

ACOUSTIC SOLUTIONS





Pleasant to the eyes, a delight to the ears and environmentally-friendly.

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ACOUSTIC LIGHTING COMPONENTS

FAMILY | BOYA

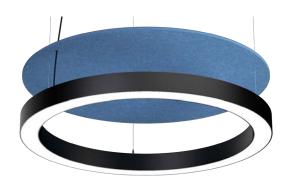
ACOUSTIC LIGHTING COMPONENTS

Acoustic Elements for

BOYA 90 DOWN Suspended







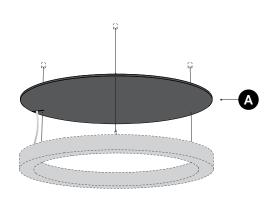
A ACOUSTIC PANEL-H BOYA TYPE A

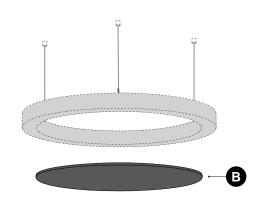
COLOUR	DIMENSIONS	CODE
	Ø600 mm	35.30.000601.00
DI	Ø800 mm	35.30.000601.01
Blue	Ø1000 mm	35.30.000601.02
	Ø1200 mm	35.30.000601.03



B ACOUSTIC PANEL-H BOYA TYPE B

DIMENSIONS	CODE
Ø600 mm	35.30.010501.00
Ø800 mm	35.30.010501.01
Ø1000 mm	35.30.010501.02
Ø1200 mm	35.30.010501.03
	Ø600 mm Ø800 mm Ø1000 mm





OTHER INFO

Other colours available on our website and customised dimensions upon request.

FAMILY | BOYA ACOUSTIC LIGHTING COMPONENTS



▲ PRODUCT | Acoustic Panel-H BOYA Type A



FAMILY | ASTRA

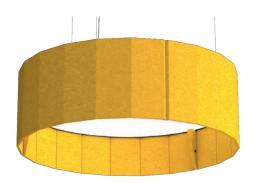
ACOUSTIC LIGHTING COMPONENTS

Acoustic Elements for

ASTRA 90 Suspended

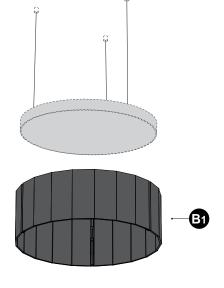






B ACOUSTIC PANEL-V ASTRA

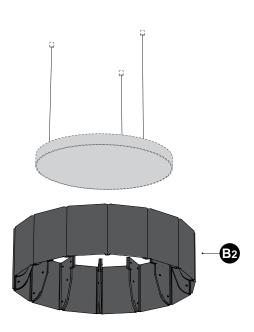
COLOUR	DIMENSIONS	CODE
	Ø550×300 mm	35.30.020401.00
	Ø550×400 mm	35.30.020401.01
V II	Ø830×300 mm	35.30.020401.02
Yellow	Ø830×400 mm	35.30.020401.03
	Ø1110×300 mm	35.30.020401.04
	Ø1110×400 mm	35.30.020401.05





B ACOUSTIC SHADE ASTRA

COLOUR	DIMENSIONS	CODE
	Ø550×300 mm	35.30.030201.00
Grey	Ø830×350 mm	35.30.030201.01
	Ø1110×400 mm	35.30.030201.02



OTHER INFO

Other colours available on our website and customised dimensions upon request.

FAMILY | ASTRA ACOUSTIC LIGHTING COMPONENTS



▲ PRODUCT | Acoustic Panel-V ASTRA



▲ PRODUCT | Acoustic Shade ASTRA

FAMILY | ALPHA

ACOUSTIC LIGHTING COMPONENTS

Acoustic Elements for

ALPHA Track Suspended







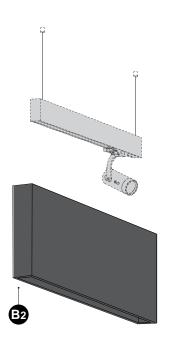
B ACOUSTIC PANEL-H ALPHA

COLOUR	DIMENSIONS	CODE
Blue	300×1995 mm	35.30.040601.00
	300×1993 HIIII	33.30.040601.00



B2 ACOUSTIC PANEL-V ALPHA

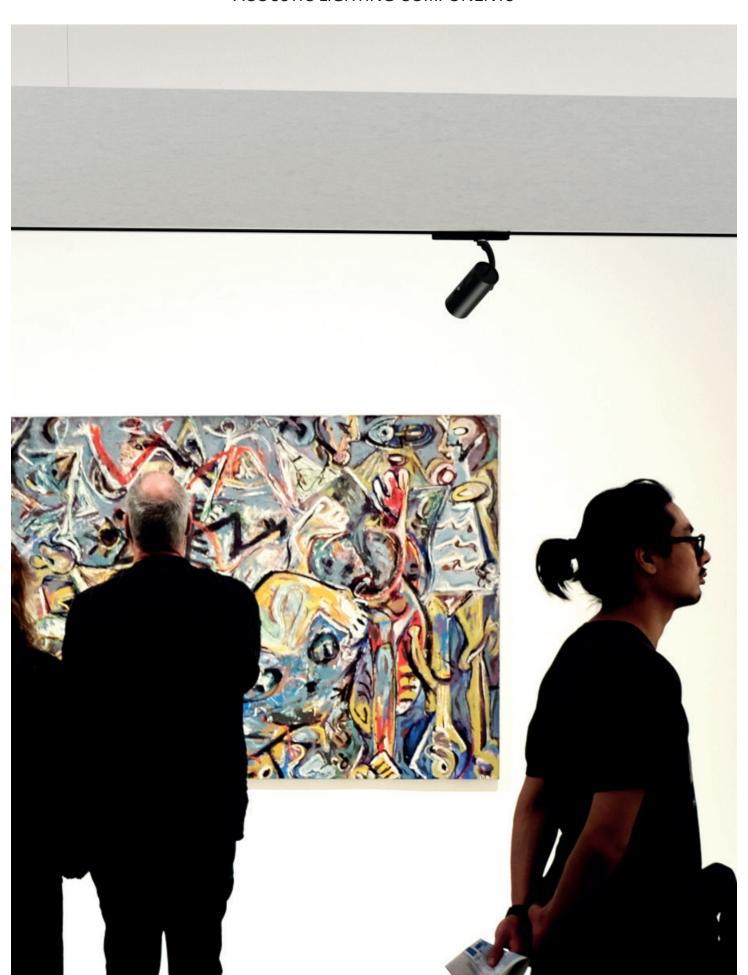
COLOUR	DIMENSIONS	CODE
White	300×1995 mm	35.30.050301.00



OTHER INFO

Other colours available on our website and customised dimensions upon request.

