

Ecophon Sombra™ A

For applications requiring a dark ceiling having low light reflection and good sound absorbing properties. Ecophon Sombra A has an exposed grid system. Each tile is easily demountable.

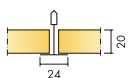
system quality, use Ecophon's matt black Connect grid and accessories. The grid is manufactured from galvanized steel.

The system consists of Ecophon Sombra A tiles and Ecophon Connect grid systems, with an approximate weight of 3 kg/m² (4 kg/m² with Ecophon Extra Bass). The tiles are manufactured from high density, 3rd generation glass wool. The visible surface is a matt black batch painted glass tissue and the back of the tile is covered with glass tissue. The edges are natural. To improve absorption in the low frequency range, Ecophon Extra Bass can be installed on top of the suspended ceiling. For best performance and



Sosnowiec, Poland

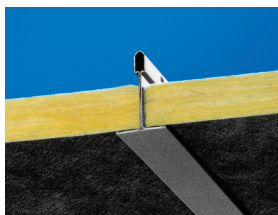
SYSTEM RANGE



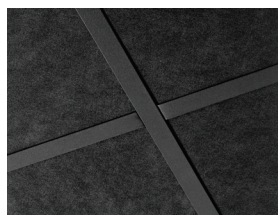
Size, mm	600x600	1200x600
T24	•	•
Thickness	20	20
Inst. Diag.	M74	M74



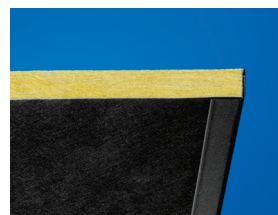
Sombra A tile



Section of Sombra A system



Sombra A system



Sombra A with black Connect Angle trim

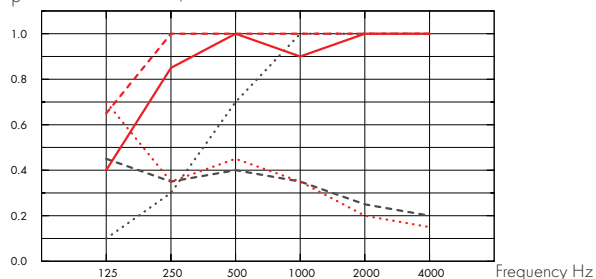


Acoustic

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.

α_p Practical sound absorption coefficient



- ... Sombra A 20 mm, 50 mm o.d.s.
- Sombra A 20 mm, 200 mm o.d.s.
- - - Sombra A + Extra Bass 70 mm, 200 mm o.d.s.
- ... Sombra A gamma 20 mm, 200 mm o.d.s.
- ... Sombra A gamma + Extra Bass 70 mm, 200 mm o.d.s.

o.d.s = overall depth of system

	THK mm	o.d.s. mm	α_p Practical sound absorption coefficient						α_w	Sound absorption class
			125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
	20	50	0,10	0,30	0,70	1,00	1,00	1,00	0,60	C
	20	200	0,40	0,85	1,00	0,90	1,00	1,00	1,00	A
+ Extra Bass	70	200	0,65	1,00	1,00	1,00	1,00	1,00	1,00	A
gamma	20	200	0,45	0,35	0,40	0,35	0,25	0,20	0,30	D
gamma + Extra Bass	70	200	0,70	0,35	0,45	0,35	0,20	0,15	0,25	E



Accessibility

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



Cleanability

Weekly dusting and vacuum cleaning.



Visual appearance

Black 997, nearest NCS colour sample S 9000-N, 3-4% light reflectance.



Influence of climate

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



Indoor Climate

Certificate / Label

Europe

EN
13501-1

M1



Environmental influence

Certificate / Label

Europe

EN
13501-1

Fully recyclable.



CO₂

Kg CO₂ equiv/m²

2,4

2,9 kg equivalent CO₂ / m² according to EPD



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.

The systems are classified as fire protective covering according to NT FIRE 003.



