

Applications

Ceilings and walls, sails and velums, suspended canopies.



- **Acoustic efficiency:** reduces reverberation effect up to four-fold.
- **Durable without maintenance:** thanks to its high resistance to tension, abrasion, impacts and its ability to withstand moist and chlorine environments.
- **Creative design:** flexibility, complex shapes, large spans, printability.
- **Health & environment:** Greenguard gold and french A+ certification for better air quality. Lightweight and recyclable for lower environmental impact (LCA).



A thin and flexible sound absorber for innovative acoustic solutions.

Sound absorber



Alphaia
Silent Aw

	■ Technical properties		Standards
Weight	620 g/m ²		EN ISO 2286-2
Width	270 cm (Kilimandjaro 6642 in 270 cm & 135 cm)		
	■ Physical properties		
Tensile strength (warp/weft)	250/220 daN/ 5 cm		EN ISO 1421
Tear strength (warp / weft)	25/25 daN		DIN 53.363
Impact resistance	Class 1A (Excellent after 36 impacts at 60km/h)		EN 13964 annex D
Micro organism resistance	Degree 0, excellent		ISO 846-A
Extreme working temperatures	-30°C / +70°C		in static position
	■ Flame retardancy		
Rating	B1 /DIN 4102-1 – BS 7837 – Class 1 / UNI 9177 – Class A /ASTM E84 – Group 1 / AS-NZS 3837 – AS-NZS 1530.2 & 3 – IMO A653		
Euroclass	B-s2,d0 /EN 13501-1		
	■ Solar and light properties		
	Kilimandjaro (White)	Lux (Translucent)	
Visible reflection Rv	90%	56%	EN 14501
Visible transmission Tv	7%	41%	EN 14501
Internal Solar Factor G _{tot,i}	0,31	0,41	EN 14501 (glazing C)
	■ Management systems		
quality			ISO 9001
environment			ISO 14001
	■ Certifications, labels, garanties		

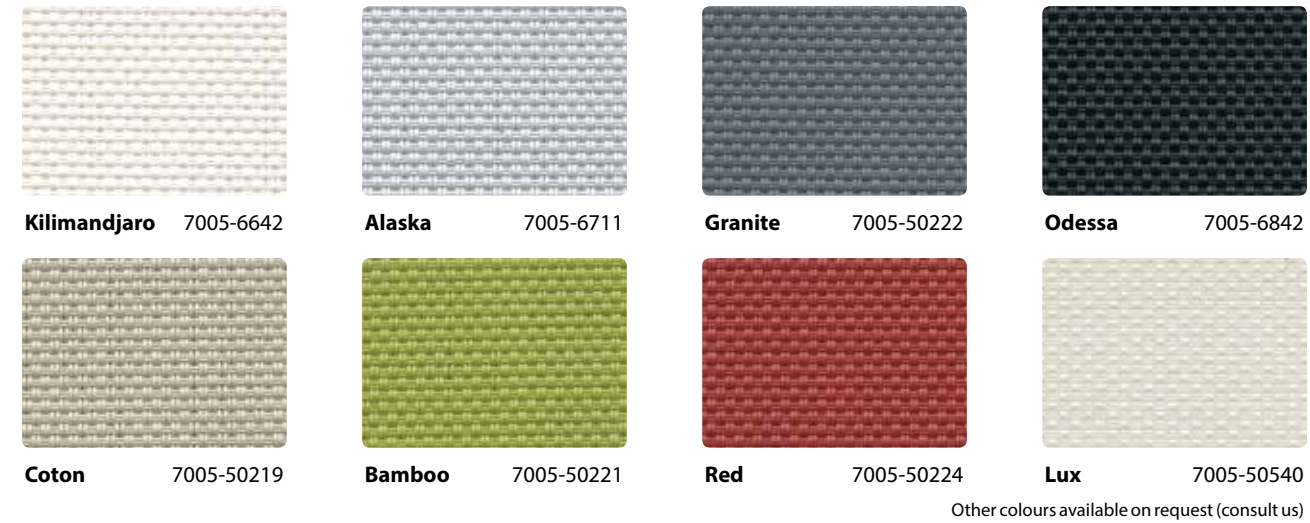
10 year guarantee | **Smart Yarn** | **CE Marking compliance (EN 14716) tensioned ceilings** | **S+** With **S+** Serge Ferrari goes further than the Standards... (consult us for further information)

- **Tools and services**
- Making-up guide & cleaning instructions available on demand
- Special colour production on demand

Material strength characteristics quoted are average values subject to a +/-5% tolerance. The buyer of our products is fully responsible for their application or their transformation concerning any possible third party. The buyer of our products is responsible for their implementation and installation in compliance with standards, codes of practice and safety regulations in force in destination countries. To ensure warranty effectiveness, refer to warranty certificate concerned available on demand. The values quoted above represent results of tests performed in compliance with common design practices and are provided for information only to enable customers to make the best use of our products. Our products are subject to changes prompted by technological developments. We reserve the right to modify their characteristics at any time. The buyer of our products is responsible for checking the validity of the above data.

