

# Silencia



Visual and acoustic quality, two key elements for your architectural spaces.



## Products that improve the acoustic properties of architectural spaces.

Silencia is a MDF or particle board acoustic moisture resistance panels, in the front laminated with high pressure laminate, or other decorative options and in the back coated with a 22 microns nonwoven fabric. This helps capture the sound waves and improves sound according to the needs of the spaces.

This panels with acoustic properties can be used in spaces where necessary to control or reduce noise generated by different sources. Ideal for theaters, meeting rooms, auditoriums, cafeterias, restaurants, lounges, food courts and churches, among others.

Silencia offers a wide possibility of perforation patterns to absorb sound waves, more than 50 colors, woodgrains designs and textures, providing acoustic and esthetic properties.





SILENCIA creates the ideal atmosphere for architectural spaces in coatings for walls and ceilings, highlighting the visual quality and the proper acoustic handling of your projects.

#### Main Features



Up to 75% sound absorption.



Ceiling panels on moisture resistant substrates.



FSC® certification, under request.

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Installation of these acoustic panels is performed on metal supports with a safety seismic clip, to ensure a lasting and safe installation.



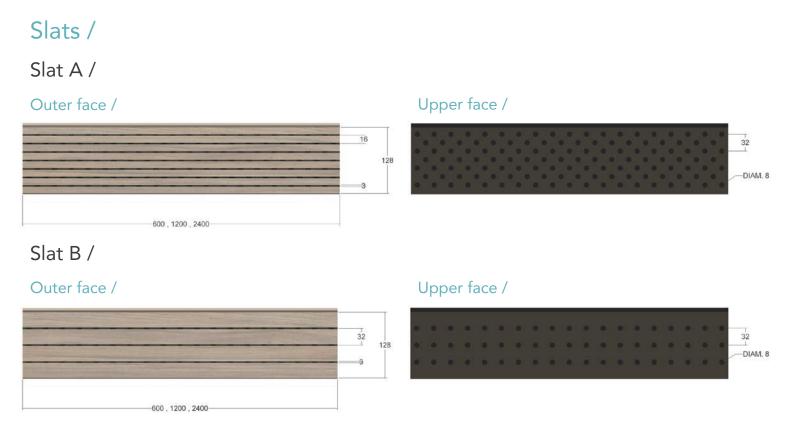
GREENGUARD Certified Coatings.



Variety of designs, finishes and perforations.

## Products

Panel in MDF RH 15 mm, slotted in the front and perforated in the back. Available in traditional MR (moisture resistance MDF or black MDF)

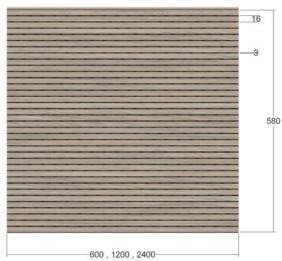


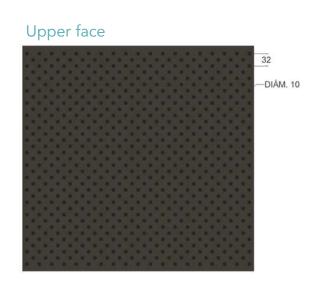
Assembly mode: The slats have a click type assembly system.

## Panels /

#### Panel A /

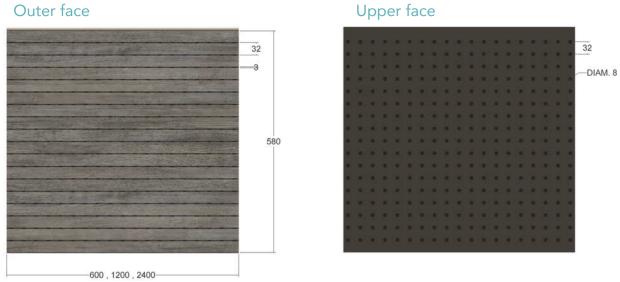
Outer face





#### Panel B / Panel B

#### Outer face



Assembly mode: The slats have a click type assembly system.

