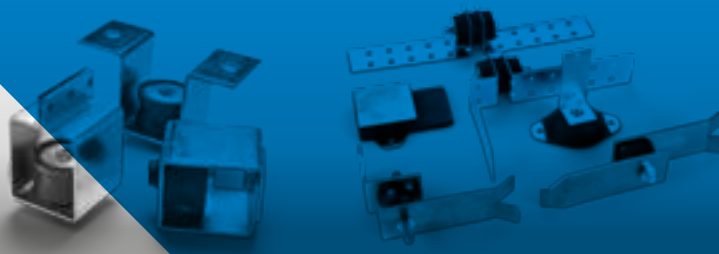




AKUSTIK + **AMC**
MECANOCAUCHO

AKUSTIK + **sylomer**[®] by getzner



AMC
MECANOCAUCHO

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AKUSTIK +

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Springtec Range	Page 14
Mountings VT	Page 16
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WALL MOUNTS

E.P. Range	Page 20
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AKUSTIK +

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CEILING MOUNTS

Akustik + Sylomer®	Page 30
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WALL MOUNTS

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FLOATING FLOOR MOUNTS

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Factory 1 of AMC-MECANOCAUCHO



Factory 2 of AMC-MECANOCAUCHO



Factory of sylomer® in Austria.



Akustik+Sylomer® is the trademark of a new solution for the anti-vibration mountings of false ceilings or vibrating elements that have to be suspended. They are used for the attenuation of vibrations, reducing structure-borne noise.

AMC-MECANOCAUCHO® has been manufacturing anti-vibration suspensions since 1969, and since then it has been manufacturing suspensions for this same purpose, using rubber, spring or a combination of both, called **Akustik**.

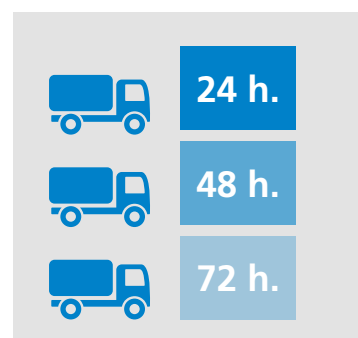
GETZNER Werkstoffe GmbH manufactures a prestigious anti-vibration material called **Sylomer®** whose main application has been the isolation of vibrations produced by railways. Operating from Austria since 1969, it is now the leader in its sector, and boasts totally cutting-edge technological facilities and media for vibration isolation.

The **Akustik+Sylomer®** ceiling mounts are made of Sylomer®, a microcelular polyurethane material specially conceived for vibration isolation. This material produces a higher degree of damping than the elastomers traditionally used for this purpose.

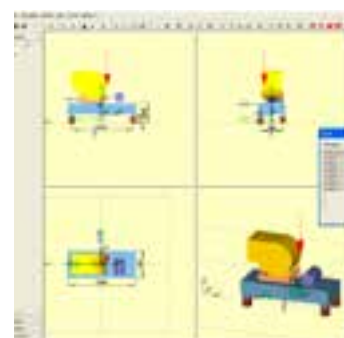
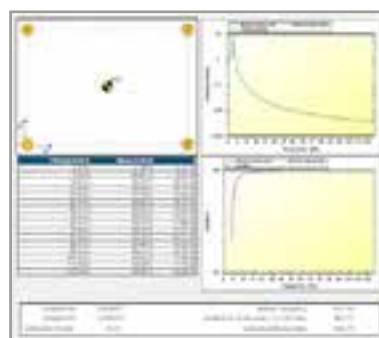
ENGINEERING



LOGISTICS



ANTIVIBRATION CALCULATIONS

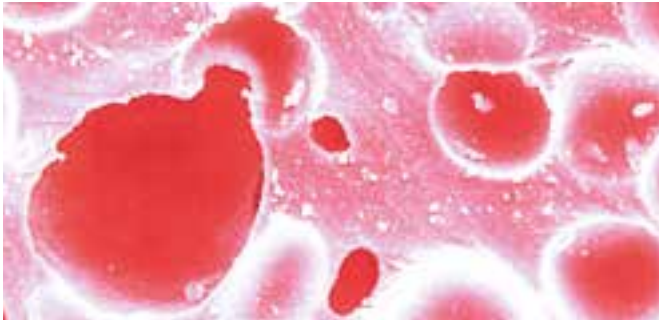


EXPOSITION TOOLS FOR DISTRIBUTORS



< The cooperation of two great companies

QUALITY



We possess more than 40 years of experience providing quality products, capable of overcoming the most demanding tests. For this purpose it is vital our knowledge on the correct manufacturing processes and the use of first grade components.

SERVICE



We keep in stock more than 3 Million euros of finished products. This fact is key to respond quickly to urgent enquiries.

ENGINEERING SERVICES



Calculations • Development • Tests • Measurements

Our technical department makes calculations, develops new products, analyzes their elastical properties and make on site measurements in order to find the correct technical solution to solve each vibration problem.

DISTRIBUTOR SUPPORT



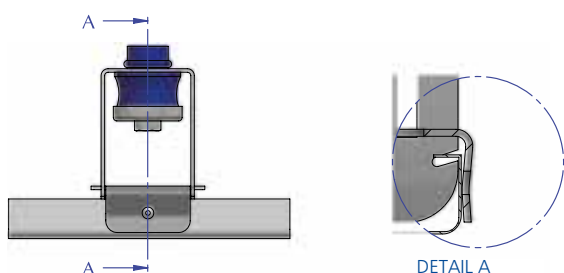
AMC-MECANOCAUCHO offers a wide range of exposition displays on store. Should you require one, do not hesitate to contact our sales dept, so they can offer you the one that adapts better to your needs.

"The SUPER security in your installation"

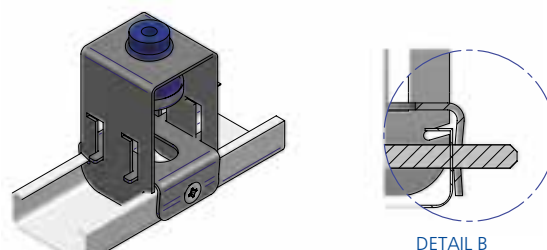
Akustik Super

The "SUPER" security feature is adaptable to the different profiles existing on the market. The external dimension of the profiles that exist on the market may vary, our "SUPER" security system with lip form adapts to the different lengths of the profile having a tight fit.

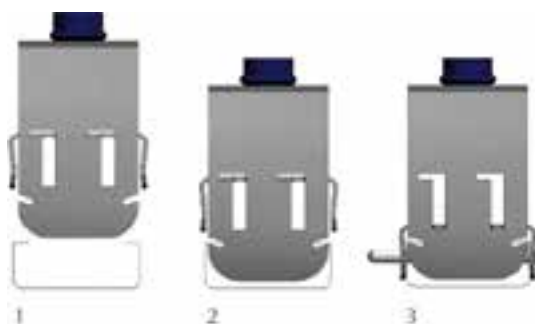
1- The security system is adaptable to different widths of profiles.



2- The "SUPER" security system admits the possibility of inserting a blocking screw.



Installation Steps

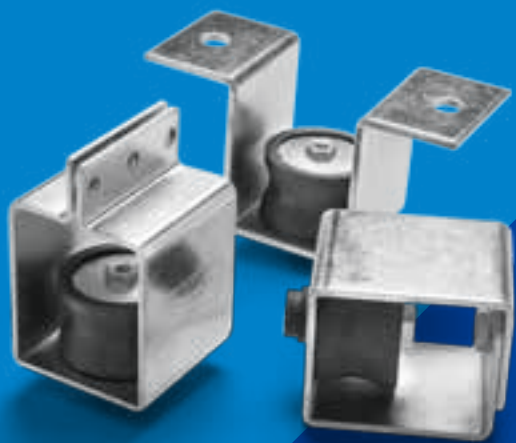


Installation of Akustik Super rubber



Installation of Akustik Super + **sylomer**[®] by getzner





Akustik+ 
MECANOCAUCHO

Reliability and cost effectiveness

BASIC KNOWLEDGE ON STRUCTURAL ACOUSTICS

1.-NOISE AND VIBRATION PROBLEMS IN PREMISES

Sound that is unpleasant to the human ear is known as noise, and ecologically speaking is a form of pollution that is becoming increasingly more widespread due to town and city development.

It could be defined as a vibratory phenomenon propagated in an elastic medium (ceilings, walls, floors and the air itself) causing perturbations in it. To isolate any premises or venue properly, the first step is to identify the composition and the values of the noise (spectrum of frequencies, noise level etc.).

Once we know the magnitude of the noise or the vibrations to be insulated, we must built an unconnected off-the-floor frame which gives us the insulating and dampening values we need.



2.-THE FUNCTION OF THE ANTIVIBRATION MOUNTS IN A SOUND-PROOFED PREMISES

All rigid connections of the false structure or "frame" of the premises must be installed elastically onto the definitive slabbing. If any rigid joint is left it will act as acoustic bridge and would annul the efficacy of the other acoustic elements placed: antivibratory, absorbents, fibreglass, plasterboard, concrete etc. There are several elements designed for the insulation of ceilings, walls and floors.



Ceiling mounts



Wall Mounts



Floor Mounts

3.-ANTIVIBRATION SOLUTIONS

A. RUBBER

Natural frequency between 7 - 15 Hz
High dampening.
Small static deflections.
Effective in medium and high frequencies.



B. SPRING

Low natural frequency of 3 - 6 Hz.
Same static and dynamic behaviour.
Low dampening, excellent insulation.



C. SPRING RUBBER

Natural frequency of 3 - 15 Hz.
High dampening and insulation.
Effective at all frequencies.



AKUSTIK+ AMC Mecanocaucho

BASIC KNOWLEDGE ON STRUCTURAL ACOUSTICS

4.- THE IMPORTANCE OF THE DYNAMIC FREQUENCY OF THE ANTIVIBRATION MOUNTS.

Real data are required to carry out a study and calculation of a premises.

The static stiffnesses that are provided by static load-deflection graphs are not valid for the calculation of a realistic insulation. Experience shows that the static calculations are very different from reality.

At the moment, AMC has a dynamic testing machine that can generate the most common types of vibration on premises, giving real frequency values, insulation, loss angle and critical dampening rate.



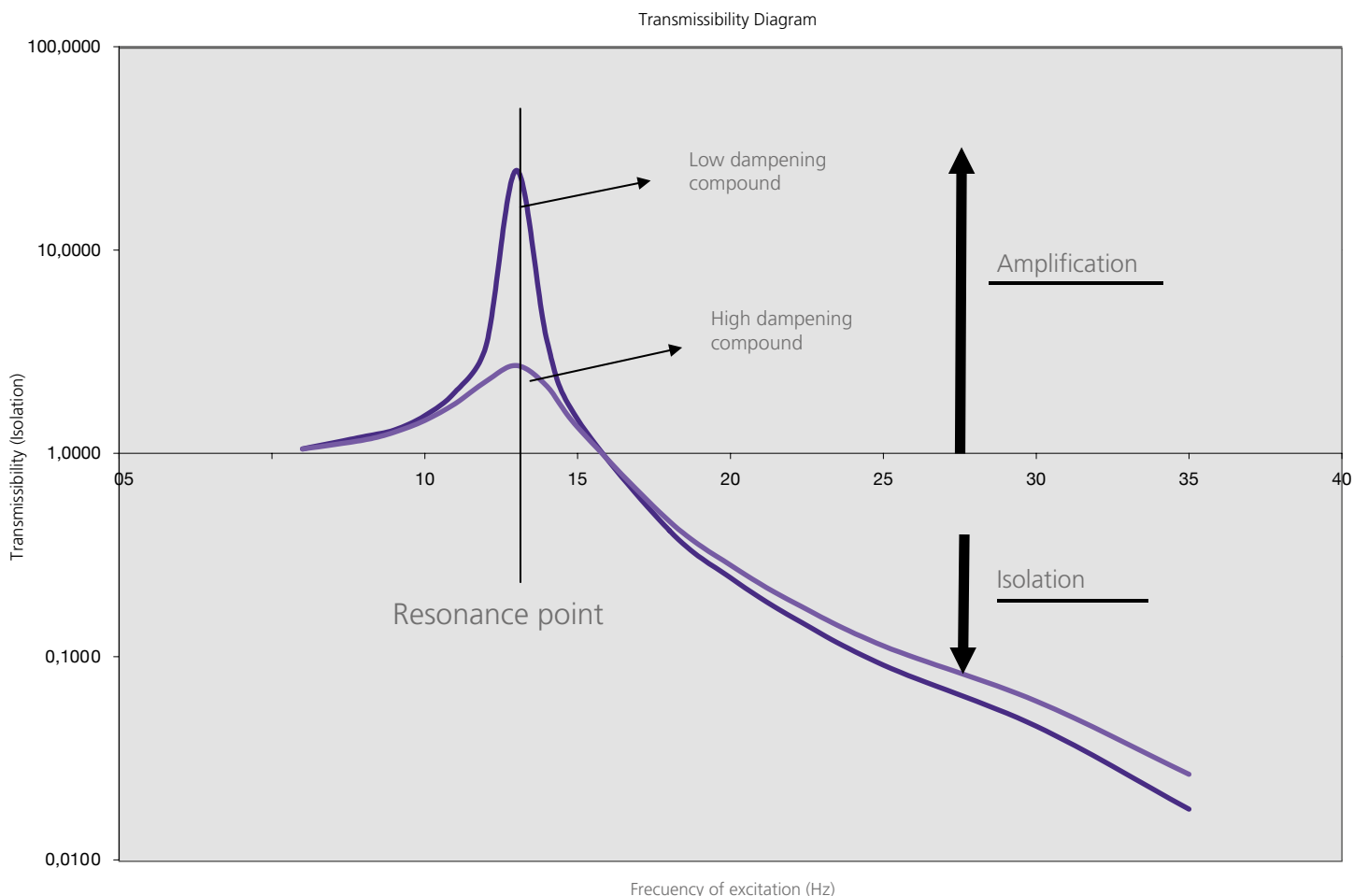
Dynamic testing machine

5.- INSULATION AND DAMPENING. GOOD INFORMATION BETTER SOLUTION.