FAMILY | ALPHA ACOUSTIC LIGHTING COMPONENTS



▲ PRODUCT | Acoustic Panel-V ALPHA

CATEGORY | PROFILE SYSTEMS

ACOUSTIC LIGHTING COMPONENTS

Acoustic Elements for

SNAP Suspended



Acoustic Elements for

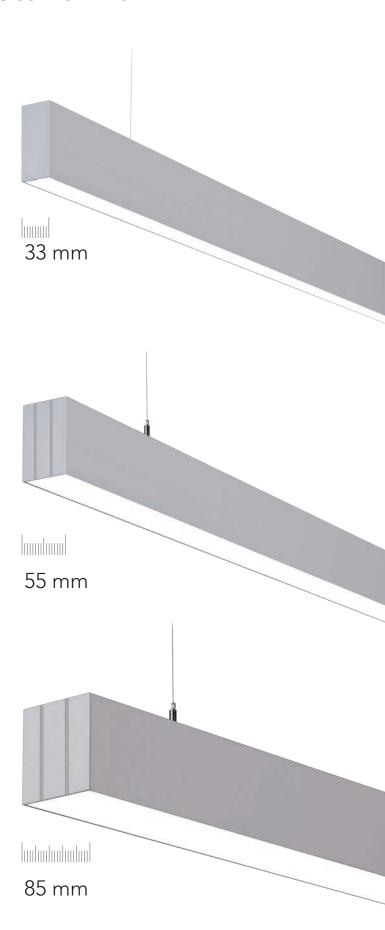
WELINE Suspended



Acoustic Elements for

OMEGA XS Suspended





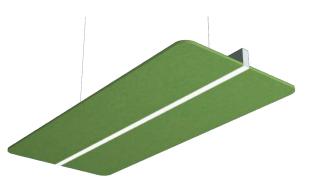
CATEGORY | PROFILE SYSTEMS ACOUSTIC LIGHTING COMPONENTS



▲ PRODUCT | Acoustic Panel-V SNAP

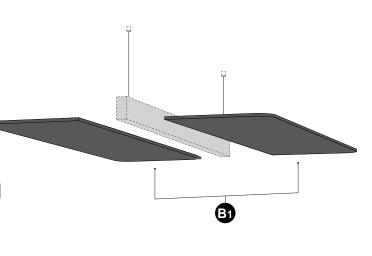
CATEGORY | PROFILE SYSTEMS

ACOUSTIC LIGHTING COMPONENTS



B1 ACOUSTIC PANEL-H SNAP

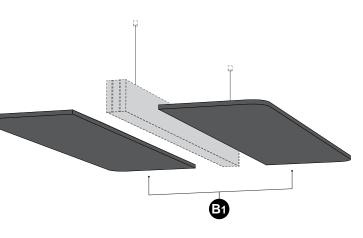
COLOUR	DIMENSIONS	CODE
	300×1134 mm	35.30.060501.00
Green	300×1415 mm	35.30.060501.01
	300×2258 mm	35.30.060501.02

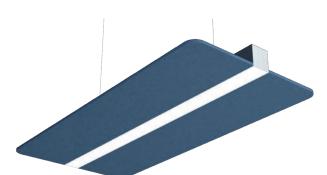




B ACOUSTIC PANEL-H WELINE

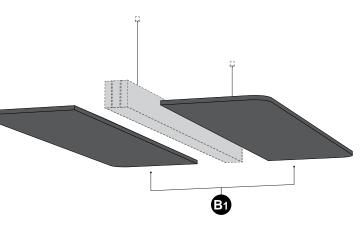
COLOUR	DIMENSIONS	CODE
	300×1126 mm	35.30.080101.00
Anthracite	300×1407 mm	35.30.080101.01
	300×2250 mm	35.30.080101.02





B ACOUSTIC PANEL-H OMEGA XS

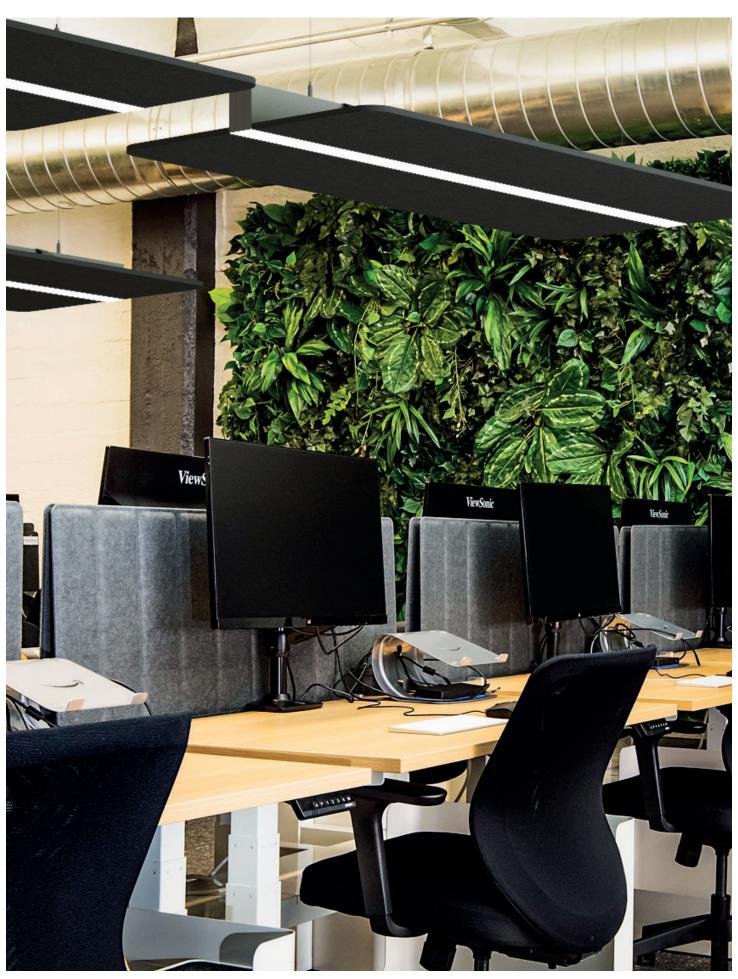
COLOUR	DIMENSIONS	CODE
	300×1126 mm	35.30.100601.00
Blue	300×1407 mm	35.30.100601.01
	300×2250 mm	35.30.100601.02