## Ceiling

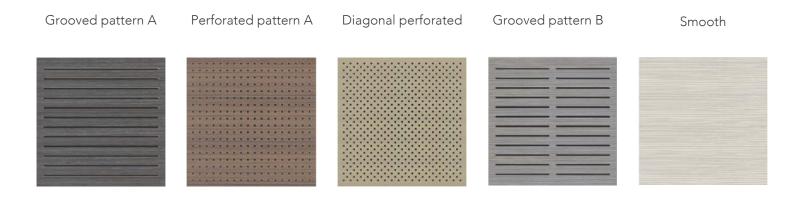
15 mm thick panels in a moisture resistant particle board of 605 x 605 mm.

### Grooved /

- Grooved /
- Distance between axis /

#### Perforated

- Drilling diameters / 6, 8, 10 o 12 mm
- Distance between axis / 16 mm y 32 mm



## Micro perforated

#### 4 straight system

Number of perforations	18769	
Diameter /	3 mm	

Ceiling and walls products are available	
throughout our line of decorative laminates.	
Contact us to check references available for	
fast delivery.	

For more information contact us info@silencia.com.co

Porcentaje de área perforada						
	Sistema de distancia entre ejes (mm)					
	16		32			
Diámetro de perforación (mm)	Diseño de perforación					
	Rectangular	Diagonal	Rectangular	Diagonal		
6	9%	18%	3%	5%		
8	17%	33%	4%	8%		
10	26%	N.A.	7%	13%		
12	N.A.	N.A.	10%	19%		

The panels with the highest acoustic absorption, have a perforated area above 15%.



"Silence has high levels of absorption, especially at high and medium frequencies, which is why it is recommended for use in public or private spaces to control environmental noise, such as food platforms, restaurants, shopping centers, airports, open-plan offices, among others"

Arq. Daniel Duplat L. Acústica, Diseño y Tecnología

## Absorption coefficient

The measurement was performed by analyzing a sample of the material (16 @ 8mm system) plus insulation, reference Black Theater of 2 ", with an area of 10.08  $M^2$ , installed directly on the reverberant chamber.

Technical datasheet of the reverberant chamber:

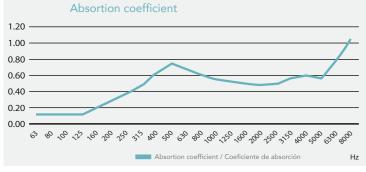
- Volume: 194,633 m<sup>3</sup>
- Total Surface: 210.67 m<sup>2</sup>
- Area: 25.61 m<sup>2</sup>
- Reverberation times: measured on site

#### Absorption coefficient calculations

Applying the formulation of the calculation of absorption coefficient, established by ISO / R345, the following results are obtained:

FREQ Hz	TR60(s) Cámara vacía	TR60(s) Muestra	Dif A= (5.3*V/c)* ((1/T2) - (1/T1))	Coeficiente de absorción
63	3.47	3.13	0.98	0.11
80	3.43	3.11	0.94	0.11
100	3.38	3.06	0.97	0.11
125	3.38	3.05	1.00	0.12
160	3.31	2.81	1.68	0.19
200	3.21	2.56	2.47	0.29
250	3.11	2.36	3.19	0.37
315	3.06	2.17	4.18	0.48
400	3.03	1.98	5.46	0.63
500	3.02	1.86	6.44	0.75
630	3.04	1.93	5.90	0.68
800	3.08	2.03	5.24	0.61
1000	3.14	2.13	4.71	0.55
1250	3.06	2.12	4.52	0.52
1600	2.99	2.11	4.35	0.50
2000	2.89	2.09	4.13	0.48
2500	2.66	1.95	4.27	0.49
3150	2.45	1.77	4.89	0.57
4000	2.18	1.6	5.19	0.60
5000	1.84	1.43	4.86	0.56
6300	1.59	1.18	6.82	0.79
8000	1.33	0.96	9.04	1.05





Coeficiente de absorción medio NRC 0.56













Encuentranos como: ILAMINAR

Visítenos en www.silencia.com.co ó escríbanos a info@silencia.com.co





\* Please ask for our certified references.

The mark of responsible forestry FSC C116247