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ECO iso soriganing is stated corons	<b>86. ECOiso®</b> NATURAL SOUNDPROOFING AND ACOUSTIC TREATMENT
ATP.	<b>94. ATP</b> ® PACKS
STAIDTREAT BOX SYSTEM	102. Jocavi® Kitbox
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# **ABOUT US**

We are a Portuguese company specialised in developing and manufacturing acoustic treatment panels for the professional audio industry.

We always look for originality, technological innovation, durability, cost and promptness to present our products. We have therefore generated a vast organisational wealth because we share Quality with those who are quality-oriented.

The use of acoustic products in working environments, by taking into account the needs and the modern corporate images, is our passion.

Our company has a varied and thorough offer of high quality products available, which enable a wide range of applications.

Our range of products offers the designer a large variety of solutions. Several types of absorption and diffusion panels deliver an excellent performance in the diverse areas of application.













# **ACTIVITY AREAS**

We have the solution for the most demanding ears, be it for auditoriums, audio studios, commercial or sporting environments, radio stations, theatres, conference rooms, churches and even for your own listening room at home. JOCAVI® presents acoustic treatment panels which blend well with any decoration and are easily mounted on ceilings or walls.

The development and improvement of these panels were done with the help of computerised calculus and analysis, in order to determine their characteristics and optimise their practical application, thus ensuring the excellence of our products.

Our products offer new aesthetics, a cutting-edge attitude, efficiency, quality and customised design. Our acoustic products are prepared to a high standard, with skills acquired from good taste, in order to serve the high-end corporate world. We are JOCAVI®, an INTERNATIONAL reference in the world of acoustics.













# WE ARE ENVIRONMENTALLY - FRIENDLY

Recycling means to repeat the life cycle continuously, by giving new use to materials discarded by society.

We are increasingly concerned about using recycled, recyclable and environmentally-friendly raw materials.

The recycled materials used in our manufacturing processes come from paper, newspapers, magazines, textiles, packagings, cardboard, plastic, polyester, wood and glass.

 $The \ recyclable \ materials \ of our \ products \ consist \ of wood \ from \ self-sustainable \ forests, ABS, PETG, EPS, fabric, ceramics \ and \ chipboards.$ 

Our painting method uses ecological paints with environmentally harmless dyes and components and no active solvents.

Recycling offers an indeterminate number of advantages. It prevents soil and water contamination, reduces the volume of waste that goes to the sanitary landfills, generates jobs for many people and spares natural resources.

In the course of the years, JOCAVI® Acoustic Panels has become increasingly concerned and aware of the need to reduce inert matters that pollute the planet. This is an issue that concerns all of us and which the industrial world in particular must pay careful attention to.

# CONCEPTS AND BUSINESS PHILOSOPHY

### **ARCHITECTURAL ACOUSTICS**

The sound we hear in a room is a combination of the direct sound propagated by the sources and all the direct and indirect reflections from the surfaces (floor, walls and ceiling), as well as the limit rate of the room itself (length, width, height). It is by handling the indirect reflections on the surfaces that it is possible to affect and alter considerably the acoustic features of the room and the consequent way we hear and perceive sound. Hence one of the central topics in the interiors acoustics

The acoustics of buildings was an undeveloped aspect until relatively recent times. In the primordial approaches to this subject the roman architect Marcus Pollio, that lived during the 1st century AC, made some guesses and some pertinent observations regarding the reverberation and interference that could be carried by us. However, the scientific aspects of the subject were only later developed by the American physicist Joseph Henry in 1856 and more thoroughly by the American physicist Wallace Sabine in 1900. The following years, after this historical landmark that was the Foundation of the architectural acoustics by Sabine, were spent studying how the absorption affects the

At that time a library was then created with absorbent materials, characterized

with its respective properties, the absorption coefficients.

Based on reasonable standards generally accepted by everyone, this notion and organized comprehension on how the absorption helps the hearing perceptibility, these teachings started to be strongly applied in room 's acoustic projects. The international standards were created with the collaboration and the involvement of standards normalization institutions; ISO, ASTM, etc.

The architectural acoustics experts study the behavior of sound in closed enclosures or semi-open, as well as the sound transmission between buildings. The sound absorption and diffusion is a crucial part when studying the behavior of sound in closed rooms to ensure a good intelligibility of speech and music.

The sound insulation in buildings in general, as well as in urban projects, is important to minimize the propagation of undesired sounds between rooms and adjacent buildings. In this way the negative acoustic effects are minimized, like the noise contamination and misrepresentation of frequencies by several factors.

#### **COMMON SOUND PROBLEMS IN ROOMS**

The acoustics of a room is satisfactorily adequate when there is a correct balance between absorption and sound reflection. That balance is determined by the physical space (dimensions of the room) and by the materials used on the coating. However, the acoustic phenomena like problematic echoes and excessive reflections can frequently occur even in a room with an adequate reverberation time. When you have for instance a ceiling or a wall with a concave shape, it will be highly reflective. In such cases, the sound is concentrated in a certain point where anomalies are felt and where the sound has an increased feature, distorted and bad. In the same way, a narrow corridor, connected to a room between parallel reflective walls, can work as a trap, an absorbent chamber generally beneficial for the lower frequencies.

Although the level of absorption of a room is being controlled, other acoustic imperfections can emerge and cause uncomfortable reflections and repeated echoes, it is then imperative to pay some attention to the elimination of the interferences. The interferences emerge from the differences on the distances from the direct sound and the reflected sound, which produce the so called

dead points, on which some frequencies are therefore cancelled as we do not feel them or hear them. All these acoustic phenomena called interferences simultaneously impair hearing and the sound capture by microphones.

When we talk about a "good room sound" we are probably talking about the acoustics as the acoustic science had been discussed about for hundreds of years. Until then, a good acoustics were achieved by experimentation, by experience or simply by accident. Currently, we know a lot about the parameters that influence the sound in a room. Talking about the control room of a studio, we know that basically, this room should work as neutral as possible, a room with the right dimensions and proportions that has the recommended materials so it can be balanced in all its sound spectrum, but this is not always the case: Here is a list with important parameters to have into consideration for good acoustics: Appropriate Reverberation time, Modal Consistency, without floating echoes, good sound distribution, appropriate sound pressure level, low level of background noise achieved by insulation.

#### **ROOM DESIGN**

The Acoustic Design of a room should take into consideration the fact that human hearing is complex, whether for physiological characteristics of the ear as for psychological characteristics. For example, sounds that are familiar to us are not interpreted in the same way, they look unreal. This is due to the part of our brain that focuses and interprets the audition, which minimizes the attention to these types of sounds. On the other hand, those sounds that we consider common and familiar are easily and quickly interpreted.

Having this notion, it is easily understandable that sound can be radically altered in an enclosed space. For example, in a gym conditioned by the hard materials of the walls, ceilings and stands, the sound causes sound waves and several beats, increasing the reverberation and totally misrepresenting the sound of the sound sources.

sound of the sound sources. The Sound produced in a room is modified by reverberations due to the number of reflections from the surfaces and to all existing elements in that room, as well as the furniture and the audience. For this reason a professional audio room should have a normal reverberation level and intelligibility to ensure the sound 's natural playback for the events that take place there. To obtain the best acoustic qualities, the rooms are designed in a way in order to ensure balance between the absorption and the diffusion, with a minimum discrepancy of the time values versus frequency. The control of the low and mid-low frequencies is therefore essential, through the absorbent elements. The enough reflection by diffusion is equally important to ensure a good natural quality of the sound.

The most easy and common way of treating spaces for music is, without any doubt, to exclusively apply absorbent materials. This method is used uniquely for reducing the reverberation time by the method of absorption. However, it is not the most correct way of doing it because when you absorb too much you can see immediately a weakening of the high frequencies which will unbalance the reverberation times versus frequency. The effect will then seem like a dead environment with the audible high frequencies in much lower levels, cancelling the natural harmonics and diminishing the audition of the instrument's timbre. In many cases, the room projects are designed by the generalist architecture sector that is in charge, besides the conception of the building, also for the

acoustic project for the interior rooms as part of the whole project.

In most cases this procedure does not have the best results, as the Architects do not have the same kind of sensibility or understanding on musical acoustics as the Acoustics Musicians or Engineers with formation and higher sensitivity. For the generalist planners, using diffuser elements can be a risk when not applied in a proper shape or proportion. They then choose more standardized solutions using uniquely absorbents, not taking the risk of using diffuser elements which require much more elaborate understanding and projects.

elements, which require much more elaborate understanding and projects. By doing so, you can give less importance to what the reflection by diffusion can help as for the balance of the reverberation times and the consequent good environment intelligibility. It is therefore absolutely imperative to consider the application of the diffusing elements in the acoustics projection in music rooms.

Over the last years, in more recent projects, it has been revealed a higher sensitivity to the use of diffusers and  $\mathsf{JOCAVI}^{\otimes}$ , with its precious range of products, has immensely contributed to that reality. The use of diffusers represents a very conscientious work for the planner, as it cannot introduce excessive reverberation on any frequency, nor echo certain frequencies in an odd way, nor produce undesirable interference effects or distortion. It is therefore an attractive task that excites the experts.

There are some available methods that make it possible to modulate the acoustic field associated to a sound source regarding a certain position or area within a room. A geometrical modulation method very well known is the Ray Tracing.

This computation technique is much more demanding than a simple mathematical calculation. It requires a processing unit and makes the calculation slower. The method allows the planner to choose, adjust and distribute the acoustic handling materials and the surface so coating according to the control of reflections, the diffusion and absorption properties versus the frequency range, to achieve the desired acoustics for the sound source and audience.

### **OUR TASKS**

The passion for Musical Acoustics has guided my life since I was a child. The taste for this matter with the tenacity to create and develop has been giving the market, under Jocavi´s name, numerous high quality acoustic solutions.

For over twenty years I have had the pleasure to make this journey that makes me feel accomplished and honored, with a work dedicated to those around me, my friends and coworkers. JOCAVI\* has now more than 100 different acoustic products on the market, catalogued, organized and available for the most complex and demanding applications, as well as for the most practical and simple on the world of environmental acoustics.

We are always improving.

Welcome to JOCAVI® world, a wide range of Acoustic Solutions.

Yours faithfully,

João Carlos Vieira Founder and CEO

	<b>JOCAVI</b> ®	Acoustic	Panels
The original company has become the leading brand in the developmen brand that is well-known for the high performance of its produ	icts. It stands out for its exper	ience coupled with a constan	t need for innovation.
Its thirty-two different models, made from the most varied raw materials in	i diliferent colours and which a with the largest and mo	are divided into three categori st versatile range of acoustic	panels in the market.







The SQUARYDIFFUSOR® is a diffusion panel that has a higher balance between diffusion/absorption. It is a 2D quadratic diffuser with five slightly uneven gradients. The SQUARYDIFFUSOR® is made of low-density clay paste.

Due to its quadratic shape and the raw material it uses, its diffusion and absorption features are well balanced for a diffusion panel.

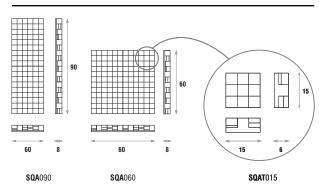
The SQUARYDIFFUSOR® enables quite good control of acoustics by fragmenting the reflected energy, while the absorption factor is not too high, therefore quite recommended for installation in small-sized rooms, by making the acoustics of those spaces quite homogeneous.

This product is also available in individual tiles mainly proposed for big diffusion surfaces, with continuous coating (see more SQAT15); it's an ideal product to the construction market.

# **FEATURES**

- · Manufactured with ceramic.
- Average diffusion: 0.57/m² [>100Hz;<5KHz].
- Fire-resistance: Euroclass A1 (similar to old M0).
- 100% recyclable.
- Installation: accessories included.

### **TECHNICAL DRAWINGS**



### **MODELS AND SIZES**

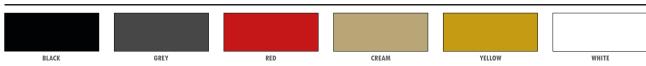
MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>SQA</b> 090	90 cm	30 cm	8 cm	11.6 Kg
<b>SQA</b> 060	60 cm	60 cm	8 cm	15.4 Kg
SQAT15	15 cm	15 cm	6 cm	0.6 Kg

### **DIFFUSION - ABSORPTION COEFFICIENT**

	0.05 0.16	0.31	0.45	0.46	0.48	0.49	0.53	0.56	0.59	0.61	0.60	0.64	0.69	0.73	0.71	0.70	0.66	0.51	0.44	0.40	0.36	0.28	0.21	0.57
αS	0.00 0.00	0.01	0.06	0.15	0.23	0.31	0.37	0.44	0.38	0.30	0.19	0.13	0.14	0.09	0.08	0.08	0.08	0.07	0.10	0.14	0.11	0.09	80.0	0.22
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0.2											\													DIFFUSION ABSORPTION
Hz	50 63	80	100	125	160	200	250	315	400	500	630	800	1k	1.25k	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k 1	0k	AVERAGE /NRC

■ ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654. ■ DIFFUSION COEFFICIENT: These values were obtained by mathematical calculations and tests carried out in our laboratory. Values [<100Hz and > 5K] are Non Standard Values.

### STANDARD CERAMIC COLOURS



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   The colours shown on this catalogue are only a reference and an illustration of the products finishing. The colours shown are not binding because brightness, contrast and colour balance may vary due to the printing process.
   Colours may vary due to raw-material suppliers' changes and some differences may occur in tonal range.
   Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



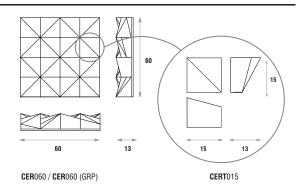
Image of 60x60cm model Ref.:CER060 (on the left) and the same model applied (ambient image)

The acoustic treatment panel CERAFLECTOR® is a 3D controlled dispersion multidirectional reflection panel and its modular design makes it unique in the market. It is built in two different models: in porcelain (CER060) and with the high-density GRP (CER060GRP)

The angles of reflection of this radial diffusion panel were thoroughly calculated. The depth factor is logarithmically varied and it is, therefore, a three-dimension omnidirectional reflection panel.

The CERAFLECTOR® panel controls primary reflections and fragments them in 64 vertices of incidence using the theoretical numerical sequence ratio of the primitive root as a basis for calculation. Thus, it produces exceptional results of sound diffusion in all directions and provides spaces with considerable sound perception.

### **TECHNICAL DRAWINGS**



# **FEATURES**

- Made of Porcelain or GRP.
- Average diffusion: 0.67/m² [>100Hz;<5KHz].</li>
- 100% recyclable.
- Fire-resistance: Euroclass A1 (similar to old M0) for porcelain;  $B\text{-}s1,\!d0 \; \text{(similar to old M1) for high-density GRP model}.$
- Installation: accessories included.

# **MODELS AND SIZES**

13 cm 23.7 K	'g
13 cm 17.6 K	g
13 cm 1.4 Kg	g

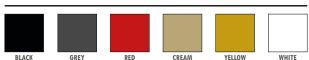
### **DIFFUSION - ABSORPTION COEFFICIENT**

	0.04	0.08	0.24	0.37	0.42	0.46	0.48	0.49	0.57	0.62	0.63	0.66	0.72	0.78	0.81	0.80	0.83	0.83	0.85	0.89	0.87	0.81	0.76 0.	70 0.67
αS	0.01	0.06	0.07	0.18	0.27	0.38	0.31	0.14	0.12	0.16	0.13	0.14	0.17	0.21	0.34	0.46	0.41	0.37	0.34	0.36	0.37	0.33	0.27 0.	23 0.22
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1.2																								
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			00	400	405	400		250	0.15						4.051	4.01		0.51	0.451			0.01	01 40	AVERAGE
Hz	50		80	100	125	160	200	250	315	400	500	630	800	1k	1.25k	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k 10	/NRC

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- DIFFUSION COEFFICIENT: These values were obtained by mathematical calculations and tests carried out in our laboratory.

Values [<100Hz and > 5K] are Non Standard Values.

### STANDARD CERAMIC COLOURS



### STANDARD GRP COLOURS



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Image of 60x60cm model Ref.:DIA060.

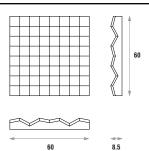
The DIAMOND® is a 3D-controlled dispersion multidirectional reflection panel with a depth factor that is logarithmically varied. It is, therefore, a three-dimension omnidirectional reflection panel that controls primary reflections and fragments the energy in 64 vertices of incidence by using the theoretical numerical sequence ratio of the primitive root as a basis for calculation.

It is built with ABS recyclable material, and its modular design makes it a particular and highperformance diffuser. The reflection angles were optimised according to mid-size room applications.

The DIAMOND® is an acoustic diffusion element with a lozenge geometry. The front view refers to 64 interconnected polygons with four multiple sound diffusion angles, which determines a diamond shape. It was created in 16 singular modules that have a quadrangular base and different extrusion heights on each corner. The combination of those positions results in a geometrically scattering diffusion pattern with a very attractive shape.

Thus, the DIAMOND® produces exceptional results of sound diffusion effect and provides spaces with considerable sound perception.

# **TECHNICAL DRAWINGS**



## **FEATURES**

- · Manufactured with ABS
- Average diffusion: **0.63/m**<sup>2</sup> [>100Hz;<5KHz].
- Fire-resistance: VO UL94 standards (similar to M2).
- 100% recyclable.
- · Installation: accessories included.

## **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>DIA</b> 060	60 cm	60 cm	8.5 cm	4.5 Kg

### **DIFFUSION - ABSORPTION COEFFICIENT**

	0.04	0.08	0.24	0.35	0.44	0.46	0.50	0.55	0.58	0.59	0.58	0.66	0.72	0.71	0.69	0.70	0.73	0.79	0.80	0.75	0.76	0.73	0.75 0	0.71	0.63
αS	0.01	0.03	0.06	0.10	0.15	0.14	0.20	0.25	0.23	0.38	0.29	0.25	0.27	0.22	0.25	0.19	0.13	0.13	0.14	0.10	0.09	0.06	0.05 0	0.05	0.22
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1.2																									
1.0																									
8.0												_								_	_		_	_	DIFFUSION
0.8											_		_		_					_		_		-	DIFFUSION
			_							<u></u>	_									_				-	DIFFUSION
0.6				_	_	_	_		_	<u></u>	_					_				_			_	_	<b>DIFFUSION</b> ABSORPTION

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### STANDARD ABS COLOURS



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  Typical Indoor Confort Standards state a temperature range of 20°C -27°C (88°F -81°F), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI\* products' range.

  Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



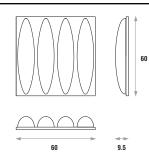
Image of 60x60cm model Ref.:DYN060

JOCAVI® has developed this acoustic diffusion panel by using non-linear convex shapes, based on a set of three ellipses which were later altered and optimised in order to achieve an oval shape with better angular diffusion coverage.

The external raw material of this panel was selected out of some materials that have the fastest and most specific properties required for a diffuser with these characteristics. However, the ABS still has some advantages, namely UV protection, impact resistance and fire resistance M2.

The DYNAMICFLOW®'s interior is composed of a substance made of impregnated mineral fibres and textiles, which gives this product a specific mass and also contributes to its consistence. The back part consists of an even surface. Its shape adjusts to even surfaces. It can be used on "T" profile false ceilings or on walls, by using our glues or fastening materials.

### **TECHNICAL DRAWINGS**



# **FEATURES**

- · Manufactured with ABS.
- Average diffusion: **0.61/m**<sup>2</sup> [>100Hz;<5KHz].
- Fire-resistance: VO UL94 standards (similar to M2).
- · 100% recyclable.
- · Installation: accessories included.

# **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>DYN</b> 060	60 cm	60 cm	9.5 cm	4.3 Kg

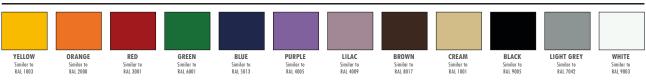
# **DIFFUSION - ABSORPTION COEFFICIENT**

	0.07	0.15 0.26	0.31	0.34	0.35	0.37	0.44	0.47	0.54	0.58	0.61	0.68	0.73	0.74	0.77	0.77	0.81	0.79	0.82	0.83	0.83	0.79	0.68	0.61
αS	0.00	0.00 0.00	0.11	0.14	0.16	0.19	0.21	0.24	0.28	0.32	0.30	0.27	0.28	0.26	0.22	0.17	0.19	0.20	0.18	0.14	0.11	0.11	0.06	0.20
1.4																								
1.2																								
1.0																								
8.0																_		_				_		
0.8														_									_	DIFFUSION
						_	_	_	_	_	_											_		DIFFUSION
0.6	_		_		_	_	_	_	_	_							_					_	_	
0.6 0.4	_	_				_	_				_										_	<u> </u>	<u>'</u>	DIFFUSION  ABSORPTION  AVERAGE

- ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654.
- DIFFUSION COEFFICIENT: These values were obtained by mathematical calculations and tests carried out in our laboratory.

## $\label{eq:Values} \blacksquare \ \mbox{Values} \ [< 100 \mbox{Hz and} \ > 5 \mbox{K}] \ \mbox{are Non Standard Values}.$

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  \*\*Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.





Image of 60x60cm model Ref.:TFX060.

TWO®FX is an acoustic diffusion panel for High-End Studios and High-Performance room's applications.

The diffusion pattern is based on a sequence of the 7 musical notes followed by a mathematical routine of transpositions, inversions and retrogrades. The shapes of the component parts are predominantly convex, but there are also some concave, they never repeat the positioning before the end of the sequence of the notes' cadence.

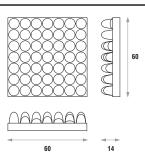
During 5 years of the production of the TWO®FX, this model was made on HIPS. Now, JOCAVI® improves this model's characteristics using GRP as raw-material. This model updated on GRP, increases the mass that helps to improve his diffusion acoustic

TWO®FX provides features of a beautiful diffusion surface with highly musical characteristics, simultaneously.

# **FEATURES**

- · Manufactured with GRP.
- Average diffusion: **0.68/m**<sup>2</sup> [>100Hz;<5KHz].
- Fire-resistance: B-s1,d0 (similar to old M1)
- 100% recyclable.
- · Installation: accessories included.

### **TECHNICAL DRAWINGS**



# **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>TFX</b> 060	60 cm	60 cm	14 cm	8.2 Kg

### **DIFFUSION - ABSORPTION COEFFICIENT**

	0.04	0.08 0.	21 (	0.35	0.42	0.46	0.48	0.49	0.57	0.62	0.63	0.67	0.73	0.78	0.82	0.82	0.84	0.85	0.87	0.89	0.87	0.81	0.76	0.70	0.68
αS	0.00	0.01 0.	)5 C	0.07	0.15	0.19	0.24	0.18	0.15	0.16	0.13	0.14	0.16	0.20	0.29	0.40	0.34	0.35	0.34	0.38	0.36	0.29	0.27	0.25	0.21
1.4																									
1.2																									
1.0																									
0.8											_													_	DIFFUSION
0.8																							_	-	DIFFUSION
			_					_		_												_	_	-	
0.6			_		_	_	_		_					_	_	<u></u>					_	_	<u> </u>	-	<b>DIFFUSION</b> ABSORPTION

- ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654. ■ DIFFUSION COEFFICIENT: These values were obtained by mathematical calculations and tests carried out in our laboratory.
- Values [<100Hz and > 5K] are Non Standard Values.

### STANDARD GRP COLOURS



- JOCAVI\* accepts no responsibility for any printing errors. Specifications can be modified without prior notice, if technical or commercial reasons so require.
   RAL\* is an international independent colour standard system partner for industry, trade, architecture and design. Should be consulted before placing any order.
   The colours shown on this catalogue are only a reference and an illustration of the products finishing. The colours shown are not binding because brightness, contrast and colour balance may vary due to the printing process.
   Colours may vary due to raw-material suppliers changes and some differences may occur in tonal range.
   Typical Indoor Comfort Standards state a temperature range of 20°C 27°C (68° 18°P), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI\* products' range.
   Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



Image of 60x60cm model Ref.:RPL060

The RIPPLE® was especially designed to have both absorption and diffusion features, balancing these two assets perfectly. It has a great diffusion pattern as well as very interesting and particular absorption characteristics.

The RIPPLE® is an essential product when you require a magnificent and controlled high-frequency sound, adding at the same time some absorption to the mid-range of the sound spectrum.

The RIPPLE® enables us to create uniform surfaces with a single model that softly absorbs the sound waves while maintaining the vivacity of the musical instruments' harmonics, which is very important for live and recording mixing techniques.

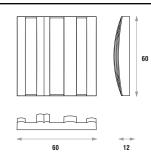
Thus, if you are looking for a superb sound in a room, without compromising absorption, you will certainly reach the required acoustics with this product, by adding a few pieces of low-frequencies bass traps as well.

The most suitable application areas for this product are: music studio rooms, piano and acoustic instruments rooms, live rooms in general, auditoriums, theatres as well as all the spaces that need specific care on sound intelligibility.

# **FEATURES**

- · Manufactured with ABS and high-quality fabric.
- Average diffusion: 0.59/m² [>100Hz;<5KHz].</li>
- NRC: 0.39/m<sup>2</sup>.
- Fire-resistance: VO UL94 standards (similar to M2).
- · Recyclable.
- Installation: accessories included.
- · Several colours available.

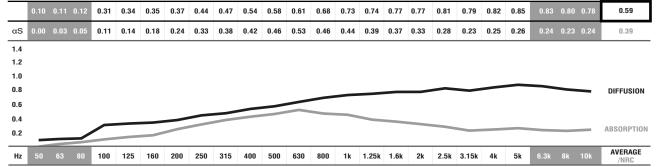
### **TECHNICAL DRAWINGS**



# **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
RPL060	60 cm	60 cm	12 cm	4.5 Kg

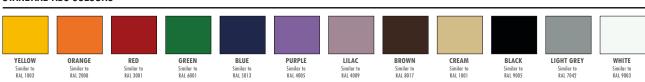
### **DIFFUSION - ABSORPTION COEFFICIENT**



- ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654.
- DIFFUSION COEFFICIENT: These values were obtained by mathematical calculations and tests carried out in our laboratory

■ Values [<100Hz and > 5K] are Non Standard Values.

### STANDARD ABS COLOURS



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   Colours may vary due to raw-material suppliers' changes and some differences may occur in tonal range.
   Spized almoor Confrott Standards state a temperature range of 20°C 27°C (68° 181\*), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI\* products' range.
   Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



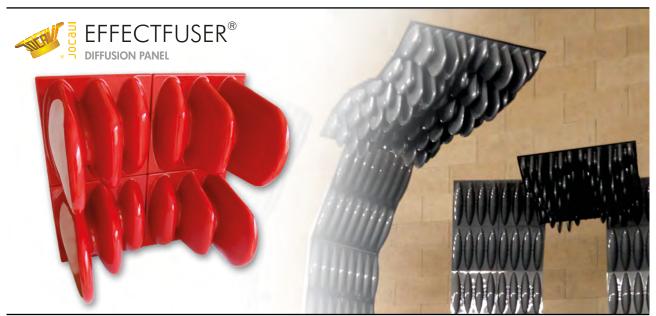


Image of 60x60cm model Ref.:EFX060 (on the left) and 180x120cm Ref.:EFXC0MBI (ambient image

Diffusion shells are acoustic treatment elements used in large volume rooms, such as theatres and auditoriums, where orchestral concerts or mere recitals take place.

The installation of these acoustic diffusion components aims to project the natural sound from the instruments and maintain some liveliness in the room's acoustics. JOCAVI®'s EFFECTFUSER® has been designed at the scale of these needs. It is a large-sized diffuser that provides a very homogeneous diffusion within the diffuse sound spectrum. Due to its shape and depth, the EFFECTFUSER\* has a high diffusion coefficient on medium/low frequencies, thus making it more balanced when compared with other diffusers. This piece can be coupled and multiplied in order to suit each room's project.

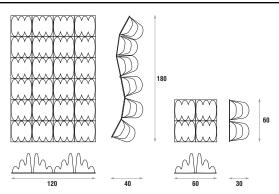
When mounted, several modules must be grouped in order to obtain a diffusion area that is proportional to each space. They are properly positioned on ceilings or walls in order to obtain sound diffusion at the intended angles.

combination with other models of absorption panels.

# **FEATURES**

- Manufactured with recycled ABS
- Average diffusion: **0.61/m**<sup>2</sup> [>100Hz;<5KHz].
- Fire-resistance: VO UL94 standards (similar to M2).
- 100% recyclable.
- Installation: accessories included.

### **TECHNICAL DRAWINGS**



# **MODELS AND SIZES**

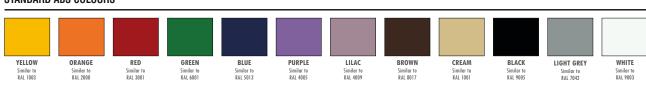
MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>EFX</b> combi	180 cm	120 cm	40 cm	55.5 Kg
<b>EFX</b> 060	60 cm	60 cm	30 cm	5.4 Kg

### **DIFFUSION - ABSORPTION COEFFICIENT**

	0.00 0	.05 0.11	0.17	0.20	0.36	0.43	0.49	0.58	0.03	0.09	0.76	0.82	0.79	0.74	0.72	0.75	0.71	0.68	0.04	0.65	0.02	0.53	0.50	0.61
αS	0.00 0	.01 0.02	0.08	0.10	0.18	0.26	0.15	0.12	0.13	0.16	0.14	0.16	0.20	0.26	0.24	0.27	0.31	0.35	0.35	0.37	0.30	0.31	0.21	0.20
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0.8 0.6			_		_			_	_	_		<u></u>	_		_							_		DIFFUSION  ABSORPTION

- ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654. ■ DIFFUSION COEFFICIENT: These values were obtained by mathematical calculations and tests carried out in our laboratory.
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# STANDARD ABS COLOURS



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   Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



Image of Mellowcloud® DIF model Ref.:MELDIF appplied (ambient image)

The MELLOWCLOUD® DIF is a One Dimensional Curved Shaped Diffuser Acoustic panel for Multipurpose, Auditoriums and Theatre Halls.

This is a product was devised to be suspended in ceilings or metal grids; it can be also used as fixed or motorized acoustic shells. This type of acoustic material is mainly applied in large area of application such as auditoriums, conference rooms, multipurpose rooms and airports, places where acoustic treatment with a modular continuous surface is required.

It is a diffuser material that also provides somewhat of homogenous sound spectrum absorption. The  $\label{eq:mellowcloud} \textbf{MELLOWCLOUD}^{\texttt{B}} \, \textbf{DIF} \, \text{evolves} \, \text{and} \, \text{meets} \, \text{the aesthetic challenge, while also offering an optimal sound diffusion} \, \text{and absorption characteristics}.$ 

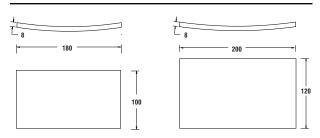
The architecture involves rectilinear and curvilinear lines. Flat rigid surfaces provide uneven sound pressure across the audience area. Shaping and curving the surfaces can improve the coverage of the sound diffusion; this will help the results, although it is a vast subject that requires its own tools of  $experimentation \ on \ case-by-case \ base \ for \ each \ project. \ MELLOWCLOUD \ ^*DIF \ provides \ architects \ and \ designers \ with \ wide \ latitude \ in \ curvilinear \ design.$ 

MELLOWCLOUD® DIF can be customized as to its shape and size to better adapt to each space. Custom panels offer in a variety of types, sizes, ellipses, geometric shapes, vaults, acoustical domes, thicknesses, and finishes.

# **FEATURES**

- · JCP® micro-fibers glass and reinforced gypsum and finishing.
- Average diffusion: 0.37/m² [>100Hz;<5KHz].</li>
- NRC: 0.18/m².
- · Fire-resistance: Euroclass A2-s1,d0 (similar to old M0).
- · Standard and custom shapes.
- · Optimized shape, arraying and positioning insures uniform coverage.
- · Suspended using Integrated mounting hardware and cable system (only four supports/hangers by each panel).
- Very lightweight (4 Kg/m2 80 mm thick panel)

### TECHNICAL DRAWINGS



# **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
MELDIF200	200 cm	120 cm	8 cm	14 Kg
MELDIF180	180 cm	100 cm	8 cm	9 Kg

### **DIFFUSION - ABSORPTION COEFFICIENT**

	0.00	0.00	0.01	0.03	0.04	0.06	0.07	0.12	0.19	0.25	0.38	0.43	0.47	0.49	0.49	0.51	0.48	0.45	0.47	0.47	0.46	0.44	0.42	0.41	0.37
αS	0.01	0.07	0.15	0.19	0.21	0.18	0.16	0.17	0.19	0.20	0.18	0.16	0.15	0.17	0.19	0.19	0.21	0.20	0.19	0.18	0.17	0.16	0.17	0.15	0.18
1.4																									
1.2																									
1.0																									
0.8																									
0.6																									
0.4																									DIFFUSION
0.2																									ABSORPTION
Hz	50	63	80	100	125	160	200	250	315	400	500	630	800	1k	1.25k	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	AVERAGE /NRC
_																									/NIG

- DIFFUSION COEFFICIENT: These values were obtained by mathematical calculations and tests carried out in our laboratory.
- ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654.
- $\blacksquare$  Values [<100Hz and > 5K] are Non Standard Values.

### STANDARD FINISHING COLOURS



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   Colours may vary due to raw-material suppliers' changes and some differences may occur in tonal range.

   Wood and Fabric products are highly succeptible to change its appearance with humidity and perfect the printing and after the installation.

   Upoal Indoor Comfort Standards state a temperature range of 20°C 27°C (68°F 51°C, 68°F 51°C, 68



Image of 60x60cm models Ref.:WFL060 and WFL060Ab (on the left) and 60cm Ref.:WFL060Ab (ambient image).

The Woodfoil® is a slightly concave diffusion panel, made of varnished birch plywood on a soft wood structure.

This diffuser is great to be used in concert halls, such as theatres and auditoriums, and is ideal for building acoustic diffusion shells.

This model has two options: the Woodfoil® diffusion panel, which is made of plain birch plywood, and the Woodfoil®Ab, which has different holes that provide it with a higher absorption coefficient.

Its format allows us to make the appropriate adjustment, by using several panels and positions through  $90^{\circ}$  rotations, in order to obtain the goals required for each room.

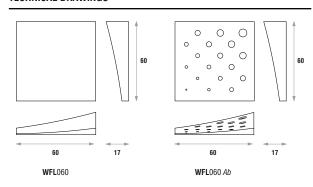
Both the angle and the gyrate of this piece were calculated to provide a more versatile use. When using multiple pieces jointly, the angle of incidence never is too convergent, thus providing a homogeneous scattering diffusion of sound energy, which contrasts with other models from our brand that have a different development conception.

The Woodfoil® is available in various wood finishings or regular colours, as an option, thus allowing an appropriate background for each space. The mounting process is rather easy by simply using the docking accessories that are supplied.

# **FEATURES**

- · Manufactured with Birch Plywood.
- NRC: 0.23/m2 (WFL060); 0.62/m2 (WFL060Ab)
- Woodfoil® Average diffusion: **0.68/m²** [>100Hz;<5KHz]
- Woodfoil<sup>®</sup>Ab Average diffusion: 0.51/m<sup>2</sup> [>100Hz;<5KHz].</li>
- Fire-resistance: Euroclass B-s2,d0 (similar to old M1).
- Two options: Woodfoil® (diffusor) Woodfoil®Ab (diffusion with absorption characteristics).
- · Installation: accessories included.

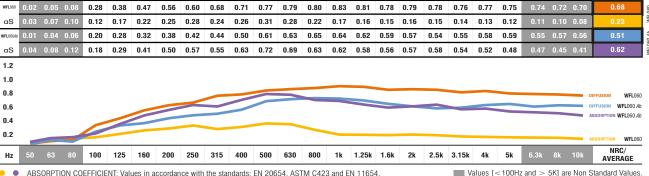
#### **TECHNICAL DRAWINGS**



# **MODELS AND SIZES**

	MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
••	<b>WFL</b> 060	60 cm	60 cm	17 cm	2.9 Kg
• •	<b>WFL</b> 060 <i>Ab</i>	60 cm	60 cm	17 cm	2.8 Kg

### **DIFFUSION - ABSORPTION COEFFICIENT**



# DIFFUSION COEFFICIENT: These values were obtained by mathematical calculations and tests carried out in our laboratory

#### Values [<100Hz and > 5K] are Non Standard Values.

### **WOOD VENEER FINISHINGS**



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   Colours may vary due to raw-material suppliers' changes and some differences may occur in fonal range.
   Due to its natural origin, wood-based products will always present natural imperfections inherent to the organic nature. And for similar reasons, they will also present traces of old-age in the course of time.
   Wood and Fabric products are highly susceptible to change its appearance with humidity and temperature. Close attention must be paid to the storage conditions and the acclimatization before, during and after the installation.
   Typical Indoor Comfort Standards state a temperature range of 20°C 27°C (68°F 18°F), and a relative thurnidity of less those. These would be considered as normal operational levies of JOCAVI\*
   Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



Image of 60x60cm model Ref.:W0D060

This wooden diffusion panel is the result of a long design and analysis process and one of JOCAVI®1s options in terms of diffusion panels. The use of this extremely efficient panel is imperative to control primary reflections and other reflections from front walls, thus improving correct sound diffusion in the room.

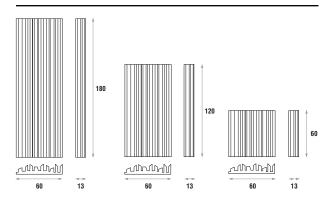
The WOODIFFUSOR® is a 2D diffusion panel that focuses on controlling horizontal dispersion and is efficient in a wide range of frequencies. It is based on the rotation sequence of primary incidence angles, thereby making sound diffusion uniform in several directions with similar energy.

This panel is made of solid pinewood with a finish of five different colours of varnish. The wood stands out inside the rooms and makes this product look very attractive, both acoustically and aesthetically.

# **FEATURES**

- · Manufactured with self-sustainable forest wood.
- Average diffusion: **0.59/m**<sup>2</sup> [>100Hz;<5KHz].
- Fire-resistance: Euroclass D-s1,d0 (similar to old M3).
- · Finished with ecological varnishes.
- 100% recyclable.
- Installation: accessories included.