Thanks to the testing we have nowadays, it is possible to clear up the role of dampening in a mass-spring insulation.

Elements with high dampening absorb part of the vibration energy that reaches them, so if resonance occurs, they absorb part of this energy, reducing its negative effects. On the other hand, in the event of resonance, low dampening elements amplify the vibration without absorbing energy.

Example of isolation and damping of vibrations.

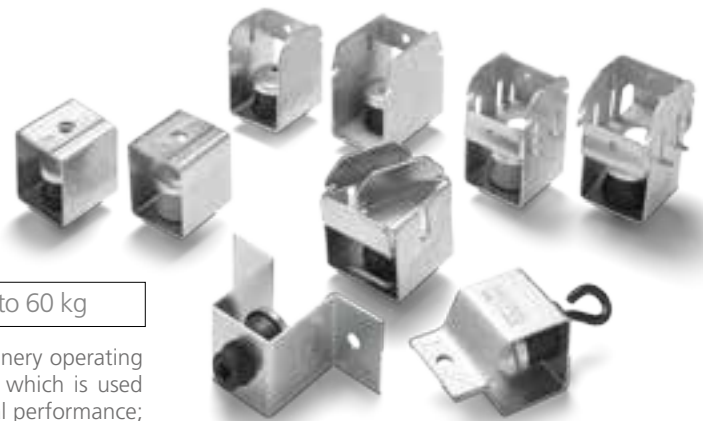


CEILING MOUNTS

Akustik Range

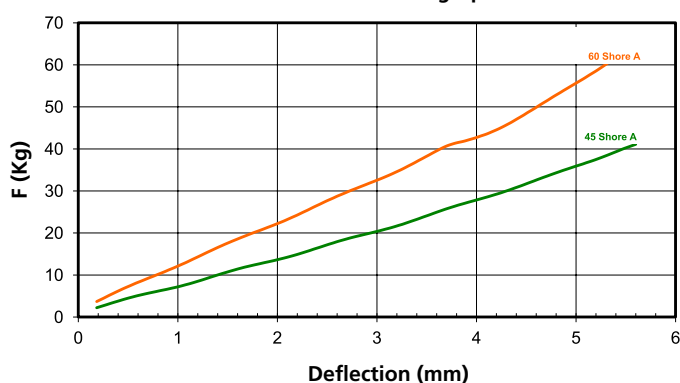
A-45 Loads from 8 to 30 kg B-60 Loads from 25 to 60 kg

Range designed for suspension of false acoustic ceilings and machinery operating at more than 1.000 r.p.m. The same vibration damping element which is used throughout the Akustik range is made of rubber of high mechanical performance; it is specially designed for vibration damping. The metallic structure is designed to resist loads up to 650 kg. It is supplied with an anti-corrosive zinc-plated coat.

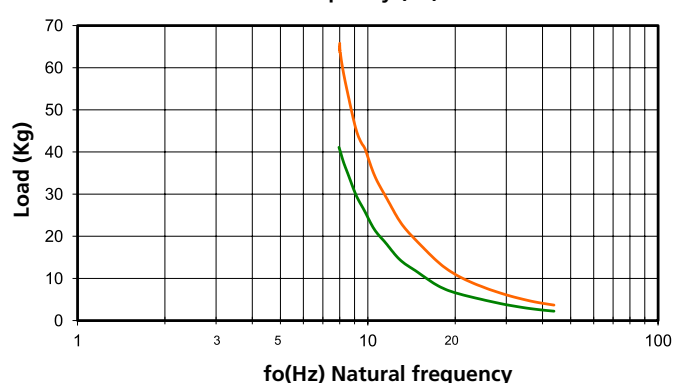


Dynamic behaviour

Static load deflection graph



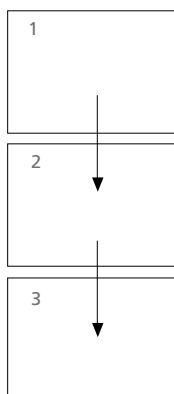
Natural frequency (Hz)



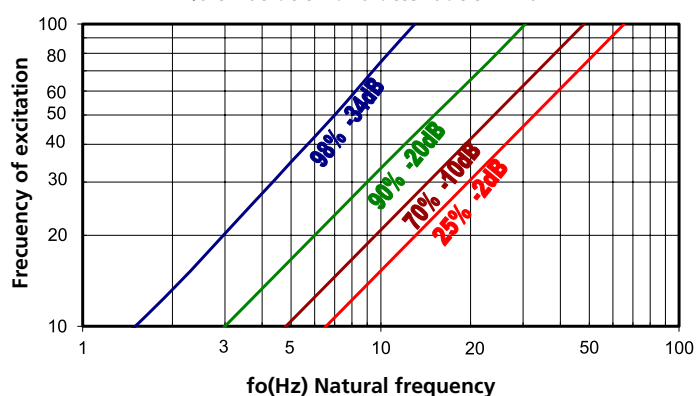
To select correct mounting, following data are needed:

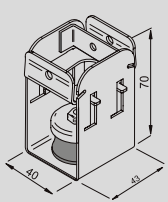
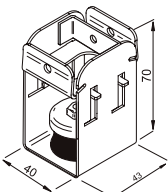
- Load per mounting (kg).
- Disturbing frequency (Hz).

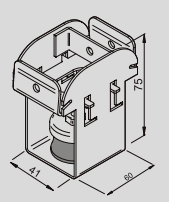
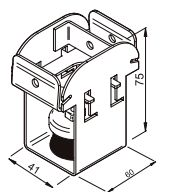
Select correct load line in diagram 1 and refer to diagram 2 to obtain the Natural frequency. With this natural frequency prolong this line to the diagram 3 and obtain the % of isolation at the given frequency of excitation.



% of isolation and attenuation in dB



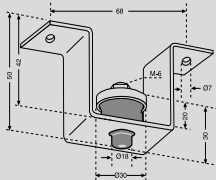
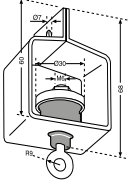
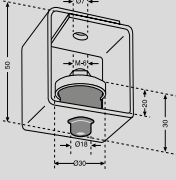
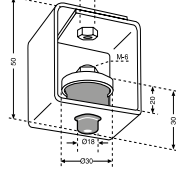
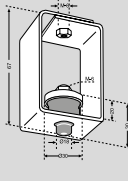
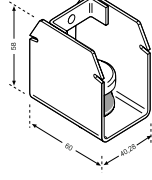
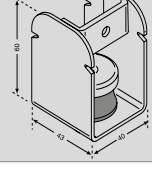
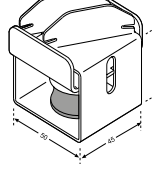
	REF. AMC	LOAD	CODE
	Akustik Super T-47 A-45	8-30 Kg.	23801
	Akustik Super T-47 B-60	25-60 Kg.	23802

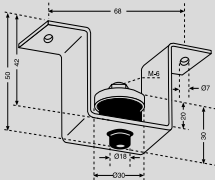
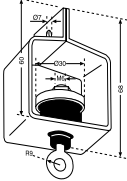
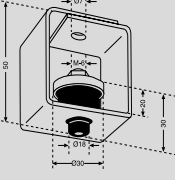
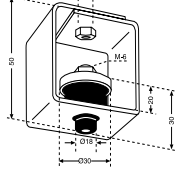
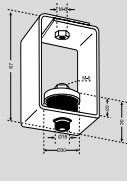
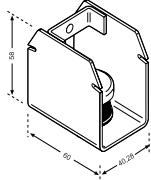
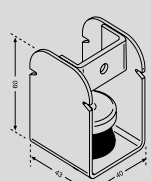
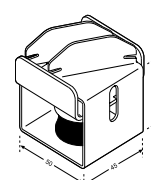
	REF. AMC	LOAD	CODE
	Akustik Super T-60 A-45	8-30 Kg.	23811
	Akustik Super T-60 B-60	25-60 Kg.	23812

	REF. AMC	LOAD	CODE
	Akustik Sierra A-45	8-30 Kg.	23861
	Akustik Sierra B-60	25-60 Kg.	23862

AKUSTIK+ AMC Mekanocaucho

CEILING MOUNTS

	REF. AMC	LOAD	CODE	SUMMARY
	Akustik 1 A-45	8-30 Kg.	23101	Fitted directly to ceiling using two holes.
	Akustik 2 A-45	8-30 Kg.	23111	Anchoring to the ceiling with hooks.
	Akustik 3 A-45	8-30 Kg.	23121	Fitted by using an M-6 rod and a nut.
	Akustik 4 A-45	8-30 Kg.	23131	Fitted to ceiling using an M-6 rod.
	Akustik 4 high A-45	8-30 Kg.	23133	Fitted to ceiling using an M-6 rod.
	Akustik Rapid T-60 A-45	8-30 Kg.	23143	Fitted to ceiling using an M-6 rod.
	Akustik Rapid T-47 A-45	8-30 Kg.	23145	Designed for easy and accessible fitting together with great strenght.
	Akustik Safety T-47 A-45	8-30 Kg.	23210	The rotational system of the part assures the correct installation thanks to the design of the metal part at 45°.

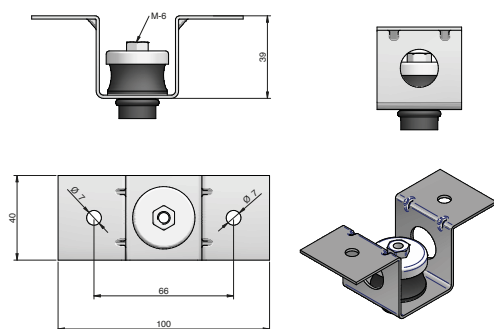
	REF. AMC	LOAD	CODE	SUMMARY
	Akustik 1 B-60	25-60 Kg.	23102	Fitted directly to ceiling using two holes.
	Akustik 2 B-60	25-60 Kg.	23112	Anchoring to the ceiling with hooks.
	Akustik 3 B-60	25-60 Kg.	23122	Fitted by using an M-6 rod and a nut.
	Akustik 4 B-60	25-60 Kg.	23132	Fitted to ceiling using an M-6 rod.
	Akustik 4 high B-60	25-60 Kg.	23134	Fitted to ceiling using an M-6 rod.
	Akustik Rapid T-60 B-60	25-60 Kg.	23144	Fitted to ceiling using an M-6 rod.
	Akustik Rapid T-47 B-60	25-60 Kg.	23146	Designed for easy and accessible fitting together with great strenght.
	Akustik Safety T-47 B-60	25-60 Kg.	23213	The rotational system of the part assures the correct installation thanks to the design of the metal part at 45°.

