

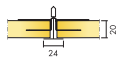
# Ecophon Master™ Rigid A

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 Hurslet, United Kingdom

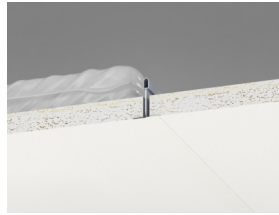
## SYSTEM RANGE



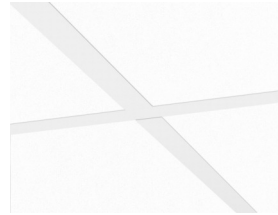
Size, mm	600x600	1200x600	XL 1600x600	XL 1800x600	XL 2000x600	XL 2400x600
Extra Bass	•	•				
T24	•	•	•	•	•	•
Thickness (THK)	20	20	20	20	20	20
Inst. Diagr.	M316EB	M316EB	M333	M333	M333	M333



Master Rigid A tile



Section of Master Rigid A system with Connect T24



Master Rigid A system with Connect T24

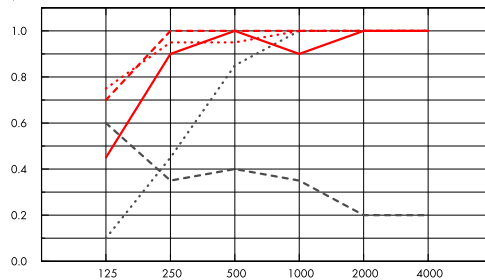
## Acoustic



### 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	0.60	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	
Eurofins Indoor Air Comfort®	IAC
French VOC	A
Finnish M1	•



## Environmental Footprint



	kg CO <sub>2</sub> equiv/m <sup>2</sup>
Master Rigid A	2,95

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



## Circularity

Minimum post-consumer recycled content	46%
Recyclability	Fully recyclable



## Fire safety

Country	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.



## 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.



## Impact Resistance

M-sketch	
M316	3A

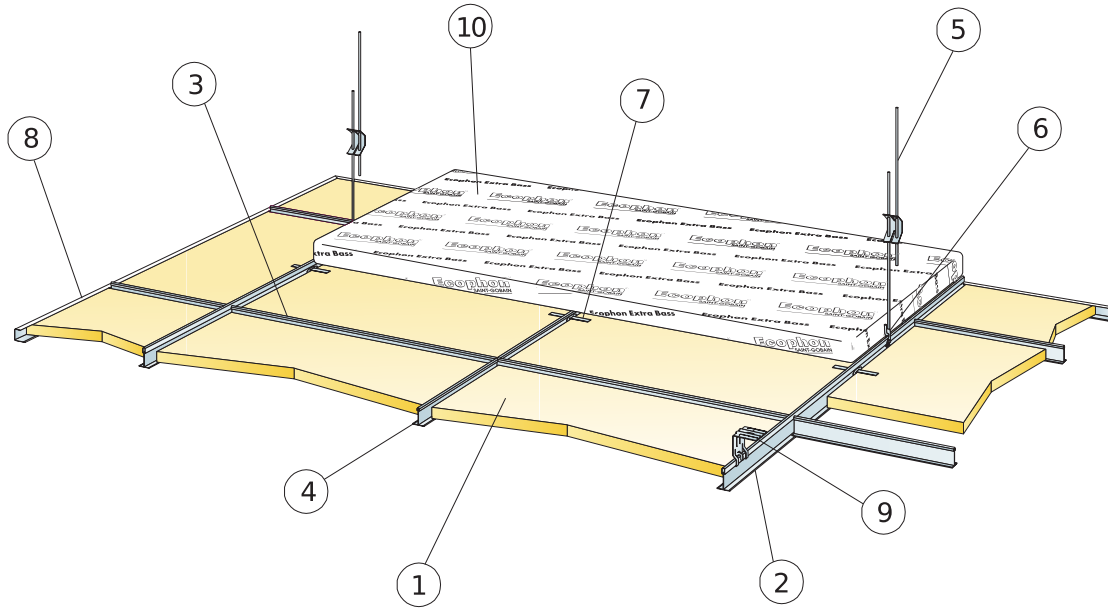
Tested and classified according to EN 13964 annex D.