■ Timeless colours

White reflects and prolongs the light, thereby optimising lighting. As a source of contrast, black absorbs the light and sculptures volumes. Soft and quiet, green and cotton colours evoke architectural materials: stone, concrete, steel, wood. Burst of colour express the desire to highlight the space.



Place this page in front of a light source to witness Alphalia Silent Aw's translucence and whiteness.



Alphalia Silent Aw Lux - A unique combination of acoustic and lighting comfort.

- Absorbs 65% of sound and transmits 41% of light.
- Protects from solar heat (-59%) and glare beneath a glass roof or facade.

The colours and textures represented in this document are provided as a reference only.

■ Optimise acoustic comfort

Alphalia Silent Aw composite material has exceptional acoustic performance.

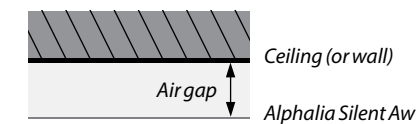
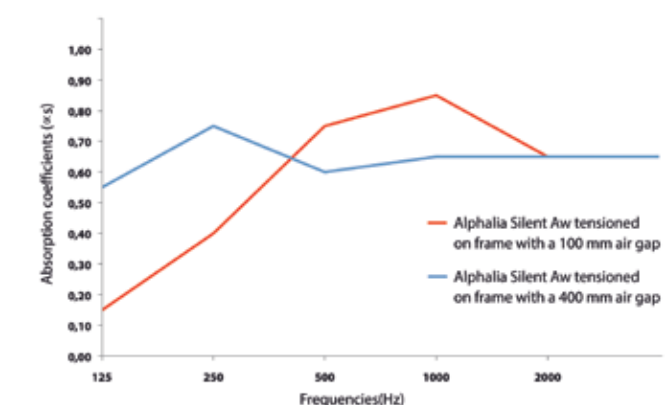
Practical cases - Alphalia Silent Aw **without additional absorbent**
reduction in reverberation time after Alphalia Silent Aw treatment (reports available on request)

	Ceiling and walls - Vaujany ice rink (FR)	Tensioned ceiling - Sports hall (NZ)	Tensioned ceiling - Aqua centre (CH)	Ceiling and baffles - Restaurant (FR)
Before	7,7 s	6,9 s	4 s	3,11 s
After	1,8 s	2,5 s	1,6 s	0,87 s
Gain	76,6 %	63,7 %	60 %	72 %

– Simply tensioned Alphalia Silent Aw

Freely tensioned Alphalia Silent Aw with an air gap is a solution that sets itself apart through:
 - Avoiding the cost of a foam-, fibre- or wool-type additional absorbent and the drawbacks associated with such products,
 - Efficient absorption throughout the sound frequency range, including low frequencies. This performance characteristic enables the requirements of multiple buildings to be met: sports halls, multipurpose halls, etc.

Alphalia Silent Aw with air gap and no additional absorbent



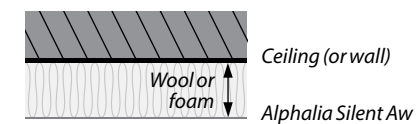
Absorption coefficient (ISO 354)

Freq. (Hz)	Alphalia Silent Aw + 100 mm air layer	Alphalia Silent Aw + 400 mm air layer
125	0.15	0.55
250	0.40	0.75
500	0.75	0.60
1000	0.85	0.65
2000	0.65	0.65
aw*	0.65	0.65
NRC*	0.65	0.65

– Alphalia Silent Aw combined with an absorbent

Alphalia Silent Aw can be combined with a conventional absorbent to meet specific needs absorption requirements.

Alphalia Silent Aw therefore enhances the absorbent's performance and reduces the thickness of the complex.



Freq. (Hz)	Alphalia Silent Aw against 45 mm Rockwool (density 28 to 36 kg/m³)	Alphalia Silent Aw against 100 mm Rockwool (density 28 to 36 kg/m³)
125	0.30	0.80
250	0.80	1.00
500	1.00	1.00
1000	1.00	1.00
2000	0.95	0.95
4000	0.90	0.90
aw*	1.00	1.00
NRC*	0.95	1.00

Yw: Weighted acoustic absorption coefficient
 NRC: Noise reduction coefficient ASTM C243-90a
 Reports on SO 354 ceiling, suspended panel, curtain and baffle tests are available on request.
 * Results subject to slight variations

■ Choose the installation system best suited to your project

Unlike conventional materials, the unmatched flexibility, lightness and finesse of Alphalia Silent Aw materials allow:
 • unrestricted freedom of implementation,
 • fulfillment of several needs: acoustic, design, light, solar protection, strength,
 • fixed or moving lightweight acoustics for adapting to a need and optimising structural usage.