OTHER INFO

Other colours available on our website and customised dimensions upon request.

CATEGORY | PROFILE SYSTEMS ACOUSTIC LIGHTING COMPONENTS



▲ PRODUCT | Acoustic Panel-H WELINE

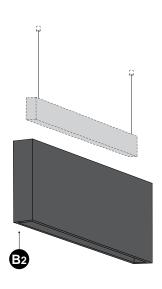
CATEGORY | PROFILE SYSTEMS

ACOUSTIC LIGHTING COMPONENTS



B2 ACOUSTIC PANEL-V SNAP

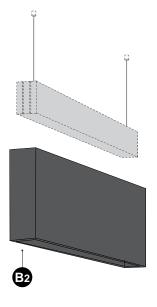
COLOUR	DIMENSIONS	CODE
	300×1134 mm	35.30.070301.00
White	300×1415 mm	35.30.070301.01
	300×2258 mm	35.30.070301.02

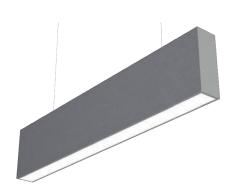




B2 ACOUSTIC PANEL-V WELINE

COLOUR	DIMENSIONS	CODE
	300×1126 mm	35.30.090401.00
Yellow	300×1407 mm	35.30.090401.01
	300×2250 mm	35.30.090401.02

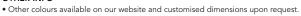


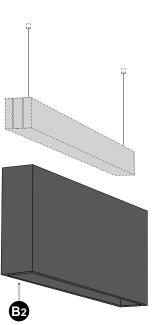


■ ACOUSTIC PANEL-V OMEGA XS

_		
COLOUR	DIMENSIONS	CODE
Grey	300×1126 mm	35.30.110201.00
	300×1407 mm	35.30.110201.01
	300×2250 mm	35.30.110201.02

OTHER INFO







FAMILY | LED ACOUSTIC LIGHTING



A ACOUSTIC SHADE LED TYPE A

COLOUR	DIMENSIONS	CONTROL	CODE	
Green Ø600×240 mm	Ø/00240	ON/OFF (3000K 38W)	33.30.120508.01	
	Ø600×240 mm	DALI (3000K 38W)	33.30.120508.03	



B ACOUSTIC SHADE LED TYPE B

COLOUR	DIMENSIONS	CONTROL	CODE	
Yellow Ø725×240 mm	Ø725 - 240	ON/OFF (3000K 38W)	33.30.130408.01	
	DALI (3000K 38W)	33.30.130408.03		

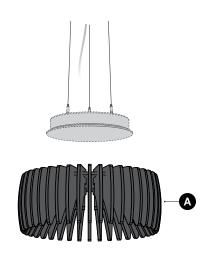


© ACOUSTIC SHADE LED TYPE C

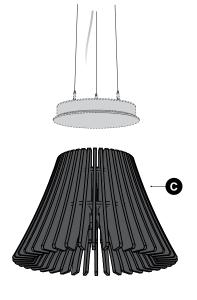
COLOUR	DIMENSIONS	CONTROL	CODE
Blue Ø710×465 mm	Ø710 : 4/F	ON/OFF (3000K 38W)	33.30.140608.01
	DALI (3000K 38W)	33.30.140608.03	

OTHER INFO

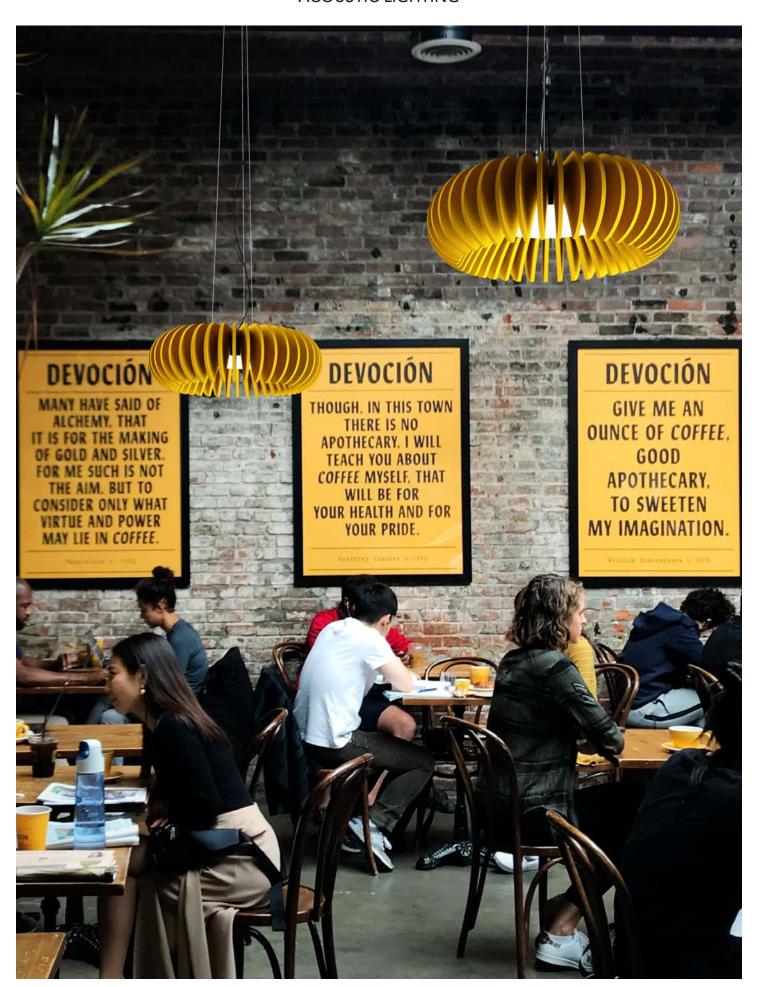
Other colours available on our website and customised dimensions upon request.