CEILING MOUNTS

Akustik Range

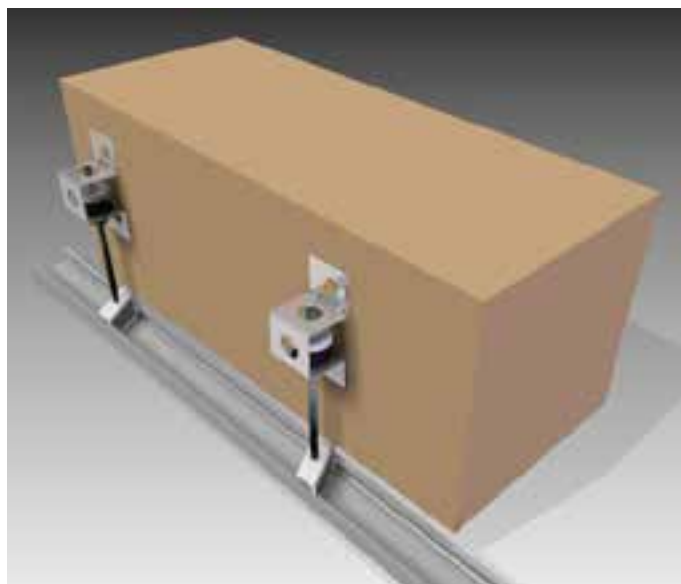
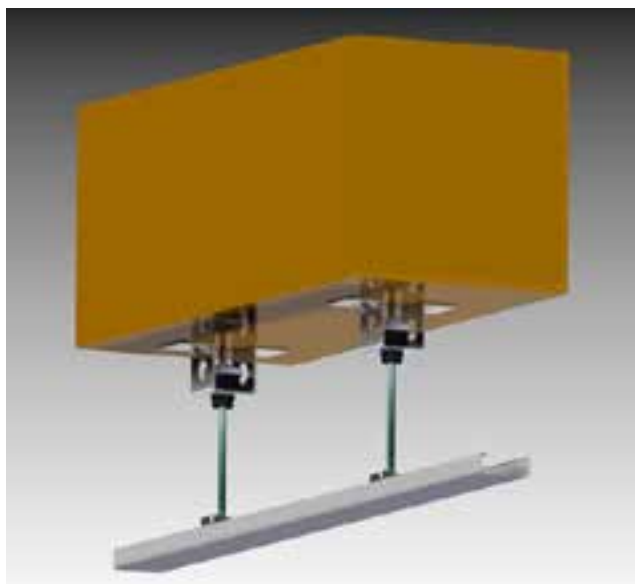
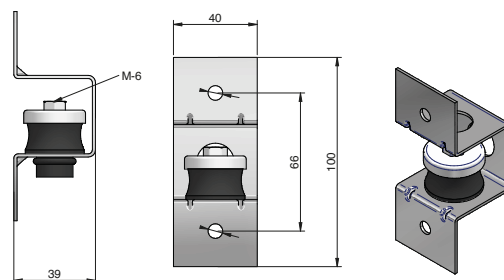
Akustik 1 Lateral (Posición estándar)

NEW

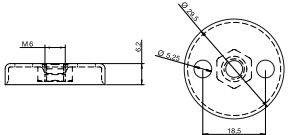


Akustik 1 Lateral




NEW



REF. AMC	LOAD	CODE
Akustik 1 Lateral A-45	8-30 Kg	23571
Akustik 1 Lateral B-60	25-60 Kg	23572

REF. AMC	LOAD	CODE
	Levelling bell	23159

Steps of the installation for the Akustik Safety

		
1. Place the part inside the beam.	2. Turn the part inside the beam until it is fixed.	3. The safety system falls by gravity, embracing the profile automatically.

AKUSTIK+ AMC Mekanocaucho

CEILING MOUNTS

Grand Akustik ceiling hanger

A-45 load from 40 to 100 kg

B-60 load from 80 to 150 kg

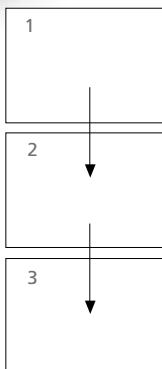
Range designed for suspension of false acoustic ceilings and machinery operating at more than 1.000 r.p.m. The same anti-vibration element is used for all the range. This element is made of rubber offering high mechanical performance and it is specially studied for vibratory insulation. The metallic structure is designed to resist loads up to 1000 Kg. It is supplied with an anticorrosive zinc-plated coat.



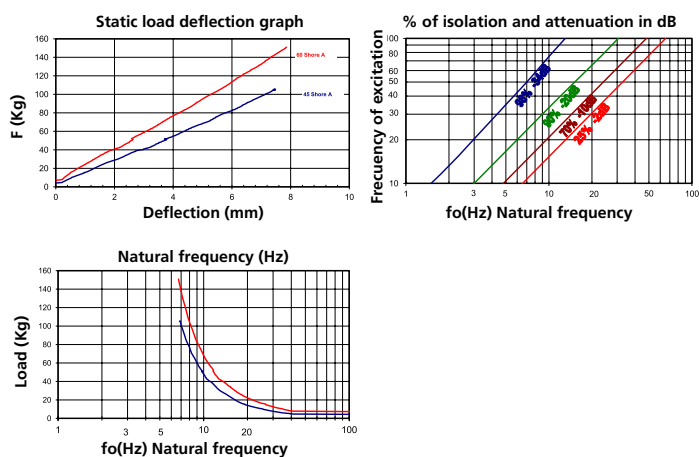
To select correct mounting, following data are needed:

- Load per mounting (kg).
- Disturbing frequency (Hz).

Select correct load line in diagram 1 and refer to diagram 2 to obtain the Natural frequency. With this natural frequency prolong this line to the diagram 3 and obtain the % of isolation at the given frequency of excitation.



Comportamiento dinámico



	REF. AMC	LOAD	CODE
	Gran Akustik 1 A-45	40-100 Kg.	23201
	Gran Akustik 2 A-45	40-100 Kg.	23211
	Gran Akustik 3 A-45	40-100 Kg.	23221
	Gran Akustik 1 B-60	80-150 Kg.	23202
	Gran Akustik 2 B-60	80-150 Kg.	23212
	Gran Akustik 3 B-60	80-150 Kg.	23222



Gran Akustik 3

Gran Akustik 2

Example of installation

CEILING MOUNTS

Springtec ceiling hanger

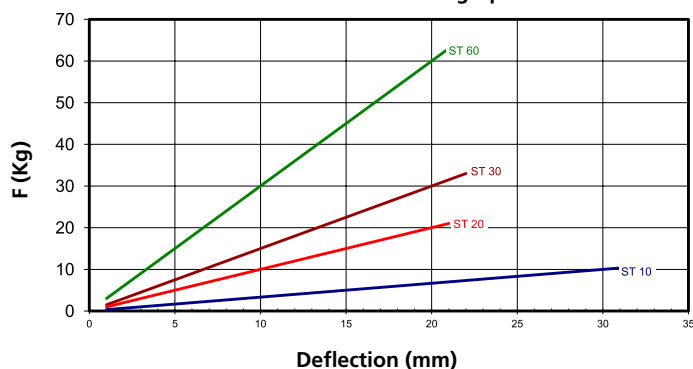
Load from 5 to 60 kg.

Range designed for suspensions of false acoustic ceilings and machinery working at more than 450 r.p.m. Manufactured with piano tail quality spring of great mechanical resistance guided by two rubber plates with integral end stops to prevent contact between spirals when overloading.

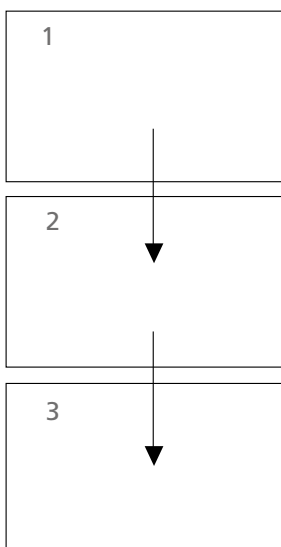
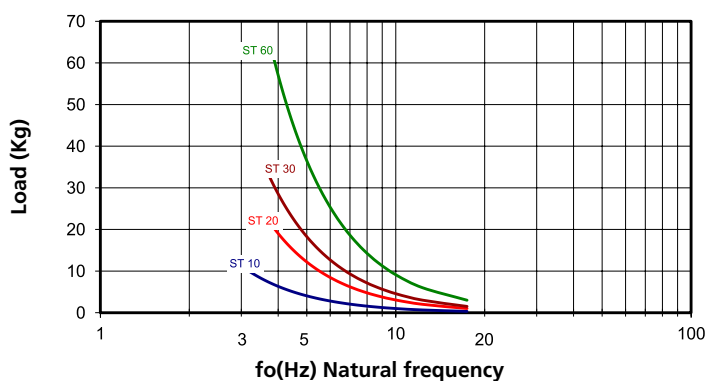


Dynamic behaviour

Static load deflection graph



Natural frequency (Hz)

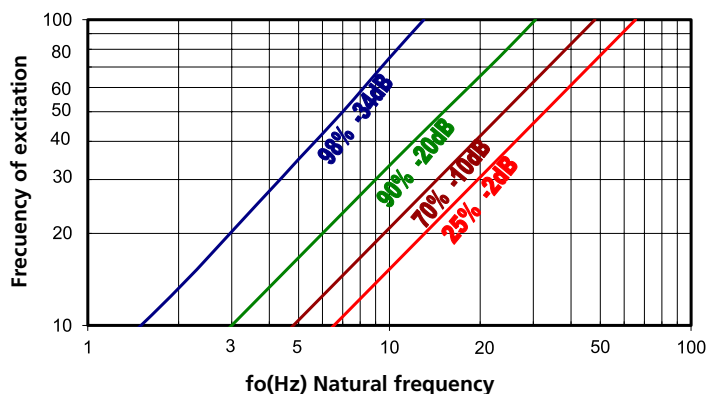


To select correct mounting, following data are needed:

- Load per mounting (kg).
- Disturbing frequency (Hz).

Select correct load line in diagram 1 and refer to diagram 2 to obtain the Natural frequency. With this natural frequency prolong this line to the diagram 3 and obtain the % of isolation at the given frequency of excitation.

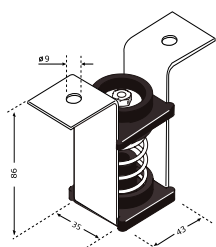
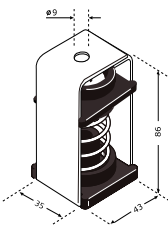
% of isolation and attenuation in dB

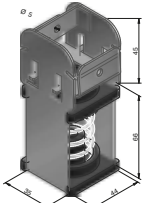
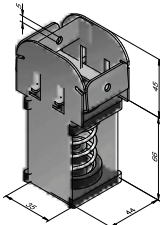


AKUSTIK+ AMC Mekanocaucho

CEILING MOUNTS

Springtec ceiling hanger

	LOAD AMC	MAX. PERMANENT LOAD	LOAD
	Springtec ST-10 Type 1	10 Kg.	23301
	Springtec ST-20 Type 1	20 Kg.	23302
	Springtec ST-30 Type 1	30 Kg.	23303
	Springtec ST-60 Type 1	60 Kg.	23304
	Springtec ST-10 Type 2	10 Kg.	23305
	Springtec ST-20 Type 2	20 Kg.	23307
	Springtec ST-30 Type 2	30 Kg.	23309
	Springtec ST-60 Type 2	60 Kg.	23311

	LOAD AMC	MAX. PERMANENT LOAD	LOAD
	Springtec Super T-47 Type ST-10	10 Kg.	23421
	Springtec Super T-47 Type ST-20	20 Kg.	23422
	Springtec Super T-47 Type ST-30	30 Kg.	23423
	Springtec Super T-47 Type ST-60	60 Kg.	23424
	Springtec Super T-60 Type ST-10	10 Kg.	23351
	Springtec Super T-60 Type ST-20	20 Kg.	23352
	Springtec Super T-60 Type ST-30	30 Kg.	23353
	Springtec Super T-60 Type ST-60	60 Kg.	23354



CEILING MOUNTS

VT ceiling hanger

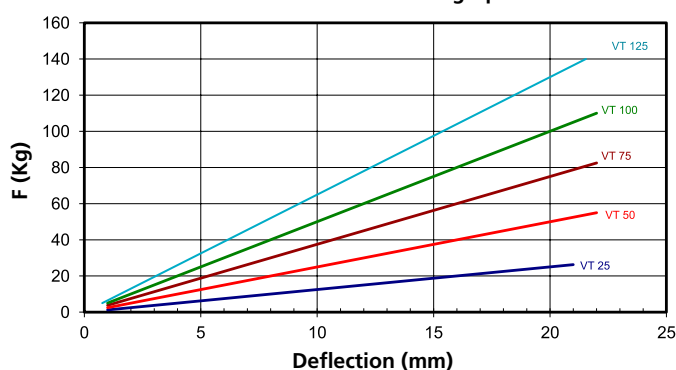
Load from 10 to 750 kg

Range designed for suspension of false acoustic ceilings and machinery operating at more than 450 r.p.m. These isolators are made of piano tail spring quality with a high mechanical performance. They incorporate rubber bush

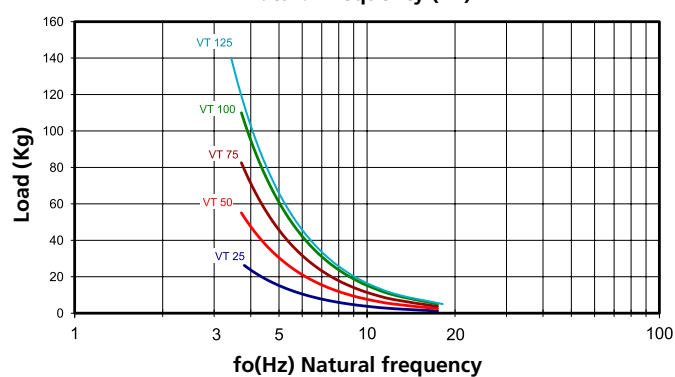
concieved to avoid the "acoustic bridges" and the contact of a non aligned screw. The metallic structure is very robust and it is supplied with an anti-corrosive zinc-plated coat.