## 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.

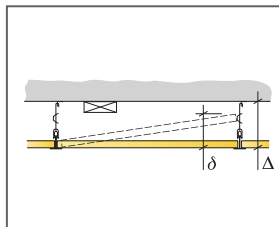
## INSTALLATION DIAGRAM (M316EB) FOR ECOPHON MASTER RIGID A



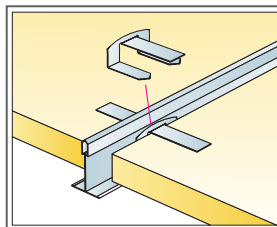
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### QUANTITY SPECIFICATION (EXCL. WASTAGE)

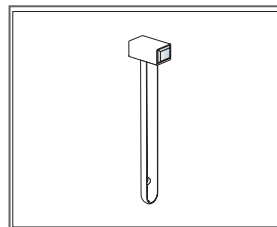
	Size, mm	
	600x600	1200x600
1 Master Rigid A	2,8/m <sup>2</sup>	1,4/m <sup>2</sup>
2 Connect T24 Main runner, installed at 1200 mm centres (max. distance from wall 600 mm, can be extended up to 1200 mm if no live load between Main runner and wall).	0,9/m <sup>2</sup>	0,9/m <sup>2</sup>
3 Connect T24 Cross tee, L=1200 mm, installed at 600 mm centres	1,7/m <sup>2</sup>	1,7/m <sup>2</sup>
4 Connect T24 Cross tee, L=600 mm	0,9/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>
11 Connect Demounting tool	-	-
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)

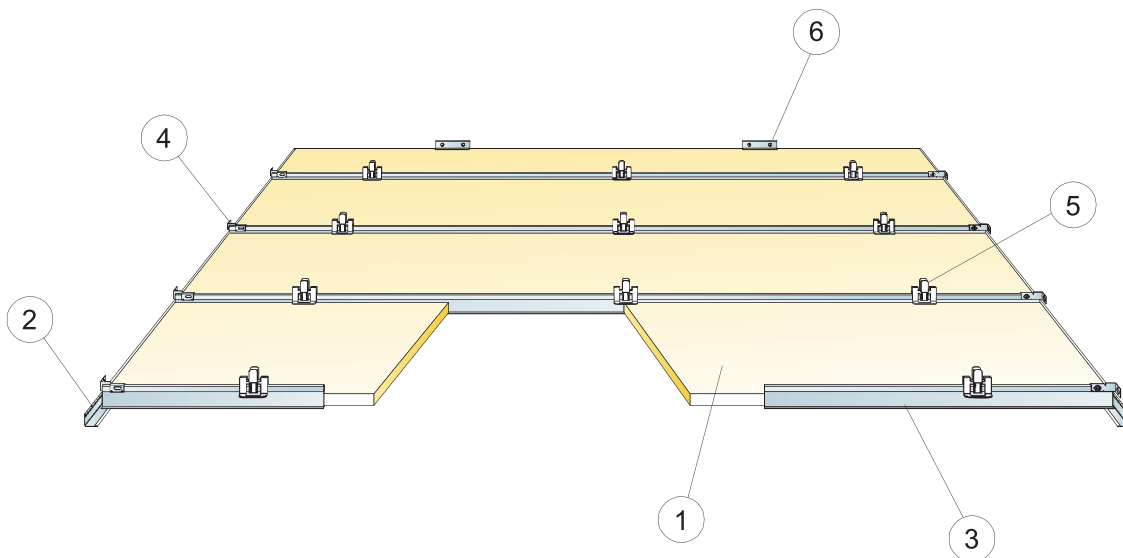


Connect Demounting tool

Size, mm	Max live load (N)	Min load bearing capacity (N)
600x600x20	50	160
1200x600x20	50	160

Live load/load bearing capacity

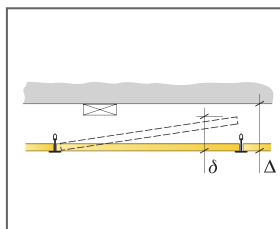
## INSTALLATION DIAGRAM (M333) FOR ECOPHON MASTER RIGID A XL IN CORRIDORS



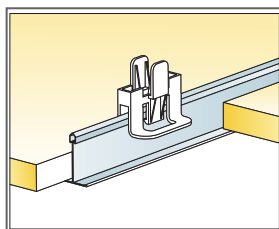
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### QUANTITY SPECIFICATION (EXCL. WASTAGE)

	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/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)
1600x600x20	40	-
1800x600x20	20	-
2000x600x20	10	-
2400x600x20	0	-

Live load/load bearing capacity