FAMILY | LED ACOUSTIC LIGHTING



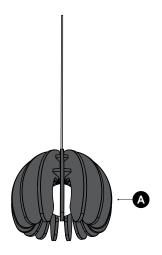
FAMILY | E27

ACOUSTIC LIGHTING



A ACOUSTIC PANEL E27 TYPE A

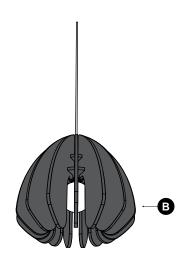
COLOUR	DIMENSIONS	CODE
Orange	Ø400×320 mm	33.30.150901.00





B ACOUSTIC PANEL E27 TYPE B

COLOUR	DIMENSIONS	CODE
Sand	Ø490×450 mm	33.30.160801.00





6 ACOUSTIC PANEL E27 TYPE C

COLOUR	DIMENSIONS	CODE
Earth	Ø690×270 mm	33.30.171201.00



- E27 lamp not included.
- Other colours available on our website and customised dimensions upon request.

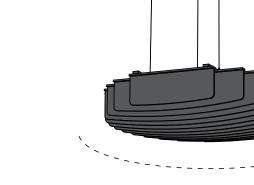




FAMILY | CIRCULAR

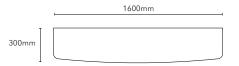
ACOUSTIC BAFFLES





ACOUSTIC BAFFLES CONCAVE

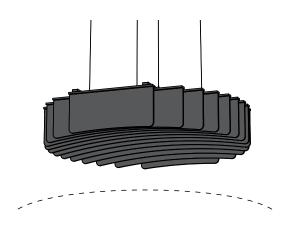
COLOUR	DIMENSIONS	CODE
Dark Green	Ø1600×300 mm	33.30.211401.00



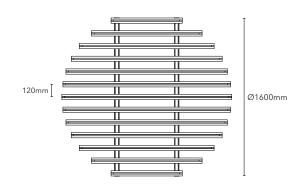


ACOUSTIC BAFFLES CONVEX

COLOUR	DIMENSIONS	CODE
Earth	Ø1600×300 mm	33.30.221201.00



	1600mm
300mm	

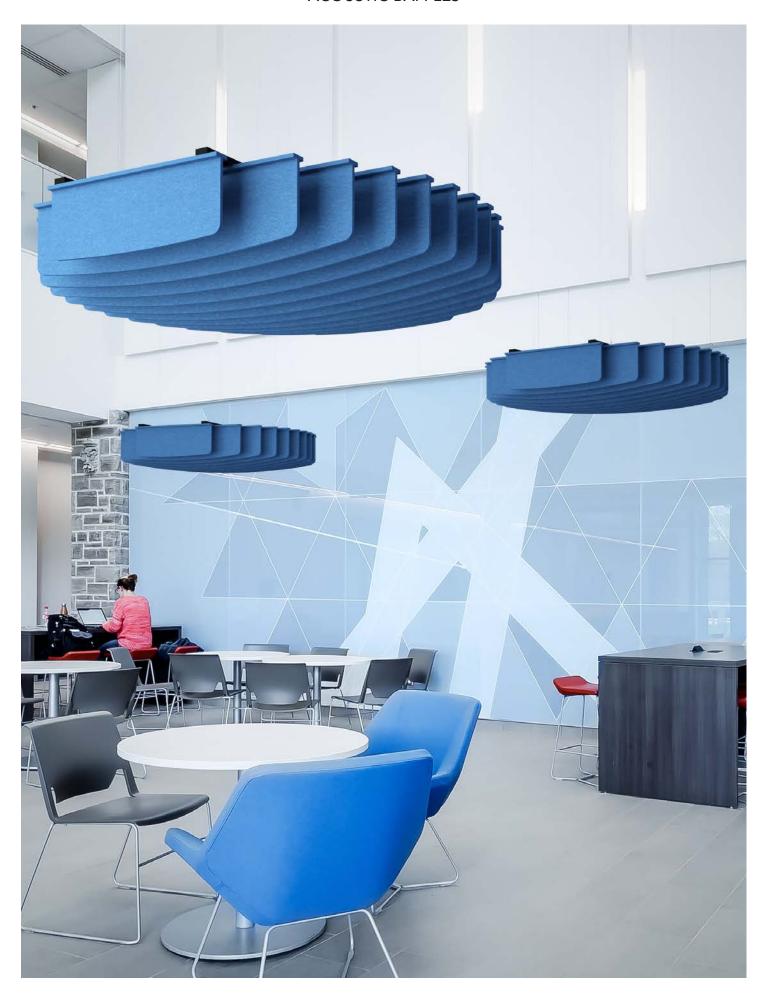


OTHER INFO

Other colours available and customised dimensions upon request.