Dynamic behaviour

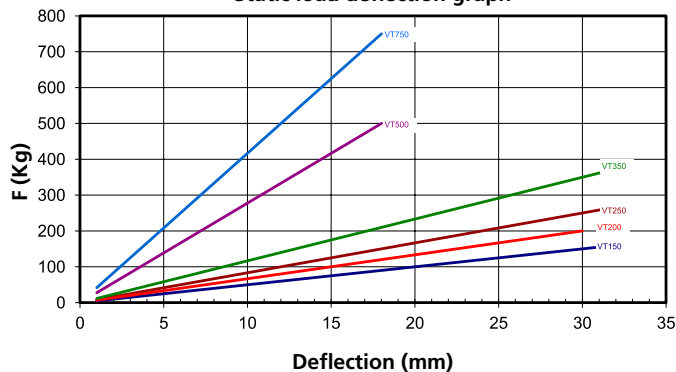
Static load deflection graph



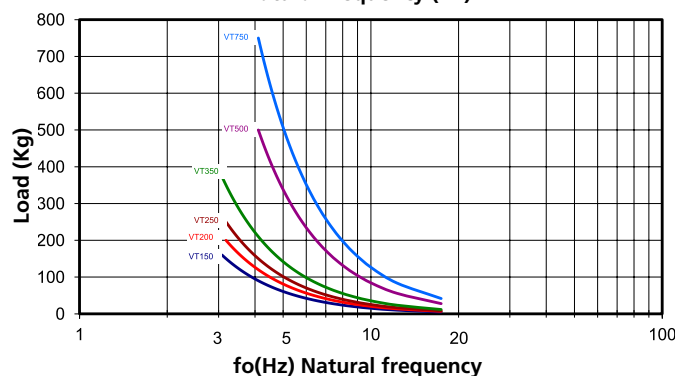
Natural frequency (Hz)



Static load deflection graph



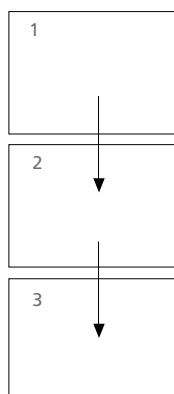
Natural frequency (Hz)



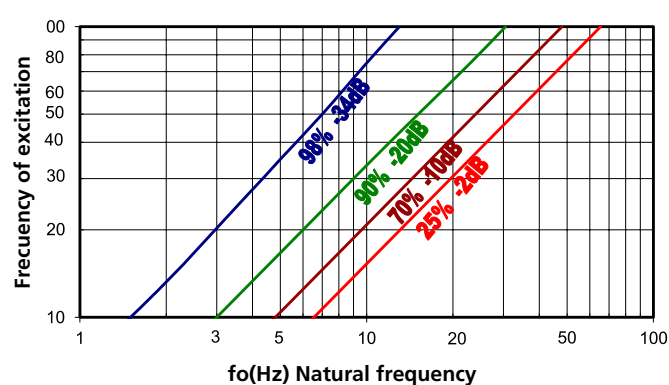
To select correct mounting, following data are needed:

- Load per mounting (kg).
- Disturbing frequency (Hz).

Select correct load line in diagram 1 and refer to diagram 2 to obtain the Natural frequency. With this natural frequency prolong this line to the diagram 3 and obtain the % of isolation at the given frequency of excitation.



% of isolation and attenuation in dB



AKUSTIK+ AMC Mekanocaucho

CEILING MOUNTS

VT ceiling hanger

	REF. AMC	MAX. PERMANENT LOAD	DIMENSIONS						CODE
			A	H	B	C	E	M	
	VT 25	25 Kg.	75	120	30	12	50	M-8	20201
	VT 50	50 Kg.	75	120	30	12	50	M-8	20202
	VT 75	75Kg.	75	120	30	12	50	M-8	20203
	VT 100	100 Kg.	75	120	30	12	50	M-8	20204
	VT 125	125 Kg.	75	120	30	12	50	M-8	20211
	VT 150	150 Kg.	120	160	30	16	80	M-12	20205
	VT 200	200 Kg.	120	160	30	16	80	M-12	20210
	VT 250	250 Kg.	120	160	30	16	80	M-12	20206
	VT 350	350 Kg.	120	160	30	16	80	M-12	20207
	VT 500	500 Kg.	140	180	30	18	100	M-14	20208
	VT 750	750 Kg.	140	180	30	18	100	M-12	20209



CEILING MOUNTS

Spring Rubber® ceiling hanger

Load from 8 to 100 kg.

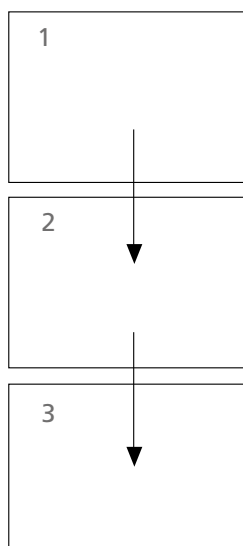
This is a new range of anti-vibration mounts, combining the high deflection of the spring with the dampening properties of the rubber. The metallic structure is very robust and it is supplied with an anticorrosive zinc-plated coat.



To select correct mounting, following data are needed:

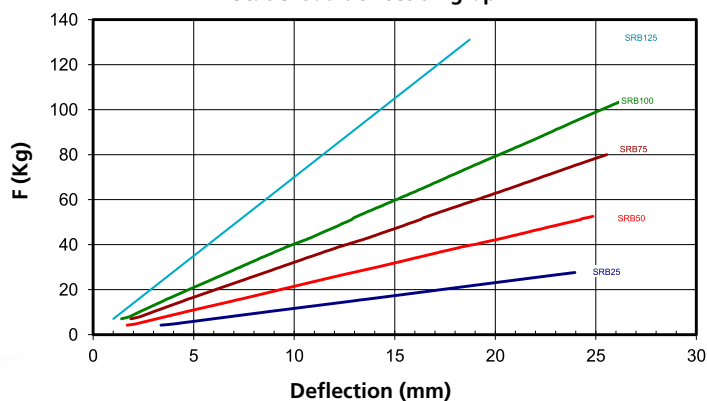
- Load per mounting (kg).
- Disturbing frequency (Hz).

Select correct load line in diagram 1 and refer to diagram 2 to obtain the Natural frequency. With this natural frequency prolong this line to the diagram 3 and obtain the % of isolation at the given frequency of excitation.

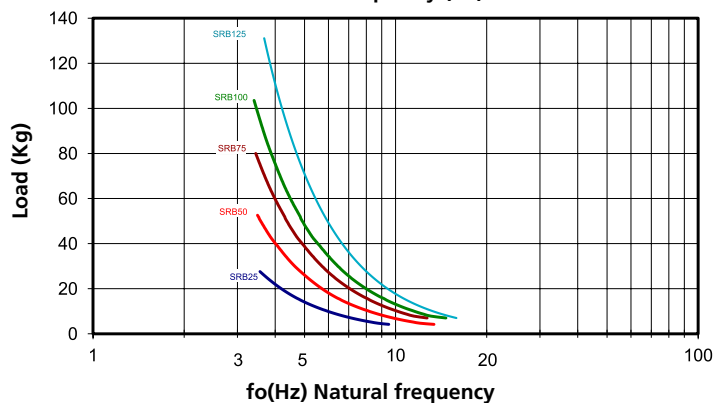


Dynamic behaviour

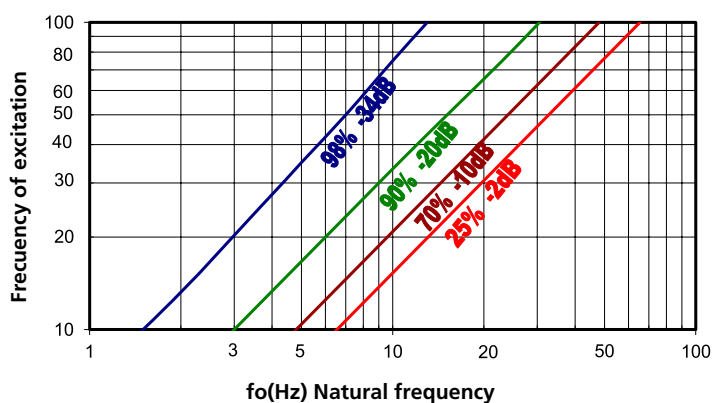
Static load deflection graph



Natural frequency (Hz)



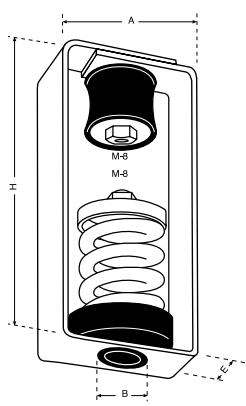
% of isolation and attenuation in dB



AKUSTIK+ AMC Mekanocaucho

CEILING MOUNTS

Spring Rubber® ceiling hanger

	REF. AMC	MAX. PERMANENT LOAD	DIMENSIONS					CODE
			A	H	B	C	E	
	SRB-25	8-25 Kg.	75	150	30	12	50	23401
	SRB-50	20-50 Kg.	75	150	30	12	50	23402
	SRB-75	45-75 Kg.	75	150	30	12	50	23403
	SRB-100	70-100 Kg.	75	150	30	12	50	23404



WALL MOUNTS

EP wall mount

Maximum load per
damper 10 kg

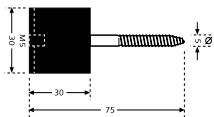
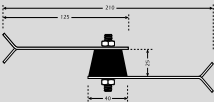
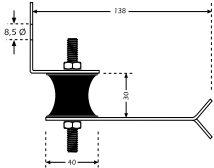
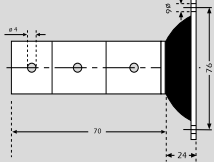
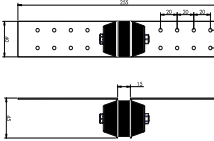
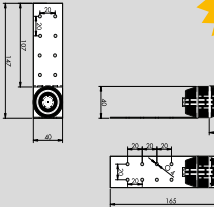
The EP wall mounts are manufactured in multiple formats to suit the different installation techniques. They are specially interesting for the fixation of walls exceeding 3.5m height. The EP mounts should be installed 1.5 meters in height. Example: Wall of 4.5 metres, the EP mounts should be installed at 1.5 and 3.