Mechanical properties

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



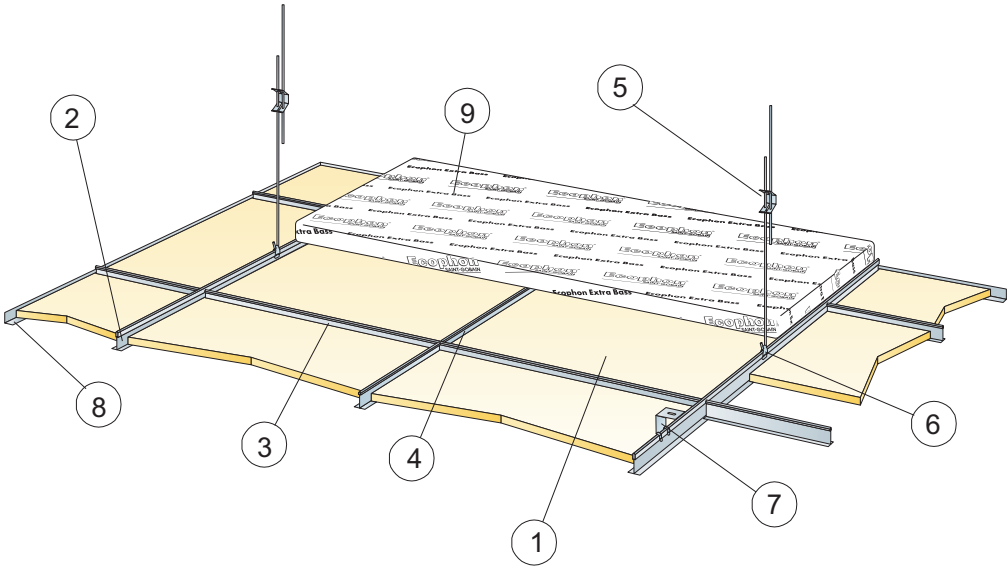
Installation

Installed according to installation diagrams, installation guides and drawing aid. (The tiles have to be installed according to the arrows on the back of the tile.)



CE

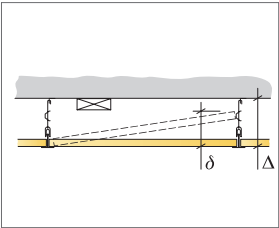
The CE marking confirms important product performance such as sound absorption, emissions, fire safety and load bearing capacity. All Ecophon ceiling products are CE marked according to European standard EN13964, and individual product performance is declared in Declaration of Performance (DoP) documents.



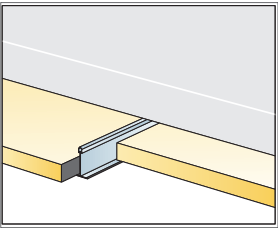
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QUANTITY SPECIFICATION (EXCL. WASTAGE)

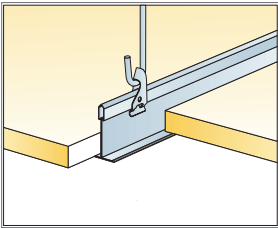
		Size, mm	
		600x600	1200x600
1	Sombra A	2,8/m²	1,4/m²
2	Connect T24 Main runner black, installed at 1200 mm centres (max. distance from wall 600 mm, can be extended up to 1200 mm if no live load between Main runner and wall).	0,9m/m²	0,9m/m²
3	Connect T24 Cross tee black, L=1200 mm, installed at 600 mm centres	1,7m/m²	1,7m/m²
4	Connect T24 Cross tee black, 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	For direct installation without Extra Bass: Connect Direct bracket, installed at 1200 mm centres	0,7/m²	0,7/m²
8	Connect Angle trim black, fixed at 300 mm centres	as required	as required
9	Extra Bass (1200x600x50 mm)	0,6/m²	0,6/m²
Δ Min. overall depth of system: Sombra A: 50 mm (Direct bracket). Sombra A/with Extra bass: 100 mm.		-	-
δ Min. demounting depth: Sombra A: 130 mm, Sombra A/with Extra bass: 170 mm		-	-



See Quantity specification



Installation with Extra Bass



Suspension with adjustable hanger and clip

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

Live load/load bearing capacity