FAMILY | CIRCULAR

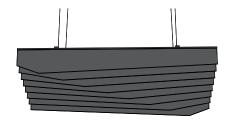
ACOUSTIC BAFFLES



FAMILY | RETANGULAR

ACOUSTIC BAFFLES

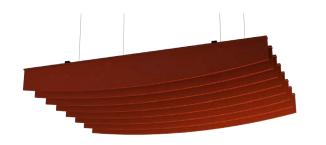




2380mm 300mm

ACOUSTIC BAFFLES TYPE A

COLOUR	DIMENSIONS	CODE
Grey	2380×1680×300 mm	33.30.180201.00



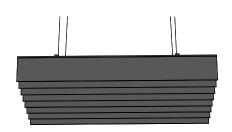


		2380mm
-	·]	
300mm	Į	

ACOUSTIC BAFFLES TYPE B

COLOUR	DIMENSIONS	CODE
Red	2380×1680×300 mm	33.30.191001.00





	2380mm	
300mm		

2380mm 227mm 1680mm

ACOUSTIC BAFFLES TYPE C

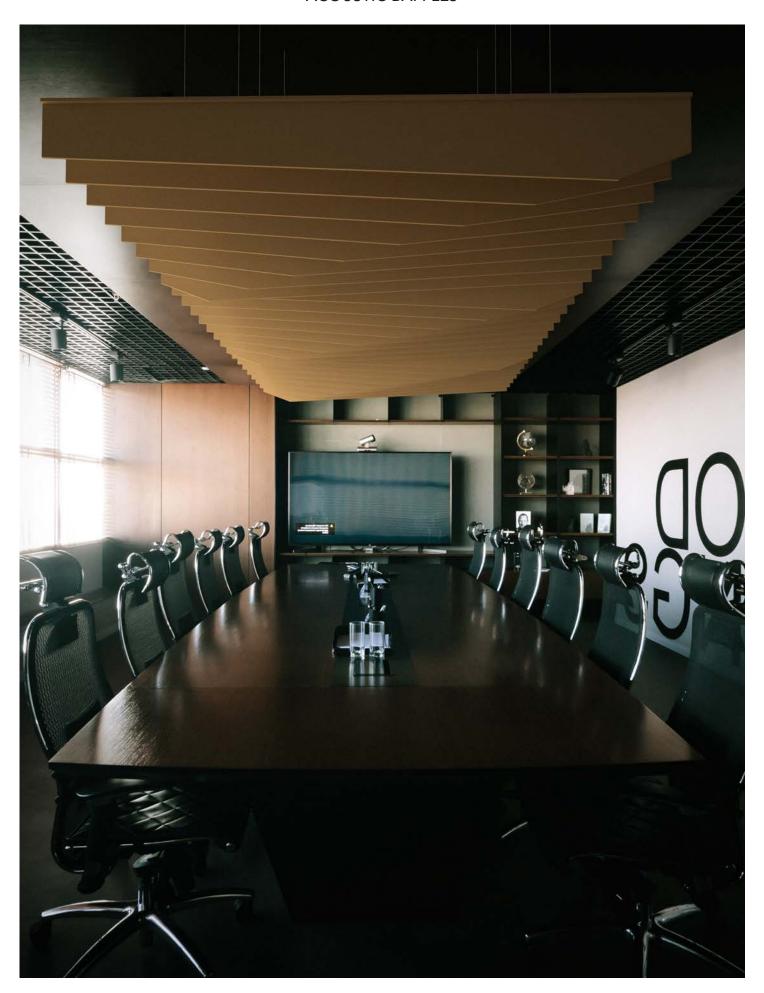
COLOUR	DIMENSIONS	CODE
Anthacite	2380×1680×300 mm	33.30.200101.00

OTHER INFO

 \bullet Other colours available and customised dimensions upon request.

FAMILY | RETANGULAR

ACOUSTIC BAFFLES





Surface/Wall





ACOUSTIC PANEL SQUARE SURFACE/WALL

COLOUR	DIMENSIONS	CODE
-	600×600 mm	33.30.250501.00
Green	800×800 mm	33.30.250501.01

ACOUSTIC PANEL RECTANGULAR SURFACE/WALL

COLOUR	DIMENSIONS	CODE
	300×800mm	33.30.290401.00
Yellow	400×1200mm	33.30.290401.01





ACOUSTIC PANEL HEXAGONAL SURFACE/WALL

COLOUR	DIMENSIONS	CODE
A	Ø500 mm	33.30.270101.00
Anthracite	Ø800 mm	33 30 270101 01

ACOUSTIC PANEL CIRCULAR SURFACE/WALL

COLOUR	DIMENSIONS	CODE
	Ø600mm	33.30.230601.00
Blue	Ø800mm	33.30.230601.01

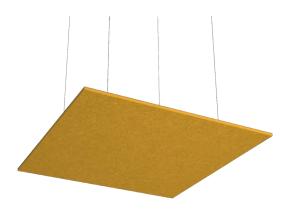
OTHER INFO

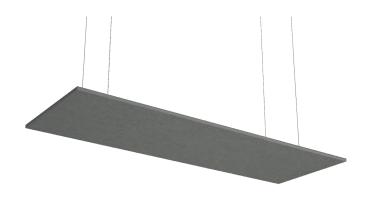
- Wall/ceiling application available in two different options.
- Other colours available on our website and customised dimensions upon request.



▲ PRODUCT | Acoustic Panel SQUARE and RECTANGULAR Surface/Wall

Suspended



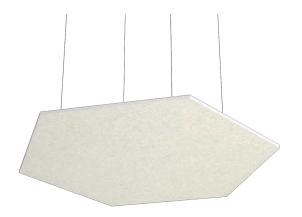


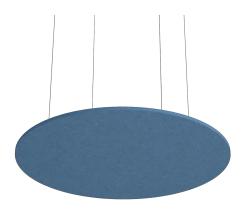
ACOUSTIC PANEL-H SQUARE SUSPENDED

COLOUR	DIMENSIONS	CODE
V II	600×600 mm	33.30.260401.00
Yellow	800×800 mm	33.30.260401.01

ACOUSTIC PANEL-H RECTANGULAR SUSPENDED

COLOUR	DIMENSIONS	CODE
C	300×800mm	33.30.300201.00
Grey	400×1200mm	33.30.300201.01