### **TECHNICAL DRAWINGS**



### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>W0D</b> 180	180 cm	60 cm	13 cm	57 Kg
<b>W0D</b> 120	120 cm	60 cm	13 cm	38 Kg
<b>W0D</b> 060	60 cm	60 cm	13 cm	19 Kg

### **DIFFUSION - ABSORPTION COEFFICIENT**

	0.04	0.11 0.29	0.44	0.48	0.53	0.55	0.54	0.57	0.63	0.60	0.64	0.70	0.72	0.71	0.73	0.75	0.63	0.50	0.47	0.35	0.31	0.27	0.23	0.59
αS	0.00	0.06 0.07	0.05	0.06	0.16	0.15	0.14	0.10	0.13	0.15	0.16	0.18	0.22	0.28	0.24	0.24	0.22	0.21	0.25	0.26	0.11	0.08	0.07	0.19
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1.2																								
1.0																								
0.8																								
0.6																								
0.4																								
0.2																								DIFFUSION
																								ABSORPTION
Hz	50	63 80	100	125	160	200	250	315	400	500	630	800	1k	1.25k	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	/NRC

- ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654.
- DIFFUSION COEFFICIENT: These values were obtained by mathematical calculations and tests carried out in our laboratory.

# $\blacksquare$ Values [<100Hz and > 5K] are Non Standard Values.

### **NATURAL WOOD COLOURS**



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   Colours may vary due to raw-material suppliers' changes and some differences may occur in tonal range.
   Use to its natural origin, wood-based products will always present natural imperfections inherent to the organic nature. And for similar reasons, they will also present traces of old-age in the course of time.
   Wood and Fabric products are highly susceptible to change its appearance with humidity and temperature. Close attention must be paid to the storage conditions and the acclimatization before, during and after the installation.
   Typical Indoor Comfort Standards state a temperature range of 20°C -27°C (68°T 81°F), and a relative thumidity of less thumidity. These would be considered as normal operational levels of JOCANI\*
   Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.







Image of 60x60cm model Ref.:TNF060.

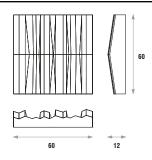
JOCAVI® is presenting this design proposal on diffusion products which is not as common. This has been done on the basis of the positive aspects of complex-shaped diffusers and the tasks carried out in the field of diffusion, to the detriment of the usual numerical sequences that are repeated to build diffusers. When a diffuser has a complex structure, as opposed to the identical or retrograde repetitions, it adopts algorithms that originate a series of N elements, thus causing an optimal musical characteristic.

Numerically structured diffusers scatter the sound effectively but have some inherent associated absorption. This model is meant to be an acoustic diffuser with the best scattering features possible coupled with the lowest absorption coefficient.

This new model has abrupt joints with planes that lean on each other, which are always different, but do not cause big concavities or parallelisms.

Design was an ever present concern in the manufacture of this product, in order not to make it unwanted due to its shape, regardless of its obvious use.

# **TECHNICAL DRAWINGS**



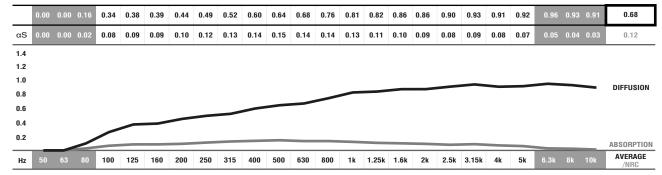
## **FEATURES**

- · Manufactured with ABS.
- Average diffusion: 0.68/m² [>100Hz;<5KHz].
- Fire-resistance: VO UL94 standards (similar to M2).
- 100% recyclable.
- · Installation: accessories included.

# **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
TNF060	60 cm	60 cm	12 cm	4.1 Kg

### **DIFFUSION - ABSORPTION COEFFICIENT**



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### STANDARD ABS COLOURS



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   Colours may vary due to raw-material suppliers changes and some differences may occur in tonal range.
   Typical Indoor Comfort Standards state a temperature range of 20°C 2°C 80°E 8\*\* 18°Ps, and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI\* products' range.
   Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



Image of 60x60cm model Ref.:PLR060

Plura® is an acoustic diffusion panel, manufactured in ABS on an absorbent filling box.

His design has a geometry that reproduces symmetry at a 180 rotation. It consists of a combination of two ellipses in one bent hollow, thus giving it a predominantly round shape with tenuous angles, which is good for diffusion.

Plura® is meant to diffuse mid and mid-high frequencies. When using multiple pieces jointly on a continuous area, it improves its sound diffusion efficiency. Amazing diffusion effect can be obtained when used in large rooms. We can make several different aesthetic combination effects by rotating the panels 90° or 180° and positioning them according to one's taste and to the room's requirements.

The inner part of this model is made on a composite substance of impregnated mineral fibers and textiles, which gives this product a specific mass and also contributes to its consistence.

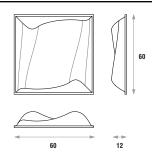
The external raw material of this panel was selected out of some materials that have the fastest and most specific properties required for a diffuser with these characteristics, however the ABS still has some advantages, namely UV protection, impact resistance and fire resistance M2.

The back part consists of a flat surface, which includes the mounting accessories. Its shape

# **FEATURES**

- · Manufactured with ABS.
- Average diffusion: **0.67/m**<sup>2</sup> [>100Hz;<5KHz]. • Fire-resistance: VO - UL94 standards (similar to M2).
- 100% recyclable.
- · Installation: accessories included.
- T-Ceiling application.

### **TECHNICAL DRAWINGS**



# **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
PLR060	60 cm	60 cm	12 cm	4.3 Kg

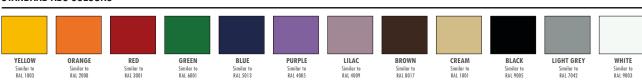
### **DIFFUSION - ABSORPTION COEFFICIENT**

	0.01	0.03	0.07	0.19	0.30	0.38	0.55	0.60	0.68	0.71	0.76	0.79	0.80	0.83	0.81	0.78	0.80	0.81	0.79	0.78	0.76	0.74	0.72	0.70	0.67
αS	0.03	0.07	0.12	0.18	0.22	0.38	0.37	0.47	0.58	0.50	0.47	0.44	0.29	0.23	0.19	0.18	0.16	0.15	0.13	0.11	0.09	0.05	0.04	0.04	0.33
1.4																									
1.2																									
1.0																									
8.0									_		_	_				_									DIFFUSION
0.6							_																		DIITOSION
0.4					_	/																			
0.2																									ABSORPTION
																									AVERAGE

- ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654.
- DIFFUSION COEFFICIENT: These values were obtained by mathematical calculations and tests carried out in our laboratory.

 $\label{eq:Values} \blacksquare \ \mbox{Values} \ [< 100 \mbox{Hz and} \ > 5 \mbox{K}] \ \mbox{are Non Standard Values}.$ 

### STANDARD ABS COLOURS



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   The colours shown on this catalogue are only a reference and an illustration of the products finishing. The colours shown are not binding because brightness, contrast and colour balance may vary due to the printing process.
   Colours may vary due to raw-material suppliers changes and some differences may occur in tonal range.
   Typical indoor Comfort Standards state a temperature range of 20°C -20°C (68° 18°P), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI\* products' range.
   Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.







Image of 60x60cm model Ref.:ADDC060 (on the left) and Ref.:ADDC060 (ambient image)

This panel is mainly used for application in auditoriums, conference rooms, multipurpose rooms, places where acoustic treatment with a continuous coating surface is required. It is an absorbent panel that provides a relevant balance in the midrange of the sound spectrum and also combines features of a unidirectional diffuser.

There are six types of perforations that give this product several aesthetic and acoustic variants.

This product uses three absorbent materials inside it which have different densities that allow different degrees of permeability, thus making it more efficient at absorbing sound. In large areas, its application may be continuous or modular, thus combining features of other products from this catalogue.

Although this panel is manufactured in standard sizes, other measurements can be considered depending on each project.

This product is very popular because the use of wood in rooms makes them look comfortable

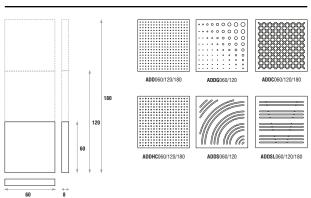
# **FEATURES**

- Uses 80% of recycled materials
- NRC: (ADD 0.56/m²), (ADDHC 0.71/m²), (ADDG 0.60/m²)  $(ADDS 0.78/m^2)$ ,  $(ADDSL 0.79/m^2)$ ,  $(ADDC 0.81/m^2)$ .
- Fire-resistance: Euroclass B-s2,d0 (similar to old M1).
- 100% recyclable.

0.4 0.2 Hz

- Installation: accessories included.
- · Other sizes are available on demand.

## **TECHNICAL DRAWINGS**



# **MODELS AND SIZES**

	MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
•	ADD060/120/180	60/120/180 cm	60 cm	8 cm	6.3/12.6/18.9 Kg
•	ADDHC060/120/180	60/120/180 cm	60 cm	8 cm	6.3/12.6/18.9 Kg
•	ADDG060/120	60/120 cm	60 cm	8 cm	6.3/12.6 Kg
•	ADDS060/120	60/120 cm	60 cm	8 cm	6.3/12.6 Kg
•	ADDSL060/120/180	60/120/180 cm	60 cm	8 cm	6.3/12.6/18.9 Kg
•	ADDC060/120/180	60/120/180 cm	60 cm	8 cm	6.3/12.6/18.9 Kg

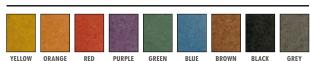
### **ABSORPTION COEFFICIENT**

•	αS	0.04 (	0.07 0.09	0.36	0.47	0.52	0.66	0.59	0.55	0.63	0.67	0.70	0.67	0.55	0.50	0.46	0.44	0.41	0.39	0.44	0.48	0.49 0.51 0.50	0.56
•	αS	0.04	0.08 0.15	0.39	0.47	0.54	0.61	0.72	0.75	0.71	0.79	0.81	0.84	0.81	0.76	0.57	0.52	0.55	0.49	0.52	0.54	0.55 0.55 0.57	0.71
•	αS	0.04 (	0.08 0.12	0.37	0.50	0.54	0.60	0.61	0.60	0.67	0.70	0.72	0.68	0.59	0.56	0.51	0.49	0.48	0.44	0.48	0.50	0.58 0.58 0.56	0.60
•	αS	0.02 (	0.08 0.15	0.39	0.46	0.55	0.63	0.69	0.67	0.72	0.78	0.83	0.87	0.86	0.84	0.83	0.77	0.74	0.72	0.69	0.68	0.62 0.60 0.60	0.78
•	αS	0.03 (	0.06 0.15	0.41	0.48	0.59	0.65	0.70	0.68	0.72	0.79	0.86	0.91	0.89	0.85	0.80	0.76	0.70	0.74	0.71	0.67	0.60 0.59 0.61	0.79
•	αS	0.04 (	0.07 0.16	0.36	0.49	0.60	0.67	0.75	0.79	0.78	0.80	0.85	0.86	0.90	0.92	0.90	0.79	0.74	0.72	0.69	0.71	0.68 0.66 0.64	0.81
	1.2																						
	1.0																						
	0.8																						
	0.6																						

 ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654.  $\blacksquare$  Values [<100Hz and > 5K] are Non Standard Values

### **ENGINEERED COLOURED WOOD COLOURS**

100 125



160 200

#### **WOOD VENEER FINISHINGS**

1k 1.25k 1.6k 2k 2.5k 3.15k 4k



5k

# **IMPORTANT NOTICES**

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  Colours may vary due to raw-material suppliers changes and some differences may occur in tonal range.

  Due to its natural origin, wood-based products will always present natural imperfections inherent to the organic nature. And for similar reasons, they will also present traces of old-age in the course of time.

  Wood and Fabric products are highly susceptible to change its appearance with humidity and temperature. Close attention must be paid to the storage conditions and the acclimatization before, during and after the installation. Typical Indoor Confront Standards state a temperature range of 20°C -27°C (68°F 81°F), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI\*

  Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.

250 315 400 500 630 800



Image of 60x60cm model Ref.:LFM060 (on the left) and Ref.:LFM120 (ambient image)

JOCAVI® has developed the LeakyFM® as an additional option within the range of its absorption panels. It is mainly meant for radio and television studios, as well as broadcasting and voice-over rooms and auditoriums.

The typical voice-off loudness requires an adequate planning of the room's acoustics in order to provide good sound reception. JOCAVI® has come up with this product which has a good absorption coefficient at 500hz, exactly within the mid-range of the human voice, thus creating a sort of a loudness effect in rooms that radio speakers and professionals much appreciate.

Although it is different in aesthetic terms, the LeakyFM® is attractive and has a pleasant  $design. \ This \ panel \ provides \ the \ customer \ with \ six \ options \ to \ project \ his \ space.$ 

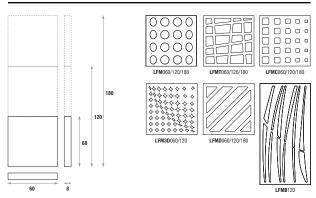
The LeakyFM® is available in three different aesthetics with equally different acoustic features.

It is built by combining absorbent raw materials made from natural fibres and recycled synthetic fibres.

# **FEATURES**

- Uses 80% of recycled materials
- NRC: (LFM 0.86/m²), (LFMB 0.82/m²), (LFMC 0.80/m²) (LFM3D 0.74/m²), (LFMT 0.93/m²), (LFMD 0.93/m²).
- · Fire-resistance: Euroclass B-s2,d0 (similar to old M1).
- 100% recyclable.
- Installation: accessories included.
- · Other sizes are available on demand.

# **TECHNICAL DRAWINGS**

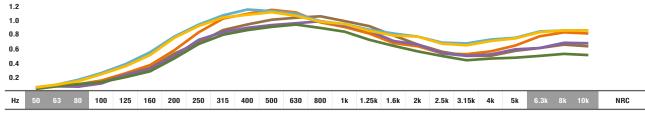


# **MODELS AND SIZES**

	MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
•	LFM060/120/180	60/120/180 cm	60 cm	8 cm	6.3/12.6/18.9 Kg
•	<b>LFMB</b> 120	120 cm	60 cm	8 cm	12.6 Kg
•	LFMC060/120/180	60/120/180 cm	60 cm	8 cm	6.3/12.6/18.9 Kg
•	LFM3D060/120	60/120 cm	60 cm	8 cm	6.3/12.6 Kg
•	LFMT060/120/180	60/120/180 cm	60 cm	8 cm	6.3/12.6/18.9 Kg
•	LFMD060/120/180	60/120/180 cm	60 cm	8 cm	6.3/12.6/18.9 Kg

### **ABSORPTION COEFFICIENT**

• •	αS	0.04	0.06 0.09	0.16	0.25	0.38	0.58	0.81	1.01	1.09	1.15	1.12	0.96	0.87	0.80	0.67	0.62	0.54	0.52	0.55	0.63	0.77	0.81	0.80	0.86
•	αS	0.05	0.06 0.07	0.15	0.23	0.34	0.52	0.67	0.85	0.94	1.00	1.01	1.04	0.99	0.90	0.77	0.64	0.55	0.48	0.48	0.55	0.59	0.64	0.62	0.82
• -	αS	0.05	0.06 0.07	0.14	0.23	0.30	0.49	0.71	0.81	0.88	0.92	0.95	0.97	0.91	0.82	0.69	0.66	0.54	0.48	0.50	0.58	0.59	0.65	0.64	0.80
• 3	αS	0.03	0.05 0.08	0.14	0.20	0.27	0.44	0.66	0.78	0.86	0.89	0.92	0.88	0.83	0.71	0.63	0.56	0.50	0.43	0.45	0.46	0.48	0.51	0.49	0.74
• •	αS	0.04	0.08 0.15	0.26	0.38	0.55	0.74	0.92	1.06	1.16	1.13	1.08	0.97	0.93	0.84	0.79	0.75	0.69	0.68	0.71	0.75	0.83	0.84	0.84	0.93
• -	αS	0.04	0.08 0.14	0.25	0.36	0.52	0.73	0.91	1.04	1.09	1.12	1.05	0.96	0.92	0.82	0.76	0.75	0.68	0.65	0.69	0.74	0.82	0.84	0.84	0.93
_	1.2																					_			



ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654.

#### Values [<100Hz and > 5K] are Non Standard Values.

### **ENGINEERED COLOURED WOOD COLOURS**



### **WOOD VENEER FINISHINGS**



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  Use to its natural origin, wood-based products will always present natural imperfections inherent to the organic nature. And for similar reasons, they will also present traces of old-age in the course of time.
  Wood and Fabric products are highly susceptible to change its appearance with humidity and temperature. Close attention must be paid to the storage conditions and the acclimatization before, during and after the installation.
  Typical Indoor Comfort Standards state a temperature range of 20°C -27°C (68° -8 17°), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI\* products' range.
  Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



Image of 60x60cm model Ref.:ARC060

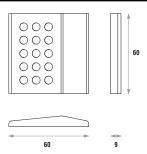
The ARCHTRAP® is a flat-shaped acoustic absorbent panel, made with birch plywood on a calculated absorbent box. This panel is meant to absorb mid-low range frequencies. Its shape is the same as the ATP® Snowsorb® and both can be used together to achieve numerous sound absorption solutions.

We can make several different aesthetic effects by rotating the panels 90° degrees and positioning them according to one's taste and to the room requirements.

As this panel is made of varnished birch plywood, it also provides some scattering diffusion. When using multiple pieces jointly, the angle of incidence never is too convergent which leads to a homogeneous sound scattering.

This piece is available in various wood finishings or regular colours, thus allowing an appropriate background for each space. The mounting process is rather easy by simply using the docking accessories' screws that are supplied.

# **TECHNICAL DRAWINGS**



## **FEATURES**

- · Manufactured in birch plywood.
- NRC: 0.63/m2.
- Average diffusion:  $0.48/m^2$  [>100Hz;<5KHz].
- Fire-resistance: Euroclass B-s2,d0 (similar to old M1).
- · Recyclable.
- Installation: accessories included.
- · Several colours available.

# **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
ARC060	60 cm	60 cm	9 cm	5 Kg

### **DIFFUSION - ABSORPTION COEFFICIENT**

	0.01 0.0	3 0.05	0.15	0.23	0.30	0.38	0.37	0.39	0.46	0.49	0.48	0.50	0.51	0.54	0.59	0.61	0.62	0.60	0.59	0.58	0.55	0.56	0.55	0.48
αS	0.04 0.0	9 0.13	0.18	0.31	0.40	0.51	0.57	0.61	0.69	0.68	0.66	0.71	0.69	0.60	0.58	0.57	0.58	0.57	0.54	0.50	0.49	0.47	0.46	0.63
1.4																								
1.2																								
1.0																								
8.0																								
0.6																							_	DIFFUSION
0.4							_	_																ABSORPTION
0.2																								
Hz	50 63	3 80	100	125	160	200	250	315	400	500	630	800	1k		1.6k	2k		3.15k	4k	5k		8k		AVERAGE

- ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654.
- DIFFUSION COEFFICIENT: These values were obtained by mathematical calculations and tests carried out in our laboratory.

Values [<100Hz and > 5K] are Non Standard Values.

### **WOOD VENEER FINISHINGS**



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   Wood and Fabric products are highly susceptible to change its appearance with humidity and temperature. Close attention must be paid to the storage conditions and the acclimatization before, during and after the installation.
   Typical Indoor Comfort Standards state a temperature range of 20°C 27°C (68°F 18°F), and a relative thurnidity of less those. These would be considered as normal operational levies of JOCAVI\*
   Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



Image of Addsorb® REV models Ref.:ADRV colour and Ref.:ADRH wood (on the left) and Ref.:ADRH colour (ambient image)

The ADDSORB REV® revetment is a composite wood veneer finish consisting of a medium/high density coloured fibreboard (Engineered Coloured Wood) which is grooved on the face and perforated on the back, its box interior is filed with a polystyrene absorbent layer.

The ADDSORB REV® revetment is also available, as an option, in natural wood veneer finish consisting of medium density fibreboard (MDF).

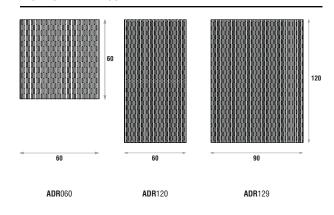
This type of acoustic covering is mainly used for large-scale areas of application: auditoriums, conference rooms, multipurpose rooms, airports, places where acoustic treatment with a continuous coating surface is required.

It is an absorbent panel that relevantly improves absorption in the mid-range of the sound spectrum. The ADDSORB REV® is presented in both standard and customised sizes providing different aesthetic and acoustic variants. These two finish options give this product a variety of natural wood finishes and colours. Due to their slots, the panel joints are invisible because of the change in geometry of the panel edges, and when carefully installed the surfaces can appear uniform.

The acoustic absorption coefficients are achieved by combining the percentage of the plate's grooves and perforation with the polystyrene absorbent layer. The acoustic performance may be increased if the product is applied with an air space between the product and the main wall or ceiling. The ADDSORB REV® is available for both ceiling and wall applications. It can be installed using the standard metal ceiling suspension system or direct fixing to the concrete surface using our accessories.

JOCAVI® can customize the sizes, perforations, colours and finishes, according to each specific project, but a minimum amount is required.

### **TECHNICAL DRAWINGS**



# **FEATURES**

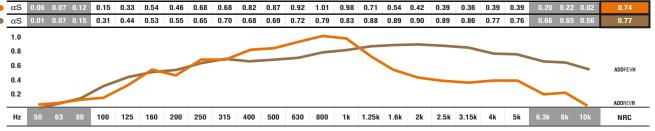
- · Finish: Coloured wood veneer and wood finishings.
- NRC: (ADDREVR 0.74/m²), (ADDREVH 0.77/m²)
- Perforations (%): (ADDREVR 25,8%), (ADDREVH 11,2%). • Fire-resistance: Euroclass B-s2,d0 (similar to old M1).
- Standard and customised grooves and perforations.
- 100% recyclable
- · Installation: metal or wood bars, glues and/or screws, can be provided.
- · Other sizes are available on demand, between dimensions of:
- Min. 60x60x4,2cm Max. 180x120x4,2cm

# **MODELS AND SIZES**

-	MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
•	ADRR060	60 cm	60 cm	4,6 / 5,2* cm	4,3 Kg
•	ADRR120	120 cm	60 cm	4,6 / 5,2* cm	8,7 Kg
•	ADRR129	120 cm	90 cm	4,6 / 5,2* cm	13 Kg
•	ADRH060	60 cm	60 cm	4,6 / 5,2* cm	4 Kg
•	ADRH120	120 cm	60 cm	4,6 / 5,2* cm	8 Kg
•	ADRH129	120 cm	90 cm	4,6 / 5,2* cm	12 Kg

\*WITH ALUMINIUM MOUNTING BARS (NOT INCLUDED).

# **ABSORPTION COEFFICIENT**



ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654.

### Values [<100Hz and > 5K] are Non Standard Values.

### **ENGINEERED COLOURED WOOD COLOURS**



#### **WOOD VENEER FINISHINGS**



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  Use to its natural origin, wood-based products will always present natural imperfections inherent to the organic nature. And for similar reasons, they will also present traces of old-age in the course of time.
  Wood and Fabric products are highly susceptible to change its appearance with humidity and temperature. Close attention must be paid to the storage conditions and the acclimatization before, during and after the installation.
  Typical Indoor Comfort Standards state a temperature range of 20°C -27°C (68°F 81°F), and a relative thumidity of less than the considered as normal operational levels of JOCAVITY products' range.
  Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.







Image of 60x60cm models Ref.:EBY060 (on the left) and Ref.:EBY060 (ambient image)

The EBONY® is a medium-frequency acoustic absorption panel. Its convex shape helps to reduce the first convergent angles in rooms. The front part of this model consists of a polyurethane resonant membrane in an air-box. Three other raw-materials with different properties are used inside it.

In spite of its small size, the EBONY® also has a reasonable absorption coefficient at low frequencies.

Due to its shape, the absorption panel EBONY® combines to perfection, technically and aesthetically, with the ATP diffuser model, the IVORY.

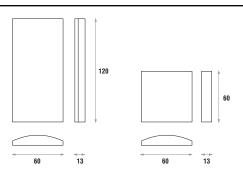
This product is meant to be mounted on walls and ceilings and its low weight makes it particularly suitable for ceilings.

The EBONY® is an absorbent panel which is widely efficient in the mid and mid-low range of the sound spectrum.

# **FEATURES**

- Uses 55% of recycled materials.
- NRC: 0.64/m<sup>2</sup>.
- 100% recyclable.
- Fire-resistance: Euroclass B (similar to old M1).
- Installation: accessories included.

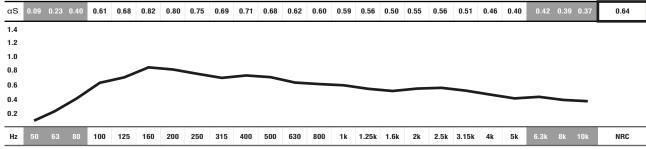
### **TECHNICAL DRAWINGS**



# **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>EBY</b> 120	120 cm	60 cm	13 cm	7.6 Kg
<b>EBY</b> 060	60 cm	60 cm	13 cm	3.8 Kg

### **ABSORPTION COEFFICIENT**



■ ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654.

 $\blacksquare$  Values [<100Hz and > 5K] are Non Standard Values.

### STANDARD FABRIC COLOURS



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   Typical Indoor Comfort Standards state a temperature range of 20°C 27°C (68°F 81°F), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI® products' range.

   Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



Image of 180x114cm model Ref.:CON180 (on the left) and 180x114cm models apllied (ambient image).

The CONVEXABSORBER® is an absorbent panel which is efficient at absorbing low and medium frequencies. It was designed to be installed on ceilings and walls.

It is manufactured by combining two techniques: a box tuned to 200 Hz, which is efficient at low and mid-low frequencies, and a mathematically studied absorbent labyrinth, which provides this product with an excellent performance in absorbing sound.

Given its characteristics, this panel balances reverberation times and echoes in large-sized rooms, auditoriums, etc..

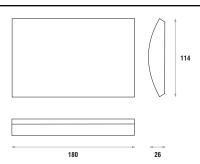
Because of its large and convex shape, it also is a diffuser with a large dispersion surface. When the areas so require, these panels can be installed alternately at 90° angles, the dispersion thus being on two plans.

The CONVEXABSORBER® panel was designed and tested in order to guarantee its high performance in controlling sound energy, by reducing resonances and reflections. It has a wide range of applications.

# **FEATURES**

- Uses 65% of recycled materials.
- NRC: 0.81/m2.
- Fire-resistance: Euroclass B (similar to old M1).
- · To apply in large rooms.
- · Installation: accessories included.

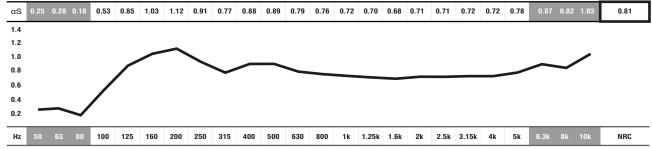
### **TECHNICAL DRAWINGS**



# **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>CON</b> 180	180 cm	114 cm	26 cm	35.1 Kg
CON120	120 cm	114 cm	26 cm	23.4 Kg

### **ABSORPTION COEFFICIENT**



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Values [<100Hz and > 5K] are Non Standard Values.

### STANDARD FABRIC COLOURS



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Image of 180x60cm, 120x60cm and 60x60cm models Ref.:MEL180, MEL120 and MEL060 (on the left) and three Ref.:MEL120 models appplied (ambient image) with MOTIF\* finishing.

Auditoriums, music audition rooms, studios, practice rooms, etc., need a efficient surface that is efficient at absorbing sound waves within the largest possible range of

The MELLOWALLTRAP® is an absorbent panel meant to be installed on walls and ceilings. This product is particularly important for absorbing the mid and mid-high range of the sound spectrum. This panel excels due to its high performance, small size and low

Although it is manufactured with the best absorbent materials of medium frequencies, JOCAVI® added to those materials a mathematicallly-studied form of incisions in order to increase and improve its results.

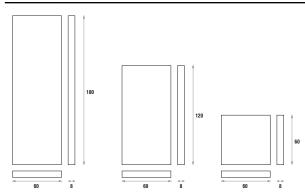
The MELLOWALLTRAP®'s shape was designed to absorb the incident sound on walls and ceilings, thus reducing the reflected energy at the hearing point and eliminating, to some extent, the room effect.

It is an absorption panel which is highly efficient in the mid-range of the sound spectrum.

# **FEATURES**

- Uses 75% of recycled materials.
- NRC: 0.95/m2.
- Fire-resistance: Euroclass B (similar to old M1).
- 100% recyclable.
- · Installation: accessories included.
- · Other sizes are available on demand

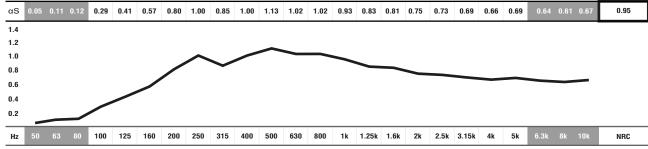
### **TECHNICAL DRAWINGS**



# **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
MEL180	180 cm	60 cm	8 cm	12 Kg
MEL120	120 cm	60 cm	8 cm	8 Kg
MEL060	60 cm	60 cm	8 cm	4 Kg

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This panel is related to the MELLOWALLTRAP® and the WALLTRAP® panels, as it is an absorption panel to be applied on walls and ceilings that predominantly absorbs in the mid-range of the sound spectrum.

The similarities end there given that its size, technical characteristics and respective type of mounting are quite different.

It is an acoustic panel that absorbs medium frequencies and has been developed for use

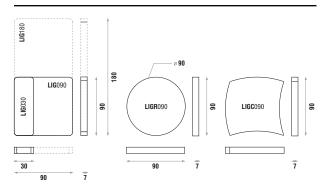
This product is manufactured with raw materials of different mass and density which are duly coupled in order to increase its absorption coefficient as much as possible.

Several panels can be assembled together with surprising results. As regards its size, it is one of the most effective panels available in the market.

# **FEATURES**

- Uses 65% of recycled materials
- NRC: 0.73/m2.
- Fire-resistance: Euroclass B (similar to old M1).
- To apply in large rooms.
- 100% recyclable.
- · Installation: accessories included.
- Other sizes available on demand.

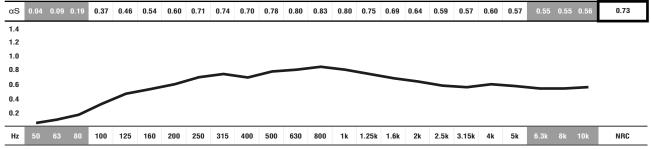
### **TECHNICAL DRAWINGS**



# **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>LIG</b> 180	180 cm	90 cm	7 cm	20.3 Kg
<b>LIG</b> 090	90 cm	90 cm	7 cm	11.2 Kg
<b>LIG</b> 030	30 cm	90 cm	7 cm	3.8 Kg
<b>LIGR</b> 090/120	-	ø90 cm / ø120 cm	7 cm	8.7 / 11.8 Kg
<b>LIGC</b> 090	90 cm	90 cm	7 cm	9.5 Kg

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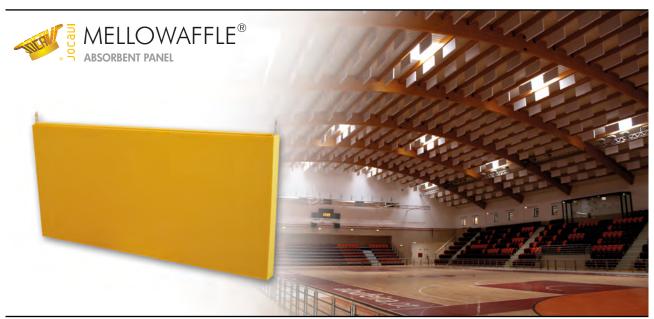


Image of 137x62cm model Ref.:MEW137 (on the left) and Ref.:MEW137 model appplied (ambient image).

JOCAVI®'s MELLOWAFFLE® has been designed to be suspended in large areas in order to eliminate echoes and reduce the reverberation time. It controls and reduces problems caused by airborne noise. This is the product recommended for large volume rooms: big studios, gymnasiums, pavilions, swimming-pools, factories, warehouses, commercial and industrial buildings, machine or engine rooms where airborne noise is a concern.

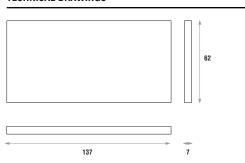
The MELLOWAFFLE® has two absorbent sides which are different from each other. Due to the large exposed area, its absorption coefficient is quite high. It is installed by suspension from a steel cable or is directly fixed to the building structure or masonry with its appropriate accessories. Besides the mentioned acoustic characteristics, this product is highly resistant to abrasion and fire (class M1). When set on fire, it releases a very low quantity of smoke. It has a long durability. It is cleaned and maintained through suction. This product has relatively good resistance to humidity and is, therefore, also recommended for swimming-pools.

This is an excellent and much better alternative to the application of acoustic foams.

# **FEATURES**

- Uses 75% of recycled materials.
- NRC: 1.09/m2.
- Fire-resistance: Euroclass B (similar to old M1).
- 100% recyclable.
- · Installation: accessories included.

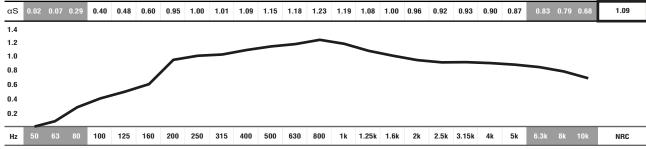
### **TECHNICAL DRAWINGS**



### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
MEW137	137 cm	62 cm	7 cm	3.4 Kg

### **ABSORPTION COEFFICIENT**



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mage of Mellowcloud® ABS model Ref.:MELABS appplied (ambient image)

The MELLOWCLOUD® ABS is a One Dimensional Curved Shaped Absorbent Acoustic panel for the acoustic construction industry. This model has been designed to provide almost infinite possibilities free combinations for ceiling applications.

The MELLOWCLOUD® ABS is a mid-range frequency absorption acoustic panel, consisting of a rigid EPS body with porous absorbing acoustic foam coated with fabric, evolves and meets the aesthetic challenge while offering as well an optimal One Dimensional Sound Diffusion.  $Shaping \ and \ curving \ the \ surfaces \ can \ improve \ the \ coverage \ of \ the \ sound \ scattered \ diffusion$ energy throughout the room.

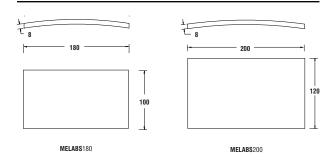
This model can be compared and combined with MELLOWCLOUD® DIF, which have the same ideology.

This is a product to be suspended in ceilings or on metal grids. The MELLOWCLOUD® ABS improves soundproofing and reverberation time levels for all types of environments, it is mainly installed in large areas of application such as auditoriums, conference rooms,  $multipurpose\ rooms,\ hospitals,\ clinics,\ offices,\ shops,\ radio\ stations\ restaurants,\ bars,\ food$ courts and airports, places where airborne noise reduction is imperative.

# **FEATURES**

- · JOCAVI® fabric finish.
- NRC : 0.89/m²
- Fire-resistance: Euroclass B (similar to old M1).
- · Optimized shape, arraying and positioning insures uniform coverage.
- · Panels can be used independently or tiled side to side and front to back.
- · Suspended using Integrated mounting hardware and cable system (only four supports/hangers by each panel).
- · Size max: 2,00mt x 1,20mt (several modules can be interconnected).
- Very lightweight (5 Kg/m² 80 mm thick panel).

### **TECHNICAL DRAWINGS**



# **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
MELABS200	200 cm	120 cm	8 cm	14 Kg
MELABS180	180 cm	100 cm	8 cm	9 Kg

### **DIFFUSION - ABSORPTION COEFFICIENT**

αS	0.01 0.04	0.11	0.22	0.36	0.45	0.64	0.64	0.81	0.79	0.82	0.84	0.89	0.95	0.99	0.97	0.98	0.99	1.03	1.09	1.07	1.02	0.98	0.90	0.89
	0.00 0.00	0.00	0.02	0.03	0.05	0.00	0.00	0.16	0.21	0.33	0.39	0.45	0.44	0.46	0.47	0.44	0.43	0.42	0.40	0.39	0.37	0.38	0.36	0.33
1.4																								
1.2																								
1.0								_																ABSORPTION
0.8						_																		
0.4				_	_																			
0.2		_																						DIFFUSION
																								AVEDAGE
Hz		80	100	125	160	200	250	315	400	500	630	800	1k	1.25k	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	AVERAGE /NRC

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Studios' large rooms are adequate to record joint "takes", with all the band's elements playing at the same time. The WALLBLIND® is recommended to physically divide the musicians or the several sound sources between each instrument or amplifier, thus  $minimizing \ both \ the \ complicity \ and \ sound \ contamination \ from \ the \ several \ instruments \ in$ relation to the microphones.

The WALLBLIND  $\!\!\!^\circ$  is a portable acoustic blind system which is ideal for your recording room. It provides a remarkable acoustic division while permitting to choose the most pleasant face for the instrument that it surrounds. You can choose from two faces with different acoustic and aesthetic features: one side has a high-density EPS profile, which is hardened with a ceramic painting film, with good diffusing features, while the other side has an optimised profile cut for open-cell acoustic foam, thus being quite more absorbent.

This product has a resistant rigid structure with big wheels and allows several modules to be coupled with quite tight union angles.

# **FEATURES**

- · Wheeled acoustic blind.
- NRC: 0.66/m2.
- Fire-resistance: Regular Foam Euroclass B-s3,d1 (similar to old M1); EPS - Euroclass B-s3,d1 (similar to old M1).
- Solid structure, excellent insulation.
- Two acoustically different faces (diffusing and absorbent).
- Ideal to separate and surround instruments.
- · Place: recording and rehearsal studios.
- · Installation: easy to install on the base provided.

