

# Ecophon Clipso™ So Acoustic – specification text

## **Technical fabric**

The technical fabric should be micro perforated knit fabric with a polyurethane coating.

## **Acoustic board**

The acoustic board must be a mineral wool acoustic panel with a white, grey, black or natural front surface, with a minimum post-consumer recycled content of 60% (20mm thickness) or 66% (40mm thickness).-. Alternatively, a white 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 a micro perforated knit technical 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  $\alpha_w$  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  $\alpha_w$  of minimum 0,50 with 10 mm absorber at ods 10mm.

	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		
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

\*Thickness of absorber used

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 be 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 and Greenguard 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  $1901 \text{ g/m}^2$  for white and black fabric, and  $2104 \text{ g/m}^2$  for fabric in other color than white and black.