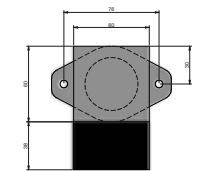


AKUSTIK+ AMC Mekanocaucho

WALL MOUNTS

EP wall mount

REF. AMC	SUMMARY	CODE
E.P. 100 	Mount designed for vibration damping of walls, equipped with long ring-attached screws for threading onto wooden or plastified walls. Maximum load per damper 10 kg.	24001
E.P. 200 	Mount designed for vibration damping of walls, equipped with flanges for fitting onto concrete. Maximum load per damper 10 kg.	24002
E.P. 300 	Mount designed for vibration damping of walls, equipped with flange and angle for fitting onto concrete and threaded. Maximum load per damper 10 kg.	24003
E.P. 400 	This mount is designed to be screwed to the profile, with the possibility of choosing different distances thanks to its 3 holes. The anchoring in to the wall is made by 2 fixing flanges.	24004
E.P. 600 	This damper is conceived to be fixed between two elements through two metal parts with "pre-drilled holes". The metal parts are easy to cut in order to adapt better to each work.	24008
E.P. 650 	This damper is conceived to be fixed between two elements through two metal parts with "pre-drilled holes". The metal parts are easy to cut in order to adapt better to each work. Following this idea we can realise a great amount of variants in order to adapt better to each work. Please enquire us if you need a more adapted system for your work.	24009

REF. AMC	SUMMARY	LOAD MÁX. (Kg.)	CODE
E.P. 500 	Amortiguador diseñado como base de apoyo de la placa cartón yeso.	150	23156

FLOATING FLOOR MOUNTS

Floating floor mounts

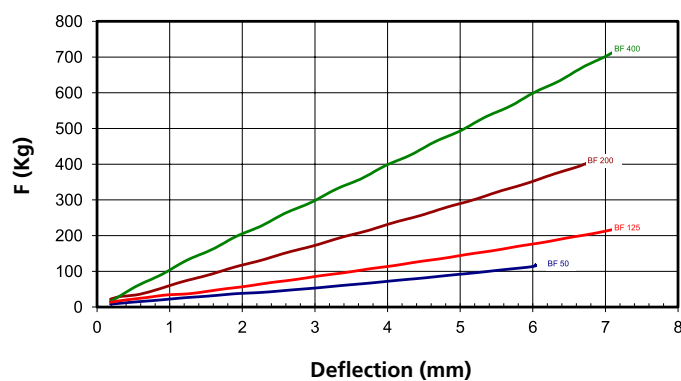
Load from 50 to 400 kg

A range designed for use in floating floors or machinery working at more than 700 r.p.m. Manufactured in rubber SMR 5CV type with excellent mechanical insulation qualities. We are able to manufacture them in different diameters and heights.

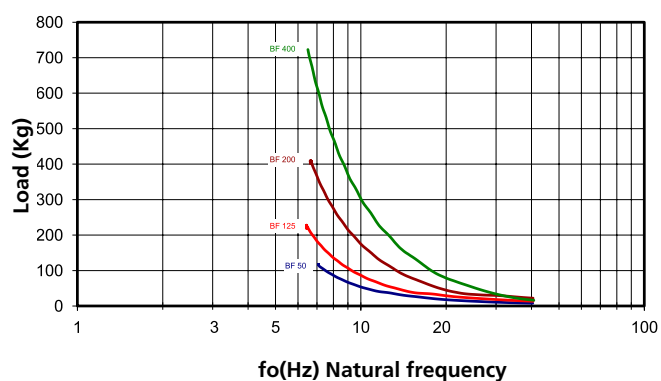
Dynamic behaviour



Static load deflection graph



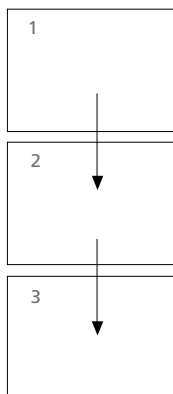
Natural frequency (Hz)



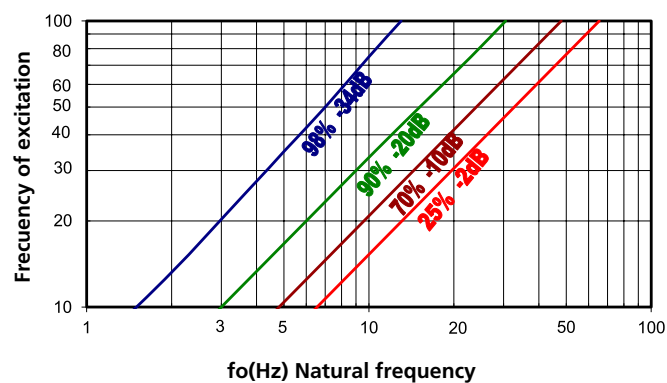
To select correct mounting, following data are needed:

- Load per mounting (kg).
- Disturbing frequency (Hz).

Select correct load line in diagram 1 and refer to diagram 2 to obtain the Natural frequency. With this natural frequency prolong this line to the diagram 3 and obtain the % of isolation at the given frequency of excitation.



% of isolation and attenuation in dB



	REF. AMC	MAX. PERMANENT LOAD	Ø	Height	CODE
	BF 50	50 Kg.	40	28	24201
	BF 125	125 Kg.	60	36	24202
	BF 200	200 Kg.	80	40	24203
	BF 400	400 Kg.	95	40	24204

AKUSTIK+ AMC Mecanocaucho

FLOATING FLOOR MOUNTS

G Supporting blocks

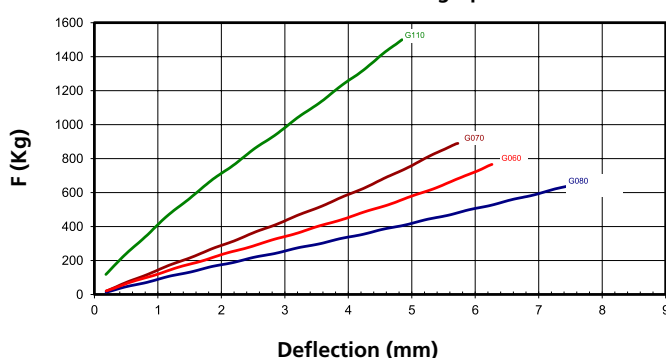
Load from 300 to 800 kg

A range of rectangular mounts ideal for those instalations that do not need anchoring or fixation.

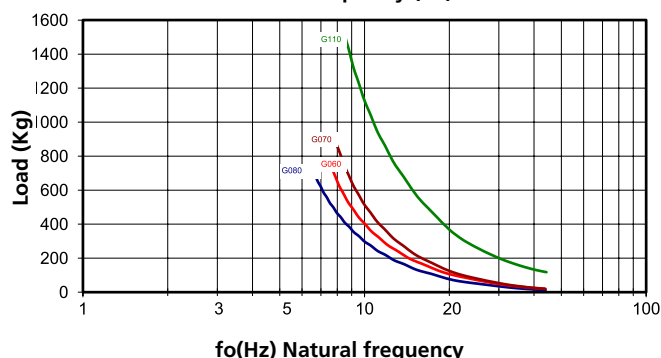


Dynamic behaviour

Static load deflection graph



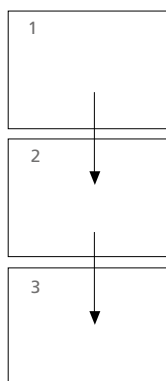
Natural frequency (Hz)



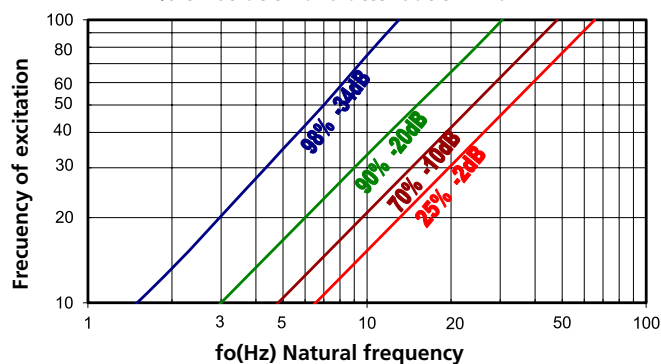
To select correct mounting, following data are needed:

- Load per mounting (kg).
- Disturbing frequency (Hz).

Select correct load line in diagram 1 and refer to diagram 2 to obtain the Natural frequency. With this natural frequency prolong this line to the diagram 3 and obtain the % of isolation at the given frequency of excitation.



% of isolation and attenuation in dB



	REF. AMC	MAX. PERMANENT LOAD	A	B	CODE
	G-060	400 Kg.	70	30	152005
	G-070	600 Kg.	80	30	152006
	G-110	800 Kg.	110	30	152009
	G-080	300 Kg.	80	50	152007
	G-090	500 Kg.	100	60	152008

TABIABSORBER

Derivery format: 1x1.25 meter layers

EFFECTIVENESS: Manufactured from CR (NEOPRENE®) particles and then compressed, the tabiabsorber can be furnished in two different versions depending on its use.

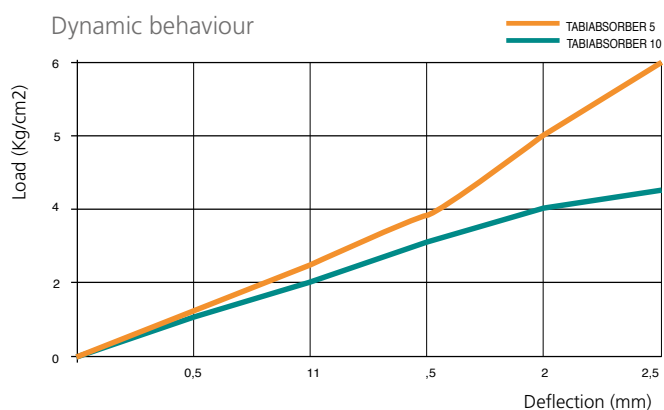
VERSATILITY: The TABIABSORBER can be furnished in two different versions depending on its use.

TABIABSORBER 5: Shock absorber and noise isolator.

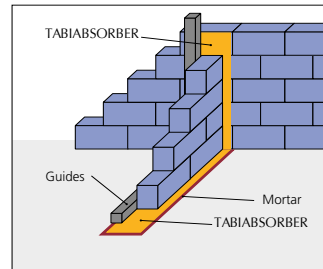
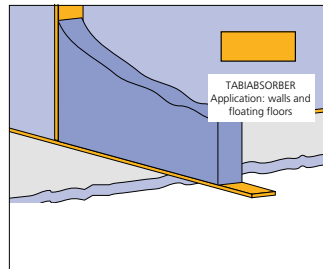
TABIABSORBER 10: Vibratory insulation.

We offer the cutting service upon requested dimensions.

EASY TO INSTALL: Due to its exterior texture, the adherence to plaster, glue, concrete etc it is easily done thanks to its waterproofing.



	REF. AMC	CODE
	Tabiabsorber 5	30105
	Tabiabsorber 10	30110
	Tabiabsorber Ondular 8/4	30106
	Tabiabsorber Ondular 17/8.	30107

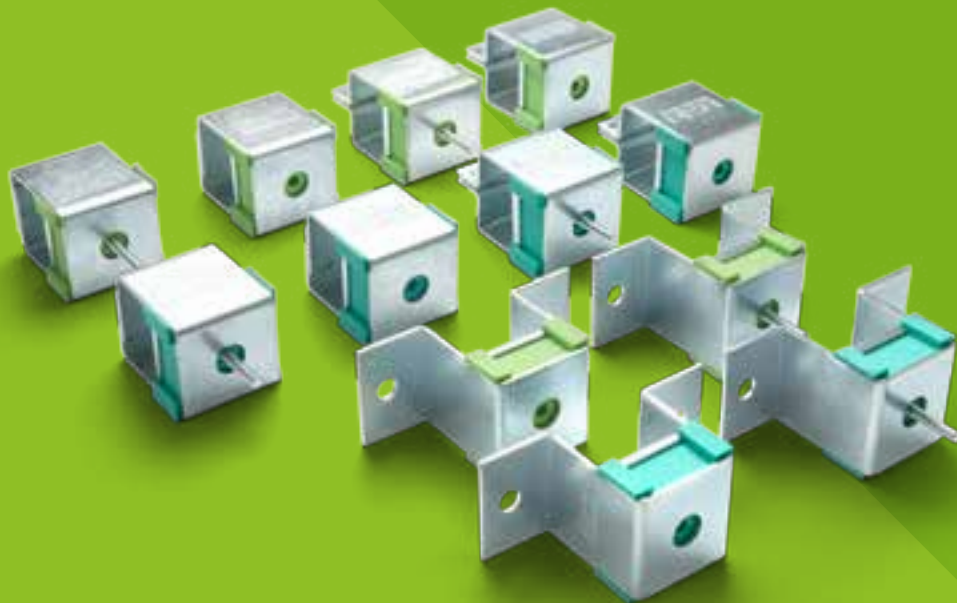


The Tabiabsorber can be cutted in bands

	TABIABSORBER 5 CODE 30105	TABIABSORBER 10 CODE 30110	TABIABSORBER ONDULAR 8/4 CODE 30106	TABIABSORBER ONDULAR 17/8 CODE 30107	NORMA DIN
DIMENSIONES (m)			8x1,25	8x1,25	
THICKNESS (mm)	5 mm	10 mm	8/4 (8 minimo + 4 en la zona ondular)	17/8 (17 minimo + 8 en la zona ondular)	
DENSITY (Kg/m³)	820	850	680-750	500-600	
WEIGHT/m² (kg)	4.1	8.5	3,87-4,73		
FUERZA A TRACCIÓN (N/mm²)	1.05	1.45	0,4	0,3	53571
LENGTHENING TILL RUPTURE (%)	90	108	50	40	53571
TENSIÓN BAJO PRESIÓN (N/mm²)	0.6 a 30% of compression	0.8 a 30% of compression	0,1		53577
WATERPROOFING, K VALUE. (cm/s)	-	0.03			18035/6
MAX. TEMPERATURE (C°)	-40 a 115	-40 a 115	-30 a 80	-30 a 80	
RESISTENCIA AL FUEGO	Clase B2	Clase B2			4102
MEJORAS DEL IMPACTO A SONIDO (dB)			22	28	

Akustik+ **sylomer**[®] by getzner

When 2 dB at low frequencies
make the difference



COMPARATIVE TESTS AT THE LABEIN TECHNOLOGY CENTRE

Akustik+Sylomer® is the trademark of a new solution for the anti-vibration mountings of false ceilings or vibrating elements that have to be suspended. They are used for the attenuation of vibrations, reducing structure-borne noise.