ACOUSTIC PANEL-H HEXAGONAL SUSPENDED

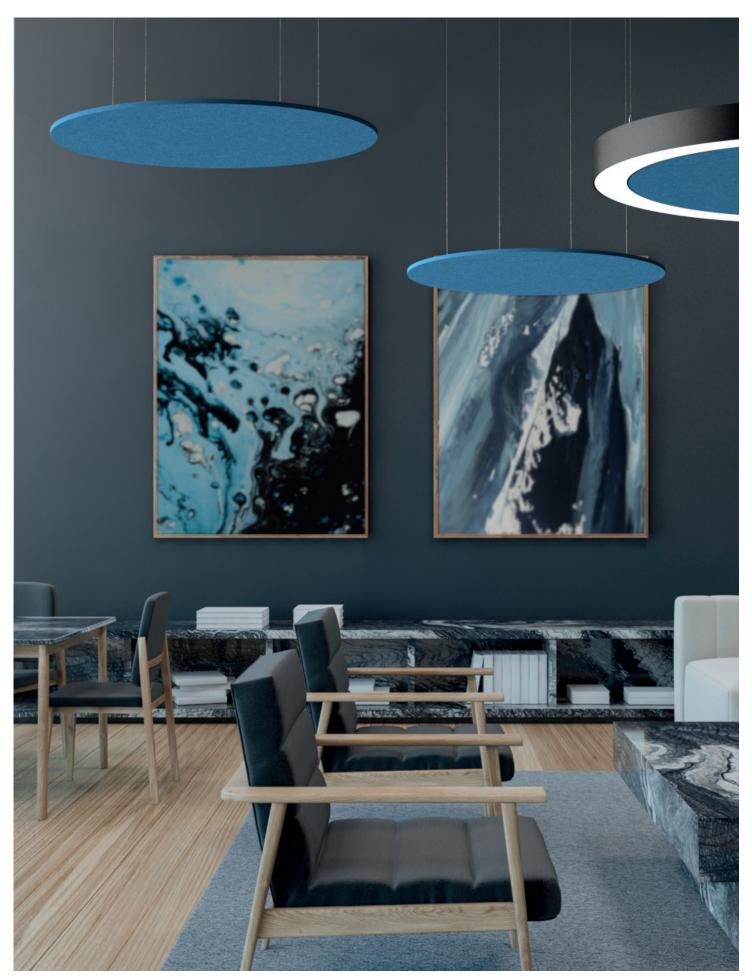
COLOUR	DIMENSIONS	CODE
AA/I	Ø500 mm	33.30.280301.00
White	Ø800 mm	33.30.280301.01

ACOUSTIC PANEL-H CIRCULAR SUSPENDED

COLOUR	DIMENSIONS	CODE
	Ø600mm	33.30.240601.00
Blue	Ø800mm	33.30.240601.01

OTHER INFO

- \bullet Suspension available in cable lengths of 1, 3 and 5 metres.
- Other colours available on our website and customised dimensions upon request.



▲ PRODUCT | Acoustic Panel-H CIRCULAR Suspended

FAMILY | RETANGULAR

ACOUSTIC DECORATIVE PANELS

Suspended/Surface





ACOUSTIC PANEL-V RECTANGULAR SUSPENDED

COLOUR	DIMENSIONS	CODE
	300×800mm	33.30.310301.00
White	400×1200mm	33.30.310301.01

ACOUSTIC PANEL-V RECTANGULAR SURFACE

COLOUR	DIMENSIONS	CODE	
V II	300×800mm	33.30.320401.00	
Yellow	400×1200mm	33.30.320401.01	

OTHER INFO

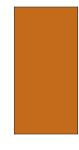
- \bullet Suspension available in cable lengths of 1, 3 and 5 metres.
- Other colours available on our website and customised dimensions upon request.



