

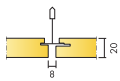
# Ecophon Master™ Rigid Dp

*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

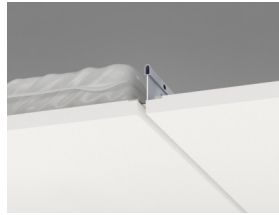
## SYSTEM RANGE



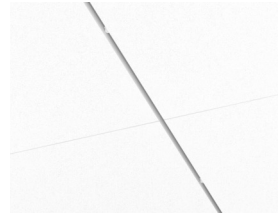
Size, mm	600x600	1200x600
ExtraBass	•	•
T24	•	•
Thickness (THK)	20	20
Inst. Diagr.	M318EB, M319	M318EB, M319



Master Rigid Dp tile



Section of Master Rigid Dp system with Connect T24



Master Rigid Dp system with Connect T24

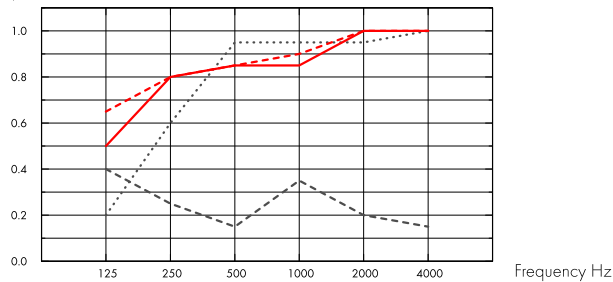


## Acoustic

### 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.

	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	Standard	Plant
Eurofins Indoor Air Comfort®	IAC	IAC Gold
French VOC	A	A+
Finnish M1	•	•



## Environmental Footprint

	Kg CO <sub>2</sub> equiv/m <sup>2</sup>
Master Rigid Dp	4,95 (Master Rigid family EPD in conformity with ISO 14025 / EN 15804)
Master Rigid Dp/Plant	4,58 (Master Rigid Dp/Plant EPD in conformity with ISO 14025 / EN 15804)
Extra Bass	1,62 (Extra Bass EPD in conformity with ISO 14025 / EN 15804)



## Circularity

Minimum post-consumer recycled content	55%
Recyclability	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

Product	
Standard	Class C, RH 95% and 30°C
Plant	Class A, RH 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 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.



### Impact Resistance

M-sketch	
M318	3A

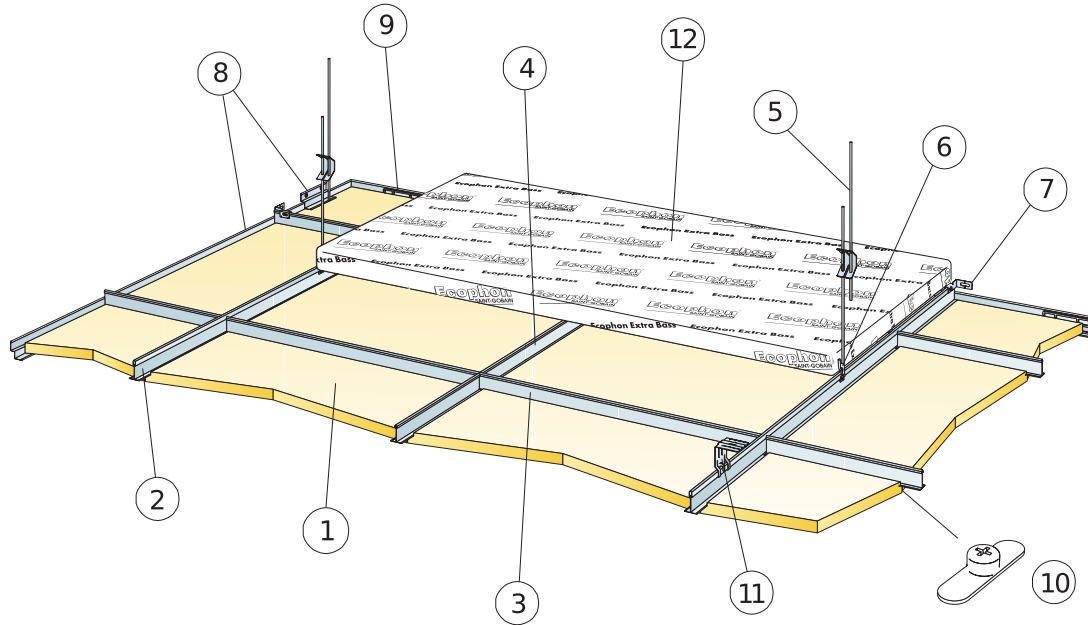
Tested and classified according to EN 13964 annex D.



### CE

Ecophon ceiling systems are CE marked according to the European harmonized standard EN 13964:2014. 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.