### **TECHNICAL DRAWINGS**



### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>WBL</b> 240	240 cm	120 cm	14 cm	64.9 Kg
<b>WBLG</b> 240	240 cm	120 cm	14 cm	74.4 Kg
<b>WBL</b> 200	200 cm	120 cm	14 cm	51.4 Kg
<b>WBLG</b> 200	200 cm	120 cm	14 cm	62 Kg

### **ABSORPTION COEFFICIENT**

	0.02	0.03	0.08	0.15	0.25	0.32	0.33	0.35	0.35	0.39	0.42	0.43	0.48	0.59	0.62	0.64	0.67	0.70	0.69	0.67	0.68	0.69	0.72	0.71	0.49
αS	0.01	0.02	0.09	0.13	0.24	0.31	0.40	0.50	0.59	0.68	0.71	0.72	0.72	0.69	0.66	0.67	0.72	0.79	0.85	0.89	0.87	0.88	0.86	0.87	0.66
1.4																									
1.2																									
1.0																									ABSORPTION
0.8																									DIFFUSION
0.6 0.4													_												
0.4				_																					
	_	_																							
Hz			80	100	125	160	200	250	315	400	500	630	800	1k	1.25k	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	AVERAGE /NRC

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STANDARD EPS RAL COLOURS



### **ACOUSTIC FOAM COLOURS**



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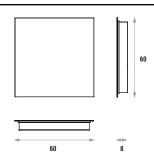
Image of 60x60cm model Ref.:WBA060 (on the left) and 60x60cm models apllied (ambient image).

The STAIDTREAT WBA® is a medium-frequency absorbent panel which is meant to be placed on walls or normal or T-type ceilings.

This absorbent panel has been developed by combining an adequately shaped high density polyurethane foam box with a filling composed of a material that was exclusively manufactured for this panel in order to increase its sound absorption coefficient.

The outer finishing plate is made of a porous and permeable pressed mineral granulate, which is highly absorbent in the medium and high frequencies, thus making this panel very balanced as regards absorption/frequency.

### **TECHNICAL DRAWINGS**



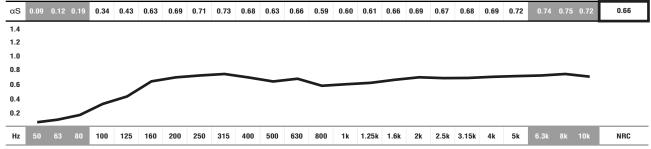
# **FEATURES**

- Plate of pressed granulated minerals.
- NRC: 0.66/m2.
- Fire-resistance: Euroclass A2-s2,d0 (similar to old M1).
- · Made of recycled materials.
- Walls and T-ceilings ready applications.
- · Installation: Mounting Aluminium Bars NOT included.
- · Available in 6 colours.

# **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>WBA</b> 060	60 cm	60 cm	8 cm	3.9 Kg
<b>WBA</b> 060/AT ◀	60 cm	60 cm	8 cm	9.1 Kg

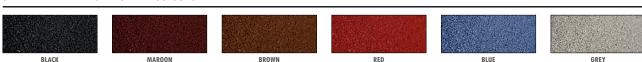
# ABSORPTION COEFFICIENT



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### STANDARD MINERAL GRANULATED COLOURS



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Image of 103xø40cm models Ref.:TUB103 (on the left with and without MOTIF® finishing), 120xø30cm model Ref.:TUBSY120and Ref.:TUB103 applied (ambient image)

The Tubabsorber® and Tubabsorber® SY are the most important absorbing elements of medium/low frequencies in our catalog.

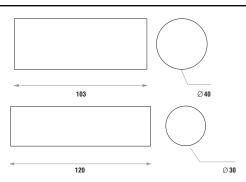
They were created to take most advantage in areas of high acoustic pressure that is normally generated in the corners of rooms.

Due to the way they work each model can be mounted on the floor or suspended on ceilings. When they are installed on the floor they are easy to assemble and to adjust in order to optimise the results.

Due to its smallest resonance chamber the Tubabsorber®SY is tuned to a higher frequency, 250Hz, while the Tubabsorber® is tuned slightly below 200Hz.

The materials used in its manufacture are very light and highly efficient what gives to these models versatility, efficiency and ease of assembly.

#### **TECHNICAL DRAWINGS**



## **FEATURES**

- Uses 60% of recycled materials.
- Tuned to 200Hz (TUB103) and 250Hz (TUBSY120).
- Average absorption: 0.86/m² (Tubabsorber®) and **0.84/m**<sup>2</sup> (Tubabsorber<sup>®</sup>SY)[>50Hz;<250Hz].
- Fire-resistance: Euroclass B (similar to old M1).
- 100% recyclable.
- · Installation: accessories included

# **MODELS AND SIZES**

MODELS	HEIGHT	DIAMETER	WEIGHT
<b>TUB</b> 103	103 cm	40 cm	8.2 Kg
TUBSY120	120 cm	30 cm	7 Kg

### **ABSORPTION COEFFICIENT**

αS	0.24 0.38 0.66	0.82	0.80	0.85	0.92	0.88	0.82	0.83	0.80	0.79	0.81	0.82	0.84	0.87	0.92	0.94	0.93	0.94	0.96	0.97	0.98 0.97	0.86
αS	0.14 0.28 0.39	0.48	0.57	0.51	0.55	0.70	0.79	0.83	0.86	0.89	0.92	0.90	0.91	0.92	0.88	0.90	0.94	0.94	0.96	0.99	1.09 1.19	0.84
1.4																						
1.2																						TUBSY120
1.0																						<b>TUB</b> 103
0.8																						
0.6						/																
						_																
0.6 0.4	50 63 80	100	125	160	200	250	315	400	500	630	800	1k	1.25k	1.6k	2k		3.15k	4k	5k		8k 10k	AVERAGE

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Image of 200x100x20cm model Ref.:BSW200 and 100x100x20cm model Ref.:BSW100(on the left) and Ref.:BSW200 applied (ambient image)

The creation of this bass trap patent and its manufacturing method consists of a very solid metal box, on which a bitumen elastic layer on each of the two sides is applied. The resonator's absorbing surfaces are thin massive plates: the front one with high elasticity and low internal friction and the back plate with less elasticity causing a high internal friction. This combination creates an all-over solid connection through the metal box between the front and back plates. This compound forms a box sealed all around, closed to the air pressure, but opened to the sound. The front and the back plates do not prevent the entering of low frequencies from going inside the box interacting with a  $\,$ different air pressure. Like a tunable Helmholtz resonator, the membrane is excited by the resonance frequency and it vibrates so strong that the weight of the limp mass pushes and pulls the air cushion inside the hox

The ABSTRACT® resonance box formula comprises two limp elastic masses separated by the distance between them, benefiting the isothermal compression, thus providing better sensibility by absorbing the low-end frequencies at very low sound pressure levels. This system is very sensitive, however, the louder the sound system is, pumping the volume up, the more absorption you can get. Consequently it is an incredible high-efficiency low-frequency absorber panel.

By using a simple air compressor device you are free to vary and change the internal air pressure, hence obtaining various different frequencies of absorption. The distance between the membranes

# **FEATURES**

1.0

- Uses 60% of recycled materials and 100% recyclable.
- Fire-resistance: Euroclass B (similar to old M1).
- Variable tuned: 80Hz, 100Hz or 125Hz [>50Hz;<250Hz].</li>
- · Peak absorption at Low Frequency:
- nominal pressure = 0.85 / 80Hz
- 8 mBar = 0.86 / 100Hz 14 mBar = 0.88 / 125Hz
- Package and Installation: individual and accessories included
- · Ideal for mid and large size halls

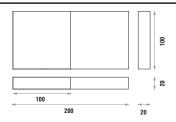
varies according to the internal air pressure difference; for example with positive air pressurization we have a bigger distance and the air pressure superior to the original exterior pressure. As result, the frequency varies in accordance with the mentioned frequencies pattern.

In a more or less intense way, the problem of the low-frequencies control is widespread in most room types; This model is ideal for Concert venues, Auditoriums, Pavilions, studios, music rooms; these are the type of rooms that can greatly benefit from the integration of these acoustic modules, once they are the most effective and accurate way to intervene in solving the problems of low-frequencies.

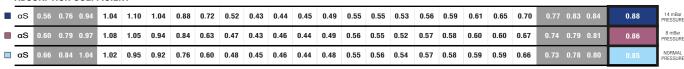
#### **MODELS AND SIZES**

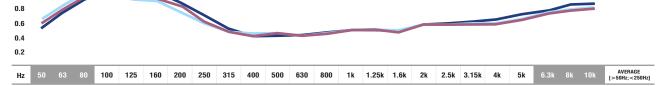
MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>BSW</b> 200	200 cm	100 cm	20 cm	45 Kg
<b>BSW</b> 100	100 cm	100 cm	20 cm	24 Kg

# TECHNICAL DRAWINGS



### **ABSORPTION COEFFICIENT**





■ ■ ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654.

■ Values [<100Hz and > 5K] are Non Standard Values.

### STANDARD FABRIC COLOURS



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  Wood and Fabric products are highly susceptible to change its appearance with humidity and temperature. Close attention must be paid to the storage conditions and the acclimatization before, during and after the installation.
  Typical Indoor Comfort Standards state a temperature range of 20°C -27°C (68°F 81°F), and a relative thumidity of less than 60%. These would be considered as normal operational levels of JOCAVI\* products' range.

  Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



Image of 60x60cm model Ref.:WAL060 (on the left) and Ref.:WAL060 (ambient image)

Music audition rooms, studios, practice rooms, etc., all need a surface that is efficient at absorbing low frequencies. The WALLTRAP® is a product that absorbs low frequencies and is tuned to 160 Hz. It is meant to be mounted on walls and ceilings.

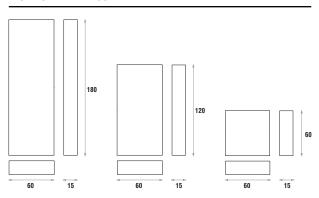
This product has been especially designed to be a main element in the construction of rooms, since it is embedded in the walls.

This panel is built in a box tuned to 80 Hz, which has a membrane manufactured by us. The WALLTRAP\* is a very easy-to-install high performance panel. It is meant to be mounted on walls or ceilings. It was designed to absorb the incident sound on the back, front or side walls, thus reducing the low energy that is present in excessive levels at the point of hearing. Therefore, it reduces unwanted resonances and helps to accommodate and improve sound perception within the low range of the sound.

# **FEATURES**

- Uses 60% of recycled materials.
- Tuned to 80Hz.
- Average absorption: 0.82/m² [>50Hz;<250Hz].
- . Fire-resistance: Euroclass B (similar to old M1).
- 100% recyclable.
- Installation: accessories included.

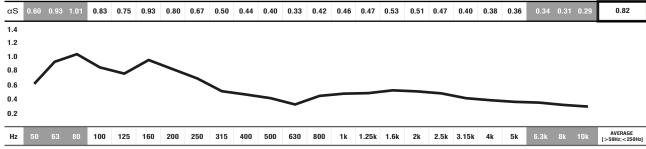
### **TECHNICAL DRAWINGS**



# **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>WAL</b> 180	180 cm	60 cm	15 cm	19.7 Kg
<b>WAL</b> 120	120 cm	60 cm	15 cm	13.8 Kg
WAL060	60 cm	60 cm	15 cm	6.9 Kg

### **ABSORPTION COEFFICIENT**



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 $\blacksquare$  Values [<100Hz and > 5K] are Non Standard Values

### STANDARD FABRIC COLOURS



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Image of 120x60cm model Ref.:BXL120 (on the left) and Ref.:BXL120 (ambient image)

The control of low frequencies in audio rooms is always essential. The absorption of this energy is successful when the adequate solution is found.

We tried to come up with a product with a good technical performance, whose size does not hinder its application, and that is a solution to most types of rooms. This product is recommended for music audition rooms or music rehearsal rooms whose volumetric dimensions range between  $32m^{\!\scriptscriptstyle 3}$  and  $220m^{\!\scriptscriptstyle 3},$  obviously by using the number of products in proportion to the space in question.

The BASSLAYER® is a low-frequency absorbent panel. It has a hard membrane absorber inside a tuned box with four lateral holes and is tuned to 160 Hz.

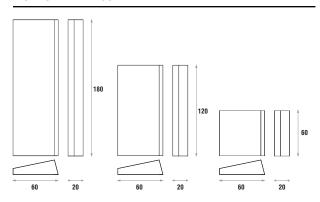
Its shape is both appealing and discreet and it is a good option for walls or ceilings. It can also be mounted in pairs in the corners of rooms, turning into a highly efficient BASSCORNER®, also tuned to 80 Hz.

This product can be combined with the absorption panel MELLOWALLTRAP® to complement the absorption of medium frequencies.

# **FEATURES**

- Uses 70% of recycled materials
- Tuned to 160Hz.
- Average absorption: **0.59/m²** [>50Hz;<250Hz].
- . Fire-resistance: Euroclass B (similar to old M1).
- 100% recyclable.
- · Installation: accessories included

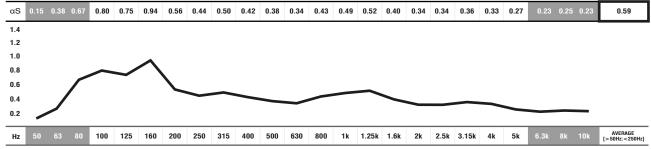
### **TECHNICAL DRAWINGS**



### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>BXL</b> 180	180 cm	60 cm	20 cm	14.2 Kg
<b>BXL</b> 120	120 cm	60 cm	20 cm	9.9 Kg
BXL060	60 cm	60 cm	20 cm	5 Kg

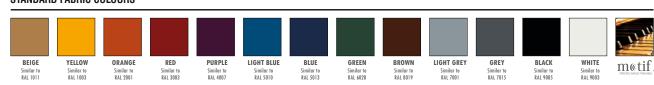
### **ABSORPTION COEFFICIENT**



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# STANDARD FABRIC COLOURS



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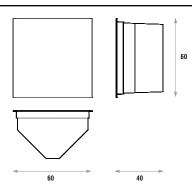
Image of 60x60cm model Ref.:BXA060 (on the left) and Ref.:BXA060 (ambient image).

The STAIDTREAT BXA® is a low-frequency absorption panel. It is tuned to 63 Hz and is meant to be placed in 90° corners. The principle used to develop the STAIDTREAT BXA® is exclusive to JOCAVI®. It combines an ABS box, which has two appropriately enhanced closed resonance chambers inside, with mass and density components. These components have been specifically developed for this model.

Therefore, because of its careful development, this panel has become one of the best offers in the market for low-frequency absorbent materials.

In order to boost bass absorption, we recommend that this panel is used together with the STAIDTREAT BXW®, as the latter functions close to the harmonics of this model.

### **TECHNICAL DRAWINGS**



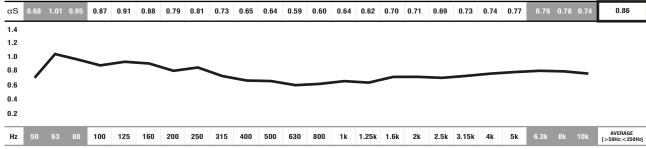
### **FEATURES**

- · Plate of pressed mineral granulate.
- Tuned to 63Hz.
- Average absorption: **0.86/m²** [>50Hz;<250Hz].
- Fire-resistance: Euroclass A2-s2,d0 (similar to old M1).
- · Made of recyclable materials.
- Application on ceiling and wall corners
- Installation: Mounting Aluminium Bars NOT included.

### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>BXA</b> 060	60 cm	60 cm	40 cm	5.9 Kg
BXA060/AT ◀	60 cm	60 cm	40 cm	11.1 Kg

### **ABSORPTION COEFFICIENT**



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### STANDARD MINERAL GRANULATED COLOURS



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   Typical Indoor Comfort Standards state a temperature range of 20°C 2°C 80°E 87-E87, and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI\* products' range.
   Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



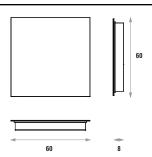
mage of 60x60cm model Ref.:BXW060 (on the left) and Ref.:BXW060 (ambient image)

The STAIDTREAT BXW® is a low-frequency absorption panel. It is tuned to 125 Hz and is meant to be placed on walls or normal or T-type ceilings. When tuned to 125 Hz, it works in the first harmonic of the STAIDTREAT BXA®, thus exponentially boosting the absorption of basses when both panels are used together.

This tuned panel uses an open resonance chamber, which is combined with a membrane that was developed and calibrated to enhance its performance.

The visible outer plate is made of a porous and permeable mineral granulate which is highly absorbent in the medium and high frequencies, thus further widening the absorption range

### **TECHNICAL DRAWINGS**



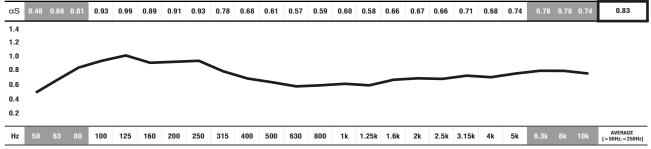
### **FEATURES**

- · Plate of pressed mineral granulate.
- Tuned to 125Hz.
- Average absorption:  $0.83/m^2$  [>50Hz;<250Hz].
- Fire-resistance: Euroclass A2-s2,d0 (similar to old M1).
- · Made of recyclable materials.
- Application on ceiling and wall corners
- Installation: Mounting Aluminium Bars NOT included.

### **MODELS AND SIZES**

MODELS BXW060	HEIGHT	WIDTH	DEPTH	WEIGHT
	60 cm	60 cm	8 cm	4.2 Kg

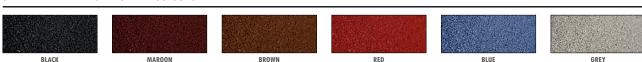
### **ABSORPTION COEFFICIENT**



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Image of 120x50cm model Ref.:RC0120 (on the left) and Ref.:RC0120 (ambient image)

It is of paramount importance to control the low range of the sound spectrum in any music room. In corners, for example, long waves are usually generated, as well as stationary low frequencies, which are heard as a "boom", thus making them slack, loose and disjointed from the rest of the spectrum range.

Applying JOCAVI®'s ROUNDBASSCORNER® is necessary. This panel, which is extremely efficient at holding back excessive levels of low frequencies, is manufactured with an exclusive production membrane applied over a tuned box.

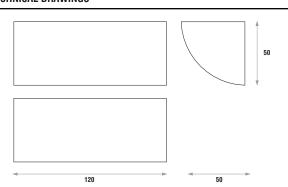
The ROUNDBASSCORNER® panel provides a good reduction of energy between 40 Hz and 400 Hz. Its highest level of reduction is at 125 Hz. This product reduces or eliminates unwanted low resonances.

Because of their trapezoidal shape, these panels look discreet in the room, since they are installed in corners which are usually overlooked.

### **FEATURES**

- Uses 60% of recycled materials.
- · Tuned to 125Hz.
- Average absorption: **0.92/m²** [>50Hz;<250Hz].
- . Fire-resistance: Euroclass B (similar to old M1).
- 100% recyclable.
- Installation: accessories included.

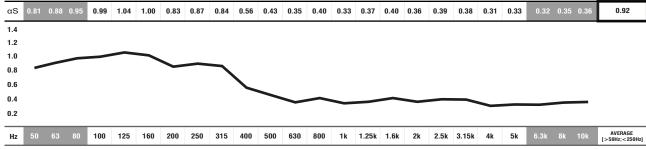
#### **TECHNICAL DRAWINGS**



### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
RC0120	120 cm	50 cm	50 cm	22 Kg

### **ABSORPTION COEFFICIENT**



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### STANDARD FABRIC COLOURS

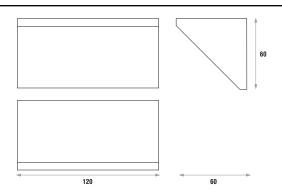




The control of low frequencies is essential in any music room, especially in the corners where long waves are generated, i.e., stationary low frequencies which are heard as a "boom", thus making low frequencies puffy and muddy and disjointed from the rest of the sound spectrum.

Applying JOCAVI®'s BASSCORNER® is imperative. This panel, which is extremely efficient at holding back excessive levels of low frequencies, is manufactured with an exclusive production membrane mounted on a tuned box, which makes this box highly efficient between 32 Hz and 280 Hz. The absorption panel BASSCORNER  $^{\!\circ}$  reduces to a high degree the excessive energy of low frequencies. Its highest absorption coefficient stands at 100 Hz.

The trapezoidal shape of this panel makes it look discreet in the room, as it is installed in corners which are usually overlooked.



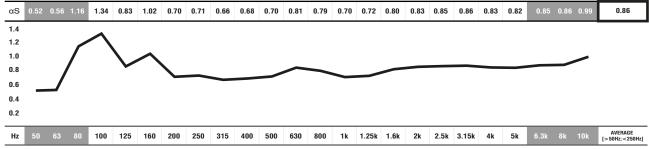
### **FEATURES**

- Uses 60% of recycled materials.
- Tuned to 100Hz.
- Average absorption: **0.86/m²** [>50Hz;<250Hz].
- . Fire-resistance: Euroclass B (similar to old M1).
- 100% recyclable.
- · Installation: accessories included

### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>BCO</b> 120	120 cm	60 cm	60 cm	28 Kg

### **ABSORPTION COEFFICIENT**



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# STANDARD FABRIC COLOURS



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  Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.

# ATP® Acoustic Panels

ATP® is a brand of acoustic treatment panels that belongs to JOCAVI GROUP®. Its main objective is to manufacture a line of efficient and inexpensive products. This efficient acoustic treatment is accessible to all and, in particular, to those projects that do not need a large financial investment. The ATP® range has a variety of available models which enable the application of practical solutions in rooms, home-studios, home-cinemas, rehearsal

As part of the JOCAVI®, ATP® shares the engagement and experience of this organisation where high quality standards must always be attained. ATP® has its own plant, which is totally independent from that of JOCAVI® Acoustic Panels, modern machines, as well as production and manufacturing techniques of acoustic foam and polyurethane.





Image of 60x60cm model Ref.: COR060.

The CORALREEF® is a 3D controlled dispersion acoustic diffusion panel. It is made of high-density polystyrene and its finishing membrane provides it with the intended acoustic qualities.

Its angular appearance gives dynamics to any space and provides a decorative effect and attractive combinations.

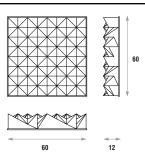
This acoustic panel is installed on ceilings and walls. Its low weight makes it the ideal product for use on false ceilings, on its own or alternated with flat modules when refinement and quality are required.

The calculation basis was the theoretical numerical sequence ratio of the primitive root, thus providing excellent results of sound diffusion in all directions. The depth factor is logarithmically varied, and it is, therefore, a three-dimension omnidirectional reflection panel. Due to its quite sinuous shape with deep recesses, as well as the raw material it is made of, this product also has a considerable associated absorption coefficient. Is the top model of ATP® diffusers set.

### **FEATURES**

- Manufactured with High-Density EPS.
- Average diffusion: 0.68/m² [>100Hz;<5KHz].
- NRC: **0.28/m**<sup>2</sup> [>100Hz;<5KHz].
- Fire resistance: Euroclass B-s3,d1 (similar to old M1).
- Finished with an ecological paint.
- 100% recyclable.

### **TECHNICAL DRAWINGS**



### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>COR</b> 060	60 cm	60 cm	12 cm	1.9 Kg

### **DIFFUSION - ABSORPTION COEFFICIENT**

	0.09 0.22	0.34	0.43	0.59	0.62	0.68	0.73	0.65	0.66	0.69	0.74	0.70	0.68	0.66	0.68	0.72	0.75	0.76	0.72	0.70	0.62	0.58	0.49	0.68
αS	0.00 0.00	0.02	0.06	0.07	0.10	0.21	0.36	0.50	0.39	0.28	0.22	0.26	0.29	0.31	0.24	0.20	0.17	0.18	0.13	0.11	0.09	0.07	0.08	0.28
1.4																								
1.2																								
1.0																								
0.8							<u> </u>	_			_								_					
0.6								^																DIFFUSION
0.4																								
0.2																								ABSORPTION
Hz		80	100	125	160	200	250	315	400	500	630	800	1k	1.25k	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	AVERAGE /NRC

- ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654. ■ DIFFUSION COEFFICIENT: These values were obtained by mathematical calculations and tests carried out in our laboratory.
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### STANDARD EPS RAL COLOURS



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mage of 60x60cm model Ref.:CUF060 (on the left) and Ref.:CUF060 applied (ambient image).

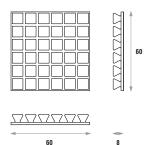
The CUBEFUSER® acoustic panel is one of the least expensive diffusers from our brand. It is cubic-shaped and is made of high-quality 100% recyclable ecologic EPS raw material.

This model can be combined with the CUBESORB®; as a result, two different acoustic areas keep maintaining the same shape.

The CUBEFUSER® offers associate absorption, because the uniformly protruding cubes make the sound to enter directly into the concavities. This diffuser offers uniform unidirectional diffusion and provides an attractive design to ceilings and walls.

It is a cost-effective diffusion panel as an alternative to other more expensive diffusers.

### **TECHNICAL DRAWINGS**



### **FEATURES**

- Average diffusion: 0.50/m² [>100Hz;<5KHz].
- NRC: **0.47/m**<sup>2</sup> [>100Hz;<5KHz].
- Fire resistance: Euroclass B-s3,d1 (similar to old M1).
- · Very easy to install.
- Other colours available upon consultation.

### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>CUF</b> 060	60 cm	60 cm	8 cm	0.5 Kg

# **DIFFUSION - ABSORPTION COEFFICIENT**

	0.04	0.04 0.09	0.16	0.25	0.32	0.34	0.36	0.39	0.40	0.44	0.49	0.55	0.63	0.67	0.66	0.68	0.65	0.65	0.68	0.70	0.71	0.70	0.70	0.50
αS	0.05	0.06 0.08	0.14	0.22	0.28	0.33	0.44	0.49	0.48	0.48	0.47	0.46	0.46	0.49	0.53	0.55	0.60	0.63	0.70	0.77	0.80	0.83	0.82	0.47
1.4																								
1.2																								
1.0																								
0.8																								ABSORPTION
																								DIFFIISION
0.6																								DIFFUSION
0.6 0.4									_			_												DIFFUSION
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- DIFFUSION COEFFICIENT: These values were obtained by mathematical calculations and tests carried out in our laboratory.

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# STANDARD EPS RAL COLOURS



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   Spical and/or Comfort Standards state a temperature range of 20°C -27°C (68°\* -81°\*), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI\* products' range.
   Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.







Image of 60x60cm model Ref.:IV0060.

The IVORY® is a 2D controlled dispersion diffusion panel in a single coordinate. It is made of high-density EPS covered with a hardened layer. This design gives this product the intended acoustic diffusion properties. It is therefore one more option within the range of diffusers presented by ATP®

Its convex external geometry with seven longitudinal incisions provides a decorative effect and attractive combinations with the absorption panel EBONY®.

The use of this extremely dynamic panel is crucial to control early reflections and other reflections from walls, thus improving control of sound diffusion in the room.

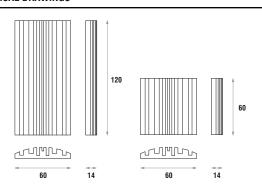
Due to its shape, with deep recesses, this product also has an interesting related absorption coefficient.

This acoustic panel is installed on walls and ceilings. Its low weight makes its installation on ceilings quite practical.

### **FEATURES**

- Manufactured with High-density EPS.
- Average diffusion: **0.67/m**<sup>2</sup> [>100Hz;<5KHz].
- NRC: **0.27/m**<sup>2</sup> [>100Hz;<5KHz].
- Fire resistance: Euroclass B-s3,d1 (similar to old M1).
- · Finished with an ecological paint.
- 100% recyclable.

### **TECHNICAL DRAWINGS**



### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
IV <b>0</b> 120	120 cm	60 cm	14 cm	4.8 Kg
IV0060	60 cm	60 cm	14 cm	2.4 Kg

### **DIFFUSION - ABSORPTION COEFFICIENT**

	0.10	0.25	0.39	0.49	0.58	0.61	0.68	0.64	0.64	0.63	0.65	0.71	0.72	0.70	0.68	0.69	0.73	0.72	0.74	0.71	0.72	0.69	0.55	0.49	0.67
αS	0.00	0.00	0.00	0.02	0.05	0.11	0.19	0.25	0.33	0.39	0.41	0.36	0.29	0.24	0.21	0.23	0.19	0.17	0.19	0.15	0.17	0.19	0.11	0.08	0.27
1.4																									
1.2																									
1.0																									
0.0																									
0.8						_	_					_					_	_	_			_			
0.6			_	_	_	_	<u></u>	_		_	_	_						_		_		_	_	_	DIFFUSION
		_	_	_	_		_													_			_	_	
0.6 0.4	_	_	_	_	_	_	<u></u>				_					_		_				<u> </u>	<u>_</u>	<u> </u>	DIFFUSION  ABSORPTION  AVERAGE

- ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654. ■ DIFFUSION COEFFICIENT: These values were obtained by mathematical calculations and tests carried out in our laboratory.
- Values [<100Hz and > 5K] are Non Standard Values.

# STANDARD EPS RAL COLOURS



- JOCAVI\* accepts no responsibility for any printing errors. Specifications can be modified without prior notice, if technical or commercial reasons so require.
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   Colours may vary due to raw-material suppliers changes and some differences may occur in tonal range.
   Typical Indoor Comfort Standards state a temperature range of 20°C 27°C (68° 81°F), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI\* products' range.
   Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



Image of 60x60cm models Ref.:WAV060 and Ref.:WAI060 (on the left) and Ref.:WAV120 and Ref.:WAI120 applied (ambient image)

The WAVYFUSER INV® is made of high-quality 100% recyclable ecologic EPS raw material. This design results from combining a sequence of concave and convex shapes with numerical techniques, which creates a profile surface that optimises the scattering of diffusion.

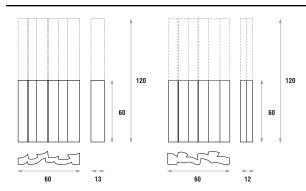
This model has two different varieties, male and female, which, when combined in the assembly, make the diffusion of medium/low frequencies more efficient. Acoustically, this translates into a more real control of sound reflections in your room, by providing uniform omnidirectional broad bandwidth diffusion without any other unwanted sound

The WAVYFUSER INV® is one of the top model of ATP® diffusers set. Its price is highly reasonable and provides a combination of hemispherical acoustic diffusion with a topquality EPS finishing painting.

### **FEATURES**

- Average diffusion: 0.57/m² [>100Hz;<5KHz].
- NRC: 0.21/m<sup>2</sup> [>100Hz;<5KHz].
- Fire resistance: Euroclass B-s3,d1 (similar to old M1).
- Finished with an ecological paint.
- · Very easy to install.
- Other colours available upon consultation.
- Sold in pairs.

### **TECHNICAL DRAWINGS**



### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>WAV/I</b> 120	120 cm	60 cm	13/12 cm	1/1.1 Kg
WAV/I060	60 cm	60 cm	13/12 cm	2/2.2 Kg

**SOLD IN PAIRS** 

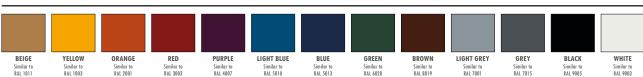
### **DIFFUSION - ABSORPTION COEFFICIENT**

	0.12	0.12	0.15	0.28	0.30	0.37	0.38	0.43	0.44	0.46	0.50	0.55	0.63	0.64	0.66	0.71	0.75	0.77	0.79	0.78	0.79	0.77	0.77	0.76	0.57
αS	0.01	0.02	0.02	0.09	0.13	0.14	0.16	0.19	0.20	0.26	0.31	0.30	0.25	0.26	0.26	0.23	0.20	0.17	0.19	0.21	0.18	0.18	0.16	0.15	0.21
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1.0																									
8.0																	_								DIFFUSION
0.6												_	_												DIFFUSION
0.6 0.4							_	_			_	_													DIFFUSION
0.6	_		_	_	_	_	_	_	_		_	_													<b>DIFFUSION</b> ABSORPTION

- ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654.
- DIFFUSION COEFFICIENT: These values were obtained by mathematical calculations and tests carried out in our laboratory.

### ■ Values [<100Hz and > 5K] are Non Standard Values.

### STANDARD EPS RAL COLOURS



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   Colours may vary due to raw-material suppliers' changes and some differences may occur in tonal range.
   Spical and/or Comfort Standards state a temperature range of 20°C -27°C (68°\* -81°\*), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI\* products' range.
   Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



age of 60x60cm models Ref.:PYR060 and PYR060f (on the left) and Ref.:PYR060 applied (ambient image).

PYRAMID® is a model that combines diffusion and absorption qualities it was devised for the acoustic music industry to enable different acoustic characteristics with the same aspect.

This design was based on a quadratic format with flat absorption surfaces made of acoustic foam and on curved diffusion surfaces made of EPS which give it a superior balance, aural and visual performance.

The original PYRAMID®(PYR060), made on EPS and Acoustic Foam combines hemispherical acoustical diffusion and absorption in the same panel, and therefore the most balanced element from ATP's catalogue.

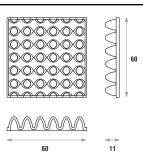
There are two other options; PYR060F an absorbent made on Acoustic Foam and the PYR060E that is a diffusor made on EPS.

These 3 options were designed to be applied, glued on walls and ceilings, on the modular or continuous applications, it is allowed to set on T-Ceilings as well.

### FEATURES\*

- Average diffusion: 0.45/m² [>100Hz;<5KHz].
- NRC: **0.75/m**<sup>2</sup> [>250Hz;<10KHz].
- Fire resistance: Regular Foam Euroclass B-s3,d1 (similar to old M1); EPS - Euroclass B-s3,d1 (similar to old M1).
- $\bullet$  Finished with an ecological paint (only PYR060E model).
- Very easy to install

### **TECHNICAL DRAWINGS**



### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
PYR060	60 cm	60 cm	11 cm	0.50 Kg
PYR060F	60 cm	60 cm	11 cm	0.40 Kg
PYR060E	60 cm	60 cm	11 cm	0.45 Kg

#### **DIFFUSION - ABSORPTION COEFFICIENT\***

	0.02 0.0	2 0.07	0.13	0.20	0.29	0.31	0.36	0.35	0.35	0.37	0.40	0.46	0.53	0.55	0.57	0.60	0.65	0.65	0.68	0.66	0.64	0.64	0.60	0.45
αS	0.04 0.0	0.03	0.03	0.08	0.13	0.23	0.32	0.40	0.51	0.64	0.79	0.86	0.91	0.94	0.92	0.89	0.83	0.78	0.77	0.80	0.81	0.81	0.82	0.75
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1.0																								ABSORPTION
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Hz	50 63		100	125	160	200	250	315	400	500	630	800	1k	1.25k	1.6k	2k	2.5k	3.15k	4k	5k	6.3k			AVERAGE /NRC

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- Values [<100Hz and > 5K] are Non Standard Values. \*PANEL DATA ONLY OF REF.: PYRO60 EPS AND FOAM MODEL.

### STANDARD EPS RAL COLOURS



### **REGULAR FOAM COLOURS**



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Image of 60x60cm model Ref.:STF060 (on the left) and Ref.:STF060 and STF120 applied (ambient image)

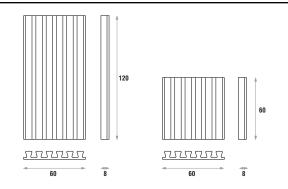
The STRIPEFUSER® acoustic panel is the least expensive model of diffusers from our brand. It has a striped shape and is made of high-quality 100% recyclable ecologic EPS raw material.

This model can be combined with the STRIPESORB®; as a result, two different acoustic areas keep maintaining the same shape.

The STRIPEFUSER® offers associate absorption because the uniform protruding stripes make the sound to enter directly into the concavities. This product offers uniform unidirectional diffusion and provides an attractive design to ceilings and walls.

It is a cost-effective diffuser as an alternative to other more expensive diffusion panels.

### **TECHNICAL DRAWINGS**



### **FEATURES**

- Average diffusion: 0.52/m² [>100Hz;<5KHz].
- NRC: **0.26/m**<sup>2</sup> [>100Hz;<5KHz].
- Fire resistance: Euroclass B-s3,d1 (similar to old M1).
- Finished with an ecological paint.
- · Very easy to install.
- Other colours available upon consultation.

### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>STF</b> 120	120 cm	60 cm	8 cm	1.5 Kg
<b>STF</b> 060	60 cm	60 cm	8 cm	0.6 Kg

# **DIFFUSION - ABSORPTION COEFFICIENT**

	0.04	0.04	0.11	0.21	0.27	0.34	0.37	0.40	0.44	0.45	0.46	0.51	0.58	0.62	0.66	0.65	0.65	0.64	0.62	0.70	0.73	0.75	0.75	0.74	0.52
αS	0.01	0.01	0.05	0.11	0.16	0.16	0.19	0.20	0.22	0.29	0.33	0.31	0.30	0.27	0.28	0.30	0.31	0.33	0.32	0.33	0.29	0.25	0.23	0.22	0.26
1.4																									
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0.8 0.6 0.4												_	_	_	_				_					_	
0.8					_		_	_				_	_	_					_					_	<b>DIFFUSION</b> ABSORPTION

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### STANDARD EPS RAL COLOURS



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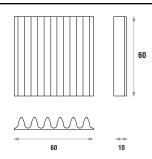


Image of 60x60cm model Ref.:RFL060 (on the left) and Ref.:RFL060 applied (ambient image)

The REFLEX® represents another option on acoustic diffusers, thus allowing different aesthetic and performance possibilities. It is made of high-quality 100% recyclable ecologic EPS raw material. It is used on side or back walls to blend the direct and early reflected sound, thus increasing speech intelligibility and enhancing musical clarity.

This diffusion panel offers optimal shape and more omnidirectional scattering diffusion than traditional, non-optimised panels do. It is a very good cost-effective choice for a 2D sound diffuser.

### **TECHNICAL DRAWINGS**



### **FEATURES**

- Average diffusion:  $0.50/m^2$  [>100Hz;<5KHz].
- NRC: **0.26/m**<sup>2</sup> [>100Hz;<5KHz].
- Fire resistance: Euroclass B-s3,d1 (similar to old M1).
- Finished with an ecological paint.
- · Very easy to install.
- Other colours available upon consultation.

### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
RFL060	60 cm	60 cm	10 cm	0.8 Kg

### **DIFFUSION - ABSORPTION COEFFICIENT**

	0.05 0.05	0.09	0.17	0.26	0.33	0.34	0.36	0.36	0.41	0.46	0.48	0.50	0.61	0.66	0.67	0.70	0.71	0.68	0.68	0.66	0.67	0.66	0.61	0.50
αS	0.02 0.02	0.07	0.12	0.15	0.17	0.17	0.18	0.27	0.25	0.25	0.27	0.28	0.30	0.34	0.36	0.35	0.31	0.30	0.25	0.23	0.20	0.18	0.18	0.26
1.4																								
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8.0																								
0.6												_												DIFFUSION
0.4				_																				
0.2																								ABSORPTION
Hz	50 63	80	100	125	160	200	250	315	400	500	630	800	1k	1.25k	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	AVERAGE /NRC

■ ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654. ■ DIFFUSION COEFFICIENT: These values were obtained by mathematical calculations and tests carried out in our laboratory. Values [<100Hz and > 5K] are Non Standard Values.

# STANDARD EPS RAL COLOURS



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   Typical Indoor Comfort Standards state a temperature range of 20°C 2°C (68°F 81°F), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI\* products' range.
   Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



Image of 60x60cm pair models Ref.:C0K060 (on the left) and the same applied (ambient image)

COOKIE® is made of a flexible open-cell regular foam which are excellent sound absorption materials. The optional velvet finishing gives this product an attractive luxury look. Its appearance describes a simple concave and convex circular shape and is always supplied in pairs.

COOKIE® s acoustic characteristics make this product ideal for use as noise control device in buildings. It improves airborne noise reduction also providing fire safety and environmental requirements.

Due to its low weight, COOKIE® allows the creation of large-surface areas that can be glued or hanging, giving rooms an attractive appearance.

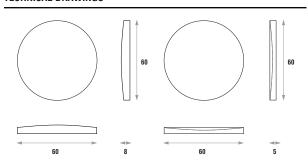
Meeting rooms, offices and hotel foyers can be acoustically upgraded just as effective and attractive by using this product. The installation method is very simple by using mounting

The raw material of this product meets the most important international fire safety regulation. It is produced without using halogenated hydrocarbons, flame-retardants and/or toxic heavy metals.

### **FEATURES**

- NRC: 0.90/m² [>250Hz; <10KHz].
- ACOUSTIC FOAM Fire resistance: Euroclass B-s3,d1 (similar to old M1).
- · Good thermal insulation properties and constant physical properties over a wide temperature range.
- · Resistance to all organic solvents.
- · Sold in pairs.
- Mounting: glue or by hanging.

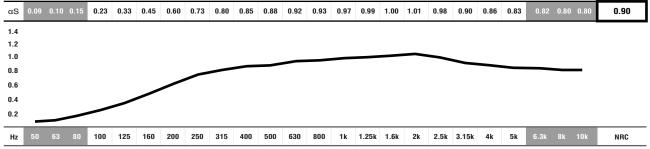
### **TECHNICAL DRAWINGS**



### **MODELS AND SIZES**

MODELS	HEIGHT	DIAMETER	WEIGHT
<b>COK</b> 060	5/8 cm	60 cm	0.3 Kg
<b>COK</b> 060v	5/8 cm	60 cm	0.3 Kg

### **ABSORPTION COEFFICIENT\***



■ ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654.

Values [<100Hz and > 5K] are Non Standard Values. \*PANEL DATA ONLY OF REF.: COKO60 VELVETY FINISHING.

### **REGULAR FOAM COLOURS**



### **VELVETY COLOURS**



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   Colours may vary due to raw-material suppliers' changes and some differences may occur in tonal range.
   Typical Indoor Comfort Standards state a temperature range of 20°C -27°C (68°F 81°F), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI\* products' range.
   Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



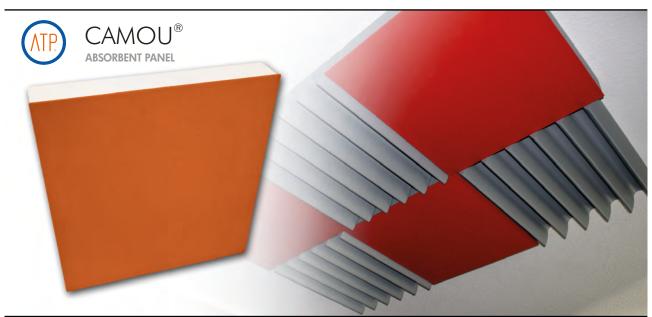


Image of 60x60cm model Ref.:CAM060 (on the left) and Ref.:CAM060 applied (ambient image).

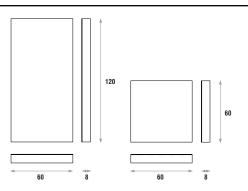
This panel is an updated version of the COSMOS® panel, but is distinct from it. It is an absorbent panel, in particular of the mid-range of the sound spectrum, and is meant to be mounted on walls and ceilings. This model has a fabric-coated front part and a support structure that gives it more mass and enables, therefore, quite different acoustic

The CAMOU® may be used in any type of rooms to reduce airborne noise. It is particularly efficient in rooms where the aesthetic factor is more neutral. This panel can be glued directly on walls and ceilings. Mounting stripes are available for removable mounting. All installation accessories are sold separately. It can be installed by coupling several pieces that form a very absorbent surface with outstanding results. Its size makes it one of the best available options in the market. The back part is a white EPS solid box which can be painted on request with our EPS available colours. The box interior's acoustic labyrinth is filled with recycled acoustic material.

### **FEATURES**

- Fabric-coated acoustic regular foam on a rigid framework.
- NRC: **0.84/m**<sup>2</sup> [>100Hz; <5KHz].
- Fire-resistance: Fabric Euroclass B (similar to old M1); EPS - Euroclass B-s3,d1 (similar to old M1).
- · Several colours.
- · Installation: easy to install.

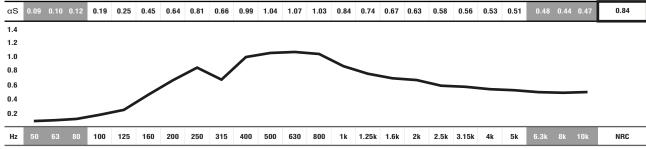
#### **TECHNICAL DRAWINGS**



### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>CAM</b> 120	120cm	60 cm	8 cm	3.4 Kg
<b>CAM</b> 060	60 cm	60 cm	8 cm	1.7 Kg

#### **ABSORPTION COEFFICIENT**



■ ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654.

 $\blacksquare$  Values [<100Hz and > 5K] are Non Standard Values.

### STANDARD FABRIC COLOURS



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- Colours may vary due to raw-material suppliers' changes and some differences may occur in tonal range.

  \*\*Flyical Indoor Comfort Standards state a temperature range of 20°C 27°C (68°F 81°F), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI\* products' range.

  \*\*Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.

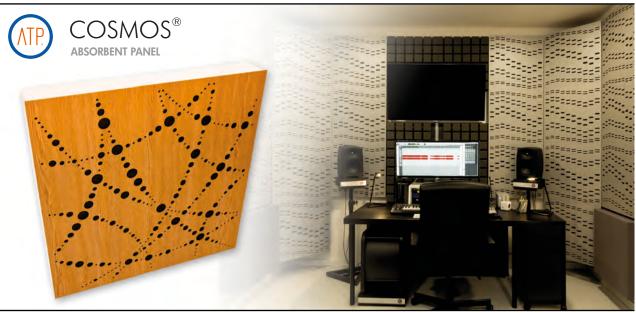


Image of 60x60cm model Ref.:COS060 (on the left) and Ref.:COS060 applied (ambient image)

The COSMOS® is an acoustic panel with a set of four different aesthetics that meet all kinds of requirements. It is an acoustic solution for commercial areas, offices, public spaces, as well as audio and video studios.

Acoustic designers usually favour this type of covering because it is efficient and has a refined finishing as well. These are inexpensive and very attractive proposals.

The 8cm thickness and the inside labyrinth provide COSMOS® with a high absorption

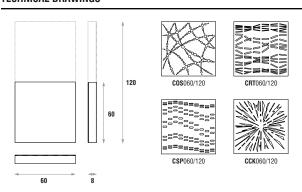
This absorbent panel comprises the full spectrum of the human voice and is used to absorb slap and flutter echoes in the room, thus allowing a more pleasant and accurate listening environment.

This model proposes four different perforations and five synthetic-wood finishes, as well as a flexible design with coupling options for the several pieces, therefore enabling different and varied aesthetic combinations.

### **FEATURES**

- Rigid melamine faced board framework on a HD EPS box.
- NRC: 0.79/m²(COSMOS), 0.88/m²(SP), 0.89/m²(RT),  $0.80/m^{2}(CK)[>250Hz;<1KHz].$
- Fire-resistance: Melamine Faced Board Euroclass B-s2,d0 (similar to old M1);  $\ensuremath{\mathsf{EPS}}$  - Euroclass B-s3,d1 (similar to old M1).
- · Very easy to install.

### **TECHNICAL DRAWINGS**



### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>COS</b> 120	120 cm	60 cm	8 cm	3.4 Kg
<b>COS</b> 060	60 cm	60 cm	8 cm	1.7 Kg

### **ABSORPTION COEFFICIENT**

αS	010	0.11 0.	14 0.16	0.28	0.43	0.58	0.77	0.92	1.06	1.10	1.05	0.95	0.74	0.66	0.59	0.55	0.51	0.46	0.42	0.39	0.39	0.37 0.36	0.79
αS	0.09	0.10 0.	0.19	0.31	0.44	0.57	0.76	0.93	0.98	1.04	1.09	1.12	1.08	0.92	0.77	0.63	0.48	0.47	0.45	0.44	0.43	042 0.42	0.88
αS	0.11	0.12 0.	16 0.18	0.29	0.41	0.54	0.74	0.90	1.02	1.04	1.06	1.10	1.11	1.08	0.84	0.62	0.52	0.47	0.42	0.38	0.36	0.36 0.35	0.89
αS	0.10	0.11 0.	15 0.16	0.26	0.40	0.54	0.73	0.87	0.93	0.97	1.00	1.01	0.98	0.73	0.61	0.52	0.47	0.43	0.41	0.34	0.33	0.33 0.32	0.80
1.2																							
1.0									-		_	₹	7										<b>COS</b> 60/120
8.0																							● CSP60/120
0.6																							
																							CRT60/120
0.4																							<ul><li>CRT60/120</li><li>CCK60/120</li></ul>
0.4 0.2																							
	50	63 8	0 100	125	160	200	250	315	400	500	630	800	1k	1.25k	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k 10k	

### **MELAMINE FACED BOARD FINISHINGS**



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  Due to its natural origin, wood-based products will always present natural imperfections inherent to the organic nature. And for similar reasons, they will also present traces of old-age in the course of time.

  Wood and Fabric products are highly susceptible to change its appearance with humidity and temperature. Close attention must be paid to the storage conditions and the acclimatization before, during and after the installation.

  Typical Indoor Comfort Standards state a temperature range of 20°C 27°C (68°F 81°F), and a relative humidity of less they. These would be considered as normal operational levels of JOCAVIP\*

  Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



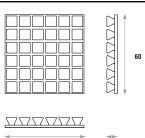
mage of 60x60cm model Ref.:CUS060 (on the left) and Ref.:CUS060 applied (ambient image)

The CUBESORB® is one of the least expensive and most popular quadratic shaped acoustic treatment absorbers made of acoustic foam. It is recommended for project spaces, vocal booths, control rooms and sound studios. The CUBESORB® is used to treat small to medium-sized rooms.

You can also use it on industry market solutions when mandatory and stronger acoustic absorption is required. Its protruding cubes form some concave grooves which cause a substantial increase of the absorption coefficient. They effectively reduce stationary waves and flutter echoes.

When used in combination with the CUBEFUSER®, the resulting scattering sound balances diffusion inside your room. Fix your room acoustics without the help of a

### **TECHNICAL DRAWINGS**



60

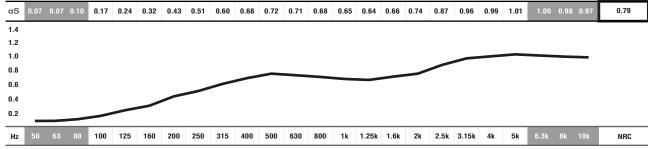
### **FEATURES**

- Raw material: Melamine Foam or Regular Acoustic Foam.
- NRC: 0.79/m<sup>2</sup> [>250Hz;<10KHz].
- MELAMINE FOAM Flame resistance: Euroclass B-s1,d0 (similar to old M1 France, Germany B1,GB class1, USA V0/HF1).
- ACOUSTIC FOAM Flame resistance: Euroclass B-s3,d1 (similar to old M1).
- Installation: glue or mount on "T-ceiling"
- Very easy to install.

### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>CUS</b> 060	60 cm	60 cm	8 cm	0.3 Kg
CUS060TC	60 cm	60 cm	8 cm	0.5 Kg

### **ABSORPTION COEFFICIENT**



■ ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654.

Values [<100Hz and > 5K] are Non Standard Values.

### **REGULAR AND MELAMINE FOAM COLOURS**









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   Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



Image of pair of the 60x60cm model Ref.:CUB060A (on the left) and Ref.:CUB060A (pair) applied (ambient image)

The CUBESORB ARC® is a quadratic-shaped acoustic treatment absorber made of selfextinguishing acoustic foam. Its geometry describes several quadrilateral and rectangular modules with different heights. When viewed from an angled perspective, the shape describes concave and convex arcs that wave uniformly, thus allowing an attractive geometric design. The CUBESORB ARC® can also be combined with the similar CUBESORB® and/or CUBEFUSER®, which has a flat appearance.

The CUBESORB  $\mathsf{ARC}^{\circledast}$  is recommended for project spaces, large room environments,  $common\ work spaces, music\ studios\ and\ vocal\ booths.$ 

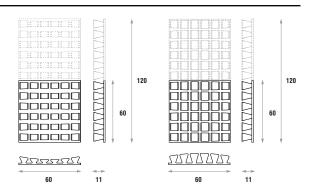
This product is installed by gluing it directly to the existing surface with our recommended adhesives. It can also be used in areas that have "T-ceiling", when mandatory and stronger acoustic absorption is required. Its protruding cubes form some concave grooves, which cause a substantial increase of the absorption coefficient, thus reducing standing waves and flutter echoes for better sound intelligibility.

It is a very efficient absorbent panel meant for budget-conscious acoustic projects.

### **FEATURES**

- Raw material: Melamine Foam or Regular Acoustic Foam.
- NRC: 0.79/m² [>250Hz; <10KHz].
- MELAMINE FOAM Flame resistance: Euroclass B-s1,d0 (similar to old M1 France, Germany B1,GB class1, USA V0/HF1).
- ACOUSTIC FOAM Flame resistance: Euroclass B-s3,d1 (similar to old M1).
- · Standard Dimensions: 60x60x11cm.
- Installation: glue or mount on "T-ceiling".
- · Sold in pairs.

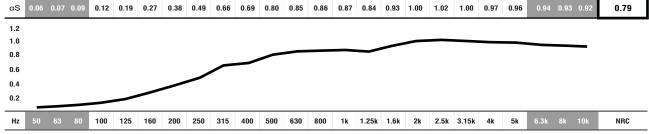
### **TECHNICAL DRAWINGS**



### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
CUB120A	120cm	60 cm	5/11 cm	0.8 Kg
CUB060A	60 cm	60 cm	5/11 cm	0.4 Kg
CUB060Atc	60 cm	60 cm	5/11 cm	0.5 Kg

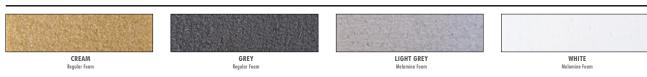
#### **ABSORPTION COEFFICIENT**



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### **REGULAR AND MELAMINE FOAM COLOURS**



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   Typical Indoor Comfort Standards state a temperature range of 20°C -27°C (68°P 81°P), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVIP. Products' range.
   Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.





Image of 60x60cm models Ref.:FS0060 and Ref.:FS1060 (on the left) and Ref.:FS0060 and Ref.:FS1060 applied (ambient image)

The FOAMSORB INV® absorption panels are ATP® registered products and the real midrange absorbers from our collection. They are made of high-quality controlled-cell, selfextinguishable M1 fire-retardant acoustic foam.

The FOAMSORB INV  $^{\!\scriptscriptstyle \odot}$  panels present a unique and elegant design; the male and female pieces help solve many of the rooms' acoustic anomalies.

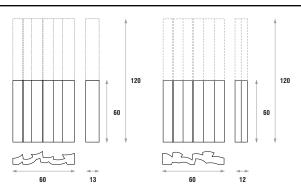
These panels have a high absorption coefficient in the broad range of the sound spectrum, and are significantly efficient at absorbing medium-low frequencies.

In general terms, they work well on flat walls and ceilings. They can be combined with the WAVYFUSER INV® diffusion panels, which have the same shape, thus giving music rooms a truly balanced continuous acoustic treatment surface and a fine-looking design.

### **FEATURES**

- Raw material: Melamine Foam or Regular Acoustic Foam.
- NRC: 0.95/m<sup>2</sup> [>250Hz;<10KHz].
- MELAMINE FOAM Flame resistance: Euroclass B-s1,d0 (similar to old M1 France, Germany B1,GB class1, USA V0/HF1).
- ACOUSTIC FOAM Flame resistance: Euroclass B-s3,d1 (similar to old M1).
- Great decorative alternatives.
- Sold in pairs.

#### **TECHNICAL DRAWINGS**

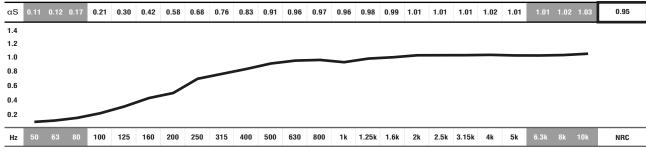


### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
FS0/I120	120 cm	60 cm	13/12 cm	1.2 Kg
FS0/I060	60 cm	60 cm	13/12 cm	0.6 Kg

**SOLD IN PAIRS** 

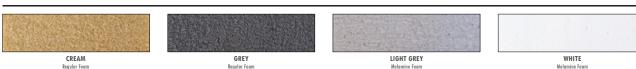
### **ABSORPTION COEFFICIENT**



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### **REGULAR AND MELAMINE FOAM COLOURS**



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   Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



Image of 120x60cm model Ref.:ABT120 (on the left) and Ref.:ABT120 applied (ambient image).

The AB Twice® is an acoustic treatment absorber made of self-extinguishing acoustic foam. Each model has an angular arc-shaped geometry that describes five mountains within a concept of three-dimensional geometry.

The finish of this model is of the utmost quality. Its soft finish layer improves its acoustic performance and provides a fine and "smooth like velvet" appearance. The velvet finish gives this product a distinctive feeling of comfort.

A combination of several modules makes this acoustic solution very attractive with a

The creation of surfaces that are efficient at absorbing sound waves becomes imperative, and that is the main feature that makes this product so relevant. This panel is meant to absorb mid-low to high range frequencies.

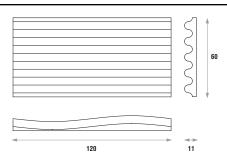
The AB Twice® is perfect to cover continuous areas of walls or ceilings as a coating material and can be used as a soundproofing reinforcement as well.

It is ideal for commercial areas, television studios, pavilions, auditoriums, meeting rooms, public spaces, etc., that need specific care regarding airborne noise control.

### **FEATURES**

- FINISHINGS AVAILABLE: Regular Foam or the Velvety Finishing.
- NRC: 0.87/m² [>250Hz; <10KHz].
- ACOUSTIC FOAM Flame resistance: Euroclass B-s3,d1 (similar to old M1).
- Shape and design recommended for continuous surface treatment.
- · Very easy to install.
- · Standard Dimensions: 120x60x11cm.
- · Sold in pairs.

### **TECHNICAL DRAWINGS**

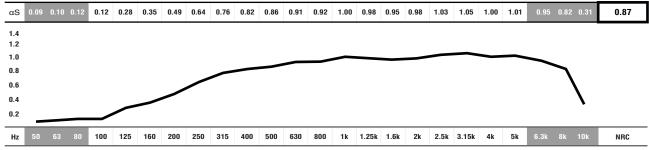


### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>ABT</b> 120	120cm	60 cm	5/11 cm	0.8 Kg

SOLD IN PAIRS

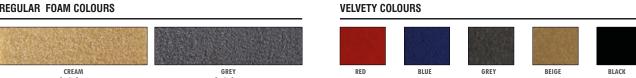
### **ABSORPTION COEFFICIENT**



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### $\label{eq:Values} \begin{tabular}{ll} \textbf{Walues} & [<& 100 \text{Hz} \ \text{and} > 5 \text{K}] \ \text{are Non Standard Values}. \end{tabular}$

### **REGULAR FOAM COLOURS**



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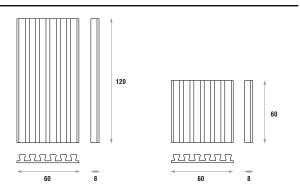


Image of 60x60cm model Ref.:STS060 (on the left) and Ref.:STS120 applied (ambient image)

The STRIPESORB® is the panel meant for budget-conscious acoustic projects. The  $\mathsf{STRIPESORB}^{\circledast}$  acoustic foam panels are cut in a simple standard method to keep them more affordable. It is a great solution to treat acoustics in small sound studios, home listening rooms and small vocal or instrument booths, by solving small flutter echo problems.

Its shape maximises the area that is exposed to the sound waves for better absorption. You can combine the STRIPESORB® with the STRIPEFUSER® diffusion panel. They have the same shape and offer great decorative alternatives.

### **TECHNICAL DRAWINGS**



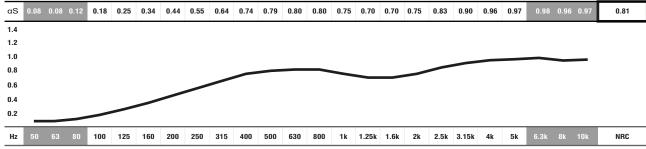
### **FEATURES**

- Raw material: Melamine Foam or Regular Acoustic Foam.
- NRC: 0.81/m<sup>2</sup> [>250Hz;<10KHz].
- MELAMINE FOAM Flame resistance: Euroclass B-s1,d0 (similar to old M1 France, Germany B1,GB class1, USA V0/HF1).
- ACOUSTIC FOAM Flame resistance: Euroclass B-s3,d1 (similar to old M1).
- Very easy to install.

### **MODELS AND SIZES**

MODELS	HEIGHT	IT WIDTH DEPTH		WEIGHT
<b>STS</b> 120	120cm	m 60 cm 8 cm		0.8 Kg
<b>STS</b> 060	60 cm	60 cm	8 cm	0.4 Kg

### **ABSORPTION COEFFICIENT**



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Image of pair of the 60x60cm model Ref.:STS060A (on the left) and Ref.:STS120A applied (ambient image)

The STRIPESORB ARC® is a stripe-shaped acoustic treatment absorber made of selfextinguishing acoustic foam.

Its shape looks similar to parallel blades with angular spaces between them. It was achieved in order to have small longitudinal absorption surfaces separated by small angled incisions meant to enhance absorption.

By combining several identical modules, the shape looks like concave and convex arcs that wave uniformly, which results in an attractive geometric look. The STRIPESORB ARC® can also be combined with the similar STRIPESORB  $^{\!\scriptsize{\text{\tiny B}}}$  , which has a flat appearance.

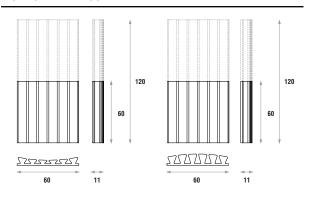
The STRIPESORB  $\mathsf{ARC}^\circledast$  acoustic foam panel is cut in a simple standard method to keep it more affordable. It is recommended for project spaces, large room environments, common workspaces, music studios, listening rooms, as well as small booths. This model can be applied on large continuous ceiling areas when mandatory and stronger acoustic absorption is required, by solving small flutter echo problems. Its shape maximises the area that is exposed to sound waves for better absorption.

The STRIPESORB ARC® is installed by gluing it directly to the existing surface with our recommended adhesives

### **FEATURES**

- Raw material: Melamine Foam or Regular Acoustic Foam.
- NRC: 0.81/m<sup>2</sup> [>250Hz; <10KHz].
- MELAMINE FOAM Flame resistance: Euroclass B-s1,d0 (similar to old M1 France, Germany B1,GB class1, USA V0/HF1).
- ACOUSTIC FOAM Flame resistance: Euroclass B-s3,d1 (similar to old M1).
- Standard Dimensions: 60x60x11cm and 120x60x11cm.
- Shape and design recommended for continuous surface treatment.
- Sold in pairs

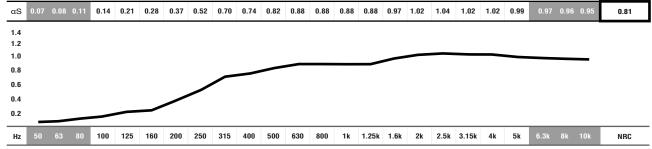
#### **TECHNICAL DRAWINGS**



### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
STS120A	120cm	60 cm	11/5 cm	0.8 Kg
STS060A	60 cm	60 cm	11/5 cm	0.4 Kg

### **ABSORPTION COEFFICIENT**



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   Typical Indoor Comfort Standards state a temperature range of 20°C -27°C (68°P 81°P), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVIP. Products' range.
   Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



Image of 60x60cm models Ref.:SF0260, Ref.:SF0460 and Ref.:SF1660 (on the left) and Ref.:SF0260 Velvety Finishing applied (ambient image)

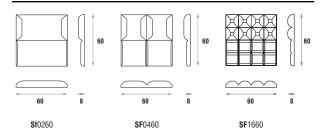
The SEAFOAM® is made of a flexible open-cell foam from melamine resin, a thermoset polymer. This foam is characterised by its three-dimensional network structure which consists of easily shaped thin filaments. The sound waves penetrate the open-cell structure, thus reducing the reflected energy and giving this product an excellent sound absorption capacity

Due to its low weight, the SEAFOAM  $^{\!\circ}$  allows the creation of large-surface elements that seem to be free-floating, giving rooms an attractive appearance. The simple installation  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ method does not require any additional structural or engineering calculations. Working areas which are exposed to high levels of noise, such as industrial areas, pavilions, among others, can be acoustically restored at a low cost, by reequipping them with these lightweight absorbers. We can make specific shapes and sizes for large projects upon demand. The SEAFOAM\*'s acoustic and safety characteristics make this product ideal for use as a noise control and sound insulation device in buildings that have demanding requirements against fire. It improves acoustics and soundproofing, thereby providing safety in accordance with environmental standards.

### **FEATURES**

- Raw material: Melamine Foam or Regular Acoustic Foam.
- NRC: 0.80/m2
- MELAMINE FOAM Flame resistance: Euroclass B-s1,d0 (similar to old M1 France, Germany B1,GB class1, USA V0/HF1).
- ACOUSTIC FOAM Flame resistance: Euroclass B-s3,d1 (similar to old M1).
- · Velvety Finishing available.
- · Very easy to install.
- 100% recyclable.

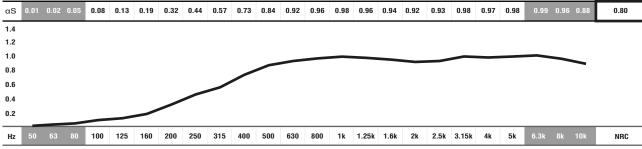
#### **TECHNICAL DRAWINGS**



### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>\$f</b> 0260	60 cm	60 cm	8 cm	0.60 Kg
<b>SF</b> 0460	60 cm	60 cm	8 cm	0.60 Kg
<b>SF</b> 1660	60 cm	60 cm	8 cm	0.60 Kg

### **ABSORPTION COEFFICIENT\***



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Values [<100Hz and > 5K] are Non Standard Values. \*PANEL DATA ONLY OF REF.: SF0460 REGULAR FOAM.

### **REGULAR AND MELAMINE FOAM COLOURS**









### **VELVETY COLOURS**



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   Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



Image of 60x60cm model Ref.:SNW060 (on the left) and Ref.:SNW060 applied (ambient image).

In order to expand the range of options available on absorption panels, ATP® created the SNOWSORB® with an attractive shape. This model can also be used as a soundproofing reinforcement material.

This panel has a simple aesthetic format that allows various different combinations. It is ideal to be mounted on walls and ceilings, on continuous surfaces or selected spots by combining it with other models.

It is made of regular acoustic foam or of melamine foam as an option.

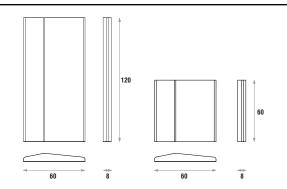
Commercial areas, Television studios, Pavilions, auditoriums, meeting rooms, public spaces, etc., need specific care regarding airborne noise control. The creation of surfaces that are efficient at absorbing sound waves becomes imperative, and that is the main feature that makes this product so relevant.

Due to its high absorption coefficient and low cost, the SNOWSORB® is specifically recommended product for the acoustic treatment of large areas. It can be easily cut with a sharp utility knife to be adjusted to the dimensions of walls and ceilings.

### **FEATURES**

- Raw material: Melamine Foam or Regular Acoustic Foam.
- NRC: 0.90/m<sup>2</sup> [>250Hz;<10KHz].
- MELAMINE FOAM Flame resistance: Euroclass B-s1,d0 (similar to old M1 France, Germany B1,GB class1, USA V0/HF1).
- ACOUSTIC FOAM Flame resistance: Euroclass B-s3,d1 (similar to old M1).
- Velvety Finishing available.
- · Very easy to install.
- 100% recyclable.

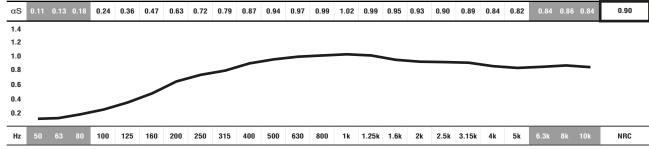
### **TECHNICAL DRAWINGS**



### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>SNW</b> 120	120 cm	60 cm	8 cm	1.2 Kg
<b>SNW</b> 060	60 cm	60 cm	8 cm	0.6 Kg

#### **ABSORPTION COEFFICIENT**



■ ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654.

■ Values [<100Hz and > 5K] are Non Standard Values.

### **REGULAR AND MELAMINE FOAM COLOURS**



### **VELVETY COLOURS**



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   Typical Indoor Comfort Standards state a temperature range of 20°C -27°C (68°F 81°F), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI\* products' range.
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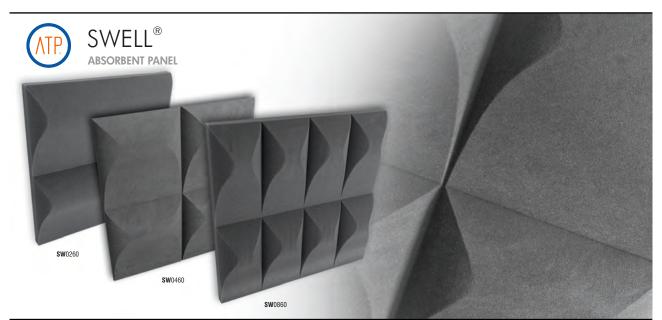


Image of 60x60cm models Ref.:SW0260, Ref.:SW0460 and Ref.:SW0860 (on the left) and Ref.:SW0460 applied (ambient image)

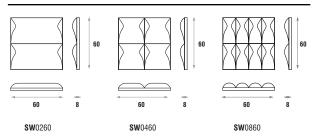
The SWELL® model is an absorbent panel made of self-extinguishing acoustic foam or melamine foam as an option, thus meeting the highest fire protection requirements.

We recommend this model for lining the continuous surfaces of walls and ceilings, which enables a high absorption coefficient and an important sound insulation

The SWELL® can be used as a sound barrier and airborne noise reduction for various types of rooms: commercial areas, television studios, pavilions, auditoriums, meeting rooms, public spaces, etc.

It is a very functional and decorative finishing that meets the performance and aesthetic attributes. Several aesthetic combinations are possible by turning the panel by 90 degrees. It can be easily cut with a knife to be adjusted to the dimensions of walls and ceilings.

#### **TECHNICAL DRAWINGS**



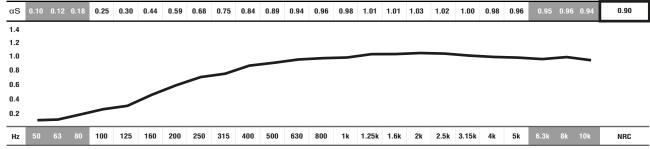
### **FEATURES**

- Raw material: Melamine Foam or Regular Acoustic Foam.
- NRC: 0.90/m<sup>2</sup> [>250Hz;<10KHz].
- MELAMINE FOAM Flame resistance: Euroclass B-s1,d0 (similar to old M1 France, Germany B1,GB class1, USA V0/HF1).
- ACOUSTIC FOAM Flame resistance: Euroclass B-s3,d1 (similar to old M1).
- Velvety Finishing available.
- · Very easy to install.
- 100% recyclable.

### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>SW</b> 0260	60 cm	60 cm	8 cm	0.60 Kg
<b>SW</b> 0460	60 cm	60 cm	8 cm	0.60 Kg
<b>SW</b> 0860	60 cm	60 cm	8 cm	0.60 Kg

### **ABSORPTION COEFFICIENT\***



■ ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654.

Values [<100Hz and > 5K] are Non Standard Values. \*PANEL DATA ONLY OF REF.: SW0460 REGULAR FOAM.

### **REGULAR AND MELAMINE FOAM COLOURS**



GREY





### **VELVETY COLOURS**



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Image of a pair of the 96x30cm model Ref.:DAT096 (on the left) and Ref.:DAT096 applied (ambient image).

The DECOART® is an acoustic treatment absorber made of self-extinguishing acoustic foam. It has an angular arc-shaped geometry describing two elevations "up and down" that make it very attractive when combined with numerous modules.

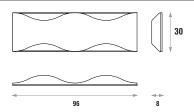
When observed from a perpendicular perspective, it has a beautiful and harmonised appearance, which is particularly attractive for common areas in public spaces.

The creation of surfaces that are efficient at absorbing sound waves becomes imperative, and that is the main feature that makes this product so relevant.

The DECOART® is perfect to cover continuous areas of walls or ceilings as a coating material and can be used as a soundproofing reinforcement as well.

It is ideal for commercial areas, television studios, pavilions, auditoriums, meeting rooms, public spaces, etc., that need specific care regarding airborne noise control. It can be easily cut with a knife to be adjusted to the dimensions of walls and ceilings.

### **TECHNICAL DRAWINGS**



### **FEATURES**

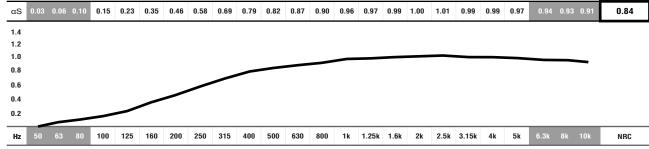
- Raw material: Melamine Foam or Regular Acoustic Foam.
- NRC: 0.84/m² [>250Hz; <10KHz].
- MELAMINE FOAM Flame resistance: Euroclass B-s1,d0 (similar to old M1 France, Germany B1,GB class1, USA V0/HF1).
- ACOUSTIC FOAM Flame resistance: Euroclass B-s3,d1 (similar to old M1).
- · Velvety Finishing available.
- · Shape and design recommended for continuous surface treatment.
- 100% recyclable.
- · Sold in pairs

### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT	
DAT096 (pair)	96cm	30 cm	8 cm	<b>0.9 Kg</b> (pair)	

### **SOLD IN PAIRS**

#### **ABSORPTION COEFFICIENT**



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### **REGULAR AND MELAMINE FOAM COLOURS**



### **VELVETY COLOURS**



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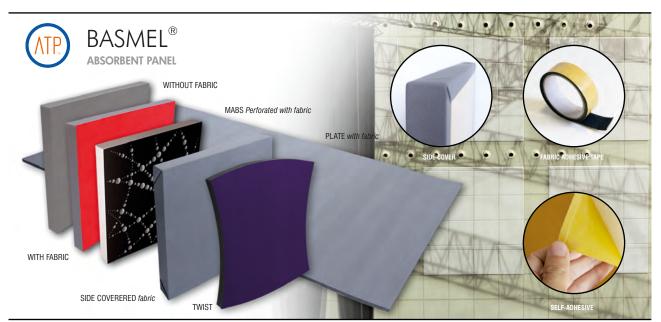


Image of 60x60cm models Ref.:BAL060 fabric (Red), Ref.:BAL060 and Ref.:BAM060 (perforated with black fabric), the new BAL060sc, the BAL200.4 (plate with fabric) and Ref.:BAL200.4 custom made applied (ambient image)

 $BASMEL^* \ is \ a \ low-cost \ acoustic \ panel \ set \ to \ be \ applied \ in \ large \ quantities \ on \ ceilings \ and \ walls. \ It's \ made \ of \ flexible \ open-cell \ melamine \ resin foam \ or \ of \ regular \ acoustic \ foam, \ a \ thermoset \ polymer \ and \ a$ fire-resistant fabric-finishing surface. The sound waves penetrate the open-cell structure, thus reducing the reflected energy and giving this product an excellent sound absorption capacity and simultaneously improving soundproofing, thereby providing safety in accordance with environmental

There are several available options; one flat (BAL060/120), other one perforated MABS060 (with the same pattern from the COSMOS\* model), BASMEL\* SC (with more thickness and side covered with fabric - thus reducing the reflected energy and giving this product an excellent sound absorption capacity), BASMEL\* Plates (with more coverage area) and the most recent, the BASMEL\* Twist\*. All these models have different possibilities (different foams, fabric colours, shapes, etc.

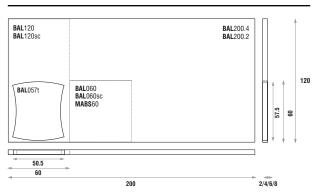
The BASMEL®'s acoustic and safety characteristics make this product ideal for use as a noise control and sound insulation device in buildings that have demanding requirements against fire. It improves  $acoustics \ and \ sound proofing, the reby \ providing \ safety \ in \ accordance \ with \ environmental \ standards.$ 

Homes, meeting rooms, offices and hotel fovers can be acoustically upgraded just as effective and attractive by using this product. The installation method is very simple by using mounting glue or can be provided with self-adhesive on the back. To conceal the union between the panels, we also have, as an option, a roll of fabric adhesive tape (with 500x3cm) that can be applied.