The **Akustik+Sylomer®** ceiling mounts are made of Sylomer®, a microcellular polyurethane material specially conceived for vibration isolation. This material produces a higher degree of damping than the elastomers traditionally used for this purpose.

The **Labein** technology centre performed a series of comparative tests to confirm the good acoustic results of Akustik+Sylomer®. This centre is officially ENAC-certified and complies with the requirements of the ISO 140-1:1997 standard.

PURPOSE OF THE TEST

The purpose of the test is to compare, in equal conditions, the acoustic isolation to air-borne noise of a false ceiling without anti-vibration suspensions (direct transmission) to a false ceiling with the new Akustik+Sylomer® suspensions.

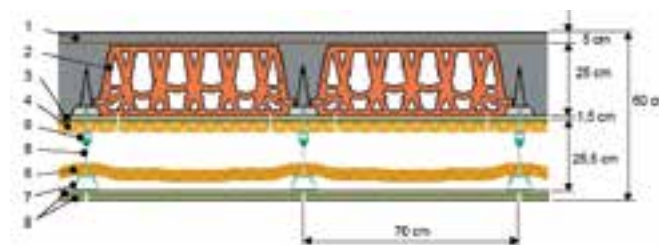
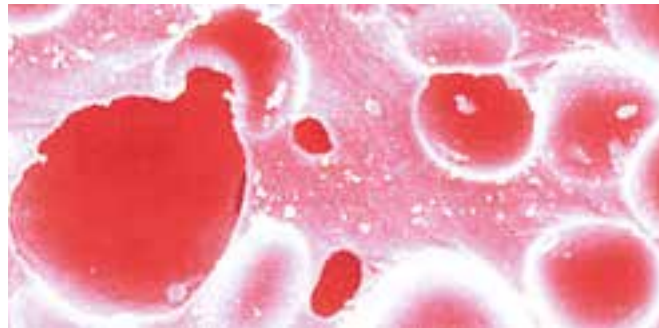
The secondary endpoint is to compare the Akustik+Sylomer® to another suspension with the same size-specific characteristics using high-resilience natural rubber from our Akustik 4 45 shore A standard series.

TEST METHODOLOGY

The reports contain the results of the noise isolation test to airborne noise conducted according to the UNE-EN ISO 140-3 standard for a false ceiling with the following ceiling mounts:

- Direct transmission (without antivibration suspensions).
- Akustik 4 45 shore A.
- Akustik 3 + Sylomer®30 Type B.

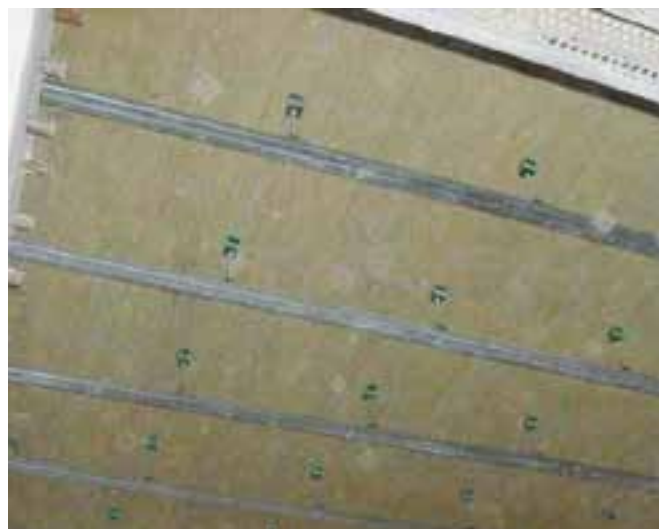
Besides the isolation curves, two RW and RA indexes have been calculated and used to compare the performance of the different suspensions. The Rw noise reduction index of the sample tested and the terms of adaptation of the C and Ctr spectrum were obtained according to the ISO 717-1 standard, based on the isolation curve. The pink noise isolation index RA between 100Hz and 5 KHz is that which is specified by the Basic Spanish Building Standard: NBE-CA 88 "Acoustic Conditions".



Specimen used for the test

IMPORTANT NOTE: The composition of the false ceiling is not meant to be used for teaching purposes in acoustics. It is a standard implementation whose objective is to compare the anti-vibration elements.

The specimen used in the tests is a standard ceramic hollow block with an approximate isolation of 54 dB.



The results and the descriptive reports can be downloaded free of charge from www.akustik.com

COMPARATIVE TESTS AT THE
LABEIN TECHNOLOGY CENTRECOMPARATIVE RESULTS OF THE TEST BETWEEN
A SUSPENDED CEILING WITH AND WITHOUT
AKUSTIK+SYLOMER[®].

Graphic 1 shows the isolation provided by a single plasterboard suspended with Akustik + Sylomer[®] suspensions and the same ceiling fitted with M6 rod. The blue line represents the isolation achieved with Akustik + Sylomer[®] mounts.

As can be seen, there are major differences at low and high frequencies, offering a difference of:

- 3 dB at 125 Hz
- 6 dB at 250 Hz
- 5 dB at 500 Hz
- 5 dB at 1000Hz

At the same time, comparative tests were conducted with ceilings with a greater number of plasterboards. Table 1 shows the results of the RW reduction index:

It is clear that the use of Akustik+Sylomer[®] suspensions provides far greater airborne isolations, which in some cases are equivalent to or greater than the use of 2 or 3 plasterboards with anti-vibration ceiling mounts.

The results and descriptive reports can be downloaded free from www.akustik.com

Akustik isolation curves

Graphic 1

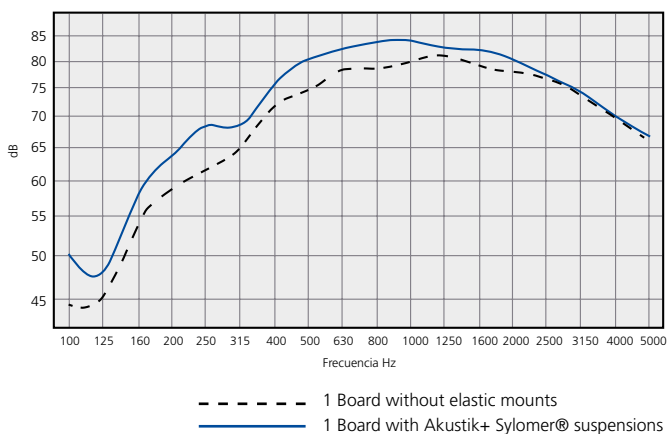
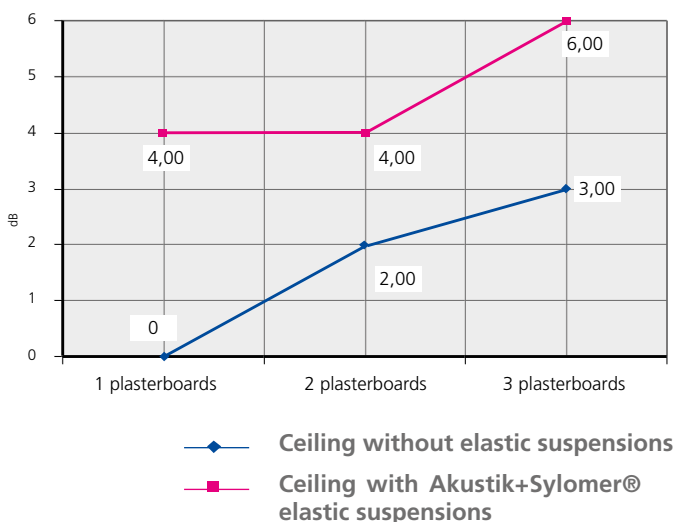


Table 1

RW sound isolation index	Without suspensions(M6 rod)	With suspensions Akustik + sylomer [®]
1 plasterboard	71 dB	75 dB
2 plasterboard	73 dB	75 dB
3 plasterboard	74 dB	77 dB

Gain in dB thanks to the use of the Akustik+Sylomer[®] suspensions as opposed to a ceiling without elastic suspensions.



COMPARATIVE TESTS AT THE LABEIN TECHNOLOGY CENTRE

COMPARATIVE RESULTS OF THE TEST BETWEEN A SUSPENDED CEILING WITH AKUSTIK+SYLOMER VS RUBBER SUSPENSIONS.

Table 2 compares the RA sound isolation index according to the number of plasterboards.

The improvement is self-evident, the akustik+sylomer® mounts offer a superior isolation to the rubber mounts. This difference is so great that it may be said that a ceiling with a plasterboard with akustik+sylomer® offers the same isolation as a ceiling with two plasterboard rubber suspensions. This therefore means savings in time and material.

The savings in plasterboard and labour costs make these mounts particularly interesting, both technically and economically.

In order to provide a better analysis of the differences between the rubber mounts and the akustik+sylomer® mounts, table 3 shows the isolation data at different frequencies.

The results of these tables show that the isolation differences are in the low frequency range, which is particularly interesting for the isolation of premises without soundproofing, since they are particularly difficult to isolate.

Table 2

RA sound isolation index	With rubber suspensions (M6 rod)	Without Akustik + sylomer® suspensions
1 plasterboard	70.8 dB	70.4 dB
2 plasterboard	70.3 dB	71.3 dB
3 plasterboard	71.3 dB	72.3 dB

Table 3

False ceiling with 1 plasterboard		
FREQUENCY	RUBBER	Akustik + sylomer®
160 Hz.	57.5 dB	58.3 dB
250 Hz.	66 dB	68.4 dB
500 Hz.	79.1 dB	80.3 dB

False ceiling with 2 plasterboards		
FREQUENCY	RUBBER	Akustik + sylomer®
160 Hz.	56,9 dB	57 dB
250 Hz.	68 dB	70 dB
500 Hz.	81,1 dB	81,5 dB

False ceiling with 3 plasterboards		
FREQUENCY	RUBBER	Akustik + sylomer®
160 Hz.	58,5 dB	60,4 dB
250 Hz.	67 dB	69,4 dB
500 Hz.	81,1 dB	82,4 dB

BEHAVIOUR AT HIGH AND LOW FREQUENCIES

Structure-borne noise is that which is transmitted through the structures of a building, machine, installation... This radiation noise becomes airborne noise.

Low noise frequencies are those that are usually less damped in the air and are therefore better transmitted through structures. The range of low frequencies is between 20 and 500 Hz.

NATURAL FREQUENCY OF THE AKUSTIK+ SYLOMER® MOUNTS

The akustik+sylomer[®] ceiling mounts can obtain very low natural frequencies of up to 7 Hz at the optimal loading point. At this loading point the decoupling frequency of the akustik+sylomer[®] mounts is 9,9Hz.

Such a low natural frequency is optimal for the false ceilings of soundproofed premises. This type of suspensions are also particularly interesting for the isolation of machines or vibrating elements that work at

more than 600 rpm. Examples are:

- Ducts / pipelines:
 - Of cooling liquids from refrigerating compressors, and are ideal for use in supermarkets, the frozen food section.
 - Air conditioning.
 - Pumping of water
 - From fume exhausts.
- Suspension of air conditioning machinery.
- Suspension of vibrating elements in general.

BEHAVIOUR OF THE AKUSTIK+SYLOMER® MOUNTS AT LOW FREQUENCIES IN SOUNDPROOFED PREMISES.

The range of audible frequencies in the human being may vary according to age and to other factors although in general it is between 20 Hz and 20.000Hz. By way of example the notes produced by a guitar have a frequency range from 82 to 698 Hz.

