

Ecophon Clipso™ So Acoustic – specification text

Technical fabric

The technical knitted fabric knit fabric with a polyurethane coating.

Acoustic board

The acoustic board must be a mineral wool acoustic panel with a white or natural front surface, with a minimum post-consumer recycled content of 60% (20mm thickness) or 66% (40mm thickness). Alternatively, a PET fiber absorber of 10 mm or 50 mm can be used.

Installation

Installation should be done according to Ecophon installation diagram M565 (ceiling installation with sound absorber), M566 (wall installation) or M571 (ceiling installation without sound absorber).

The installation consists of a combination of technical knit fabric with a uniform coating and an acoustic absorbent.

The technical fabric should be installed by being stretched by a discrete PVC profile fixed in the room's perimeter. The acoustic absorbent is fixed directly to the soffit.

The fabric should be stretched without heating.

Visual appearance

The visible surface is a knitted textile that is coated to provide a highly resistant fabric. The closest RAL color of the white visible surface should be RAL 9016. Surface should be matt, smooth and uniform.

Acoustic absorption

If ceiling installation:

The ceiling should have a weighted sound absorption coefficient α_w of 1.0 with 50 mm PET absorber at ods 55mm or 0.95 with a 40mm glasswool absorber at ods 200mm .

If wall installation:

The wall installation should have a weighted sound absorption coefficient α_w of minimum 0,50 with 10 mm absorber at ods 10mm.

	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		
495AC GW40	40	200	0.20	0.85	0.90	0.85	0.95	1.00	0.90	A
495AC GW20	20	200	0.20	0.65	0.75	0.65	0.75	0.65	0.75	C
495AC LA50	50	200	0.30	0.85	0.95	0.85	0.90	1.00	0.90	A
495AC LA50	50	55	0.25	0.70	1.00	1.00	0.95	0.90	0.95	A
495AC LA10	10	10	0.15	0.30	0.45	0.60	0.85	0.95	0.50	D
495AC	0	200	0.10	0.55	0.75	0.60	0.70	0.75	0.70	C
495D GW40	40	200	0.30	0.85	0.95	0.85	0.95	0.90	0.95	A
495D GW20	20	200	0.20	0.70	0.90	0.75	0.90	0.90	0.85	B
495D	50	200	0.30	0.90	0.85	0.75	0.85	0.85	0.85	B
495D LA50	50	55	0.25	0.75	1.00	1.00	0.95	0.90	1.00	A
495D LA10	10	10	0.15	0.25	0.50	0.70	0.90	0.95	0.50	D
495D	0	200	0.10	0.50	0.75	0.65	0.70	0.70	0.70	C

	THK mm	o.d.s. mm	NRC	SAA
495AC GW40	40	200	0.90	0.90
495AC LA50	50	200	0.90	0.89
495AC	0	200	0.65	0.65
495D	50	200	0.85	0.83
495D	0	200	0.65	0.65

Values should be measured according to EN ISO 354 and classified according to ISO 11654.

Fire safety

The technical fabric should be classified B-s1, d0 according to EN 13501-1. The technical fabric should in white and black color fulfil Modules B and D according to Resolutions MSC.307(88) and MSC.61(67).

Mechanical stability

If technical fabric in color white or black, the tensile strength, according to standard ISO 1421, should be 30 daN/5 cm (MD), 54 daN/5 cm (CMD)

If technical fabric in other colors than white and black, the tensile strength, according to standard ISO 1421, should be 29 daN/5 cm (MD), 107 daN/5 cm (CMD).

Indoor health and wellbeing

The technical fabric should comply with the French regulation of VOC emissions, A+ level. The technical fabric should comply with Eurofins indoor air comfort (IAC) Gold.

If PET absorber is used, it should comply with French regulation of VOC emissions, A+ level.

If glass wool absorber is used it should comply with French regulation of VOC emissions, A level and Eurofins indoor air comfort IAC.

System weight

Area weight should be maximum $250 \text{ g/m}^2 \pm 10\%$ according to standard ISO 2286-2.

CE marking

Technical fabric should be CE-marked according to the European harmonized standard EN14716:2005. 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.

Maintenance

pH-neutral cleaning agents can be used with a soft cloth.

Mould and bacteria resistance

Technical fabric should have mould and bacterial resistance classification 0 from method A and C according to ISO 846.

Humidity resistance

Dimensional stability under the action of humidity for the technical fabric should according to standard EN 14716 (appendix C) be 0% (MD), 0% (CMD) for fabric in white and black color.

Dimensional stability under the action of heat for the technical fabric should according to standard EN 12280-1 (30 min, 60°C) be 0% (MD), 0% (CMD).

Water vapor transmission rate for the technical fabric should according to standard ISO 2528 (38°C, 90% RH) be 1901 g/m^2 for white and black fabric, and 2104 g/m^2 for fabric in other color than white and black.