### **FEATURES**

- Raw material: Melamine Foam or Regular Acoustic Foam.
- NRC: 0.80/m² (40mm), 0.54/m² (20mm) and 0.90/m² (80mm SIDE COVER Panels).
- MELAMINE FOAM Flame resistance: Euroclass B-s1,d0 (similar to old M1 France, Germany B1,GB class1, USA V0/HF1).
- ACOUSTIC FOAM Flame resistance: Euroclass B-s3,d1 (similar to old M1). . Minimum 4 units (SIDE COVER panels) and 8 units
- Mounting glue and FABRIC ADHESIVE FINISHING TAPE sold separately.
- . SELF-ADHESIVE option available on request.

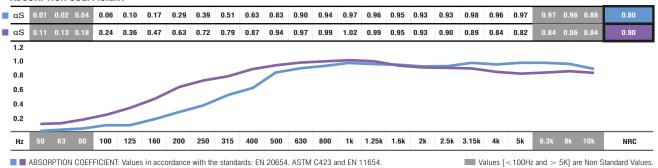
#### **TECHNICAL DRAWINGS**



### **MODELS AND SIZES**

_	MODELS	RF Regular Foam	MF Melamine Foam	FRF Fabric RF	FMF Fabric MF	<b>SA</b> Self-Adhesive	SIZES (cm)	WEIGHT (Kg)
	TWT057	Х	Х	Х	Х	Х	57,5x50,5x4	0.30/0.22
	BAL120	Х	Х	X	Х	Х	120x60x4	0.60/0.44
	BAL060	Х	Х	Х	Х	Х	60x60x4	0.30/0.22
	BAL200.4	Х	Х	X	Х	Х	200x120x4	2.24/1.52
	BAL200.2	Х	Х	Х	Х	Х	200x120x2	1.48/0.76
	BAL120sc				Х	Х	120x60x8	0.62/0.46
	BAL060sc				Х	Х	60x60x8	0.31/0.23
	MABS060	Х	Х	Х	Х	Х	60x60x4cm	0.21

#### **ABSORPTION COEFFICIENT**



# STANDARD FABRIC COLOURS



### **REGULAR AND MELAMINE FOAM COLOURS**



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   Spicial indoor Comfort Standards state a temperature range of 20°C 27°C (68°F 81°F), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI® products range.
   Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



Image of Watercot® models Ref.:WAW120 (on the left) and Ref.:WAB120 models. Watercot® WAL model (ambient image).

This model comes in two versions: the WATERCOT\*BAF, which is a suspension baffle for ceilings, and the WATERCOT\*WAL, which is a covering material for walls and ceilings. The latter is provided with its own glue, a self-adhesive film, and it is very easily applied.

The WATERCOT® is manufactured with one component only, i.e., closed-cell polyethylene foam, whose cells are open by perforation at a later process during manufacture. The result is a very efficient material for acoustic treatment.

The several advantages of this product are its weight, price, durability and moisture resistance. When compared to other similar materials, i.e., polyester-foam and melamine-foam, this material has distinct advantages which allow its use in rather wet environments and outdoors. given its resistance to moisture and water.

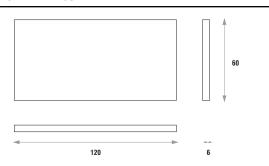
One of the key features of this foam is actually its capacity to remain physically and acoustically unchanged when exposed to water and moisture.

These two products, the WATERCOT®WAL and the WATERCOT®BAF, are yet another option of acoustic treatment provided by JOCAVI®, mainly when both moisture and fire resistance requirements are essential criteria. It is a mandatory tool for airborne noise control problems and a very low-cost solution.

### **FEATURES**

- Raw material: PE Foam.
- Excellent acoustic properties NRC: (Watercot® WAL 0.82/m²) and (Watercot® BAF - 0.86/m²).
- Flame resistance: Euroclass B (similar to old M1 France, B1 Class (DIN 4102), GB class1, V0/HF1 (UL94). Meets all fire policies required for the Building & Construction. No volatile mineral fibres.
- It withstands the direct contact with water and may be washed by water pressure.
- Water absorption: %Vol. (28d-95%HR) < 4 %vol. Density: 30kg/m<sup>3</sup>
- Low average weight that allows light fastening structures.
   Easy installation: Self-adhesive Watercot\* WAL and Watercot\* BAF suspension panel.

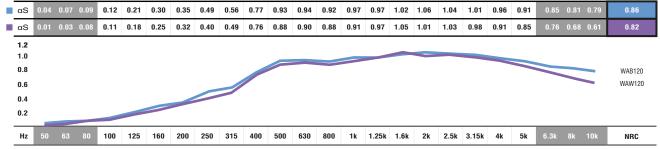
#### **TECHNICAL DRAWINGS**



### **MODELS AND SIZES**

_	MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
	<b>WAW</b> 120	120 cm	60 cm	6 cm	0.46 Kg
	<b>WAB</b> 120	120 cm	60 cm	6 cm	0.44 Kg

### **ABSORPTION COEFFICIENT**



ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654

- Watercot<sup>®</sup> BAF model: values obtained with one panel per m<sup>2</sup>, suspended from the ceiling.
- Watercot® WAL model: values obtained with one panel per m², with the product glued to a concrete wall.

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### STANDARD COLOURS



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  Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may slightly vary due to their production method and some inherent raw-materials characteristics.



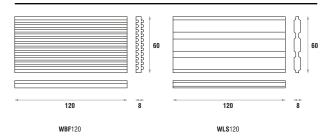
Image of 120x60cm models Ref.:WBF120 and Ref.:WLS120 (on the left) and Ref.:WBF120 applied (ambient image

WIDEBAFLE® is our acoustic baffle to be applied in large rooms. This baffle is ideal to reduce reverberation time and airborne noise in gyms, pools, cafeterias, churches, schools, nightclubs, metal buildings and multipurpose rooms. It is a mandatory tool for airborne noise control problems and a very low cost solution.

The WIDEBAFLE® is easy to install and can be assembled in very different aesthetic combinations. These sound baffles are typically suspended from the ceiling, and may also be used as acoustic wall panels, helping decrease the reflected sound energy.

And now we have another model with the same efficiency but with a different design, the WIDEBAFFLE LS® (WLS120).

### **TECHNICAL DRAWINGS**



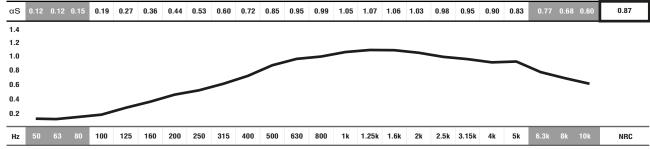
### **FEATURES**

- Raw material: Melamine Foam or Regular Acoustic Foam.
- NRC: 0.87/m<sup>2</sup> [>250Hz;<10KHz].
- MELAMINE FOAM Flame resistance: Euroclass B-s1,d0 (similar to old M1 France, Germany B1,GB class1, USA V0/HF1).
- ACOUSTIC FOAM Flame resistance: Euroclass B-s3,d1 (similar to old M1).
- Very easy to install.
- 100% recyclable.

### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>WBF</b> 120	120 cm	60 cm	8 cm	1 Kg
<b>WL\$</b> 120	120 cm	60 cm	8 cm	1 Kg

### **ABSORPTION COEFFICIENT**



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   Typical Indoor Comfort Standards state a temperature range of 20°C 27°C (68°F 81°F), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVIP.
   Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



Image of 120x30cm models Ref.:T3R120, Ref.:T3S120 and Ref.:T4S120 and T4S060(on the left) and Ref.:T4S120 applied (ambient image).

TRAP 30S® and TRAP 30R® are node reduction tools of low-frequencies. They are made of high-quality controlled-cell, self-extinguishable M1 fire-retardant acoustic foam.

Bass corners' absorbers are substantially adequate to control nodes in rooms. This simple and affordable solution provides immediate results for those who do not want time-

-consuming building solutions. The TRAP 30S  $^{\! \rm e}$  and TRAP 30R  $^{\! \rm e}$  are effective low-frequency smoothing panels at a price affordable to everybody.

This model proposes two optional shapes: one with straight lines and another one with

The TRAP®40S is a low frequencies reduction tool. It is made of high-quality controlled-

-cell, self-extinguishable M1 fire-retardant acoustic foam. Bass corners' absorbents are substantially recommended to control Low Frequencies in rooms.

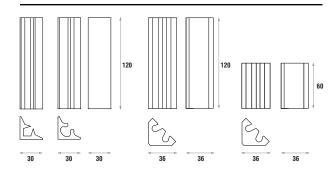
The TRAP  $^{\! \otimes }\!40S$  is an effective low-frequency absorbent panel used for corners, meant to be placed in 90° corners.

This model proposes an attractive shape with curved lines at a very affordable price.

### **FEATURES**

- FINISHINGS AVAILABLE: Regular Foam or the Velvety Finishing.
- NRC: TRAP 30S/R 0.84/m²;
- TRAP 40S  $0.86/m^2$  [>250Hz; <10KHz].
- ACOUSTIC FOAM Flame resistance: Euroclass B-s3,d1 (similar to old M1).
- · Very easy to install.

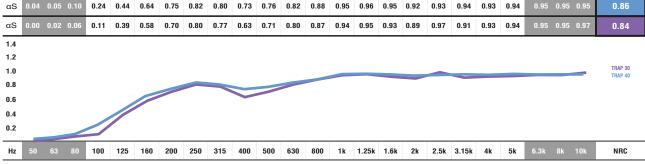
### **TECHNICAL DRAWINGS**



### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>T3S</b> 120	120 cm	30 cm	30 cm	0.9 Kg
<b>T3R</b> 120	120 cm	30 cm	30 cm	0.9 Kg
<b>T4S</b> 120	120cm	36 cm	36 cm	1.8 Kg
<b>T4S</b> 060	60 cm	36 cm	36 cm	0.9 Kg

### **ABSORPTION COEFFICIENT**



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### **REGULAR FOAM COLOURS**



### **VELVETY COLOURS**



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of 60x60cm model Ref.:LFA060 (on the left) and Ref.:LFA060 applied (ambient image)

The LF CAMOU® is a low-frequency absorptiont panel suitable for applying in the 90° corners of rooms. The absorption peak of this panel is at 100 Hz. It combines a high-density foam box with JOCAVI®'s fabric finishing. It has exactly the same finishing as the CAMOU® absorbent panel, so we can combine the two models with the same aesthetics. The combined use with CAMOU® will increase the absorption of the nearest harmonic frequencies.

The closed resonance chamber has sufficient mass and density to provide a very concentrated and effective absorption coefficient. This panel will become one of the most efficient and inexpensive offers in the market for low-frequency absorbent materials.

This panel is mounted by pasting it with our recommended adhesive glue.

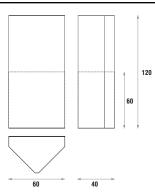
The LF CAMOU® is designed to fit and match the CAMOU® or any other 80mm thickness models.

In order to boost bass absorption, we recommend that you use a number of panels enough to fill all the edge corners of the room.

### **FEATURES**

- Made up of high-density PU foam and Fabric finishing plate.
- Average absorption: 0.77/m² [>63Hz;<500Hz].</li>
- Tuned to 100 Hz.
- Fire-resistance: Fabric Euroclass B (similar to old M1); HD PU Foam Euroclass B-s3,d1 (similar to old M1).
- Designed to fit and match any 80mm thickness models.
- · Very easy to install.

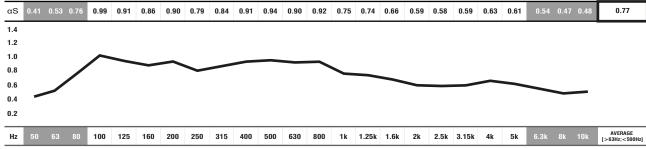
### **TECHNICAL DRAWINGS**



### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>LFA</b> 120	120 cm	40 cm	40 cm	8.8 Kg
<b>LFA</b> 060	60 cm	40 cm	40 cm	4.4 Kg

### **ABSORPTION COEFFICIENT**



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 $\blacksquare$  Values [<100Hz and > 5K] are Non Standard Values

### STANDARD FABRIC COLOURS



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  \*\*Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



Image of 60x60cm model Ref.:LF0060 (on the left) and Ref.:LF0060 applied (ambient image)

The LF COSMOS® is a low-frequency absorbent panel suitable for applying in the 90° corners of rooms. The absorption peak of this panel is at 100 Hz. It combines a highdensity foam box with JOCAVI®'s melamin faced board finishings. It has exactly the same finishing as the COSMOS\* absorbent panel, so we can combine the two models with the same aesthetics. The combined use with COSMOS\* will increase the absorption of the nearest harmonic frequencies.

The closed resonance chamber has sufficient mass and density to provide a very concentrated and effective absorption coefficient. This panel will become one of the most efficient and inexpensive offers in the market for low-frequency absorbent materials.

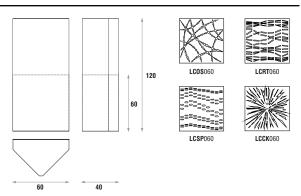
This panel is mounted by pasting it with our recommended adhesive glue. The LF COSMOS® is designed to fit and match the COSMOS® or any other 80mm thickness models.

In order to boost bass absorption, we recommend that you use a number of panels enough to fill all the edge corners of the room.

### **FEATURES**

- Made up of high-density PU foam and Rigid melamine faced board plate.
- Average absorption: **0.75/m**<sup>2</sup> [>63Hz;<500Hz].
- . Tuned to 100 Hz.
- Fire-resistance: Melamine Faced Board Euroclass B-s2,d0 (similar to old M1); HD PU Foam Euroclass B-s3,d1 (similar to old M1).
- 4 perforations and 6 melamine faced boards finishings.
- Designed to fit and match any 80mm thickness models.
- Very easy to install.

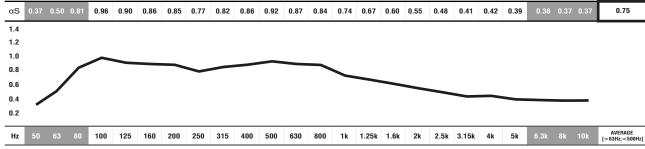
### **TECHNICAL DRAWINGS**



### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>LF0</b> 120	120 cm	40 cm	40 cm	8.8 Kg
<b>LF0</b> 060	60 cm	40 cm	40 cm	4.4 Kg

### **ABSORPTION COEFFICIENT**



■ ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654.

■ Values [<100Hz and > 5K] are Non Standard Values.

### **MELAMINE FACED BOARD FINISHINGS**



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  Due to its natural origin, wood-based products will always present natural imperfections inherent to the organic nature. And for similar reasons, they will also present traces of old-age in the course of time.

  Wood and Fabric products are highly susceptible to change its appearance with humidity and temperature. Close attention must be paid to the storage conditions and the acclimatization before, during and after the installation.

  Typical Indoor Comfort Standards state a temperature range of 20°C 27°C (68°F 81°F), and a relative humidity of less they. These would be considered as normal operational levels of JOCAVIP\*

  Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.





mage of 120x60cm model Ref.:BKW120 (on the left) and Ref.:BKW120 applied (ambient image).

The BASSKEEPER WALL® is the ATP® solution for the absorption of low frequencies and it is meant to be mounted on walls and ceilings.

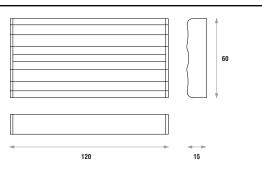
When combined with the BASSKEEPER ANGLE®, it provides the best ATP® choice among the low-frequency products.

This bass trap is an open resonance box model, tuned to 160 Hz, like the BASSKEEPER ANGLE®, and you can match them. These two products together provide a true linear tool and a first-class approach to tame low frequencies and take perfect control of the

In most situations, these two models combined solve most problems caused by the excess of low frequencies in the room.

Several colours are at your disposal.

#### **TECHNICAL DRAWINGS**



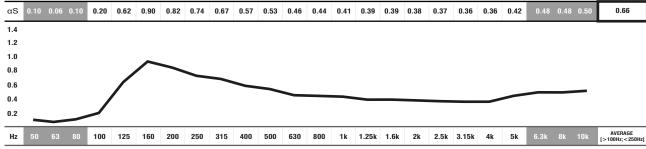
### **FEATURES**

- Raw material: HD EPS with Coloured Projectable Cellulose Finishing.
- Average absorption: **0.66/m²** [>100Hz;<250Hz].
- Fire-resistance: Projectable Cellulose Euroclass A2-s1,d0 (similar to old M0); EPS - Euroclass B-s3,d1 (similar to old M1).
- · Very easy to install.
- · Other colours available upon consultation.

### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
BKW120	120 cm	60 cm	15 cm	3.1 Kg

#### **ABSORPTION COEFFICIENT**



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### STANDARD PROJECTABLE CELLULOSE FINISHING COLOURS



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   Typical Indoor Comfort Standards state a temperature range of 20°C 27°C (68°F 81°F), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI\* products' range.
   Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



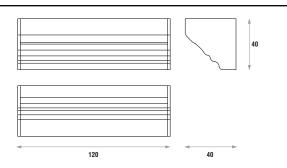
Image of 120x40cm model Ref.:BKA120 (on the left) and Ref.:BKA120 applied (ambient image)

The BASSKEEPER ANGLE® is the best proposal from the ATP® low-frequency absorption panels. It produces an overpowering effect in the corners of the room where the basses build-up is most often present. The BASSKEEPER ANGLE® is an open  $resonance\ box\ model,\ tuned\ to 160\ Hz,\ thus\ being\ very\ effective.$ 

The BASSKEEPER ANGLE® and the BASSKEEPER WALL® have the same shape and are bass traps. The BASSKEEPER ANGLE® is applied in corners while the BASSKEEPER WALL® is applied on walls. It is a first-rate approach to tame low-frequency anomalies in your room.

In most cases, the combination of these two models solves all problems caused by the accumulation of low frequencies in the room, by allowing you to create your own design while providing acoustic control of low frequencies.

### **TECHNICAL DRAWINGS**



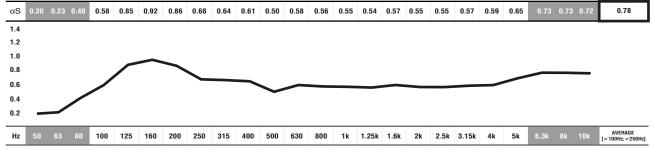
### **FEATURES**

- Raw material: HD EPS with Coloured Projectable Cellulose Finishing.
- Average absorption: **0.78/m**<sup>2</sup> [>100Hz;<250Hz].
- Fire-resistance: Projectable Cellulose Euroclass A2-s1,d0 (similar to old M0); EPS - Euroclass B-s3,d1 (similar to old M1).
- · Very easy to install.
- Other colours available upon consultation.

### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
BKA120	120 cm	40 cm	40 cm	3.6 Kg

### **ABSORPTION COEFFICIENT**



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### STANDARD PROJECTABLE CELLULOSE FINISHING COLOURS



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Image of 120x30cm model Ref.:SLB120 (on the left) and Ref.:SLB120 applied (ambient image).

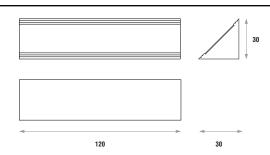
Music rooms, studios, rehearsal rooms, etc., requires surfaces that are efficient at absorbing low-frequencies.

ATP® proposes the SLIMBASS ANGLE® absorbent panel for the absorption of low-frequencies.

It is made of high-quality controlled-cell regular acoustic foam with a wooden-like  $melamine\ faced\ board\ finish\ plate.\ It\ forms\ inside\ it\ a\ 160\ Hz\ closed\ resonance\ box.$ 

The SLIMBASS  $\mathsf{ANGLE}^{\circledast}\;\;\mathsf{panel}\;\mathsf{has}\;\mathsf{a}\;\mathsf{thin}\;\mathsf{and}\;\mathsf{elegant}\;\mathsf{design},\;\mathsf{which}\;\mathsf{is}\;\mathsf{appropriate}\;\mathsf{for}\;\;$ the  $90^{\circ}$  corners of the room's walls or ceilings.

### **TECHNICAL DRAWINGS**



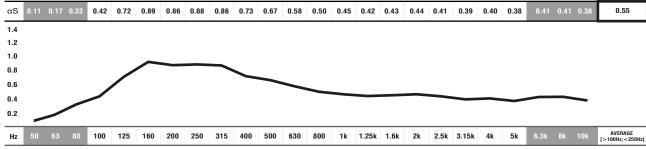
### **FEATURES**

- Raw material: Refular Foam and rigid Melamine Faced Board plate.
- Average absorption: **0.55/m**<sup>2</sup> [>100Hz;<250Hz].
- Fire-resistance: Melamine Faced Board Euroclass B-s2,d0 (similar to old M1); PU Foam Euroclass B-s3,d1 (similar to old M1).
- · Very easy to install.

### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>SLB</b> 120	120 cm	30 cm	30 cm	1.4 Kg

### **ABSORPTION COEFFICIENT**



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### **MELAMINE FACED BOARD FINISHINGS**



### **REGULAR FOAM COLOURS**



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  Pylipaci Indoor Comfort Standards state a temperature range of 20°C 27°C (68° 81°F), and a relative humidity of less than of the considered as normal operational levels of JOCAVI\*

  Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.

Image of 120x40cm model Ref.:LFT120 (on the left) and Ref.:LFT120 applied (ambient image).

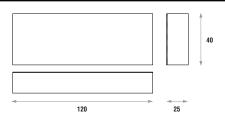
The LF TONE® is a low-frequency membrane absorbent panel to be used on walls or ceilings. It was conceived as a whole box and with a membrane designed to provide more sensitivity to the low pressure sound waves. It is tuned tot 250Hz and it also has an effective performance at lower frequencies.

The finishing of the LF TONE® is made from JOCAVI®'s fabric and it can be matched with any other fabric finishing models with the same aesthetics.

The LF TONE® aims to reduce the acoustic anomalies caused by the excess of low frequencies and it takes perfect control of the basses specially in music rooms, studios, home-theatres, rehearsal rooms, etc.. It provides one of the best choices among the lowfrequency ATP® products.

It can be directly glued to the existing surfaces by using our recommended adhesive glue.

### **TECHNICAL DRAWINGS**



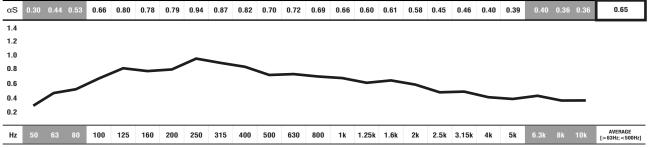
### **FEATURES**

- Fabric-coated acoustic regular foam on a rigid framework.
- Average absorption: 0.65/m² [>63Hz;<500Hz].</li>
- . Tuned to 250 Hz.
- Fire-resistance: Fabric Euroclass B (similar to old M1);  $\ensuremath{\mathsf{EPS}}$  - Euroclass B-s3,d1 (similar to old M1).
- · Several colours.
- · Very easy to install.

### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>LFT</b> 120	120cm	40 cm	25 cm	1.7 Kg

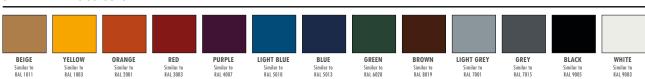
### **ABSORPTION COEFFICIENT**



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### STANDARD FABRIC COLOURS



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# ATP® Music Accessories®

Based on the experience of the JOCAVI®s CEO João Vieira as a Studio and Live sound engineer, we developed this line of music accessories for the music market industry.

Before these accessories are mass-produced and catalogued, João Vieira used these models as prototypes helping to improve the sound of several albums and touring concerts.

This accessory line appears when we were celebrating a year after the creation of the ATP® brand. A complete line of accessories which is divided by: Studio Line, Speakers Line and Drum Kit Line. All these components are important tools to achieve the sound excellence of the instruments.





# VOCAL MIC REFLECTION FILTER®

**ATP® STUDIO LINE** 





Image of VMRF filter Ref.:VMRF and the POP OFF Ref.:PO applied.

#### **FEATURES**

- · Acoustic bell for microphone.
- Insulates the microphone from the room effect.
- · Acoustically conditions the microphone.
- · Use: recording and broadcast studios.
- · Installation: direct fastening to the microphone tripod.
- Packaging: 1 unit.

#### SIZES AND COLOURS

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
VMRF ●	38 cm	58 cm	24 cm	2.1 Kg

#### **DESCRIPTION**

This parabola-shaped accessory is a creativity aid to sound engineers who search for the perfect loudness for each project. It enables significant sound variations by adjusting the position between the piece and the microphone.

The bell that defines its shape is sealed, which improves the insulation of the room environment effect. It reduces the amount of energy reflected from the room surfaces, walls, floor and ceiling, thus making the sound of voices or instruments more authentic.

The VMRFilter® is made of four different raw materials with no metal components, thus not causing any change to the magnetic field of microphones. The size and shape of this piece were optimised with the aim to maximise the absorption inside the VMRFilter<sup>®</sup>, in order not to influence the colouring or polarity of each microphone but influence the surrounding acoustics.

The VMRFilter's interior is made of three different permeable absorbent materials which provide it with interesting features.

It is a great piece to record singers, broadcasters, acoustic and electric guitars and basses, flutes, wind instruments, etc... It works even if your room is not duly treated.

It can be mounted on the same tripod of the microphone itself. However, if mounted on a separate tripod, it is easier to tune the VMRFilter's best positioning in relation to the microphone that is being used.



# $BABS^{\tiny{\circledR}}$ two sided self-standing absorbent panel

ATP® STUDIO LINE





Image of BABS model Ref.:BABS.

#### **FEATURES**

- · Portable acoustic blind.
- NRC: 0.79 (FOAM FACE); 0.68 (FABRIC FACE).
- Ideal to put around instruments, amplifiers and speakers.Use: recording studios and mobile studios.
- · Installation: easy to mount on the base provided
- · Packaging: 2 units.

### SIZES AND COLOURS

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
BABS	117 cm	55 cm	9 cm	4.8 Kg

#### **DESCRIPTION**

The BABS® is an acoustic blind system which is ideal to have in your recording room. It provides an outstanding acoustic division between each instrument or amplifier, thus optimising the separation between microphones during sound capturing.

It is also the ideal solution for portable acoustic treatment. It can be used to improvise a rehearsal room, recording room or control room that surrounds a monitoring system, etc.

It is provided with a foot for each module. It is easily mounted by placing it on your room's floor and adjusts to the intended situations.

BABS's two faces are acoustically and aesthetically different. One of them absorbs more than the other one, also within different ranges of the sound spectrum, thus providing various options of loudness and modulation to your room. For different audition or sound capturing purposes, this versatile system allows to adapt the rooms' acoustic disturbances, thus becoming a very useful tool for your projects

It can be provided (optional) with a carrying bag for each two pieces, thus being very light and easy to carry.

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Image of HORNDIFFUSER model Ref.:HD.

#### **FEATURES**

- · Acoustic reflector for wind instruments.
- · Increases the return of the direct sound back to the musician.
- Insulates the sound coming from the monitors.
- · Installation: by embedding in the microphone or microphone tripod.
- · Use: at live and in studio
- · Packaging: 1 unit

#### SIZES AND COLOURS

MODELS	DIAMETER	HEIGHT	DEPTH	WEIGHT
HD ●●○	Ø29 cm	1 cm	-	0.1 Kg

#### **DESCRIPTION**

This accessory works as an acoustic mirror for trumpeters, trombonists and saxophonists. It is applied around the microphone. It provides the musician with the direct return of the sound that he/she played. Besides this important advantage to the musician, it also offers benefits to the sound technician or engineer, since it insulates the microphone from the sound that comes from the stage monitors by creating a sort of a wall behind the microphone.

Its curvature shapes are optimised with the aim of focusing on the musician the reflection of his/her sound in the most efficient way.







Image of MIC PROTECTOR model applied Ref.:MP

### **FEATURES**

- · Insulation protector for microphones.
- · Acoustically separates sound capturing.
- · Fits most microphone models.
- · Installation: on a microphone tripod.
- Packaging: box with 1 or 3 units. · Use: live and studio

### SIZES AND COLOURS

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
MP ●●	22 cm	11 cm	8.5 cm	0.1 Kg

### **DESCRIPTION**

This accessory is more useful to sound engineers and technicians than to musicians themselves

This accessory is original, unique, highly necessary and in high demand. It is often used by sound engineers to improvise and make bricolage, when they need to use something that produces this insulation effect while capturing several instruments that are close to each other. The MP1 surrounds the microphone individualising the sound that is captured.

Especially at live events, it modifies the behaviour of noise gates, compressors, dynamics' controllers inserts and provides them with better autonomy and easiness of control.

It is ideal to use under and over snare drums, as well as floor toms, jazz bass drums, guitar amplifiers, basses and wherever each one's imagination will dictate.

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Image of 8x25x30cm model Ref.:NFBI and NFBII

#### **FEATURES**

- · Anti-vibration speaker base available in two sizes.
- Use: nearfield and midfield speakers.
- · Position adjustment in the vertical angle.
- Installation: to be placed on working consoles or speaker stands.
- · Fits most models.
- · Packaging: 2 units.

#### SIZES AND COLOURS

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
NFB I	8 cm	25 cm	30 cm	0.35 Kg
NFB II	8 cm	35 cm	40 cm	0.53 Kg

#### **DESCRIPTION**

The NFB $^{\circ}$  is an essential accessory for your music audition room or studio control room. This quite inexpensive piece works miracles on your room's sound. It minimizes the propagation of physical vibrations to the pieces installed on the workbenches, which also end up playing and vibrating thus causing spurious noises.

The innovation of the NFB's design consists on the possibility of adjusting the vertical angle from the speaker's position to the audition sweet spot, thus adding one more important benefit

All these benefits will thus allow you to optimise the sound of your room. You can position this piece in relation to the monitors and reduce the unwanted vibrations.

This accessory is meant to be used in near fields. The two existing sizes, NFB I and NFB II, adjust to most models of this type of speakers.



# SUB WOOFER BASE®

ATP® SPEAKER LINE





Image of the two SUB WOOFER BASE models Ref.:SWBI and Ref.:SWBII.

#### **FEATURES**

- · Anti-vibration speaker base available in two sizes.
- Use: sub-woofer.
- · Installation: to be placed on the floor
- · Fits most models.
- · Packaging: 1 unit.

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
SWB I	9 cm	40 cm	40 cm	0.96 Kg
SWB II	9 cm	58 cm	50 cm	1.67 Kg

### SIZES AND COLOURS

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# **DESCRIPTION**

The  $\text{SWB}^{\circledast}$  is a key piece for your set-up when you use a sub-woofer. This accessory is essential and quite inexpensive, and reduces the vibrations caused by the physical propagation to the accessories present in the room.

The top part is stiff and causes a weight distribution across the whole area in contact with the

The sizes are in accordance with most manufacturers of this type of speakers. There are two different sizes, SWB I and SWB II.







Image of 197x197x2.7cm model Ref.:DB and the carrying-bag.

#### **FEATURES**

- · Anti-vibration platform.
- Packaging: 1 kit (9 pieces)
- Installation: by embedding; Use: live and studio.
- · Fits the standard size of stage platforms.
- Manufactured with 60% recycled material.
- · Provided with carrying-bag.
- · Other sizes available on demand.

#### SIZES AND COLOURS

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
DB •	197 cm	197 cm	2.7 cm	26 Kg

#### **DESCRIPTION**

The ATP® DRUMBASE® is an anti-vibration platform for drum sets which is composed of 9 pieces that fit together and make up a total area of 4m<sup>2</sup> (2mt x 2mt).

The material used in its base is non-skid, closed-cell, made of recycled rubber, and its density is duly adjusted. In order to exert the best inertia on the physical propagation of energy, we took into account the weight of both the instrument and the musician, as well as the weight of the reverberated movements that are made when the musician is playing.

It is easily mounted by fitting together the several modules on the floor or the stage. It just takes two minutes for your DRUMBASE® to be ready. The 9 modules fit together in a perfect way, thereby preventing them from getting separated due to oscillations during performance. It has a carpet finishing.

The DRUMBASE® is a great tool to optimise the sound of your drum kit and is excellent to be used at live or in studio.

We offer a carrying-bag and a pencil to mark the position of the several pieces that are on the







Image of the KICK PAD KIT® (inside) the KICK PAD, Ref.:KP and the PUNCH MASTER, Ref.:PM (outside).

#### **FEATURES**

- Kit includes: KICK PAD® and PUNCH MASTER®
- · Absorbent for the bass drum, manufactured in Acoustic Foam and Plastic.
- Efficiently reduces unwanted resonances to use live and on studio.
   For all bass drums ranging between 18" and 24" depth.
- · Packaging: 1 unit.
- · Installation: to be placed inside the bass drum.

### SIZES AND COLOURS

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
KP	86 cm	56 cm	7 cm	0.6 Kg
PM ● ●	Ø14 cm			0.1 Kg

#### DESCRIPTION

To tune and get good sound out of a bass drum is sometimes a hard task. This instrument, which is an essential base of drum kits, needs to be treated once in a while

The KICK PAD® was created to absorb unwanted harmonics which are out of tune with the bass drum note, thus making the beat clearer and more defined.

This accessory has some small markings in order for the musician to highlight small slices and adjust loudness as he/she pleases. It can be used in all sizes of bass drums.

ATP® PUNCH MASTER® is provided together with the KICK PAD®. This accessory allows you to fully control the bass drum head's vibration accentuating its punch and deepness at every beat. Its ultra light material and attractive design makes it look distinct and stylish. It also allows protection against tearing from cables or the microphone's tripod

The KICK PAD® is cut alongside the curvature of the bass drum which prevents the foam cells from being closed, thus resulting in a more beneficial absorption.

This is a tool to be used either at live or in studio and is very useful for both the musician and the sound engineer.

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$AS^{\mathbb{R}}$	Acoustic	Shel	R
/ \J			1

AS® Acoustic Shell® is a brand that sells and rents out highly specialised acoustic shells which are conceived in the laboratories (R&D) of the Portuguese company JOCAVI® Acoustic Panels Lda. The AS® brand belongs to the JOCAVI® Group. We prepare projects to advise on our products by seeking the best shell for each space. We rent out through "long term rental" contracts for events to be carried out on a continuous basis on the same

We sell for permanent installation in theatres and auditoriums where the main activity requires the use of these acoustic diffusers. We also carry out the installation and acoustic checking and enter into maintenance contracts for our shells. We are AS® Acoustic Shell®, a company specialised in acoustic diffusion shells.





# FIXED DIFFUSION ACOUSTIC SHELLS

EFFECTFUSER®AcSh® • DYNAMICFLOW®AcSh® • WOODFOIL® AcSh® • PLURA®AcSh®



# MOUNTED MODELS AND SIZES

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
EFX COMBI 180	180 cm	120 cm	32 cm	57 Kg
EFX Plate 120	120 cm	120 cm	32 cm	38 Kg
DYN Plate 180	180 cm	120 cm	11 cm	34 Kg
DYN Plate 120	120 cm	120 cm	11 cm	25 Kg

#### DESCRIPTION

The diffusing acoustic shells are acoustic treatment elements intended for large volume rooms, such as theatres or auditoriums with a stage where orchestral concerts or mere recitals take place. These acoustic diffusing components are meant to project the nonamplified original sound from the stage to the audience. This will enable people to hear the sound coming directly from its sound sources and instruments, without the electro-acoustic inherent characterization or colouring. This panel also aims to enable the stage and the room to be within the same space and not separate in two by the mouth of the stage. JOCAVI®'s EFFECTFUSER®, WOODFOIL®, PLURA® and DYNAMICFLOW® models have been designed at the specific scale of these needs. Due to its shape and depth, they also have a high diffusion coefficient on medium/low frequencies. The all are large-sized diffusers that provide a very  $homogeneous\ diffusion\ within\ the\ diffuse\ and\ sound\ spectrum.$ 

Manufactured in ABS (except WOODFOIL® in wood) with a rigid framework, these pieces can be coupled and multiplied in order to suit each project's demands. When mounted, several modules should be grouped so as to obtain an area that is proportional to each space. Mounting: They can be hung from the ceiling in a strategic position in order to obtain sound diffusion in the required angles. They can also be mounted with a motorized rigging system from the stage ceiling. These elements / modules are fastened with steel cables by using appropriate mounting accessories. Their low weight makes mounting easier. As with any other JOCAVI® diffusion panel, these models can also be applied on false ceilings, flat ceilings or walls.

The combination of the various EFFECTFUSER\*COMBI and the other models Plates, diffusing pieces must be optimised so as to obtain a diffusion as uniform as possible in the entire room.

#### **MAIN FEATURES**

To adjust the diffusing properties of these models to the room where this product is applied, the placement of the pieces must be taken into account in order to obtain its best performance, bearing in mind these two types of diffusion:

#### DIFFUSION WITH COMPRESSION EFFECTS (only EFX COMBI and EFX Plate)

It emphasizes the sound diffusion with a smaller covering angle, effective at a longer incidence distance.

Features: efficient at a longer distance; smaller incidence angle; higher sound level.

# DIFFUSION WITH SCATTERING EFFECTS (only EFX COMBI and EFX Plate)

It emphasizes the sound diffusion at a wider covering angle, effective at a shorter incidence distance.

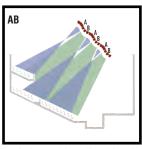
Features: efficient at a shorter distance; less sound level; wider incidence angle.

#### MOUNTED MODELS AND SIZES

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
WFL Plate 180	180 cm	120 cm	19 cm	26 Kg
WFL Plate 120	120 cm	120 cm	19 cm	21 Kg
PLR Plate 180	180 cm	120 cm	16 cm	33 Kg
PLR Plate 120	120 cm	120 cm	16 cm	24 Kg

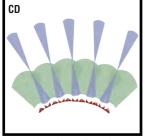
#### SCATTERING EFFECTS (example for the EFX180COMBI)

# **SIDE VIEW**



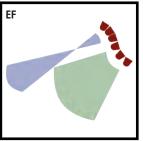
HORIZONTAL DIFFUSION WITH COMPRESSION EFFECT - HORIZONTAL DIFFUSION WITH SCATTERING EFFECT.