Considering that the most unfavourable excitation frequency, i.e. 20 Hz, the isolation degree of structure-borne noise produced by an akustik+sylomer[®] suspension would be close to 90%. (*)

(*) Installation of the optimal loading point of the akustik + sylomer for a theoretical single mass spring system.

BEHAVIOUR OF THE AKUSTIK+SYLOMER® MOUNTS AT MEDIUM AND HIGH FREQUENCIES.

Sound waves are not comprised of just one frequency, but rather of a set of frequencies superimposed without any order, which is the main reason why noise is unpleasant. Thus, the ideal suspender must be able to isolate the broadest possible range of frequencies.

Behaviour of a metal spring

These suspenders are often recommended for the elastic suspension of false ceilings. It is important to know that this

type of mount is suitable for the damping of low frequencies, whereas the high frequencies are propagated through the coils of the spring. To filter this type of frequencies the springs must be combined with a stage of viscoelastic material under the spring to stop the propagation of this type of vibration.

Behaviour of the akustik+ Sylomer

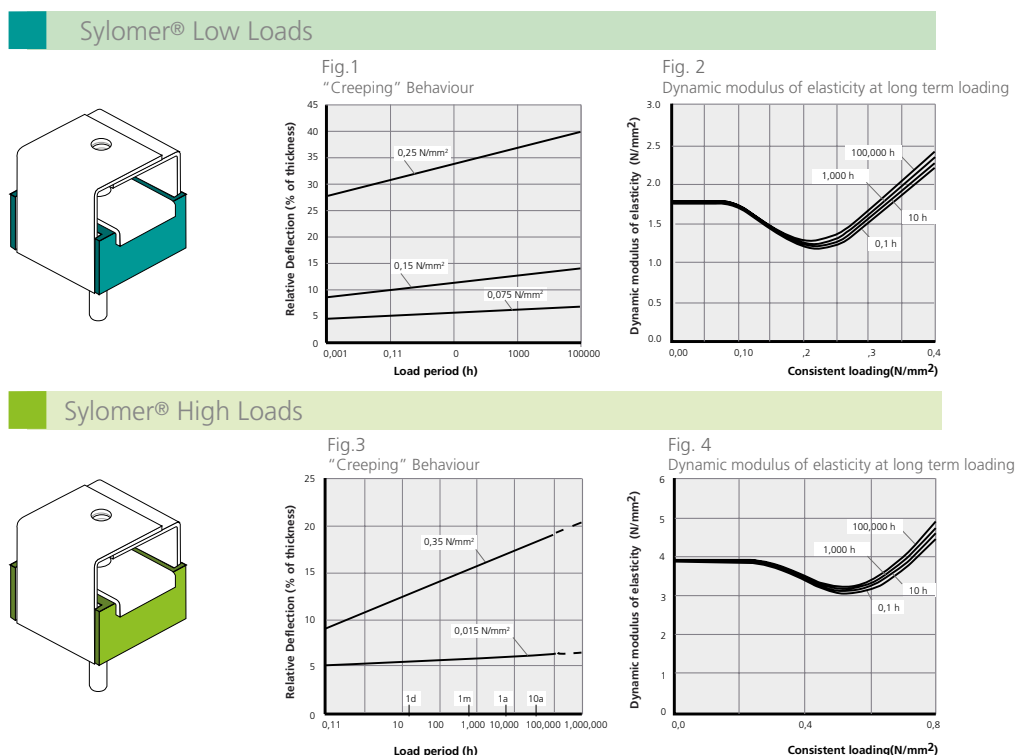
Thanks to the viscoelastic properties of the Sylomer, the akustik+Sylomer has a behaviour similar to the spring at low frequencies and at the same time not only prevents the high frequencies as occurs in the spring via its coils, but also considerably improves the behaviour of the rubber at high frequencies. These results are shown in the comparative section of Akustik + Sylomer with regard to rubber suspenders.

CREEPING AND LONG-TERM BEHAVIOUR

Static loads produce a certain degree of creeping. This phenomenon can be observed in all elastomers. Creeping is the increase in deformation under consistent loading Figs. 1 and 3 show the creeping for the two types of Sylomer[®] used for our ceiling mounts.

Within the field recommended for the application of continuous loads, the additional deflection remains under 50% of the initial deflection even after an extended period of 10 years.

The dynamic stiffness of the ceiling mounts must increase as little as possible over time. Figs. 2 and 4 show the variation of the dynamic module over time of the two types of Sylomer used in our ceiling mounts.



CEILING MOUNTS

Akustik + Sylomer®: Models and dimensions

PRODUCT DESCRIPTION

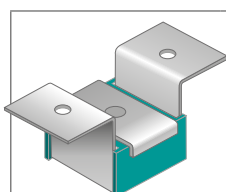
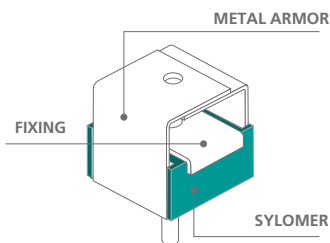
These antivibration mounts have been conceived for suspension from false ceilings, vibrating pipelines and machinery that has to be suspended.

The excellent properties of the Sylomer® microcelular polyurethane achieve eleva-

ted isolation values as opposed to other mounts using rubber or cork, or a combination of both. These antivibration mounts are manufactured in two special mixes of Sylomer® to adapt better to the load of each application.

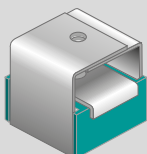
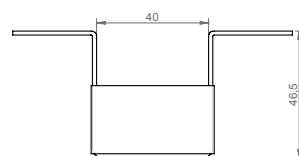
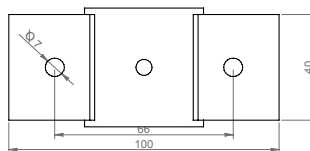
A great variety of fixing metal

armors and elements facilitate installation and adapt better to each type of job. Their rugged metal parts withstand can tensile stresses from 650 kg to 1000 kg. They are supplied with an anticorrosive treatment that can withstand the toughest environments.



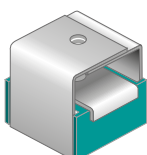
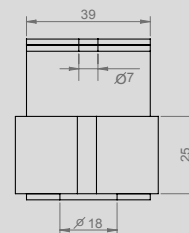
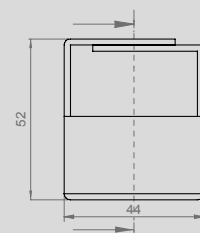
Akustik 1

It is secured directly to the ceiling by means of two holes.



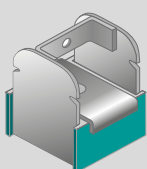
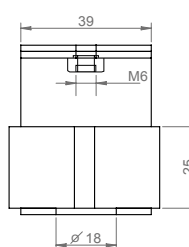
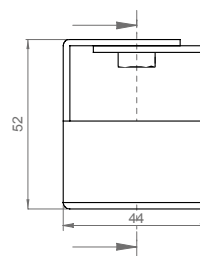
Akustik 3

It is secured directly to the ceiling with a screw and locking nut.



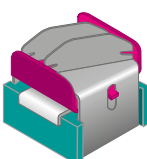
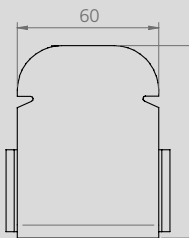
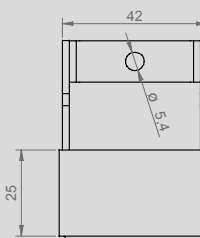
Akustik 4

It is secured with a screw via a nut welded to the metal armor.



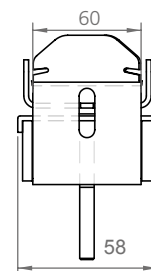
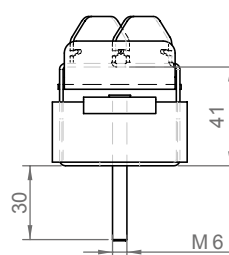
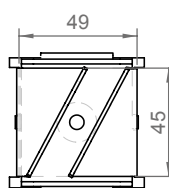
Akustik Rapid

Designed to be secured to most profiles on the market. Its design makes for easy and safe installations.



Akustik Safety

Its gravitational system guarantees correct installation and offers greater safety, preventing elements from becoming detached. Thanks to its design, the mount will not attach to the profile if it is not installed properly. It prevents possible slip-ups. Its 45° forked design makes installation and removal easy and safe.



AKUSTIK + sylomer[®]

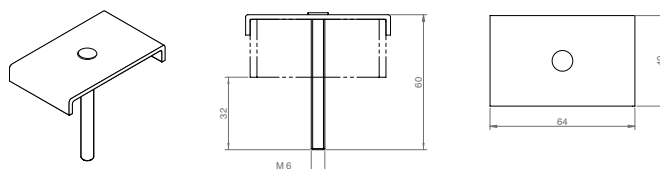
CEILING MOUNTS

Akustik + Sylomer[®]:
Models and dimensions

TYPE OF FIXING

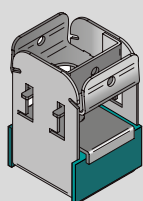
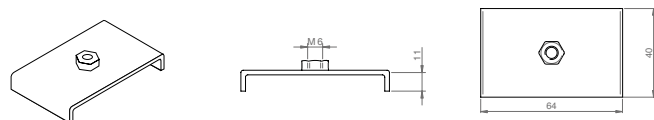
TYPE A

For installations where M6 male fixing is required, the recommended fixing is **Type A**.



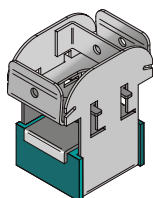
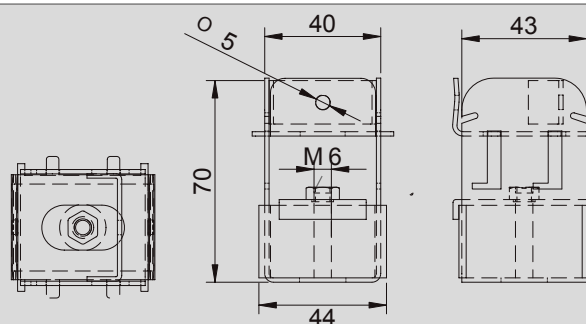
TYPE B

For installations where M6 female fixing is required, the recommended fixing is **Type B**.



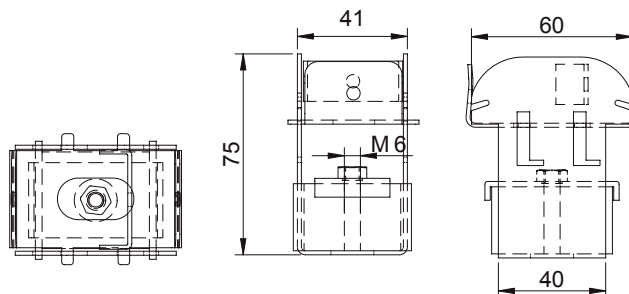
Akustik
Super T47

The "SUPER" security feature is adaptable to the different profiles existing on the market.



Akustik
Super T60

The external dimension of the profiles that exist on the market may vary, our "SUPER" security system with lip form adapts to the different lengths of the profile having a tight fit.



INSTALLATION STEPS OF AKUSTIK SUPER



Detail A



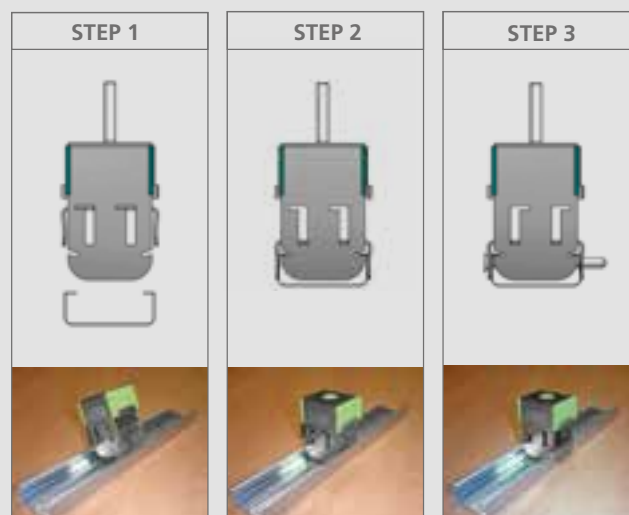
1• The security system is adaptable to different widths of profiles.



Detail B



2• The "SUPER" security system admits the possibility of inserting a blocking screw.