ACOUSTIC WALL PANELS

FAMILY | RETANGULAR

ACOUSTIC FLAT WALL PANELS



ACOUSTIC FLAT WALL PANEL TYPE A

COLOUR	DIMENSIONS CODE	
Orange	1180×2360×12 mm	33.30.330901.00



ACOUSTIC FLAT WALL PANEL TYPE E

COLOUR	DIMENSIONS CODE	
Green	1180×2360×12 mm	33.30.370501.00



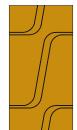
ACOUSTIC FLAT WALL PANEL TYPE B

COLOUR	DIMENSIONS	CODE
White	1180×2360×12 mm	33.30.340301.00



ACOUSTIC FLAT WALL PANEL TYPE F

COLOUR	DIMENSIONS	CODE	
Blue	1180×2360×12 mm	33.30.380601.00	



ACOUSTIC FLAT WALL PANEL TYPE C

COLOUR	DIMENSIONS	CODE	
Yellow	1180×2360×12 mm	33.30.350401.00	



ACOUSTIC FLAT WALL PANEL TYPE G

COLOUR	DIMENSIONS	CODE	
Anthracite	1180×2360×12 mm	33.30.390101.00	



ACOUSTIC FLAT WALL PANEL TYPE D

COLOUR	DIMENSIONS	CODE	
Red	1180×2360×12 mm	33.30.361001.00	



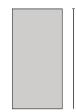
ACOUSTIC FLAT WALL PANEL TYPE H

COLOUR	DIMENSIONS CODE	
Sand	1180×2360×12 mm	33.30.400801.00

GENERAL DIMENSIONS

1180 mm

- 12 mm

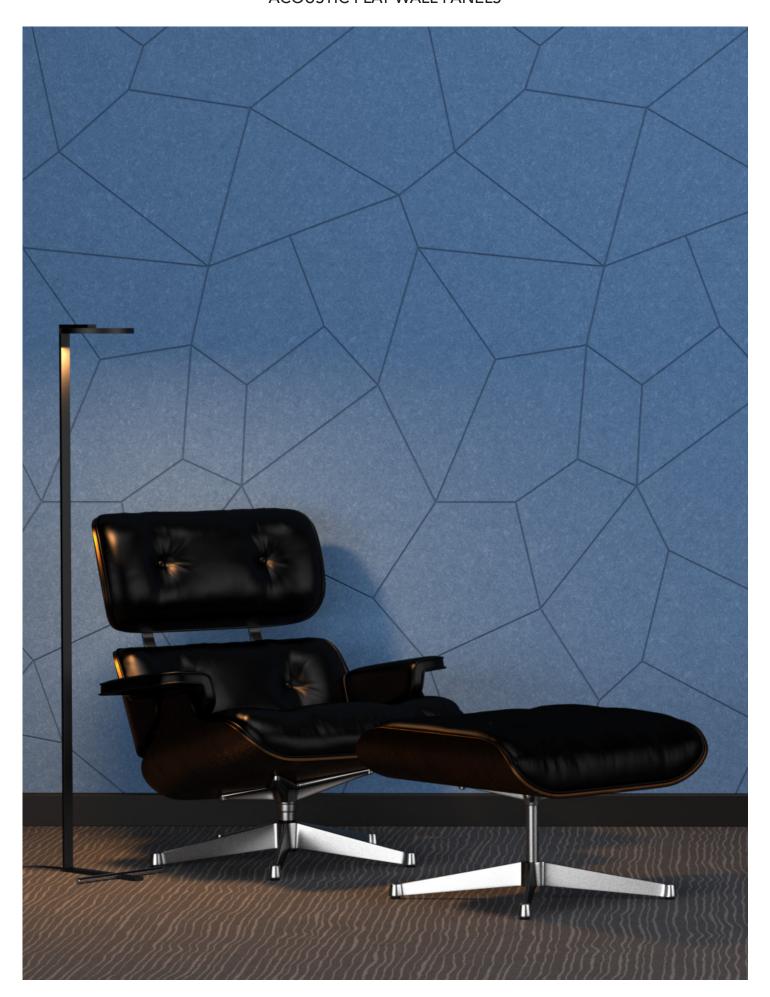


2360 mm

OTHER INFO

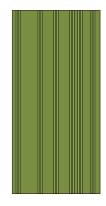
Other colours available and customised dimensions upon request.

FAMILY | RETANGULAR ACOUSTIC FLAT WALL PANELS



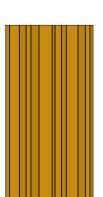
FAMILY | RETANGULAR

ACOUSTIC 3D WALL PANELS



ACOUSTIC 3D WALL PANEL TYPE A

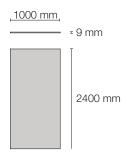
CODE	
0.410501.00	
3	



ACOUSTIC 3D WALL PANEL TYPE B

COLOUR	DIMENSIONS	CODE	
Yellow	1000×2400×9 mm	33.30.420401.00	-

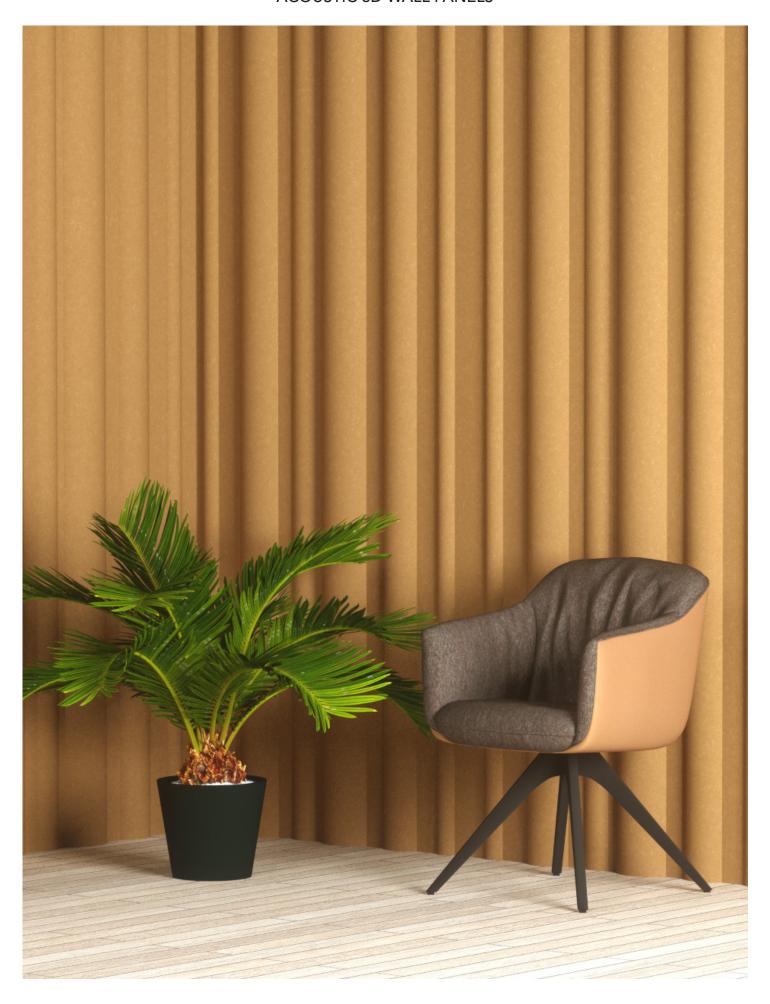
GENERAL DIMENSIONS



OTHER INFO

Other colours available and customised dimensions upon request.

FAMILY | RETANGULAR ACOUSTIC 3D WALL PANELS







BESPOKE SOLUTIONS



▲ PRODUCT | Bespoke Desk Partition

MATERIAL | COLOURS BESPOKE SOLUTIONS

Available Colours



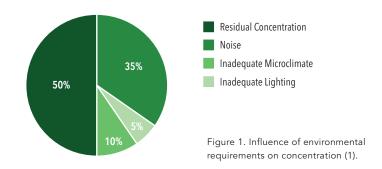




ACOUSTIC BASICS

Why is ACOUSTIC so important?

Up to 35% of the decrease in concentration is due to the presence of noise (Figure 1).



People need a time variable from 15 to 20 minutes to achieve the concentration necessary to carry out intellectual activity (Figure 2).

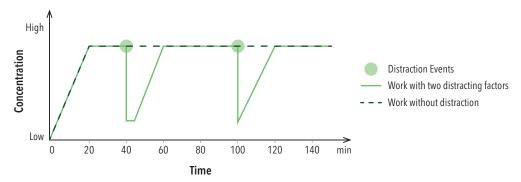


Figure 2. Time incidence of the distraction factors on worker's concentration (1).