#### **TOP VIEW**



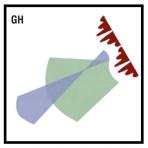
C - VERTICAL DIFFUSION WITH COMPRESSION EFFECT. D - VERTICAL DIFFUSION WITH SCATTERING EFFECT.

# SIDE VIEW (single unit)



- HORIZONTAL DIFFUSION WITH COMPRESSION EFFECT F - HORIZONTAL DIFFUSION WITH SCATTERING EFFECT.

**TOP VIEW (single unit)** 



H - VERTICAL DIFFUSION WITH SCATTERING EFFECT. G - VERTICAL DIFFUSION WITH COMPRESSION EFFECT.

#### STANDARD ABS COLOURS





# **WOOD VENEER FINISHINGS**

ΟΔΚ









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   Typical motor Comfort Standards state a temperature range of 20°C -27°C (68° -14°P), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI\* products' range.
   Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



# PORTABLE DIFFUSION ACOUSTIC SHELLS

DYNAMICFLOW®AcSh® • WOODFOIL® AcSh® • PLURA®AcSh®



#### DESCRIPTION

Based on works and experiments in the field of sound wave diffusion and the positive aspects that result from the presence of diffusers in rooms, we have built this acoustic diffuser.

Therefore, we are presenting new design proposals that are less common in diffusion structures designed for mobile use.

The DYNAMICFLOW® AcSh®, the WOODFOIL® AcSh® and the PLURA® AcSh® are an easyto-install portable acoustic diffusion shells meant to be used in certain types of musical

It is a piece that changes the room's acoustics by enhancing its features.

Diffusion shells are acoustic treatment elements used in large volume rooms, such as theatres and auditoriums. They may also be used outdoors for the performance of concerts by large orchestras or just recitals.

The installation of these acoustic diffusion components is meant to project the nonamplified original sound from the stage towards the audience.

This will enable to hear the sound that comes directly from the sound sources and instruments, without the characterization or colouring inherent to the use of electroacoustics. These shells also enable the stage and the room to be within the same space and not separate in two by the mouth of the stage. These pieces do not need any preparation prior to their installation, just a free stage with good access.

They must be coupled and multiplied in such a way that is adequate to each project in order to obtain a diffusing area that is proportionate to the space in question.

#### **MAIN FEATURES**

Depending on the space available on the stage, more or less elements may be used in order to form the shape of a perfect shell.

Built on a modular configuration with 120 x 120cm pieces, up to four modules can be  $coupled in height, thus totalling a diffusing homogeneous surface of 480\,x\,120cm.$ 

The DYNAMICFLOW® AcSh®, the WOODFOIL® AcSh® and the PLURA® AcSh® are a largesized diffusers that provides a very homogeneous diffusion within the sound and diffuse spectrum

#### **DIFFUSION WITH SCATTERING EFFECTS**

It emphasizes the sound diffusion at a wider covering angle, effective at a shorter incidence distance.

Features: efficient at a shorter distance; less sound level; wider incidence angle

#### MOUNTED MODELS AND SIZES

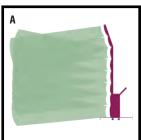
MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
DYNAS3 / AS4	380 / 500 cm	124 cm	78 cm	55 / 70 Kg
WFLAS3 / AS4	380 / 500 cm	124 cm	78 cm	55 / 70 Kg
PLRAS3 / AS4	380 / 500 cm	124 cm	78 cm	55 / 70 Kg

#### MODELS IN FLIGHT-CASE

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
DYNAS3 / AS4	165 cm	124 cm	78 cm	65 / 80 Kg
WFLAS3 / AS4	165 cm	124 cm	106 cm	65 / 80 Kg
PLRAS3 / AS4	165 cm	124 cm	82 cm	65 / 80 Kg

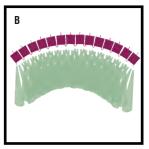
#### SCATTERING EFFECTS (example for the DYNAS4)

#### SIDE VIEW



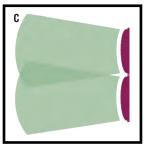
A - VERTICAL DIFFUSION WITH SCATTERING EFFECT.

#### **TOP VIEW**



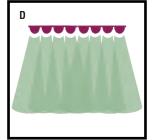
B - HORIZONTAL DIFFUSION WITH SCATTERING EFFECT.

#### SIDE VIEW (single unit)



C - VERTICAL DIFFUSION WITH SCATTERING EFFECT.

# **TOP VIEW (single unit)**



D - HORIZONTAL DIFFUSION WITH SCATTERING EFFECT.

#### STANDARD ABS COLOURS



#### WOOD VENEER FINISHINGS













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   Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.





When performing at a conventional theatre, symphonic and chamber orchestras, as well soloists and opera singers, encounter problems related to the projection of the sound and voice, due to the noise that is produced on the space of the stage box and the absence of diffusion materials.

The sound that is produced by the orchestra is dispersed heterogeneously in all directions, depending on the instruments. It needs an acoustic shell to channel it towards the audience. In order not to lose the sound level and all the musicality of orchestras, acoustic shells should be placed around them.

To project the sound, it is necessary to install diffusion panels shaped like a shell, open towards the audience, in order to scatter the sound in that direction. The Acoustic Shells can be installed hanging on the stage's ceiling and/or on the floor around the musicians.

Following the research on acoustic panels, JOCAVI® adopted four of its models of acoustic diffusers to create these models of AS® acoustic shells.

Spaces, like theatres and auditoriums, where classic music performances are programmed, are usually big-volume rooms. Thus, due to the noise from the audience and the lack of an acoustic shell, electro-acoustic equipment (microphones, power stages and loudspeakers) is overused in these spaces. Musicians, singers and musical directors do not tend to overuse electro-acoustics in order not to distort the natural colour of the instruments and voices. The use of our AS® acoustic shells increases the natural level of the sound that is genuinely produced by the instruments and naturally increases the level of the acoustic pressure of the room, thus leading to a balanced diffusion throughout the whole range of the sound spectrum.



AS® Acoustic Shell® is a brand that sells highly specialised acoustic shells which are conceived in the laboratories (R&D) of the Portuguese company JOCAVI® Acoustic Panels Lda. The AS® brand belongs to the JOCAVI® Group. We prepare projects to advise on our products by seeking the best shell for each space.

We sell for permanent installation in theatres and auditoriums where the main activity requires the use of these acoustic diffusers. We also carry out the installation and acoustic checking and enter into maintenance contracts for our shells. We are AS® Acoustic Shell®, a company specialised in acoustic diffusion shells.

### **VERSATILITY OF A SHELL**

Unlike the most ancient and original open-air acoustic shells made of stone in roman amphitheatres, today's acoustic shells used in performance rooms have to be versatile and discreet, so that their presence does not hinder the use of the space for the most varied types of performances.

Our shells have been developed and built with light and attractive materials, which facilitate as much as possible their practical use. They adapt to the orchestra by increasing the number of the necessary modules and by adjusting their application according to the type of performance. It is a stage equipment that is easily assembled and disassembled and that is imperceptible when it is not being used.

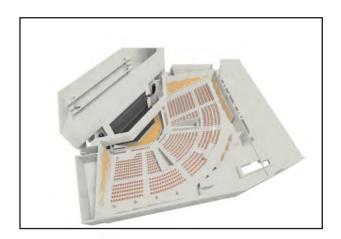
#### **ACOUSTIC BEHAVIOUR**

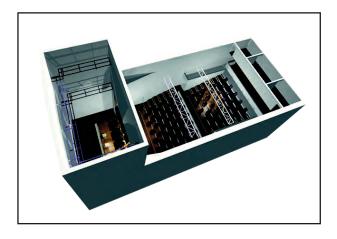
often than medium/low frequencies.

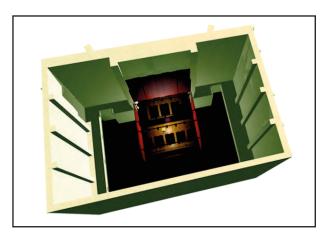
The purpose of acoustic shells is to use both the acoustic energy and sound, which were beforehand wasted in the stage-box, and direct them towards the audience. It is particularly important how this is done. Acoustic shells, which are simply a flat, convex or concave piece of varnished plywood, are normally used. These pieces, due to their big size, return the acoustic energy in very tight angles of incidence. Their scattering coefficient versus frequency is not balanced either, meaning that they do not scatter all frequencies in a uniform way. They scatter high frequencies much more

Effectfuser® AcSh®, Dynamicflow® AcSh®, Woodfoil® AcSh® and Plura® AcSh® acoustic shells come from duly characterised JOCAVI®'s acoustic diffusion panels, in order to obtain the best diffusion balance throughout the sound spectrum. Therefore, a good and distributed angular coverage and a better balance of the diffusion values over the several frequencies are obtained.









#### BENEFITS FOR THE ORCHESTRA AND THE MAESTRO

Acoustic comfort for a musician or musical director is fundamental. It is impossible to win a battle against a room with bad acoustics.

It is a frustrating situation for musicians, maestros and sound technicians when that happens and there is nothing within their reach that they can do.

The quality of the interpretation of musical pieces may be enhanced when conditions are excellent. The acoustic shell harmonises the sound and enables musicians to listen to each other clearly, thus making their performance pleasant and perfectly harmonious. It also allows to highlight or mildly moderate the several groups of instruments of the orchestra in accordance with the Maestro's taste.

#### **AS® FIXED SHELLS**

The EFFECTFUSER® AcSh®, DYNAMICFLOW® AcSh®, WOODFOIL® AcSh® and the PLURA® AcSh® fixed acoustic shells consists of lateral background and ceiling modules. These elements enable several angulations among themselves, which are defined according to the degrees of incidence towards the audience.

These modules are fixed to the stage's ceiling with duralumin and steel cable structures. They are moved through a system of electric engines, which allow preprogramming some points on the most usual positions. When not in use, shells are gathered on the stage's ceiling and go completely unnoticed.

This type of study is available by our company and prepared through simulation of ray tracing, the only way to preview the objective. Therefore, we assure the homogeneous scattering levels of the acoustic energy and the subsequent increase of reverberation time in the room.

#### **AS® PORTABLE AND REMOVABLE SHELLS**

DYNAMICFLOW® AcSh®, WOODFOIL® AcSh® and PLURA® AcSh® removable acoustic shells are composed of four 120cm x 120cm modules which are set on a flight-case type box. This box is part of the basic structure of the shell itself and there is no need to store the box while the shell is being used. Two people are enough to install it on the stage floor.

This shell adapts to each orchestra according to the number of musicians, groups of instruments and the stage area by adjusting the quantity of modules to be used.

It is versatile since it allows several configurations in accordance with the musical formation, as well as the easy access of musicians and instruments and a quick assembly and disassembly.

This shell is easily carried on its wheeled box. When not in use, it is kept in storage in order not to interfere with the good functioning of the performance room.

#### **MAIN FEATURES**

- The  $\mathsf{AcSh}^{\$}$  shell system gives the dimension of a big concert hall.
- $AcSh_{\underline{\ \ }}^{\circ}$  provides excellent options of acoustic shells for any performance room.
- AcSh® provides a wide range of applications in theatres, auditoriums or smaller concert spaces.
- The AcSh® products from JOCAVI® have the right practical solutions for what you want
- The AcSh<sup>®</sup> shells are an added-value, since they provide acoustic features
  which are precise, simple, easy to install, attractive and are available in all
  colours
- AcSh® Acoustic Shells® are a must in theatres and auditoriums where classic music performances are programmed.











# ECOiso® Ecological Acoustic Products

Following an ecological philosophy, JOCAVI® has designed this line of acoustic insulation and treatment materials, which are made exclusively from 100% natural raw-materials, like cork and coconut fibers and wood.

This line of products provides a practical and efficient solution for acoustic insulation and treatment, with the associated benefit of using recycled, recyclable and environmentally-friendly raw materials.

ECOiso® line provide it with a high degree of thermal, acoustic and anti-vibration insulation and airborne noise reduction. These products represents the most ecological solutions to build high-quality acoustic insulation and treatment.

The acoustic behavior of this line of products delivers a natural combination, and ensures solutions with superb acoustic performances and an excellent aesthetical and decorative integration.





mage of 25x25x6cm model Ref.:QCK006 (on the left) and Ref.:QCK006 models appplied (ambient image

Following an ecological philosophy, JOCAVI® has designed this product made exclusively of cork from cork oak trees. Its industrial process is 100% natural.

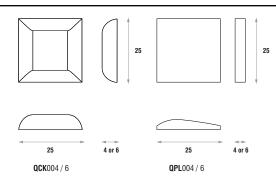
The QUADCORK® is an anti-vibration insulation and acoustic treatment product with a high degree of thermal insulation as well. The outstanding behaviour of the Expanded Cork Agglomerate, in terms of insulation and dimensional elasticity and its controlled porosity and density, delivers excellent acoustic performances to reduce sound levels by structure-born transmission and to reduce airborne noise and reverberation time. The QUADCORK® is thus the practical, efficient and ecological solution for a good acoustic insulation and treatment. It is meant to be applied on continuous surfaces or on selected spots. It comes in 25cm x 25cm mosaics that are simply glued to the surfaces, walls and ceilings

The  ${\tt QUADCORK}^{\circledast}$  is simply made of cork as its raw-material, without additives..., and is bonded with its own resin. 90% of the energy consumption is made up of biomass, the waste of its industrial process, granules and dust. It is fully reusable.

# **FEATURES**

- Renewable and 100% natural raw-material and fully recyclable.
- NRC: (0.42/m<sup>2</sup> 40mm) (0.53 /m<sup>2</sup> 60mm).
- Level of sound insulation: Rw 52 dB.
- Fire resistance: Euroclass E (EN 13501-1 similar to old M4). No release of toxic gases.
- Thermal, acoustic and anti-vibration insulation material.
- Density: 120Kg / m³.
- Thermal conductivity / Specific heat: 0.004W/mk.
- · Natural industrial process (without additives).
- · Unlimited durability, no loss of features.

#### **TECHNICAL DRAWINGS**

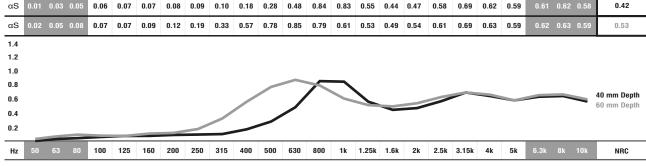


# **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>QCK</b> 006	25 cm	25 cm	6 cm	0.5 Kg
<b>QCK</b> 004	25 cm	25 cm	4 cm	0.3 Kg
<b>QPL</b> 006	25 cm	25 cm	6 cm	0.5 Kg
<b>QPL</b> 004	25 cm	25 cm	4 cm	0.3 Kg

SOLD PER BOX ONLY -  $1m^2$  - 16 Units/Tiles =  $1 m^2$ 1 BOX OF 4cm units = 4 m<sup>2</sup> - 1 BOX OF 6cm units = 2.5 m<sup>2</sup>

#### **ABSORPTION COEFFICIENT\***



0.48 0.84

ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654.

 $\blacksquare$  Values [<100Hz and > 5K] are Non Standard Values. \*PANEL DATA ONLY OF REF.: QCK004 AND QCK006 MODELS.

0.42

#### STANDARD CORK COLOUR



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  Due to its natural origin, wood-based products will always present natural imperfections inherent to the organic nature. And for similar reasons, they will also present traces of old-age in the course of time. Typical Indoor Confort Standards state a temperature range of 20°C 27°C (68°F 81°F), and a relative humidity of less that woods. These would be considered as normal operational levies of JOCAVIP products' range.

  Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



Image of 25x25x6cm model Ref.:Q0C008 and Q0F008 (on the left) and Ref.:Q0C008 models appplied (ambient image)

QUADCORK® OUTLINE is an anti-vibration insulation and acoustic treatment product with a high degree of thermal insulation as well. The outstanding behaviour of the Expanded Cork Agglomerate, in terms of insulation and dimensional elasticity and its controlled porosity and density, delivers excellent acoustic performances to reduce sound levels by structure-born transmission and to reduce airborne noise and reverberation time.

QUADCORK® OUTLINE is an efficient and ecological solution for a good acoustic insulation and acoustic treatment.

You can chose from two design options, It is supplied in plates with 100cm x 50cm to be glued on continuous surfaces of walls and ceilings on selected spots.

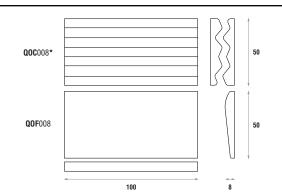
This is a product made exclusively of cork from cork oak trees his manufacture process is 100% natural.

QUADCORK® is simply made of cork as its raw-material, without additives..., and is bonded with its own resin. 90% of the energy consumption is made up of biomass, the waste of its industrial process, granules and dust. It is fully reusable.

### **FEATURES**

- · Renewable and 100% natural raw-material and fully recyclable.
- NRC: (QOC100 0.70/m²) (QOF100 0.71 /m² 60mm).
- Fire resistance: Euroclass E (EN 13501-1 similar to old M4). No release of toxic gases.
- Thermal, acoustic and anti-vibration insulation material.
- Density: 120Kg / m³.
- Thermal conductivity / Specific heat: 0.004W/mk.
- Natural industrial process (without additives).
- · Unlimited durability, no loss of features.

#### **TECHNICAL DRAWINGS**

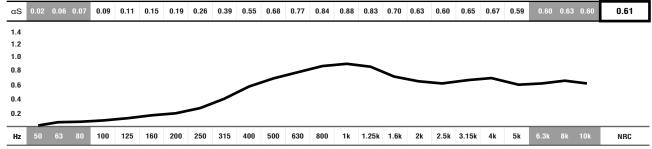


#### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>Q0F</b> 008	100 cm	50 cm	8 cm	3.5 Kg
QOC008*	100 cm	50 cm	8 cm	4.1/3.5 Kg

SOLD IN PAIRS / m<sup>2</sup> - 2 UNITS = 1m<sup>2</sup>

#### **ABSORPTION COEFFICIENT\***



ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654.

■ Values [<100Hz and > 5K] are Non Standard Values. \*PANEL DATA ONLY OF REF.: QOCOO8 MODEL.

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  Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



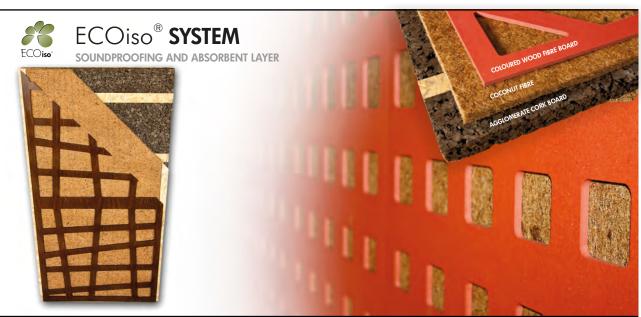


Image of 120x600cm model Ref.:EC0IS093 (on the left) and Ref.:EC0IS073 applied (ambient image).

Following an ecological philosophy,  $\mathsf{JOCAVI}^{\otimes}$  has designed this line of acoustic insulation and treatment materials, which are made exclusively from natural raw-materials, like cork and coconut. This compound, made of strictly 100% natural ecological materials, has an excellent technical performance. The unique features of these raw materials combined in the ECOiso® provide it with a high degree of thermal, acoustic and anti-vibration insulation and airborne noise reduction. This product represents the most practical, efficient and ecological solution to build high-quality acoustic insulation and treatment. The ECOiso® is ideal to install in music and television studios, business spaces, auditoriums, conference rooms, restaurants and bars,

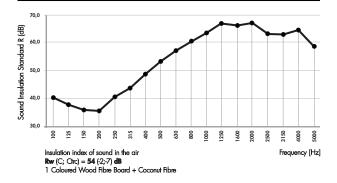
The acoustic behaviour of the  ${\sf ECOiso}^*$  (cork + coconut + wood) delivers a natural combination, and ensures solutions with superb acoustic performances to reduce sound levels, as well as an excellent aesthetical and decorative integration.

The ECOiso® system is composed of two types of elements in plates and some accessories. The first element to be applied is the Acoustic Insulation, and the second element is the Acoustic Absorber that gives the final decorative finishing. Accessories are: wooden slats, wall plugs, bolts and glue.

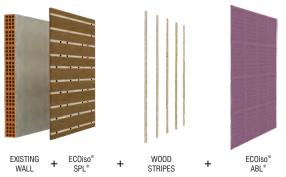
## **FEATURES**

- Renewable, 100% natural raw-material and fully recyclable.
- Noise reduction coefficient (NRC): 0.78/m²
   Level of sound insulation: Rw 54 dB.
- Fire-resistance: Wood Veneer Faced (or Engineered Coloured Fibre) Boards Euroclass B-s2,d0 (similar to old M1), Coconut (Coir Fibre) - Euroclass E (similar to old M4) and Cork Euroclass E (similar to old M4).
- Thermal, acoustic insulation, anti-vibration and acoustic absorbent.
- · Unlimited durability, no loss of features.
- Excellent dimensional stability (even when subject to high thermal variations).
- Low energy consumption during the manufacturing process.

#### SOUND INSULATION INDEX R (dB)



# **TECHNICAL DRAWINGS**



# **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
EC0 S093	120 cm	60 cm	9.3 cm	13.6 Kg
EC0 S073	120 cm	60 cm	7.3 cm	12.6 Kg

#### THERMAL TRANSMISSION COEFFICIENT)

LAYERS	λ [W/m.℃]	e [m]	R [m².C/W]
Rse			0,040
traditional plaster	1,30	0,015	0,012
brick 22 Preceram	-	0,220	0,580
traditional plaster	1,30	0,015	0,012
ECO iso board	0,04	0,040	1,500
ADD or LFM finishing board	0,25	0,0125	0,050
Rsi			0,130

Thermal transmission coefficient  $U = 0,430 \text{ W/m}^2.^{\circ}\text{C}$  (without insulation  $U = 1,294 \text{ W/m}^2.^{\circ}\text{C}$ 

#### **ENGINEERED COLOURED WOOD COLOURS**



#### **WOOD VENEER FINISHINGS**



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  Wood and Fabric products are highly susceptible to change its appearance with humidity and temperature. Close attention must be paid to the storage conditions and the acclimatization before, during and after the installation. Typical Indoor Confront Standards state a temperature range of 20°C -27°C (68°F 81°F), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI\* products' range.
  Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



Image of 120x60cm model Ref.:ECOABLw (on the left) and Ref.:ECOABLw applied (ambient image) LFMT120 perforation on both images

The ECOiso®ABL® is ideal to install in auditoriums, conference rooms, business spaces, restaurants and bars, etc.. The coconut fibre is a natural, renewable and very light vegetal material. It has high porosity (95% of pores), which translates into an extremely high absorption of sound energy. The good behaviour of the recycled wood fibres, associated with the coconut fibre's micro-porous absorbent properties, makes a natural first-class combination in terms of acoustic solutions.

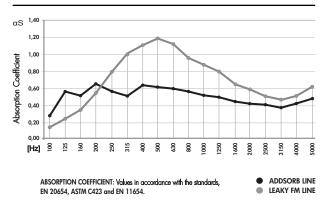
The acoustic behaviour of the ECOiso®ABL® (coconut + wood) delivers a natural combination, and ensures solutions with superb acoustic performances to reduce airborne levels, as well as an excellent aesthetical and decorative integration.

The ECOiso®ABL® is composed of two materials (coconut fibres and recycled wood fibres) forming the Acoustic Absorber element, that gives us the final decorative finishing

## **FEATURES**

- 100% natural materials.
- 100% recycled and recyclable.
- Noise reduction coefficient (NRC): 0.78/m2
- Fire-resistance: Wood Veneer Faced (or Engineered Coloured Fibre) Boards Euroclass B-s2,d0 (similar to old M1), Coconut (Coir Fibre) Euroclass E (similar to old M4).
- · Unlimited durability, no loss of features.
- · Excellent dimensional stability
- (even when subject to high thermal variations).
- · Low energy consumption during the manufacturing process.

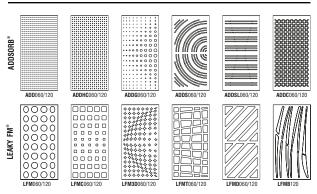
#### **ABSORPTION COEFFICIENT**



# **ENGINEERED COLOURED WOOD COLOURS**



#### **TECHNICAL DRAWINGS**



# **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
ECO <b>ABLc</b>	120 cm	60 cm	2.8 cm	4.1 Kg
ECOABLW	120 cm	60 cm	2.8 cm	4.1 Kg

#### ABSORPTION COEFFICIENTS OF ALL MODELS (NRC) AND FINISHING PANELS PERFORATIONS (%/m²)

ADDSORB® REFERENCE AND SIZES AVAILABLE	PERFORATIONS (%/ m²)	NRC	LEAKY FM® REFERENCE AND SIZES AVAILABLE	PERFORATIONS (%/m²)	NRC
ADD 060/120	6,30%	0,53	LFM 060/120	43,09%	0,82
ADDHC 060/120	10,22%	0,63	LFMC 060/120	32,45%	0,77
ADDG 060/120	9,26%	0,59	LFM3D 060/120	18,40%	0,72
ADDS 060/120	24,61%	0,74	LFMT 060/120	72,57%	0,90
ADDSL 060/120	25,54%	0,74	LFMD 060/120	71,26%	0,90
ADDC 060/120	28,78%	0,76	LFMB 060	38,35%	0,80

#### **WOOD VENEER FINISHINGS**



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  Wood and Fabric products are highly susceptible to change its appearance with humidity and temperature. Close attention must be paid to the storage conditions and the acclimatization before, during and after the installation.
  Typical Indoor Comfort Standards state a temperature range of 20°C -27°C (68°F 81°F), and a relative thumidity of less than the considered as normal operational levels of JOCAVITY products' range.
  Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



Different thickness models of SPL (on the left) and SPL applied (ambient image

It is definitely the oldest and noblest raw material used for Acoustic and Thermal Insulation. Cork, a 100% natural product, is par excellence the best material for soundprofing.

This agglomerate is made of selected raw material originating from self-sustainable cork-oak stands, which are more than 100 years old, in the Portuguese territory. The process to manufacture the agglomerate only uses cork and steam, no other additives. The density is controlled at 110kg/m<sup>3</sup>.

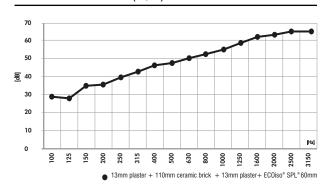
It comes in 1000 x 500mm plates and its thickness varies between 20 and 100mm. It may be placed on the inner layers of walls, ceilings or floors or may be placed on the outer layer as a final finishing.

This material is simply beautiful, exotic and very attractive and it may certainly make the difference in your space. Control noise like never before!

## **FEATURES**

- 100% Cork and Natural Material
- •110 Kg/m³ Density.
- Fire-resistance: single product Euroclass E (similar to old M4) and ETICS system Euroclass B-s1,d0 (similar to old M1).
- Unlimited durability.
- Excellent Thermal Properties.
- Excellent anti-vibration properties
- Aplicable on ceilings, floors and walls.
- · Aplicable as revetment or as insulation material.
- Plate sizes: 1000x500mm; thickness, 10/20/40/60/80/100mm.

#### SOUND INSULATION INDEX (dB/Hz)



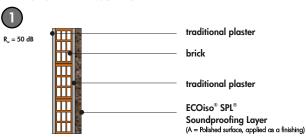
### **INSULATION AND THERMAL RESISTANCE VALUES**

	Insulation values R <sub>w</sub> <sup>(1)</sup>	THERMAL RESISTANCE R <sub>7</sub> (m².°C/W)
20mm ECOiso® SPL®	R <sub>w</sub> = 39 dB	0,50
40mm ECOiso® SPL®	$R_w = 44 \text{ dB}$	1,00
60mm ECOiso® SPL®	R <sub>w</sub> = 50 dB	1,50
80mm ECOiso® SPL®	R <sub>w</sub> = 52 dB	2,00
100mm ECOiso® SPL®	R <sub>w</sub> = 54 dB	2,50

# **IMPORTANT NOTICES**

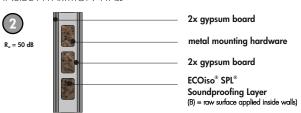
# **APPLICATION EXAMPLES**

#### REINFORCEMENT INSULATION REVETMENT



13mm plaster + 110mm ceramic brick + 13mm plaster + ECOiso® SPL®60mm

#### INSIDE A PARTITION WALL



2x13mm gypsum board + ECOiso® SPL®60mm on metal frame + 2x13mm gypsum board

#### **GENERAL FEATURES**

TECHNICAL FEATURES	STANDARD	LIMIT VALUES / TOLERANCES	CLASS
Apparent bulk density	NP EN 1602	< 130 kg/m³	
Thermal conductivity coefficient	EN 12667	$<$ 0,040 W/m.K ( $\lambda_{\scriptscriptstyle D}$ )	
Water content	EN 12105	< 8%	
Water absorption	NP EN 1609	< 0,5 kg/m²	ws
Fire Class	NP ISO 11925-1	< 150 mm (h)	Euroclass E
Fire Class	ETICS		B - s1,d0

### **INSULATION AND THERMAL RESISTANCE VALUES**

2	INSULATION VALUES  R., (1)	THERMAL RESISTANCE R <sub>r</sub> (m².°C/W)
40mm ECOiso® SPL®	R <sub>w</sub> = 44 dB	1,00
60mm ECOiso® SPL®	$R_w = 50 \text{ dB}$	1,50
80mm ECOiso® SPL®	R <sub>w</sub> = 53 dB	2,00
100mm ECOiso® SPL®	R <sub>w</sub> = 56 dB	2,50

(1) Laboratory Measurement of Sound Absorption Coefficient according to ISO 140-3 and ISO 354:2003

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Image of NCF single unit (on the left) and NCF applied (ambient image)

ECOiso®NCF® is a sound insulation material composed by one sheet of Cork Agglomerate and one board of high-density recycled wood fibers. This material was thought in order to reduce transmission of sound and vibration in the floors of residential and commercial buildings. It can also be used on walls and ceilings.

The strength and durability added to the available dimensions of the ECOiso®NCF® make it ideally suitable for primary construction or retrofitting of existing applications. There is arequirement for a sound isolation material that should be as thin as possible, in order to maximize the usable room areas.

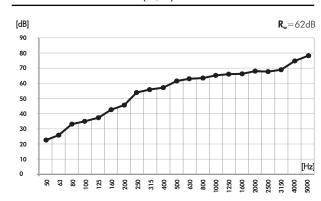
Beforetime the use of cork and wood agglomerates was one of earliest methods for building studios soundproofing insulation. It was soon discovered that these same excellent characteristics so essential in recording studios, could be applied equally well to home theatres, home studios, music rooms and many others.

ECOiso®NCF® has also proven effective over a wide sound frequencies range, giving the best noise reduction values at the low and high-frequencies in a single composite material.

## **FEATURES**

- 100% Recyclable and Natural raw-materials.
- · Recycled raw-materials.
- Fire-resistance: OSB Euroclass D-s1,d0 (similar to old M3) and Cork - Euroclass E (similar to old M4).
- Supplied in tiles, easy to install.
- Excellent anti-vibrate performance.
- Easily cut to adjust to room dimensions.
- Provided in two sizes: 48 X 48 cm or 96 X 48 cm.
- Suitable for primary construction or retrofitting.

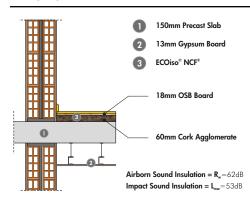
#### AIRBORN SOUND INSULATION (dB/Hz)



#### PACKAGE INFORMATION of 48 x 48 cm tiles

REFERENCE	PACKAGE DIMENSIONS	NR. OF TILES PER BOX			
ECOiso® NCF486 - 60mm	1 Box - 62 x 62 x 36 cm	6 tiles (2,88m²)			
ECOiso® NCF488 - 80mm	1 Box - 62 x 62 x 36 cm	4 tiles (1,92m²)			

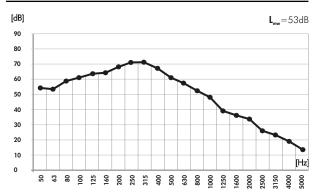
#### APPLICATION EXAMPLE



#### **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
ECONCF968	96 cm	48 cm	8 cm	8.2 Kg
ECONCF966	96 cm	48 cm	6 cm	7.4 Kg
ECONCF488	48 cm	48 cm	8 cm	4.1 Kg
ECONCF486	48 cm	48 cm	6 cm	3.7 Kg

# IMPACT SOUND INSULATION (dB/Hz)



#### PACKAGE INFORMATION of 96 x 48 cm tiles

REFERENCE	PACKAGE DIMENSIONS	NR. OF TILES PER BOX
ECOiso® NCF966 - 60mm	1 Box - 120 x 62 x 36 cm	6 tiles (5,76m²)
ECOiso® NCF968 - 80mm	1 Box - 120 x 62 x 36 cm	4 tiles (3,84m²)

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   Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.

# ATP® Packs

The market of musical production and home-cinemas in small rooms has been one of the fastest growing markets.

Mindful of this segment's needs, JOCAVI® features acoustic treatment products and solutions which are practical and accessible to all.

These are convincing ideas for those customers who wish to solve the acoustics of their room with a practical sense and a controlled budget.

To choose the room dimensions is a good way to start the design of a music room, followed by the insertion of the acoustic treatment panels and subsequent installation of the sound or video equipment.

Particular attention must be given to the loudspeakers, since a suitable framing with the listener is required for a good performance of the system. Various software, namely multi-dimensional tools, may be used for optimisation as they can automatically determine the best locations for the sources and the listener. The next step is to optimise the acoustic components in order to interconnect the listener with the loudspeakers.

By observing these steps, your room will have a good distribution of modal pressure. Besides, it will be acoustically balanced and ready to receive from the smoothest to the strongest percussion sounds from your sound system.

This way, the modal emphasis and the SBIR (speaker-boundary interference response) are simultaneously minimised to produce the best response from the room.

To facilitate the design of this type of rooms, JOCAVI® developed these Packs which correspond to different room sizes in a do-it-yourself scheme. The Packs are easy to assemble and include all the necessary glues, accessories and mounting instructions at anyone's reach. These rooms were acoustically simulated with the dimensions mentioned in each case and later verified with acoustic analyses. They may serve as a comparison to find a solution for your space.

These are practical and efficient ideas for those customers who are interested in advanced technology when wishing to add a solution to the acoustic treatment of a room.

These are proposals for customers who look for practical, low-cost solutions coupled with a rather refined aesthetic effect, with the visual display of all the acoustic products.





**ROOMS FROM** 9 TO 13 M<sup>2</sup>





**STANDARD** Sabine: 0.52 sec

# **EXCELLENCE**

Sabine: 0.52 sec

#### DESCRIPTION

According to the audio and home cinema fans designation, home cinema and studios is a system designed to be assembled in the average rooms of anyone's house. Usually, these rooms have neither

the correct dimensional proportions nor the ideal acoustic conditioning materials for a good audition.

This assembling example, the ATP\* PACK 01 acoustic panel set, has been designed for rooms measuring between 9 and 13 square metres. It optimises the placement of the acoustic treatment components, the listener and the electro acoustic equipment, while minimising the SBIR and the modal emphasis to produce the best frequency response in the room.

To simplify the room design, JOCAVI® developed the ATP®PACK 01 for small home cinema and music rooms with the aim to obtain an authentic acoustic framing, by correcting and arranging the sound perceptibility in your room. You can choose from the two ATP\* PACK 01 available solutions: STANDARD or EXCELLENCE, depending on your needs and aesthetic taste.

In a practical way, ATP\* PACKS are designed for small-sized rooms. The acoustic elements remain

exposed. They are easily assembled and all accessories needed are included. Give your ears an opportunity to see how the performance of your sound system improves.

#### WHERE TO APPLY:

Rooms with an area between: 9 and 13 square meters.

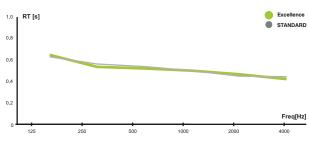
Rooms with volumes between: 22 and 35 cubic meters.

For use in small-sized home-theatre rooms, home-studios, Hi-fi rooms or instrument rooms.

# **FEATURES**

- Values were obtained by simulation in specific JAS® software and later confirmed through acoustic analyses in the rooms.
- The simulated and tested rooms are totally empty, and only the referred ATP® PACK 01 acoustic panels are applied.
- Traditional construction room with dimensions: (L,W,H): 3.47m/2.85m/2.50m Walls: masonry with painted fine stuff and a wooden door. Ceiling: 12 mm - thick plaster. Floor: natural floating parquet.

#### **ABSORPTION COEFFICIENT AND GRAPHIC**



FREQUENCY	125 Hz	250 Hz	500 Hz	1 Khz	2 Khz	4 Khz	RT60
αS	0.62	0.56	0.53	0.50	0.46	0.45	0.52
αS	0.64	0.53	0.52	0.50	0.47	0.43	0.52

# **PACK QUANTITIES**

REFERENCE	PANELS	UNITS	DIFFUSOR	ABSORBENT	TUNED	
WAV060 / WAI060	WAVYFUSER/INV	8	<b>V</b>	-	_	
FS0060 / FSI060	FOAMSORB/INV	8	_	<b>✓</b>	-	
T3S <b>120</b>	T3S <b>120</b> TRAP 30S		-	<b>/</b>	-	
REFERENCE	PANELS	UNITS	DIFFUSOR	ABSORBENT	TUNED	
STS <b>120</b>	STRIPESORB	8		<b>/</b>		
T3S <b>120</b>	TRAP 30S	8	_		_	

#### STANDARD EPS RAL COLOURS



#### **REGULAR FOAM COLOURS**



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  Typical Indoor Confrot Standards state a temperature range of 20°C 27°C (68°F 61°F), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI\* products' range.

  Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



**ROOMS FROM** 



Sabine: 0.53 sec



**STANDARD** Sabine: 0.53 sec

DESCRIPTION

While some customers favour the ATP® PACK 01 acoustic panel set, others certainly need an answer for their larger-sized rooms. The ATP® PACK 02 acoustic panel set has been designed for rooms measuring between 13 and 17 square metres. The approach consists in adjusting the room dimensions to sizes which are slightly bigger than the size of the ATP® PACK 01.

