 1200x600x20
 50
 160

 1200x1200x20
 50
 160

Live load/load bearing capacity