Open plan offices are designed so workers can collaborate, share and communicate openly. Yet their very design can harm work performance.

A University of Sydney study demonstrated that in spaces with a high Speech Intelligibility Index such as open plan offices, workers' performance actually suffered (Figure 3).

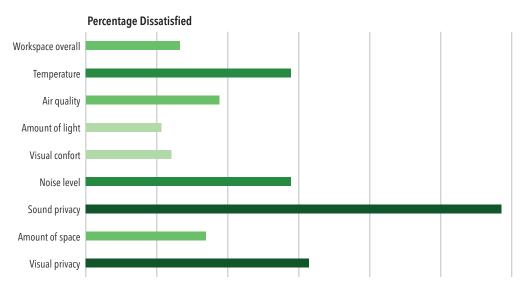


Figure 3. A study found that sound privacy was the greatest concern of office workers across all office layout types (2).

ACOUSTIC BASICS

Absorption, reflection and sound diffusion



Figure 4. Sound reflection when it hits a surface: absorption, reflection and diffusion (3).

DIFFUSION

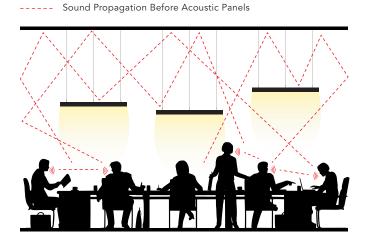
Diffusion is when a sound is scattered or spread in all directions after hitting a surface, i.e. the sound waves that are not absorbed will travel in different directions around the room, making it appear as if the sound is coming from everywhere.

ABSORPTION

Acoustic treatment focuses on controlling sound reflections within the room to reduce echoes and background noise.

REELECTION

Reflection is when a sound wave hits a surface and bounces back into the room without losing its energy, much like a mirror! It is possible to adapt economical solutions to existing rooms and significantly improve their acoustics (Figure 5).



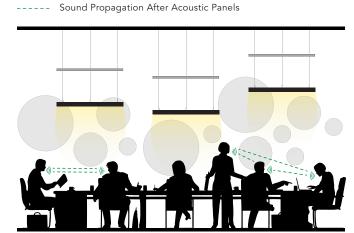


Figure 5. Sound propagation, before and after the application of some acoustic solutions.

Room acoustics and noise control

The persistence of sound after its production in rooms, originating from the surfaces of objects in the space, is called reverberation. Reverberation is a key parameter in evaluating the acoustic status of a room.

Reverberation time measures the deterioration of the sound in a room in seconds. Reverberation time is the time required for the sound pressure level to fall by 60 dB from its initial level (RT60).

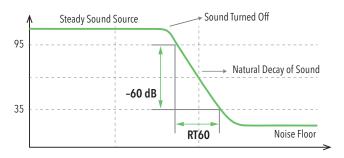


Figure 6. Reverberation time RT60 (4).

ACOUSTIC BASICS

PET Specifications

MATERIAL

Acoustic PET panel with fire retardant properties, engineered to reduce and control reverberated noise and echo in a wide variety of environments, body 100% in PET fibers (60% recycled from plastic bottles).

ACOUSTIC LIGHTING - HOW IT'S MADE

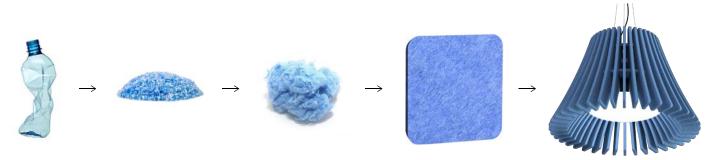


Figure 7. Steps in the development of acoustic lighting.

MAIN FEATURES

- Flame Retardant;
- Anti-bacterial properties;
- Moisture resistant (extremely low moisture absorption coefficient);
- Long useful life (>20 years);
- High stability;
- Odour free;
- Easy to clean.

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PET Panel Thickness 12 mm

Noise Reduction Coefficient (NRC) 0,4

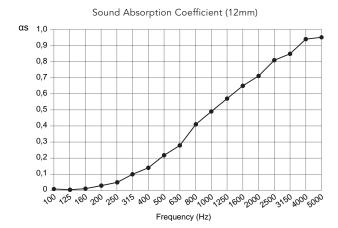
Sound Absorption Coefficient 0,25

Fire Test ASTM E84 CLASS A EN 13501-1 CLASS B-s1,d0

Glow-wire Resistance 850°C

Environmental Certificate OEKO-TEX® STANDARD 100

OEKO-TEX®
CONFIDENCE IN TEXTILES
STANDARD 100



References

(1)

Delle Macchie, Sara, Simone Secchi, and Gianfranco Cellai. (2018) "Acoustic Issues in Open Plan Offices: A Typological Analysis" Buildings 8, 11

Web. https://www.mdpi.com/365816

(2)

Haapakangas, A. Et Al. (2008) "Effect of speech intelligibility on task performance – an experimental laboratory study". ICREN

Web. https://resonics.co.uk/12-ways-noise-affects-employee-wellbeing-health-productivity/

(3)

Vreede Pieter. (2018) "Diffusion vs Absorption"

Web. https://www.linkedin.com/pulse/diffusion-vs-absorption-pieter-vreede

(4)

Dewesoft (2023) "Reverberation Time RT60"

Web. https://downloads.dewesoft.com/brochures/dewesoft-rt60-brochure-en.pdf

CLIMAR - INDÚSTRIA DE ILUMINAÇÃO, S.A.

HEADQUARTERS

Rua Estrada Real, 50 3750-866 Águeda - Portugal N 40° 32′ 44″ | W 8° 27′ 11″

- t +351 234 690 330 | m +351 915 599 110
- e geral@climar.pt

LONDON OFFICE

63 - 66 Hatton Garden, Fifth Floor, Suite 23 London EC1N 8LE UK

- t +44 (0)20 3137 2891
- e info@climarlighting.co.uk





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