The acoustic treatment modules must also be placed in relation to the listener and the speakers, while minimising the SBIR and the modal emphasis to produce a frequency response as flat as possible in the

Given the elegant look of these Acoustic Elements, most of our customers prefer to leave them in sight as if they were acoustic sculptures.

In a practical way, ATP® PACKS have been designed for small-sized rooms. They are easily assembled and all accessories needed are included. You can choose from the two ATP® PACK 02 available solutions: STANDARD or EXCELLENCE, depending on your needs and aesthetic taste.

All packs are supplied with assembly instructions, as well as the glues and tools which are necessary to install the acoustic modules.

#### WHERE TO APPLY:

Rooms with an area between: 13 and 17 square meters.

Rooms with volumes between: 35 and 45 cubic meters.

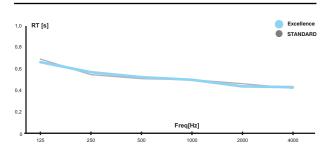
For use in small-sized home-theatre rooms, home-studios, Hi-fi rooms or instrument rooms.

# **FEATURES**

- Values were obtained by simulation in specific JAS® software and later confirmed through acoustic analyses in the rooms.
- The simulated and tested rooms are totally empty, and only the referred ATP® PACK 02 acoustic panels are applied.
- Traditional construction room with dimensions: (L,W,H): 4.31m/3.58m/2.80m. Walls: masonry with painted fine stuff and a wooden door.

Ceiling: 12 mm - thick plaster. Floor: natural floating parquet.

#### **ABSORPTION COEFFICIENT AND GRAPHIC**



	FREQUENCY	125 Hz	250 Hz	500 Hz	1 Khz	2 Khz	4 Khz	RT60
•_	αS	0.66	0.58	0.54	0.50	0.46	0.45	0.53
•	αS	0.69	0.55	0.52	0.50	0.48	0.43	0.53

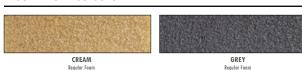
# **PACK QUANTITIES**

REFERENCE	PANELS	UNITS	DIFFUSOR	ABSORBENT	TUNED
WAV060 / WAI060	WAVYFUSER/INV	12	/		
FS0060 / FSI060	FOAMSORB/INV	12	-	/	-
T3S <b>120</b>	TRAP 30S	8	-	<b>/</b>	_
REFERENCE	PANELS	UNITS	DIFFUSOR	ABSORBENT	TUNED
STS <b>120</b>	STRIPESORB	12	-	<b>/</b>	
T3S <b>120</b>	TRAP 30S	8	_	<u> </u>	_

#### STANDARD EPS RAL COLOURS



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   Typical Indoor Comfort Standards state a temperature range of 20°C -27°C (68°F 81°F), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI\* products' range.
   Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



**ROOMS FROM** 17 TO 24 M<sup>2</sup>





Sabine: 0.47 sec **STANDARD** Sabine: 0.53 sec

#### DESCRIPTION

The ATP® PACK 03 is an acoustic panel set designed for rooms measuring between 17 and 24 square metres. This set of panels has been therefore prepared for medium-sized rooms, which are probably the most usual ones.

The presence of acoustic panels in a room helps to enhance, in the most real way, the sound produced by its system, thus improving the soundstage and the channel separation.

The next step is to optimise the acoustic coupling between the listener and the speakers, while minimising the SBIR and the modal emphasis to produce a frequency response as flat as possible in the

It uses low-frequency tuned modules,  $\bf BKA120$  and  $\bf BKW120$ , which are duly balanced with the absorbers and diffusers  $\bf FS0060$  and  $\bf WAV060$ , as pictures show.

It is imperative to use these modules in this type of rooms in order to hold the energy at low frequencies. You can choose from the two ATP\* PACK 03 available solutions: STANDARD or EXCELLENCE, depending on your needs and aesthetic taste.

It is a very practical assembly kit and is provided with assembly instructions, as well as the glues and tools which are necessary to install the acoustic modules.

#### WHERE TO APPLY:

Rooms with an area between: 17 and 24 square meters.

Rooms with volumes between: 45 and 58 cubic meters.

For use in medium-sized home-theatre rooms, home-studios, Hi-fi rooms or instrument rooms.

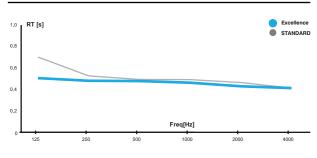
# **FEATURES**

- · Values were obtained by simulation in specific JAS® software and later confirmed through acoustic analyses in the rooms.
- The simulated and tested rooms are totally empty, and only the referred ATP® PACK 03 acoustic panels are applied.
- Traditional construction room with dimensions: (L,W,H): 5.82m/4.00m/2.50m. Walls: masonry with painted fine stuff and a wooden door. Ceiling: 12 mm - thick plaster. Floor: natural floating parquet.

#### STANDARD EPS RAL COLOURS



#### **ABSORPTION COEFFICIENT AND GRAPHIC**



FREQUENCY	125 Hz	250 Hz	500 Hz	1 Khz	2 Khz	4 Khz	RT60
αS	0.52	0.49	0.49	0.48	0.44	0.42	0.47
αS	0.71	0.55	0.52	0.50	0.47	0.42	0.53

# **PACK QUANTITIES**

REFERENCE	PANELS	UNITS	DIFFUSOR	ABSORBENT	TUNED
WAV060 / WAI060	WAVYFUSER/INV	18	<b>/</b>		
FS0060 / FSI060	FOAMSORB/INV	18	_	<b>V</b>	_
BKA <b>120</b>	BASSKEEPER ANGLE	8	-	-	/
BKW <b>120</b>	BASSKEEPER WALL	4	-	-	<b>/</b>
REFERENCE	PANELS	UNITS	DIFFUSOR	ABSORBENT	TUNED
STS <b>120</b>	STRIPESORB	18	-	V	
T3S <b>120</b>	TRAP 30S	8	_	<b>/</b>	_

#### **REGULAR FOAM COLOURS**





**ROOMS FROM** 24 TO 30 M<sup>2</sup>



**EXCELLENCE** Sabine: 0.50 sec



**STANDARD** Sabine: 0.54 sec

# DESCRIPTION

The  $\mbox{ATP}^{\mbox{\tiny \$}}$  PACK 04 is specific for large-sized music rooms, as it was designed for rooms measuring between 24 and 30 square metres.

You can choose from the two ATP® PACK 04 available solutions: STANDARD or EXCELLENCE, depending on your needs and aesthetic taste.

It provides acoustic comfort in control room studios, recording rooms, hi-fi or home-cinema rooms. rehearsal rooms, etc. It uses low-frequency tuned modules, **BKA120** and **BKW120**, which are duly balanced with the absorbers and diffusers **FS0060** and **WAV060**, as pictures show.

The application of the low-frequency tuned absorbers in the corners of the room and on the walls is mandatory, in this case, to hold the energy at low frequencies.

The integration of the acoustic modules, sound system and listener is decisive for a good audition, therefore minimising the differences in the distribution of the acoustic pressure and minimising the modal emphasis and SBIR (speaker-boundary interference response). Give your ears an opportunity and see how the performance of your sound system improves.

#### WHERE TO APPLY:

Rooms with an area between: 24 and 30 square meters.

Rooms with volumes between: 58 and 90 cubic meters.

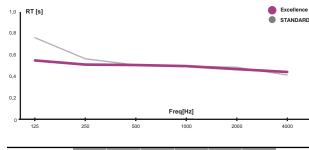
 $For use in control \, room \, studios, tracking \, rooms, \, hi\text{-}fi \, or \, home-cinema \, rooms, \, rehears al \, rooms, \, etc. \, and \, rooms \, rehears al \, rooms, \, r$ 

# **FEATURES**

- · Values were obtained by simulation in specific JAS® software and later confirmed through acoustic analyses in the rooms.
- The simulated and tested rooms are totally empty, and only the referred ATP® PACK 04 acoustic panels are applied.
- Traditional construction room with dimensions: (L,W,H): 6.52m/4.48m/2.80m. Walls: masonry with painted fine stuff and a wooden door.

Ceiling: 12 mm - thick plaster. Floor: natural floating parquet.

#### ABSORPTION COEFFICIENT AND GRAPHIC



FREQUENCY	125 Hz	250 Hz	500 Hz	1 Khz	2 Khz	4 Khz	RT60
αS	0.55	0.52	0.52	0.50	0.47	0.45	0.50
αS	0.77	0.57	0.52	0.50	0.48	0.42	0.54

#### **PACK QUANTITIES**

	REFERENCE	PANELS	UNITS	DIFFUSOR	ABSORBENT	TUNED
	WAV060 / WAI060	WAVYFUSER/INV	24	/	_	_
	FS0060 / FSI060	FOAMSORB/INV	24	-	<b>✓</b>	-
	BKA <b>120</b>	BASSKEEPER ANGLE	8	-	_	<b>V</b>
	BKW <b>120</b>	BASSKEEPER WALL	8	-	-	<b>/</b>
•	REFERENCE	PANELS	UNITS	DIFFUSOR	ABSORBENT	TUNED
	STS <b>120</b>	STRIPESORB	28	_	V	
	T00400	TD4D 000	•		. 4	

#### STANDARD EPS RAL COLOURS



#### **REGULAR FOAM COLOURS**

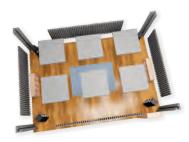


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   Colours may vary due to raw-material suppliers' changes and some differences may occur in tonal range.
   Typical Indoor Comfort Standards state a temperature range of 20°C -27°C (68°F 81°F), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI\* products' range.
   Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



**ROOMS FROM** 30 TO 40 M<sup>2</sup>





# **EXCELLENCE**

Sabine: 0.63 sec

**STANDARD** Sabine: 0.64 sec

#### DESCRIPTION

The ATP® PACK 05 is specific for large-sized music rooms, as it was designed for rooms measuring between 30 and 40 square metres.

You can choose from the two ATP® PACK 05 available solutions: STANDARD or EXCELLENCE, depending on your needs and aesthetic taste.

It provides acoustic comfort in control room studios, recording rooms, hi-fi or home-cinema rooms. rehearsal rooms, etc. It uses low-frequency tuned modules, **BKA120** and **BKW120**, which are duly balanced with the absorbers and diffusers **FS0060** and **WAV060**, as pictures show.

The application of the low-frequency tuned absorbers in the corners of the room and on the walls is mandatory, in this case, to hold the energy at low frequencies.

The integration of the acoustic modules, sound system and listener is decisive for a good audition, therefore minimising the differences in the distribution of the acoustic pressure and minimising the modal emphasis and SBIR (speaker-boundary interference response). Give your ears an opportunity and see how the performance of your sound system improves.

#### WHERE TO APPLY:

Rooms with an area between: 30 and 40 square meters.

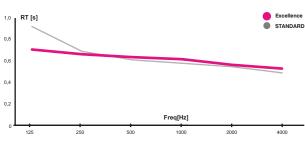
Rooms with volumes between: 90 and 130 cubic meters.

For use in: control room studios, tracking rooms, hi-fi or home-cinema rooms, rehearsal rooms, etc.

### **FEATURES**

- · Values were obtained by simulation in specific JAS® software and later confirmed through acoustic analyses in the rooms.
- The simulated and tested rooms are totally empty, and only the referred ATP® PACK 05 acoustic panels are applied.
- Traditional construction room with dimensions: (L,W,H): 7.45m/5.20m/3.20m. Walls: masonry with painted fine stuff and a wooden door. Ceiling: 12 mm - thick plaster. Floor: natural floating parquet.

# **ABSORPTION COEFFICIENT AND GRAPHIC**



	FREQUENCY	125 Hz	250 Hz	500 Hz	1 Khz	2 Khz	4 Khz	RT60
•	αS	0.71	0.67	0.64	0.62	0.58	0.55	0.63
•	αS	0.92	0.68	0.61	0.59	0.56	0.49	0.64

# **PACK QUANTITIES**

	REFERENCE	PANELS	UNITS	DIFFUSOR	ABSORBENT	TUNED
	WAV060 / WAI060	WAVYFUSER/INV	32	/	-	-
	FS0060 / FSI060	FOAMSORB/INV	32	-	<b>/</b>	-
	BKA <b>120</b>	BASSKEEPER ANGLE	8	-	-	<b>✓</b>
	BKW <b>120</b>	BASSKEEPER WALL	10	-	-	/
•	REFERENCE	PANELS	UNITS	DIFFUSOR	ABSORBENT	TUNED
	STS <b>120</b>	STRIPESORB	38		/	
	T3S <b>120</b>	TRAP 30S	8	-	<b>/</b>	-

#### STANDARD EPS RAL COLOURS



#### **REGULAR FOAM COLOURS**



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# VELVETY **FINISHING**



**STANDARD** Sabine: 0.25 sec

# ATP® PACK 06



#### DESCRIPTION

ATP® PACK 06 was developed by JOCAVI® to fulfil and achieve a compromise between aesthetics and acoustics in Home Cinemas and private Home Theatres applications.

ATP® PACK 06 is a new set of acoustic panels prepared for mid-size rooms and based on the room dimensions of previous  $\mbox{ATP}^{\mbox{\tiny \$}}\mbox{ PACK 03}.$ 

Despite the intentional non-inclusion of low frequency absorbent panels in this pack, the presence of this set of panels, helps to enhance, in the most real way, the sound produced by its system and to optimise the acoustic coupling between the listener and the speakers, while minimising the SBIR and the modal emphasis to produce a frequency response as flat as possible in the room.

As the others ATP\* PACKS, ATP\* PACK 06 is available in two options: Standard and Excellence. The Standard is composed only by standard acoustic foam panels while the Excellence version is available with the same acoustic models but with our new finishing: velvety.

It is a very practical assembly kit and is provided with assembly instructions, as well as the glues and tools which are necessary to install the acoustic modules.

#### WHERE TO APPLY:

Rooms with an area between: 17 and 30 square meters.

Rooms with volumes between: 45 and 58 cubic meters.

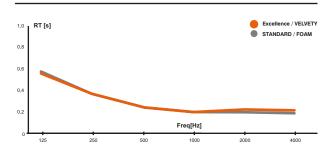
For use in medium-size home-theatre rooms, home-studios, Hi-Fi rooms, listening rooms, etc

# **FEATURES**

- · Values were obtained by simulation in specific JAS® software and later confirmed through acoustic analyses in the rooms.
- The simulated and tested rooms are totally empty, and only the referred ATP® PACK 06 acoustic panels are applied.
- Traditional construction room with dimensions: (L,W,H): 4.90m/3.60m/2.80m. Walls: masonry with painted fine stuff and a wooden door. Ceiling: 12 mm - thick plaster.

Floor: natural floating parquet.

#### **ABSORPTION COEFFICIENT AND GRAPHIC**



	FREQUENCY	125 Hz	250 Hz	500 Hz	1 Khz	2 Khz	4 Khz	RT60
	αS	0.58	0.36	0.24	0.21	0.23	0.22	0.25
•	αS	0.60	0.38	0.25	0.21	0.22	0.21	0.25

# **PACK QUANTITIES**

REFERENCE	PANELS	UNITS	DIFFUSOR	ABSORBENT	TUNED
SF2 <b>060</b>	SEAFOAM SF2	60	_	/	
T4S <b>060</b>	TRAP 40 S	16	_	<b>✓</b>	_
REFERENCE	PANELS	UNITS	DIFFUSOR	ABSORBENT	TUNED
SF2 <b>060</b>	SEAFOAM SF2	60	_	<b>/</b>	-
T4S <b>120</b>	TRAP 40 S	8	-	<b>/</b>	-

#### **REGULAR FOAM COLOURS**



#### **VELVETY COLOURS**



# **IMPORTANT NOTICES**

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  Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.

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# JOCAVI® KITBOX

The market of musical production and home-cinemas in small rooms has been one of the fastest growing markets.

Mindful of this segment's needs, JOCAVI® features acoustic treatment products and solutions which are practical and accessible to all.

These are convincing ideas for those customers who wish to solve the acoustics of their room with a practical sense and a controlled budget.

To choose the room dimensions is a good way to start the design of a music room, followed by the insertion of the acoustic treatment panels and subsequent installation of the sound or video equipment.

Particular attention must be given to the loudspeakers, since a suitable framing with the listener is required for a good performance of the system. Various software, namely multi-dimensional tools, may be used for optimisation as they can automatically determine the best locations for the sources and the listener. The next step is to optimise the acoustic components in order to interconnect the listener with the loudspeakers.

By observing these steps, your room will have a good distribution of modal pressure. Besides, it will be acoustically balanced and ready to receive from the smoothest to the strongest percussion sounds from your sound system.

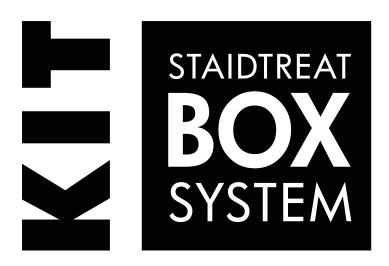
This way, the modal emphasis and the SBIR (speaker-boundary interference response) are simultaneously minimised to produce the best response from the room.

To facilitate the design of this type of rooms, JOCAVI® developed these KITBOX which correspond to different room sizes in a do-it-yourself' scheme.

The KITBOX are easy to assemble and include all the necessary accessories and mounting instructions at anyone's reach. These rooms were acoustically simulated with the dimensions mentioned in each case and later verified with acoustic analyses. They may serve as a comparison to find a

These are practical and efficient ideas for those customers who are interested in advanced technology when wishing to add a solution to the acoustic treatment of a room.

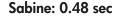
These are proposals for customers who look for practical solutions coupled with a rather refined aesthetic effect, with the visual display of all the acoustic products.



# **ROOMS FROM** 13 TO 17 M<sup>2</sup>



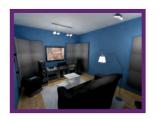














#### DESCRIPTION

The STAIDTREAT\* is an innovative modular system designed to aesthetically conceal the acoustic treatment in its room in a very sober manner. The finishing plate made of pressed mineral sand is similar for the standard or the three models. As the engineering portion of each model, the STAIDTREAT\* consists of three different models with very different acoustic absorption curves and performance. The semi-transparent mineral granulate plate also combines the absorption and unidirectional micro-diffusion features. The different specificities of each model are well combined to fit the room's requirements. This range of panels is particularly meant for small and medium-sized rooms that require an outstanding acoustic balance. The KITBOX set has been created for home-cinemas, studios, conference halls and auditoriums providing them with a very pleasant atmosphere.

The JOCANI® KITBOX 01 has been created for small-sized home-cinema rooms, home-studios and rehearsal rooms measuring between 13 and 17 square metres. The acoustic treatment modules must also be placed in relation to the listener and the speakers, while minimising the SBIR (speaker-boundary interference response) and the modal emphasis to produce a frequency response as flat as possible in the room. Give your ears an opportunity to see how the performance of your sound system improves. All packs are supplied with assembly instructions, as well as the glues and tools which are necessary to install the supplied with a second control of the supplied w the acoustic modules.

#### WHERE TO APPLY:

Rooms with an area between: 13 and 17 square meters. Rooms with volumes between: 35 and 45 cubic meters

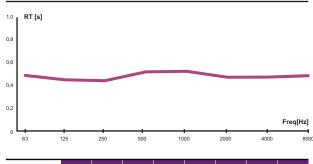
For use in small-sized home-theatre rooms, home-studios, Hi-fi rooms or instrument rooms.

**FEATURES** 

#### through acoustic analyses in the rooms.

- · The simulated rooms were tested with all the materials and equipments shown in the images, and the mentioned JOCAVI®KIT BOX 01 acoustic panels
- Traditional construction room with dimensions: (L.W.H): 4.31m/3.58m/2.80m. Walls: masonry with painted fine stuff and a wooden door. Ceiling: 12 mm - thick plaster. Floor: natural floating parquet.

#### ABSORPTION COEFFICIENT AND GRAPHIC



FREQUENCY	63 Hz	125 Hz	250 Hz	500 Hz	1 Khz	2 Khz	4 Khz	8 Khz
αS	0.48	0.44	0.43	0.52	0.53	0.47	0.47	0.49

Sabine: 0.48 sec

### KITBOX 01 QUANTITIES

REFERENCE	PANELS	UNITS	DIFFUSOR	ABSORBENT	TUNED
BXA060	Staidtreat <sup>®</sup> BXA	12	_	_	<b>/</b>
BXW060	Staidtreat®BXW	9	_	_	<b>/</b>
WBA060	Staidtreat®WBA	12	-	<b>/</b>	-

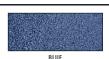
#### STANDARD MINERAL GRANULATED COLOURS













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# **ROOMS FROM** 17 TO 24 M<sup>2</sup>





Sabine: 0.51 sec











#### DESCRIPTION

The **STAIDTREAT**\* is an innovative modular system designed to aesthetically conceal the acoustic treatment in its room in a very sober manner. As the engineering portion of each model, the **STAIDTREAT**\* consists of three different models with very different acoustic absorption curves and performance. The semi-transparent mineral granulate plate also combines the absorption and unidirectional micro-diffusion features. The different specificities of each model are well combined to fit the room's requirements. This range of panels is particularly meant for small and medium-sized rooms that require an outstanding acoustic balance. The KITBOX set has been created for home-cinemas, studios, conference halls and  $auditoriums \ providing \ them \ with \ a \ very \ pleasant \ atmosphere.$ 

The JOCAVI® KITBOX 02 has been created for small-sized home-cinema rooms, home-studios and rehearsal rooms measuring between 17 and 24 square metres. The JOCAVI\* KITBOX 02 approach consists in adjusting the room dimensions to sizes which are slightly bigger than those of the JOCAVI\* KITBOX 01. The acoustic treatment modules must also be placed in relation to the listener and the speakers, while minimising the SBIR (speaker boundary interference response) and the modal emphasis to produce a frequency response as flat as possible in the room. Give your ears an opportunity to see how the performance of your sound system improves. All packs are supplied with assembly instructions, as well as the glues and tools which are necessary to install the acoustic modules.

#### WHERE TO APPLY:

Rooms with an area between: 17 and 24 square meters.

Rooms with volumes between: 45 and 58 cubic meters.

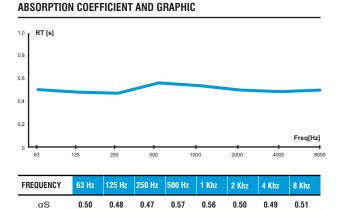
For use in small and medium-sized home-theat rerooms, home-studios, Hi-fi rooms or instrument rooms.

## **FEATURES**

- · Values were obtained by simulation in specific JAS® software and later confirmed through acoustic analyses in the rooms.
- The simulated rooms were tested with all the materials and equipments shown in the images, and the mentioned JOCAVI®KITBOX 02 acoustic panels
- Traditional construction room with dimensions: (L.W.H): 5.82m / 4.00m / 2.50m.

Walls: masonry with painted fine stuff and a wooden door

Ceiling: 12 mm - thick plaster Floor: natural floating parquet.

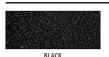


Sabine: 0.51 sec

#### KITBOX 02 QUANTITIES

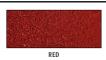
REFERENCE	PANELS	UNITS	DIFFUSOR	ABSORBENT	TUNED
BXA060	Staidtreat <sup>®</sup> BXA	12	_	-	<b>/</b>
BXW060	Staidtreat®BXW	12	_	-	<b>/</b>
WBA060	Staidtreat®WBA	18	_	<b>/</b>	-

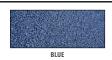
#### STANDARD MINERAL GRANULATED COLOURS













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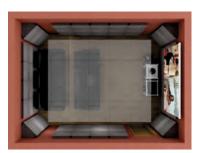
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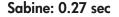


# **ROOMS FROM** 20 TO 30 M<sup>2</sup>



















#### DESCRIPTION

The  ${\it JOCAVI}^{\rm e}$  KIT  ${\it BOX}$  03 has been created for rooms with an area between 20 and 30 square meters, so small or medium-sized rooms such as home-cinema rooms, home-studios and rehearsal rooms.

JOCAVI® KIT BOX 03 it is composed of STAIDTREAT® acoustic modules which consists of three different models with very different acoustic features though with the same appearance, namely: STAIDTREAT® BXA\* as a Low-frequency absorbent tuned at 80Hz, the BXW\* as a Low-frequency absorbent tuned at 160Hz and the WBA\*, which is a broad band mid-high absorbent.

As a whole, these three different specificities provide an outstanding acoustic balance, thus the resulting

aesthetic look is a light and very pleasant design.

The finishing plate is similar to the three options and conceals the remaining engineering portion of each model. This pressed mineral granulate plate also combines absorption with unidirectional micro-diffusion

This KIT of panels it is the most recommended pack of acoustic panels for those who want an authentic acoustic balance with a sober decoration.

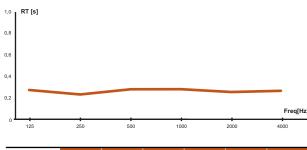
#### WHERE TO APPLY:

Rooms with an area between: 20 and 30 square meters.

Rooms with volumes between: 58 and 90 cubic meters.

For use in small-sized home-theat re rooms, home-studios, Hi-fi rooms or instrument rooms.

### ABSORPTION COEFFICIENT AND GRAPHIC



FREQUENCY	125 Hz	250 Hz	500 Hz	1 Khz	2 Khz	4 Khz
αS	0.27	0.23	0.28	0.28	0.26	0.27

Sabine: 0.27 sec

#### **FEATURES**

- through acoustic analyses in the rooms.
- The simulated rooms were tested with all the materials and equipments shown in the images, and the mentioned JOCAVI®KIT BOX 03 acoustic panels
- Traditional construction room with dimensions: (L.W.H): 4.90m/3.60m/2.80m. Walls: masonry with painted fine stuff and a wooden door. Ceiling: 12 mm - thick plaster. Floor: natural floating parquet.

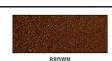
### KITBOX 03 QUANTITIES

REFERENCE	PANELS	UNITS	DIFFUSOR	ABSORBENT	TUNED
BXA060	Staidtreat <sup>®</sup> BXA	12	_	_	/
BXW060	Staidtreat®BXW	34	-	_	<b>/</b>
WBA060	Staidtreat®WBA	37	_	<b>/</b>	-

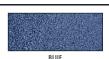
#### STANDARD MINERAL GRANULATED COLOURS











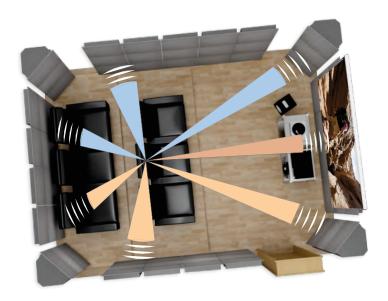


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**ROOMS FROM** 20 TO 30 M<sup>2</sup>







Sabine: 0.27 sec







ABSORPTION COEFFICIENT AND GRAPHIC



#### DESCRIPTION

The **STAIDTREAT KITBOX 03.A** (Active Speakers System), is an innovative modular acoustic treatment method, which combines with high quality performance speakers. The speakers are placed inside the absorbent boxes of the WBA /BXA models. This set of acoustics and public address devices is designed to aesthetically conceal acoustic treatment with speakers providing a good sound intelligibility, besides making technology

This system was essentially planned for 7.1 and 5.1 home-theatres surround systems, but it is also advisable for conference rooms, restaurants and bars, public spaces and for background music or speech purposes. It is composed by the two-way loudspeaker mounted inside the acoustic panel and by a self-amplified Subwoofer to be placed on the floor of the room. It has been created for small and mid-sized home-cinema rooms. It is a discrete system that combines acoustic treatment and the embedded speakers. The approach consists on adjusting the number of the modules to the room dimensions.

All packs are supplied with assembly instructions, as well the necessary mounting accessories to apply the

Surround sound is the idea of engaging a listener in sound, just like a movie theater. Sound is half of the importance of the entertainment experience and the speaker placement is essential to experiencing the true impact of movies and music.

A 7.1 surround system has seven discrete audio channels, Left, Right, Center, Left Surround, Right Surround. Left and Right Back, and of course, the Subwoofer.

#### WHERE TO APPLY:

Rooms with an area between: 20 and 30 square meters.

Rooms with volumes between: 58 and 90 cubic meters.

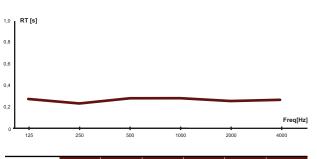
For use in small and medium-sized home-theatre rooms, home-studios, Hi-fi rooms or instrument rooms.

#### **FEATURES**

- · Values were obtained by simulation in specific JAS® software and later confirmed through acoustic analyses in the rooms.
- The simulated rooms were tested with all the materials and equipments shown in the images, and the mentioned JOCAVI®KITBOX 03.A acoustic panels.
- Traditional construction room with dimensions: (L.W.H): 4.90m/3.60m/2.80m.

Walls: masonry with painted fine stuff and a wooden door. Ceiling: 12 mm - thick plaster.

Floor: natural floating parquet.



FREQUENCY 125 Hz 250 Hz 500 Hz 1 Khz 2 Khz 4 Khz 0.27 0.23 0.28 0.28 0.26 0.27

Sabine: 0.27 sec

### KITBOX 03.A QUANTITIES

REFERENCE	PANELS	UNITS	DIFFUSOR	ABSORBENT	TUNED
BXA060	Staidtreat <sup>®</sup> BXA	10	_	-	<b>/</b>
BXW060	Staidtreat®BXW	34	_	-	<b>/</b>
WBA060	Staidtreat®WBA	31	_	<b>/</b>	_
BXA060A	Staidtreat®BXA Active ◀	02	_	<b>/</b>	_
WBA060A	Staidtreat®WBA Active ◀	06	_	<b>✓</b>	_

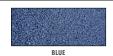
#### STANDARD MINERAL GRANULATED COLOURS













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   Colours may vary due to raw-material suppliers' changes and some differences may occur in tonal range.
   Typical Indoor Comfort Standards state a temperature range of 20°C -27°C (68°F 81°F), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCAVI\* products' range.
   Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.

Thinking about Industrial Insulation and on construction business segment, JOCAVI® made this line of products to face big space applications such as manufacturing industries, large hangars, public transport bays and sport stadiums.

This range of products completes our product range.

You can find from this product line, various products for soundproofing and noise absorption such as self-adhesive insulation rolls, antivibration hardware elements, sandwich damping noise, acoustic ink and metal perforated acoustic panels.







GROUTPAINT® is a water-based acoustic anti-vibration adhesive paint. Different from the conventional damping materials, GROUTPAINT® is a low-density product, which has a high damping performance on the premise of its low weight.

The product is a key choice to reduce air noise and reverberation time, ideal for use on large surfaces for environments with strict additional weight requirements, such as plasterboard and concrete surfaces, constructions structures and building ceilings, yachts, vehicles and trains, etc. It provides a quick drying performance, environmentprotection, performance and fire resistance. GROUTPAINT® is a 95% recycled compound.

This product can be applied on almost all surfaces by spraying, either using a pressure tank spray machine or an endless screw spray machine system gun.

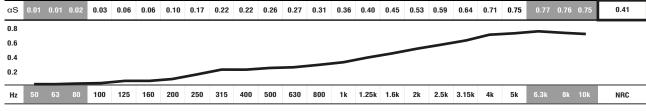
GROUTPAINT® should be diluted with water (10%). It is advisable to apply a thin coat of (800g/sq.m) as a primer to enhance adherence and to let it dry out completely before the next coat is sprayed. After that, you can apply more 2 or 3 coats, reaching 15mm maximum thickness.

The product effectively reduces the reverberation time, the resonance effect and the transmission loss is increased. Obviously it controls the resonant frequency of the raw base material, caused by micro vibrations, improving the noise reduction rate.

#### RECOMMENDATIONS AND FEATURES

- 10Kg bucket, Water-based, easy to use and clean, 95% recycled compound.
- · Main composition: Cellulose, textile, Rockwool fibres and inert mineral fillers.
- Fire Class: A2-s1.d0. Non-Flammable (similar to old M0. French Norms CSTB).
- Absorption coefficient: 0,41/m<sup>2</sup> 12 to 15mm thickness.
- Application: any pressure tank spray machine or an endless screw spray machine using a large nozzle, from 8 to 12 mm.
- GROUTPAINT® should be diluted with water (10%). It is important to keep the same dilution during the whole job in order to ensure a continuous final look. DO NOT FORGET to add the small bottle of additive before application with an electrical mixer. This additive increases air entrainment and facilitates spraying application.
- GROUTPAINT® is fully compatible with all concentrated aqueous Paints used as colorants. Add the dye in the mix with an electrical mixer and make the color test before applying.
- Drying: 24 to 36 hours (allow enough ventilation)
- Coverage: 4kg/m<sup>2</sup> = 5mm to 12 Kg/m<sup>2</sup> = depending on required sound absorption.
- Productivity: 0,8 to 1,2 Kg/m2 depending on the desired effect and the type of support.
- Maximum thickness per layer: 5mm
- Excellent adhesive ability to all surfaces.
- The product follows IMO A653 standard and CE certification (MED B) and reaches the quality requirements of BS476.6 and BS476.7.
- · Suitable for indoor use only
- Storage: 6 months in original packaging if not opened. Keep away from intensive heat and

## **ABSORPTION COEFFICIENT**



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## **APPLICATION METHODS**









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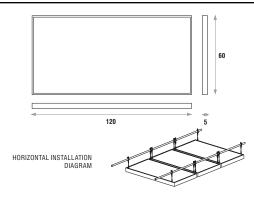
Image of 120x60cm model Ref.:MTAF050

The AIRflat® is an additional option as an absorption panel. This panel's structure is made on an aluminum frame, which gives the product a good robustness; the absorbent layer is built in a mineral fiber plate with viselike fabric that makes the finishing.

It is mainly meant for stadiums, large halls, airports, subways and bus stations, as well as for industrial applications. It can also be applied in moist environments or outdoors. The AIRflat® is available in several colors with the same acoustic features. It is easy to install hanging on ceilings.

The typical public and industrial spaces require an adequate planning of acoustics in order to provide good noise control and sound reception. This product provides a good absorption coefficient at mid frequency range, exactly within the area where the largest common noise occur.

## **TECHNICAL DRAWINGS**



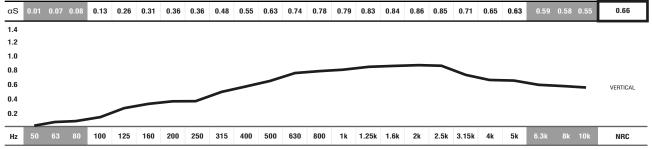
## **FEATURES**

- Made on an aluminium frame and different raw absorbent materials inside.
- NRC: 0.66/m2.
- Fire-resistance: B-s1,d1 (similar to old M1). Several combinations and positioning.
- · Good robustness and airborne noise control.
- Can be used in different environments.
- Suitable for areas with large space, subways, stadiums, airports and bus stations, pavilions as well as for public or industrial facilities.

## **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
MTAF050	120 cm	60 cm	5 cm	4 Kg

## **ABSORPTION COEFFICIENT**



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## STANDARD COLOURS



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   Typical Indoor Comfort Standards state a temperature range of 20°C 27°C (68°F 81°F), and a relative humidity of less than 60%. These would be considered as normal operational levies of JOCAVI\* products' range.
   Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.

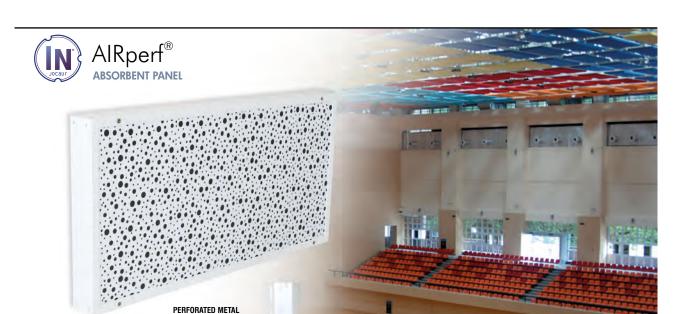


Image of 120x60cm model Ref.:MTPF100Q.

JOCAVI® has developed this range of acoustic absorbent panels, mainly meant for stadiums, large halls, airports, subways and bus stations, as well as for industrial applications. It can also be applied in moist environments and outdoors.

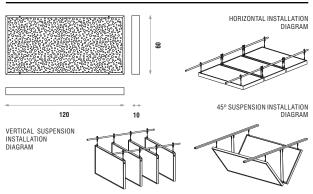
This panel's structure is made on a perforated metal lacquered plate, which gives the product a good robustness; the interior is built by combining absorbent raw materials made from mineral fibers in different layers and densities. These products are applicable to ceilings and suspended with the provided accessories.

The typical public and industrial spaces require an adequate planning of acoustics in order to provide good sound reception. Due to its composite absorption layer, the AIRperf® has a good absorption coefficient in mid and mid-low spectrum, which is very important to reduce the airborne noise in the frequencies common noise range.

## **FEATURES**

- Made of metal lacquered plate and different raw absorbent materials inside.
- NRC: 0.76/m2.
- Fire-resistance: B-s1,d1 (similar to old M1).
- Several combinations and positionings: vertical, horizontal and 45°.
- · Good robustness and airborne noise control.
- Suitable for areas with large space, subways, stadiums, airports and bus stations, pavilions as well as for public or industrial facilities.