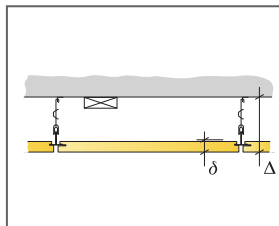
## INSTALLATION DIAGRAM (M318EB) FOR ECOPHON MASTER RIGID DP



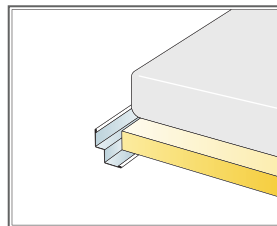
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### QUANTITY SPECIFICATION (EXCL. WASTAGE)

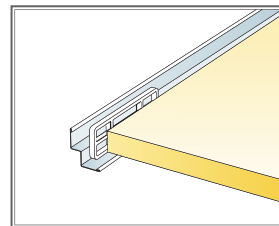
	Size, mm	
	600x600	1200x600
1 Master Rigid Dp	2,8/m <sup>2</sup>	1,4/m <sup>2</sup>
2 Connect T24 Main runner, installed at 1200 mm centres (max. distance from wall 600 mm, can be extended up to 1200 mm if no live load between Main runner and wall).	0,9m/m <sup>2</sup>	0,9m/m <sup>2</sup>
3 Connect T24 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 Shadowline trim

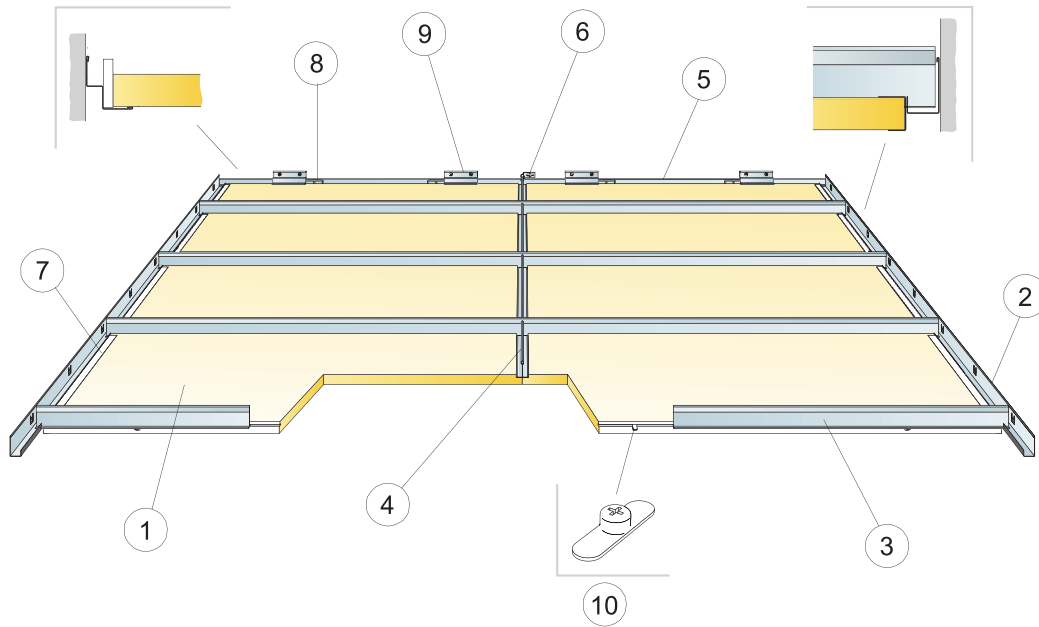


Connect Wall spacer 5 for locking of the perimeter tile

Size, mm	Max live load (N)	Min load bearing capacity (N)
600x600	50	160
1200x600	50	160

Live load/load bearing capacity

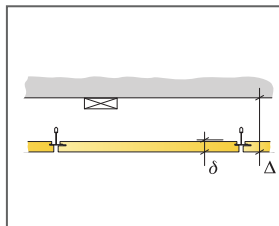
## INSTALLATION DIAGRAM (M319) FOR ECOPHON MASTER RIGID DP IN CORRIDORS



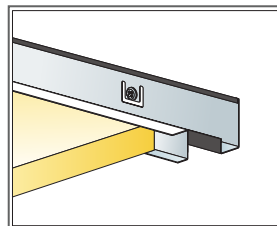
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### QUANTITY SPECIFICATION (EXCL. WASTAGE)

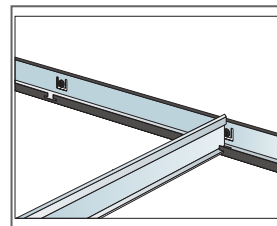
	Size, mm	
	600x600	1200x600
1 Master Rigid Dp	2,8/m <sup>2</sup>	1,4/m <sup>2</sup>
2 Connect Modular Wall trim	as required	as required
3 Connect T24 Corridor profile	as required	as required
4 Connect T24 Cross tee, L=600 mm	0,9m/m <sup>2</sup>	-
5 Connect Shadow-line trim, fixed at 300 mm centres	as 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