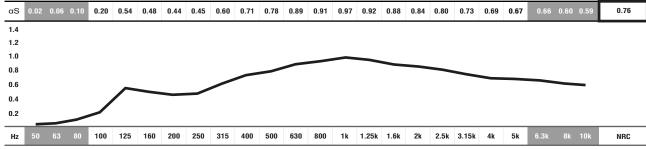
## **TECHNICAL DRAWINGS**



## **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
MTPF100Q	120 cm	60 cm	10 cm	7.1 Kg

## **ABSORPTION COEFFICIENT**



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## STANDARD COLOURS



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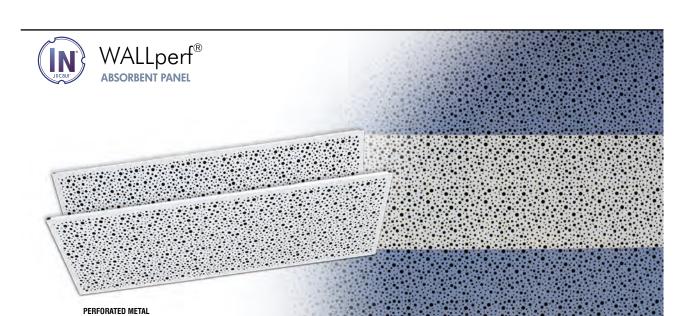


Image of 180x60cm model Ref.:MTPF025QC

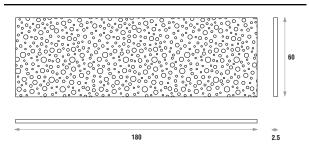
WALLperf® is an additional option within the IN® absorption panels range. It is mainly meant for stadiums, large halls, airports, subways and bus stations, as well as for industrial applications. It can also be applied in moist environments or outdoors.

This panel's structure is made on a perforated metal lacquered plate, which gives the product a good robustness; the interior is built by combining absorbent raw materials made from mineral and synthetic fibers.

The typical public and industrial spaces require an adequate planning of acoustics in order to provide good sound perception. The brand IN® has come up with this line of products which has a good absorption in the largest common noise range.

Although it is different in aesthetic terms, the WALLperf  $^{\! \circ}\!\!$  is attractive and has a pleasant  $design. \ The \ WALL perf^{@}\ is\ available\ in\ multiple\ colors\ with\ the\ same\ acoustic\ features.\ It$ is easy to install on the walls and ceilings with its own accessories.

## **TECHNICAL DRAWINGS**



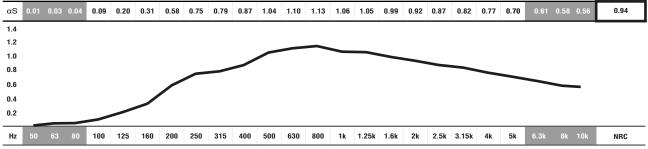
## **FEATURES**

- · Made of metal lacquered plate and different raw absorbent materials inside.
- NRC: 0.94/m2.
- Fire-resistance: B-s1,d1 (similar to old M1).
- For ceiling applications.
- · Good robustness and airborne noise control.
- Suitable for areas with large space, subways, stadiums, airports and bus stations, pavilions as well as for public or industrial facilities.

## **MODELS AND SIZES**

MTPF025QC	180 cm	60 cm	2.5 cm	3.3 Kg
MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT

## **ABSORPTION COEFFICIENT**



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   Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



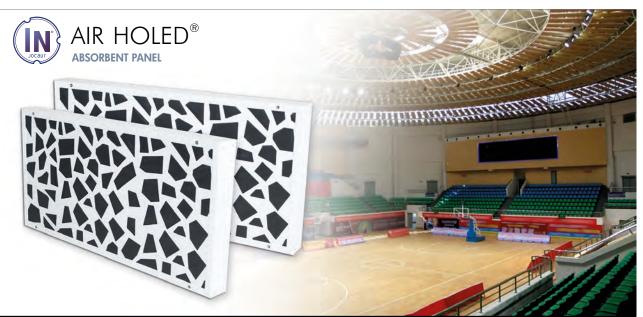


Image of 120x60cm model Ref.:MTHL100D

AIRholed® is an absorbent suspension panel mainly meant for stadiums, large halls, airports, subways and bus stations, as well as for industrial applications. It can also be applied in moist environments and outdoors.

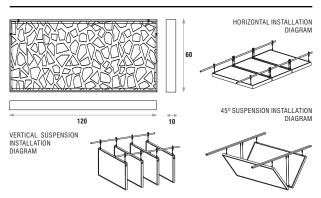
This panel's structure is made on a holed metal lacquered plate, which gives the product  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ a good robustness; the interior is built by combining absorbent raw materials made from mineral fibers in different layers and densities. These products are applicable to ceiling, suspended with the provided accessories.

The typical public and industrial spaces require an adequate planning of acoustics in order to provide good noise control and sound perception. AlRholed® has a good absorption coefficient in mid range spectrum, which is very important to improve the absorption of the airborne noise in big venues.

## **FEATURES**

- Made of metal lacquered plate and different raw absorbent materials inside.
- NRC: 0.68/m2.
- Fire-resistance: B-s1,d1 (similar to old M1).
- Several combinations and positionings: vertical, horizontal and 45°.
- · Good robustness and airborne noise control.
- Suitable for areas with large space, subways, stadiums, airports and bus stations, pavilions as well as for public or industrial facilities.

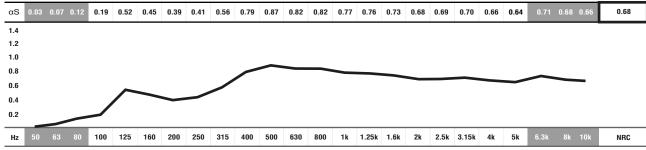
#### **TECHNICAL DRAWINGS**



## **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
MTHL100D	120 cm	60 cm	10 cm	8.7 Kg

## **ABSORPTION COEFFICIENT**



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## STANDARD COLOURS



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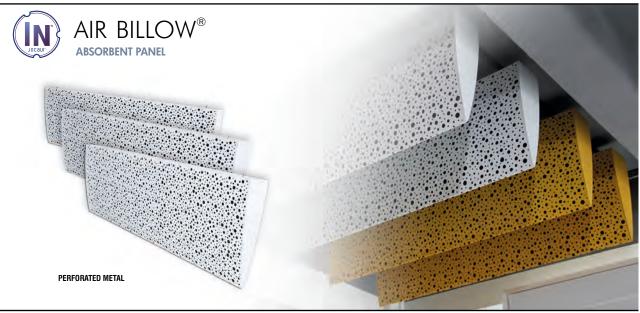


Image of model Ref.:MTBL150V (on the left) and applied (ambient image)

AIRbillow® is an absorbent suspending panel mainly meant for big venues like; stadiums, large halls, airports, subways and bus stations, as well as for industrial applications. It can also be applied in moist environments and outdoors.

AIRbillow® it is different in aesthetic terms, its triangular shape is attractive and provides pleasant combinations. It is available in several colors and it is easy to install suspending on the ceilings.

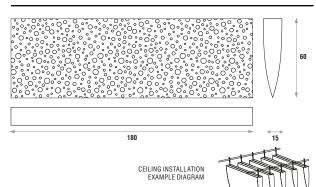
This panel's structure is made on a holed metal lacquered plate, which gives the product a good robustness; the interior is built by combining absorbent raw materials made from mineral fibers in different layers and densities. These products are applicable on a ceiling, suspended with the provided accessories.

The typical public and industrial spaces require an adequate noise control in order to provide good sound perception. This model has a good absorption coefficient in midlow spectrum, concentrated within 400hz to 1250hz, which is very important to improve the absorption in the sound frequencies of the common noise.

## **FEATURES**

- · Made of metal lacquered plate and different raw absorbent materials inside.
- NRC: 1.05/m2.
- Fire-resistance: B-s1,d1 (similar to old M1).
- Several and pleasant combinations.
- Good robustness and air noise control.
- Suitable for areas with large space, e.g. stadiums, airports and bus stations, pavillions as well as for public or industrial facilities.

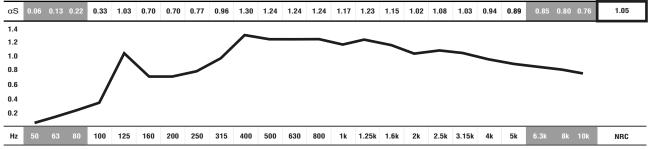
## **TECHNICAL DRAWINGS**



## **MODELS AND SIZES**

MTBL150V	180 cm	60 cm	15 cm	9.4 Kg
MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT

## **ABSORPTION COEFFICIENT**



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## STANDARD COLOURS





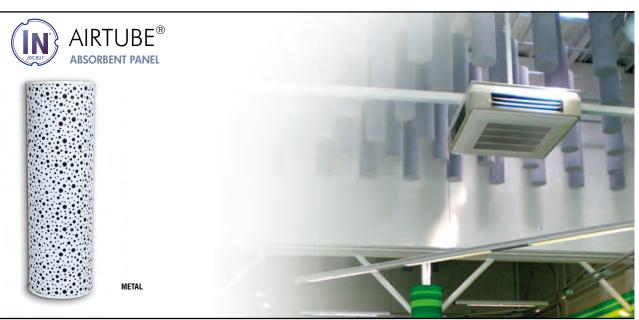


Image of 100x32cm model Ref.:MTAT032

AIRtube® is a tube-shaped absorbent panel that can be suspended in vertical or horizontal position providing pleasant combinations. This model is mainly meant for stadiums, large halls, airports, subways and bus stations, as well as for industrial applications. It can also be applied in moist environments and outdoors.

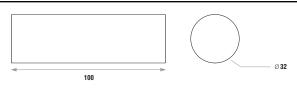
This panel's structure is made on a holed metal lacquered plate, which gives the product a good robustness; the interior is built with mineral fibres in different layers and densities. It is available in several colors and it is easy to install with the supplied accessories.

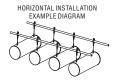
Big venues and industrial spaces require an adequate noise control in order to provide good sound perception. Due to its formation, the AIRtube® has a good absorption values at the mid-range of the sound spectrum, which is very important to improve the reduction of the common air-noise.

# **FEATURES**

- · Made of metal lacquered plate.
- NRC: 0.95/m²
- Fire-resistance: B-s1,d1 (similar to old M1).
- Several and pleasant combinations.
- · Can be suspended horizontal or vertical positions.
- · Suitable for areas with large space, e.g. stadiums, airports and bus stations, as well as for industrial facilities.

## **TECHNICAL DRAWINGS**



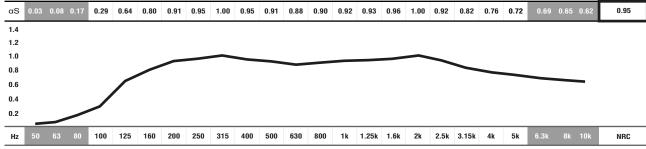




## **MODELS AND SIZES**

MODELS	HEIGHT	DIAMETER	WEIGHT
MTAT032	100 cm	32 cm	7.2 Kg

## **ABSORPTION COEFFICIENT**



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## STANDARD COLOURS



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Image of 120x60cm model Ref.:WP1624 (on the left) and applied (ambient image)

WOODFACE® 1624 is a wooden construction finishing material with acoustic absorbing properties. Following an ecological philosophy, this line of acoustic treatment materials was exclusively developed from recycled pressed wood fibers (HMDF) and coconut fibers, which are recycled materials.

This line of products provides a practical and efficient solution for acoustic treatment. It is composed of coconut fiber (as an energy absorbent material) and perforated panels made of pressed wood fiber (as a finishing surface). This compound, made of strictly 100% recycled materials, has an excellent technical performance. The coconut fiber is a natural, renewable and very light vegetal material. It has high porosity (95% of pores), which translates into an  $extremely \ high \ absorption \ of \ sound \ energy.$ 

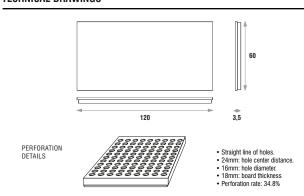
The good behavior of the recycled wood fibers, associated with the coconut fiber's microporous absorbent properties, makes it a natural first-class combination in terms of acoustic

The WOODFACE® is ideal for installing in auditoriums, conference rooms, sport pavilions, business spaces, restaurants and bars, etc... It can be installed with normal wood-stripes or with the supplied aluminum interconnection bar.

## **FEATURES**

- · Standard perforations / wood finishings and coconut fibres (coir fibres).
- Uses 95% of recycled materials.
- NRC: 0.64/m<sup>2</sup>
- Fire-resistance: Wood Veneer Faced (or Engineered Coloured Fibre) Boards Euroclass B-s2,d0 (similar to old M1), Coconut (Coir Fibre) - Euroclass E (similar to old M4).
- · Installation: wood or metal bars.
- · Others sizes are available on demand.

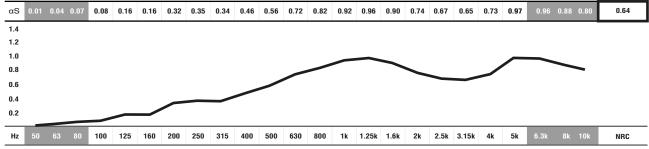
## **TECHNICAL DRAWINGS**



## **MODELS AND SIZES**

	OTHER SIZES A	VAILABLE UNDER	CONSULTING	
<b>WP</b> 1624	120 cm	60 cm	3,5 cm	2.5 Kg
MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT

## **ABSORPTION COEFFICIENT**



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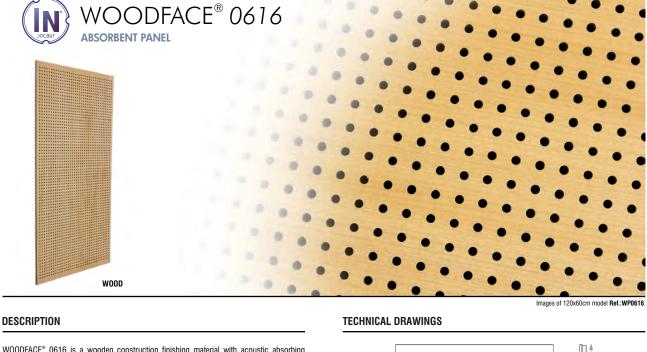
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## STANDARD FINISHINGS AND COLOURS



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   Olours may vary due to raw-material suppliers' changes and some differences may occur in tonal range.
   Out to its natural origin, wood-based products will always present natural imperfections inherent to the organic nature. And for similar reasons, they will also present traces of old-age in the course of time.
   Wood and Fabric products are highly susceptible to change its appearance with humidity and temperature. Close attention must be paid to the storage conditions and the acclimatization before, during and after the installation.
   Typical Indoor Comfort Standards state a temperature range of 20°C -27°C (68°F 48°F), and a relative humidity of less they. These would be considered as normal operational levels of JOCAVIP\*
   Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.





WOODFACE® 0616 is a wooden construction finishing material with acoustic absorbing properties. Following an ecological philosophy, this line of acoustic treatment materials was exclusively developed from recycled pressed wood fibers (HMDF) and coconut fibers, which are recycled materials.

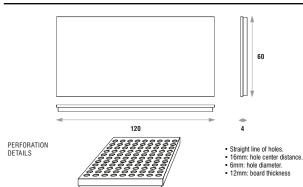
This line of products provides a practical and efficient solution for acoustic treatment. It is composed of coconut fiber (as an energy absorbent material) and perforated panels made of pressed wood fiber (as a finishing surface). This compound, made of strictly 100% recycled materials, has an excellent technical performance. The coconut fiber is a natural, renewable and very light vegetal material. It has high porosity (95% of pores), which translates into an extremely high absorption of sound energy.

The good behavior of the recycled wood fibers, associated with the coconut fiber's microporous absorbent properties, makes it a natural first-class combination in terms of acoustic

The WOODFACE® is ideal for installing in auditoriums, conference rooms, sport pavilions, business spaces, restaurants and bars, etc... It can be installed with normal wood-stripes or with the supplied aluminum interconnection bar.

## **FEATURES**

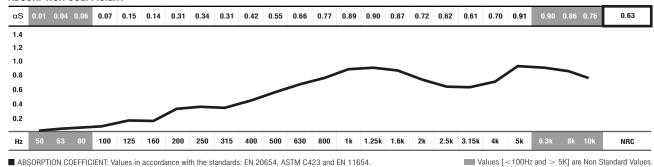
- · Standard perforations / wood finishings and coconut fibres (coir fibres).
- Uses 95% of recycled materials.
- NRC: 0.63/m2
- Fire-resistance: Wood Veneer Faced (or Engineered Coloured Fibre) Boards Euroclass B-s2,d0 (similar to old M1), Coconut (Coir Fibre) - Euroclass E (similar to old M4).
- · Installation: wood or metal bars. · Others sizes are available on demand.



## **MODELS AND SIZES**

WP0616	120 cm	60 cm	4 cm	2.5 Kg
MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT

#### **ABSORPTION COEFFICIENT**



## ■ Values [<100Hz and > 5K] are Non Standard Values.

## STANDARD FINISHINGS AND COLOURS



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  Colours may vary due to raw-material suppliers' changes and some differences may occur in tonal range.

  Due to its natural origin, wood-based products will always present natural imperfections inherent to the origanic nature. And for similar reasons, they will also present traces of old-age in the course of time.

  Wood and Fabric products are highly susceptible to change its appearance with humidity and temperature. Close attention must be paid to the storage conditions and the acclimatization before, during and after the installation. Typical Indoor Confort Standards state a temperature range of 20°C -27°C (68°F -81°F), and a relative humidity of less than 60%. These would be considered as normal operational levels of JOCANY\* products' range.

  Despite all the standard sizes of all products, this model can be oustomised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.



Image of two samples of model Ref.:WT0428 (on the left) and applied (ambient image).

 $WOODWALL ^*0428 \ is \ a \ construction \ finishing \ material \ with \ acoustic \ absorbing \ properties.$ Following an ecological philosophy, JOCAVI® has developed this line of acoustic treatment materials, which are made exclusively from recycled pressed wood fibers (HMDF) and coconut fibers. The wood plate is provided separately from the coconut fiber layer and can be assembled together during the installation.

This compound is made of coconut fiber (as an energy absorbent material) and perforated panels made of pressed wood fibers, made of strictly 100% recycled materials has an excellent technical performance. The coconut fiber is a natural, renewable and very light vegetal material. It has high porosity (95% of pores), which translates into an extremely high absorption of sound energy.

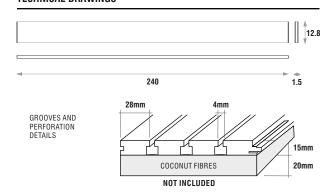
The good behavior of the recycled wood fibers, associated with the coconut fiber's microporous absorbent properties, makes it a natural first-class combination in terms of acoustic solutions.

The WOODWALL® 0428 is ideal to install in auditoriums, conference rooms, sport pavilions, business spaces, restaurants and bars, etc... It can be installed with wood or

## **FEATURES**

- Standard perforations / wood finishings and NOT INCLUDED, coconut fibres.
- · Uses 95% of recycled materials.
- NRC: 0.62/m<sup>2</sup>.
- Fire-resistance: Wood Veneer Faced (or Engineered Coloured Fibre) Boards Euroclass B-s2,d0 (similar to old M1), Coconut (Coir Fibre) - Euroclass E (similar to old M4).
- · Installation: wood or metal bars.

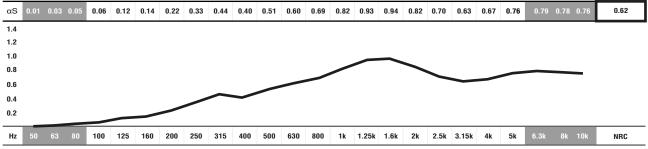
## **TECHNICAL DRAWINGS**



## **MODELS AND SIZES**

MODELS	HEIGHT	WIDTH	DEPTH	WEIGHT
<b>WT</b> 0428	240 cm	12.8 cm	1.5 cm	3.0 Kg

#### **ABSORPTION COEFFICIENT**



■ ABSORPTION COEFFICIENT: Values in accordance with the standards: EN 20654, ASTM C423 and EN 11654

■ Values [<100Hz and > 5K] are Non Standard Values.

## STANDARD FINISHINGS AND COLOURS



- OLCAVI\* accepts no responsibility for any printing errors. Specifications can be modified without prior notice, if technical or commercial reasons so require.
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   Olours may vary due to raw-material suppliers' changes and some differences may occur in tonal range.
   Out to its natural origin, wood-based products will always present natural imperfections inherent to the organic nature. And for similar reasons, they will also present traces of old-age in the course of time.
   Wood and Fabric products are highly susceptible to change its appearance with humidity and temperature. Close attention must be paid to the storage conditions and the acclimatization before, during and after the installation.
   Typical Indoor Comfort Standards state a temperature range of 20°C -27°C (68°F 48°F), and a relative humidity of less they. These would be considered as normal operational levels of JOCAVIP\*
   Despite all the standard sizes of all products, this model can be customised upon previous consultation. Sizes may vary slightly due to their production method and some inherent raw-materials characteristics.









Image of FLOATSHEET\* INS ROLL, Ref.:FINr010AD (on the left) and PLATE, Ref.:FINp010AD (on the right).

#### **FEATURES**

- Noise and sound Insulation layer.
  Good fire resistance, elasticity, flexibility and tensile strength.
  Great performance/cost.

- Installation: with nails or adhesive glue.
   Supplied in rolls or plates, with or without adhesive.
   Suitable for walls, ceilings and floors.

#### SIZES AND SPECIFICATIONS

MODELS	LENGTH	WIDTH	THICKNESS	WEIGHT
FINr010/AD (roll)	1000 cm	150 cm	1 cm	4.62 Kg
FINp010/AD (plate)	200 cm	120 cm	1 cm	1.3 Kg

#### **DESCRIPTION**

The Floatsheet® INSulation is made of polyurethane and it is a great material to be used as an insulation layer. The application of Floatsheet® INSulation meets the active sound insulation. It is suitable for use on the sound insulation composite constructions in studios, cabins, residences, hotels, clubs, nightclubs, as well as for industrial and traffic equipment.

Floatsheet® INSulation can effectively absorb and obstruct the noise transmitted through the walls, ceilings and floor structures by utilizing the mass law and damping principle of the architectural acoustic materials.

This thin and high quality material can provide obvious noise control and vibration absorption resulting in a highest cost/performance. It has good fire resistance, heat resistance, elasticity, flexibility and tensile strength. It can be cut with the wallpaper cutter and be fixed with nails or adhesive. This material is supplied in two options: rolls or plates.







FLOATSHEET® VIB

Image of FLOATSHEET® VIB, Ref.:FVI003AD (with adhesive on the left), and FLOATSHEET® VIB, Ref.:FVI003 (on the right).

## **FEATURES**

- · Anti-vibration and noise control layer with great mass.
- · Good fire resistance, elasticity, flexibility and tensile strength.
- · Great performance/cost.
- · Installation: with nails or adhesive glue.
- · Supplied in rolls with or without adhesive.
- · Suitable for walls, ceilings and floors.

## SIZES AND SPECIFICATIONS

MODELS	LENGTH	WIDTH	DEPTH	WEIGHT
FVI003AD	700 cm	100 cm	0.3 cm	25 Kg
FVI003	700 cm	100 cm	0.3 cm	25 Kg

## DESCRIPTION

Floatsheet® VIBration, is a composed material made of a mixture of tar and rubber. It is a great product to be used as an anti-vibration layer, suitable to be applied on the sound insulation composite construction in residences, hotels, clubs, nightclubs, recording studios, as well as for sound insulation and noise reduction of the industrial traffic equipment. This thin and high quality material provides obvious noise control and vibration absorption results in a highest cost/performance.

Floatsheet® VIBration can effectively absorb and obstruct the noise transmitted through the walls, ceilings and floor structures by utilizing the mass law and damping principle of the architectural acoustic materials.

This product has good fire resistance, heat resistance, elasticity, flexibility and tensile strength. It can be cut with the wallpaper cutter and be fixed with nails or adhesive. This material is supplied in roll in two options: with or without adhesive.

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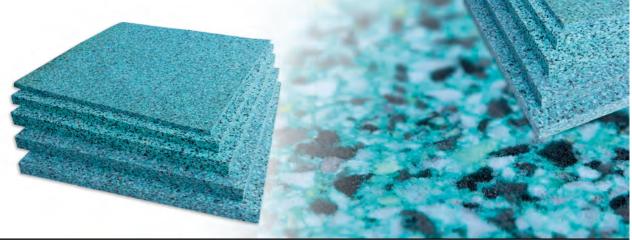


Image of ARG with different thickness, Ref.:ARG

#### **FEATURES**

- · Self-extinguishable recycled foam agglomerate
- Made from the agglomeration of flexible polyurethane foam of different densities
   Good fire resistance (M1 fire-class), uniform and stable composition.
- Great performance/cost. Supplied in 1m<sup>2</sup> plates
- Installation: with contact glue.
   Wide range of thickness (from 20mm to 100mm) with 80Kg/m³.
- (others upon consulting and request)
- · Suitable for walls, ceilings and floors

#### **SPECIFICATIONS**

REF.	DIMENSIONS
ARG020	100x100x2cm
ARG040	100x100x4cm
ARG060	100x100x6cm
ARG080	100x100x8cm
ARG100	100x100x10cm

#### **DESCRIPTION**

ARG® is a product resulting from the agglomeration of flexible polyurethane foam of different densities, presented on plates, which shows a uniform and stable composition. Endowed with a porous cellular structure and unique physical and mechanical characteristics, ARG® constitutes a central element in various building systems that allow solving the most complex acoustic problems of buildings, structures, machinery and the like. Find wide application in insulation systems percussion sounds, an area where leads, allowing the development of highly competitive solutions in terms of cost / benefit ratio. It is virtually universal in its application in double construction systems (or trucks) to meet the requirement of insulation to air sounds. This field is particularly important for systems "box-in-box" particularly when necessary for rehabilitation of buildings. Other uses the level of vibration control equipment to support and reverberation control in closed spaces complete range of applications in the acoustic behavior of buildings. ARG® thus exhibits a substantially unique feature of being useful at all required in the field of acoustic behavior of buildings. This universal characteristic in the field of acoustics allows you to stand out among the products for the building, like the one in the acoustic field can contribute more for the comfort of human beings. When coupled with plaster sheets or clusters give large amounts of insulation in the whole range of the sound spectrum. Gives a high absorption power. Because it is glued, without physical contact of rigid structures, mitigation damping is achieved by means of elasticity. Acoustic Insulation above 60 dB, one must isolate all areas of walls, ceilings and floors avoiding structural physical transmissions







Image of SHOCK AB WALL®, Ref.:SHAW, and of SHOCK AB CEILING®, Ref.:SHAC.

## **FEATURES**

- · Dramatically improves the performance of your soundproofing layer.
- · Minimise physical and structure sound transmission.
- Operating range of 40Kg to 80Kg per piece. Application: using screws.
- · Can be applied in standard steel chains used in the construction with plasterboard.
- · Packaging: 20 pieces.

## **MODELS AND SPECIFICATIONS**

MODELS	MAXIMUM LOAD CAPACITY RANGE (unit)	PACKAGE (units)	
SHAC	40 Kg to 80 Kg	20 pcs	
SHAW	40 Kg to 80 Kg	20 pcs	

## DESCRIPTION

SHOCK AB® is a wall and ceiling vibration absorber, a composite piece consisting of a molded metal frame and a damping rubber component, which allows to support the weight of the wall or ceiling, thereby minimizing physical contact to the support structure and forming the sound insulation layer between the sound wave irradiation and the original base surface, wall or

The SHOCK AB® is provided in two models; one for the ceiling and one for the wall.

SHOCK AB® Ceiling is an effective way to cut off the structure-borne sound transmission of the suspended ceiling and the original building base.

SHOCK AB® Wall is suitable for installing and fixing the wall reinforced sound insulation layer

The quantity of pieces to be used on each application depends on the weight of the insulation layer that will be applied, so it is recommended make the calculation, bearing in mind that it is considered an operating range of 40kg to 80kg per piece (fixation point).







Image of STILLNESS I, Ref.:STLLI, Soundproofing Plates of two layers.

#### **FEATURES**

- · Depending on the constitution of the base of the wall or ceiling, this material can enhance the sound insulation between 12 and 14 dB.
- · Reduces sound transmission loss property. Installation: with screws or contact glue.
- . Fire-resistance: B-s1,d0 (similar to old M1).
- · Environmentally friendly material. High-density board surface, paintable.
- Suitability of a large-area of construction and use.
- · Total thickness: 23mm.

#### SIZES AND SPECIFICATIONS

MODELS	LENGTH	WIDTH	DEPTH	WEIGHT
STLL I	2000mm	1200 mm	23 mm	18.4 Kg

#### **DESCRIPTION**

STILLNESS® I is a damping system and sound insulation board composed of anti-vibration and massive elements. We select inorganic materials with different densities and thicknesses to form a composite layer with the best properties of sound insulation and vibration damping in order to effectively insulate the medium-low and low frequencies of the sound transmission. The layers of each compound model are sandwiched and adhere under high pressure.

These composite vibration damping and sound insulation board are much more practical than the traditional layer-by-layer construction and provides an effective sound reduction rate of  $walls \ and \ ceilings \ in \ all \ types \ of \ applications, from \ the \ music \ business \ to \ the \ industrial \ markets.$ This multi-layer structure is portable and simple to install by using screws or contact glue and it is easy to cut to adjust to the room dimensions.

STILLNESS® I is composed by:

- 1 layer of (10mm Polyurethane - Floatsheet® INS) and 1 layer of (13mm Gypsumboard).







Image of STILLNESS II, Ref.:STLLII, Soundproofing Plates of three layers.

## **FEATURES**

- Depending on the constitution of the base of the wall or ceiling, this material can enhance the sound insulation between 14 and 18 dB.
- $\bullet \ \ {\sf Reduces \ sound \ transmission \ loss \ property. \ Installation: \ with \ screws \ or \ contact \ glue.}$
- Fire-resistance: B-s1,d0 (similar to old M1).
- Environmentally friendly material. High-density board surface, paintable.
- · Suitability of a large-area of construction and use.
- . Total thickness: 36mm

## SIZES AND SPECIFICATIONS

MODELS	LENGTH	WIDTH	DEPTH	WEIGHT
STLL II	2000mm	1200 mm	36 mm	35.8 Kg

## DESCRIPTION

STILLNESS® II is a damping system and sound insulation board composed of anti-vibration and massive elements. We select inorganic materials with different densities and thicknesses to form a composite layer with the best properties of sound insulation and vibration damping in order to effectively insulate the medium-low and low frequencies of the sound transmission. The layers of each compound model are sandwiched and adhere under high pressure.

These composite vibration damping and sound insulation board are much more practical than the traditional layer-by-layer construction and provides an effective sound reduction rate of walls and ceilings in all types of applications, from the music business to the industrial markets. This multi-layer structure is portable and simple to install by using screws or contact glue and it is easy to cut to adjust to the room dimensions.

STILLNESS® II is composed by:

- 1 layer of (13mm Gypsumboard), 1 layer of (10mm Polyurethane - Floatsheet® INS), and 1 layer of (13mm Gypsumboard).

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Image of STILLNESS III, Ref.:STLLIII, Soundproofing Plates of four layers.

#### **FEATURES**

- · Depending on the constitution of the base of the wall or ceiling, this material can enhance the sound insulation between 18 and 21 dB.
- · Reduces sound transmission loss property. Installation: with screws or contact glue.
- Fire-resistance: B-s1,d0 (similar to old M1).
- · Environmentally friendly material. High-density board surface, paintable.
- · Suitability of a large-area of construction and use.
- . Total thickness: 33mm.

#### SIZES AND SPECIFICATIONS

MODELS	LENGTH	WIDTH	DEPTH	WEIGHT
STLL III	2000mm	1200 mm	33 mm	53.5 Kg

#### **DESCRIPTION**

 ${\it STILLNESS}^{*} \ {\it III} \ is \ a \ damping \ system \ and \ sound \ insulation \ board \ composed \ of \ anti-vibration$ and massive elements. We select inorganic materials with different densities and thicknesses to form a composite layer with the best properties of sound insulation and vibration damping in order to effectively insulate the medium-low and low frequencies of the sound transmission. The layers of each compound model are sandwiched and adhere under high pressure.

These composite vibration damping and sound insulation board are much more practical than the traditional layer-by-layer construction and provides an effective sound reduction rate of walls and ceilings in all types of applications, from the music business to the industrial markets. This multi-layer structure is portable and simple to install by using screws or contact glue and it is easy to cut to adjust to the room dimensions.

STILLNESS® III is composed by:

- 1 layer of (10mm Polyurethane - Floatsheet® INS), 1 layer of (13mm Gypsumboard), 1 layer of (2mm Floatsheet® VIB) and 1 layer of (8mm Viroc).



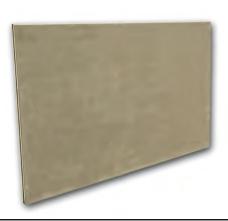




Image of STILLNESS IV, Ref.:STLLIV, Soundproofing Plates of five layers.

## **FEATURES**

- · Depending on the constitution of the base of the wall or ceiling, this material can enhance the sound insulation between 21 and 24 dB.
- Reduces sound transmission loss property. Installation: with screws or contact glue.
   Fire-resistance: B-s1,d0 (similar to old M1).
- Environmentally friendly material. High-density board surface, paintable.
- · Suitability of a large-area of construction and use
- . Total thickness: 46mm

## SIZES AND SPECIFICATIONS

MODELS	LENGTH	WIDTH	DEPTH	WEIGHT
STLL IV	2000mm	1200 mm	46 mm	70.7 Kg

## DESCRIPTION

STILLNESS® IV is a damping system and sound insulation board composed of anti-vibration and massive elements. We select inorganic materials with different densities and thicknesses to form a composite layer with the best properties of sound insulation and vibration damping in order to effectively insulate the medium-low and low frequencies of the sound transmission. The layers of each compound model are sandwiched and adhere under high pressure.

These composite vibration damping and sound insulation board are much more practical than the traditional layer-by-layer construction and provides an effective sound reduction rate of walls and ceilings in all types of applications, from the music business to the industrial markets. This multi-layer structure is portable and simple to install by using screws or contact glue and it is easy to cut to adjust to the room dimensions.

STILLNESS® IV is composed by:

- 1 layer of (13mm Gypsumboard), 1 layer of (10mm Polyurethane - Floatsheet® INS), 1 layer of (13mm Gypsumboard), 1 layer (2mm of Floatsheet® VIB) and 1 layer of (8mm Viroc).

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# MOTIF® Printed Image Finishing

Motif® is a finishing for digital printing on fabric or wood.

Challenge your imagination and choose the finishing you want for your space without any limitation. We print any image on wood or fabric for our panels, just choose from our gallery or send us your image.

Available on all JOCAVI® models with a finishing in wood or fabric:

Addsorb®, LeakyFM®, Mellowalltrap®, Lightwalltrap®, Convexabsorber®, Ebony®, Basscorner®, Roundbasscorner®, Walltrap®, Basslayer®, Tubabsorber® and Tubabsorber®SY, Mellowaffle®.

All these models may have the image you want as a finishing, as an alternative to the usual colours and textures.



# $\mathsf{MOTIF}^{^{\circledR}}$

PRINTED IMAGE FINISHING



# ENHANCE YOUR COMFORT, DECORATE ACOUSTICALLY

## **MAIN INFO**

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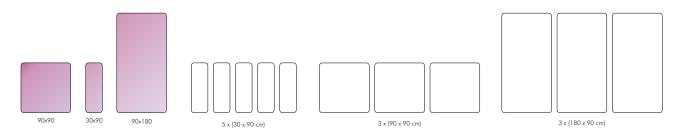
## **FEATURES**

- · Printed on fabric or wood.
- Acoustically transparent textile and/or perforated wood.
- $\bullet$  Same acoustic performance as the original models.
- Exclusive customized images guaranteed by our One of a Kind department.
- Fire security requirements (B1) for public use (fabric finishing).
- High-quality print, using CMYK colour system and resolution up to 1080 dpi.
- Custom-made by size and images.
- · Large-scale seamless images.

## EXAMPLES OF MODELS SIZES AND COMBINATIONS

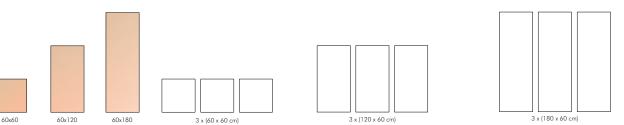
## LIGHTWALLTRAP®

**STANDARD SIZES** OTHER SIZES AND COMBINATIONS AVAILABLE UNDER REQUEST



## MELLOWALLTRAP® ADDSORB® LEAKY FM®

 $\mathsf{M}^{\mathsf{w}}$  **STANDARD SIZES** other sizes and combinations available under request



# **MOTIF**®

## PRINTED IMAGE FINISHING



ON WOOD 3x Addsorb® 120x60cm

 $\label{eq:model} \begin{tabular}{ll} Motif* is a new image printed finishing meant to widen the decorating options on acoustic panels. It can be used on the Addsorb* and LeakyFM* wood-finishing models, while keeping the same acoustic performance as the original models. \\ \end{tabular}$ 

Besides the 6 standard wood verneer finishings and the 10 standard coloured wood fibre JOCAVI® colours, Motif®image printed finishing line provides an option for those who want a more personalised solution. The Motif® image printed finishing line offers a sophisticated look with our acoustically perforated woods, which are available in a multitude of design options that perfectly match decor of your space.



3x Mellowalltrap® 120x60cm

**ON FABRIC** 

Motif® is a new printed textile finishing meant to widen the decorating options on acoustic panels. It can be used on the Mellowalltrap® and Lightwalltrap® fabric-finishing models, while keeping the same acoustic performance as the original models.

Besides the 15 standard JOCAVI® colours, Motif® provides an option for those who want a more personalised solution.

The Motif® printed textile finishing line offers a sophisticated look with our acoustically transparent fabric, which is available in a multitude of design options that perfectly match decor of your space.

## ONE OF A KIND

Motif\* offers a new possibility to use acoustic elements in a unique customised interior design. Sound control solutions need to meet greater acoustic demands while maintaining an aesthetic appeal.

Acoustic Panels help control the excessive reverberation and echoes caused by the hard surfaces of construction materials. The strategic placement of acoustic panels on walls and ceilings helps absorb unwanted sound energy and causes a reduction of acoustic defects. Thus, you can hear your music and movies as they were meant to be heard.





MOTIF\* images can be obtained by printing them from our image data bank or by using our design services for individual designs or customers' own images, texts and symbols.

A precise evaluation of the customers' files resolution will be confirmed before printing. The **One of a Kind** department guarantees the quality and exclusivity of your file printing, which will be used only once and only for you.

Different colours and patterns can be used for printing. The quality of our textiles used with the pictures fulfils the fire security requirements (B1) for public use.







# SOME IMAGES FROM OUR GALLERY (check online at jocavi.net)



REF: ART-O1









REF: MUS-01 REF:

DEE, LIDE O1

127































































































