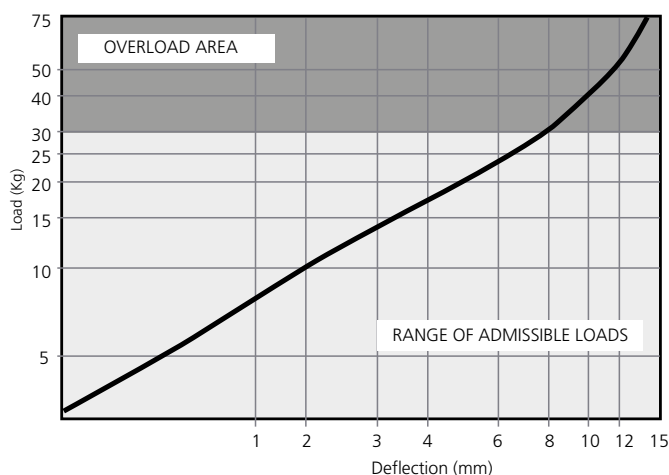


CEILING MOUNTS

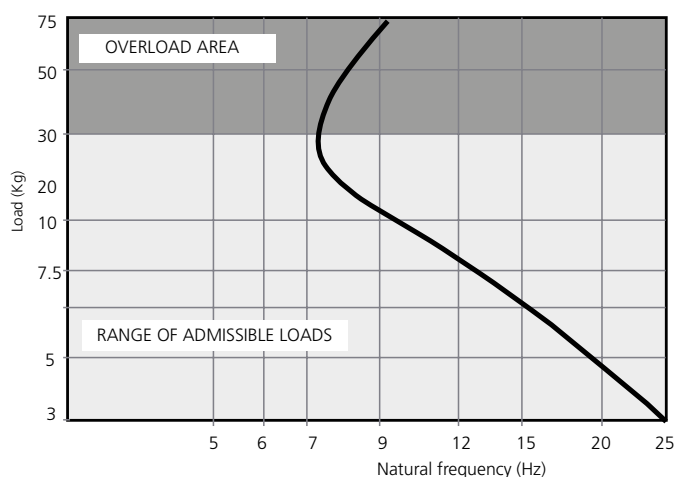
Akustik + Sylomer®: Models and dimensions

TYPES OF SYLOMER

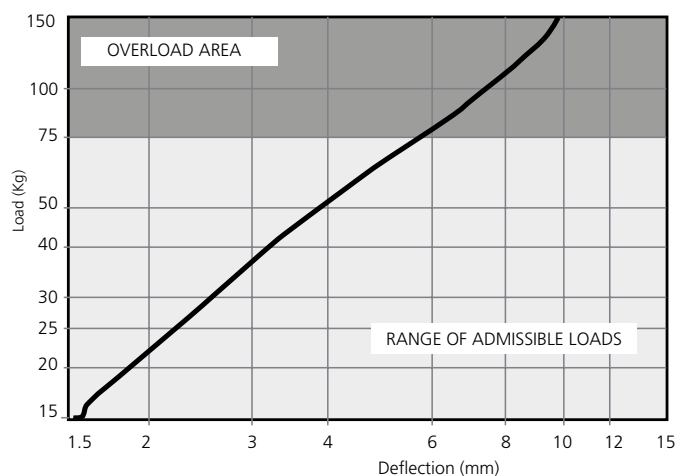
LOAD DEFLECTION GRAPH
Akustik + Sylomer **30** ■



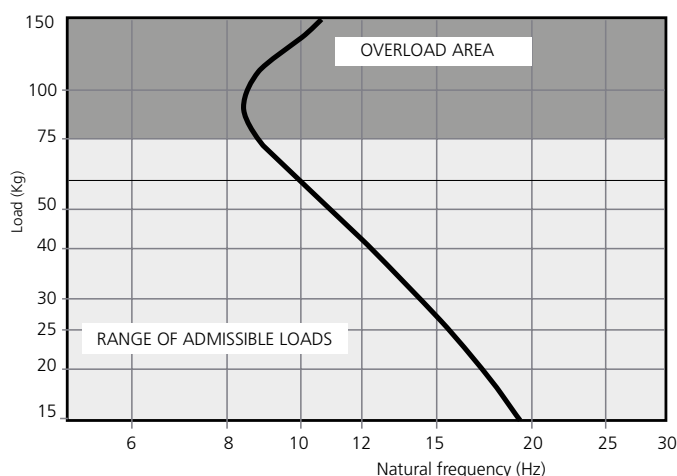
NATURAL FREQUENCY
Akustik + Sylomer **30** ■



LOAD DEFLECTION GRAPH
Akustik + Sylomer **75** ■



NATURAL FREQUENCY
Akustik + Sylomer **75** ■



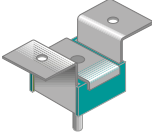
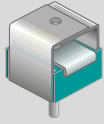

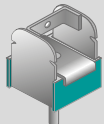
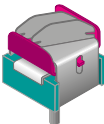
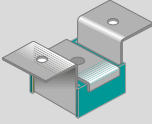

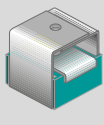
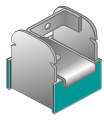
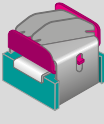
Application of an Akustik 4+Sylomer 30 type A.



Application of an Akustik Super T60 +Sylomer 30 type B.

CEILING MOUNTS

Akustik + Sylomer[®]: Range

	REF AMC	SUMMARY	(Kg) MAX. LOAD	CODE
	Akustik 1 + Sylomer@30 Type A	Ventana del Akustik 1 fijada al techo con dos agujeros y un Type de FIXING macho M- 6.	30	23501
	Akustik 3 + Sylomer@30 Type A	Metal armor of the akustik 3 secured to the ceiling by an M6 screw and with a nut.	30	23503
	Akustik4 + Sylomer@30 Type A	Metal armor of the Akustik 4 secured to the ceiling by an M6 screw.	30	23505
	Akustik Rapid + Sylomer@30 Type A	Metal armor of the Akustik rapid secured to the ceiling by an M6 screw.	30	23507
	Akustik Safety + Sylomer@30 Type A	Metal armor of the Akustik Safety secured to the ceiling by an M6 screw.	30	23508
	Akustik 1 + Sylomer@30 Type B	Metal armor of the Akustik 3 secured to the ceiling by a welded M6 nut.	30	23509
	Akustik 3 + Sylomer@30 Type B	Metal armor of the Akustik 4 secured to the ceiling by a welded M6 nut.	30	23511
	Akustik4 + Sylomer@30 Type B	Metal armor of the Akustik Rapid secured to the ceiling by a welded M6 nut.	30	23513
	Akustik Rapid + Sylomer@30 Type B	Metal armor of the Akustik Safety secured to the ceiling by an M6 screw.	30	23515
	Akustik STeguridad + Sylomer@30 TypeB	Metal armor of the Akustik Safety secured to the ceiling by a welded M6 nut.	30	23516

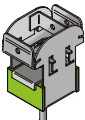
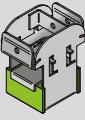
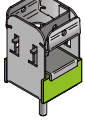
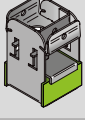
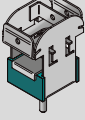
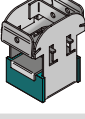
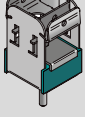
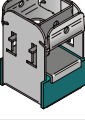
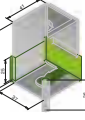
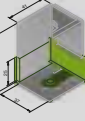
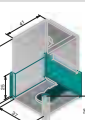
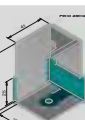
CEILING MOUNTS

Akustik + Sylomer®: Range

REF. AMC	SUMMARY	(Kg) MAX. LOAD	CODE
 <p>Akustik 1 + Sylomer®75 Type A</p>	Metal armor of the Akustik 1 secured to the ceiling with two holes and an M6 male fixing type (Type A).	75	23517
 <p>Akustik 3 + Sylomer®75 Type A</p>	Metal armor of the akustik 3 secured to the ceiling by an M6 screw and with a nut.	75	23519
 <p>Akustik4 + Sylomer®75 Type A</p>	Metal armor of the Akustik 4 secured to the ceiling by an M6 screw.	75	23521
 <p>Akustik Rapid + Sylomer®75 Type A</p>	Metal armor of the Akustik rapid secured to the ceiling by an M6 screw.	75	23523
 <p>Akustik Safety + Sylomer®75 Type A</p>	Metal armor of the Akustik 1 secured to the ceiling by a welded M6 nut.	75	23524
 <p>Akustik 1 + Sylomer®75 Type B</p>	Metal armor of the Akustik 3 secured to the ceiling by a welded M6 nut.	75	23525
 <p>Akustik 3 + Sylomer®75 Type B</p>	Metal armor of the Akustik 4 secured to the ceiling by a welded M6 nut.	75	23527
 <p>Akustik4 + Sylomer®75 Type B</p>	Metal armor of the Akustik Rapid secured to the ceiling by a welded M6 nut.	75	23529
 <p>Akustik Rapid + Sylomer®75 Type B</p>	Metal armor of the Akustik Safety secured to the ceiling by an M6 screw.	75	23531
 <p>Akustik Safety + Sylomer®75 TypeB</p>	Metal armor of the Akustik Safety secured to the ceiling by a welded M6 nut.	75	23533

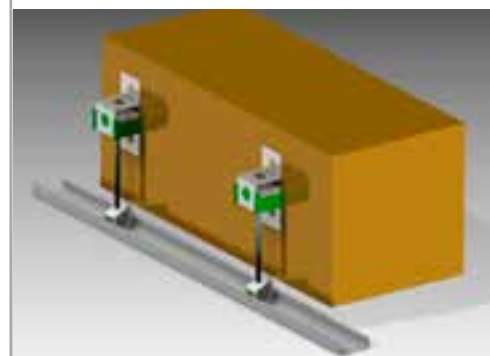
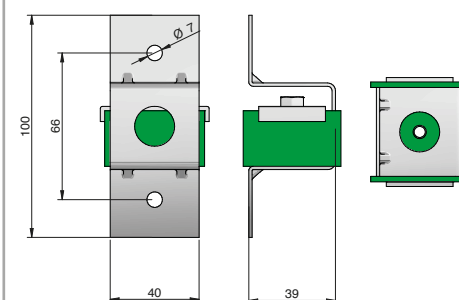
CEILING MOUNTS

Akustik Super + Sylomer[®] y Akustik Sierra + Sylomer[®]: Range

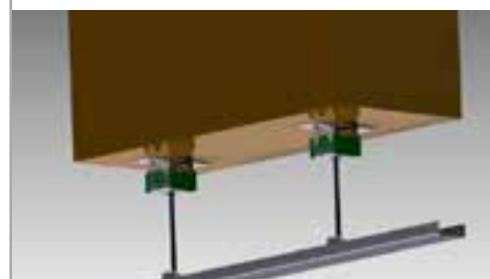
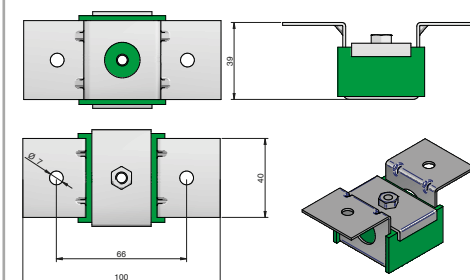
REF. AMC	SUMMARY	(KG) MAX. LOAD	CODE
 Akustik Super T60 + Sylomer®75 Type A	Metal armor of the Akustik Super secured to the ceiling by an M6 screw.	75	23851
 Akustik Super T60 + Sylomer®75 Type B	Metal armor of the Akustik Super secured to the ceiling by an M6 screw.	75	23852
 Akustik Super T47 + Sylomer®75 Type A	Metal armor of the Akustik Super secured to the ceiling by an M6 screw.	75	23841
 Akustik Super T47 + Sylomer®75 Type B	Metal armor of the Akustik Super secured to the ceiling by an M6 screw.	75	23842
 Akustik Super T60 + Sylomer®30 Type A	Metal armor of the Akustik Super secured to the ceiling by an M6 screw.	30	23831
 Akustik Super T60 + Sylomer®30 Type B	Metal armor of the Akustik Super secured to the ceiling by an M6 screw.	30	23832
 Akustik Super T47 + Sylomer®30 Type A	Metal armor of the Akustik Super secured to the ceiling by an M6 screw.	30	23821
 Akustik Super T47 + Sylomer®30 Type B	Metal armor of the Akustik Super secured to the ceiling by an M6 screw.	30	23822
 Akustik Sierra + Sylomer®75 Type A	Ventana fijada al techo mediante tornillo M6. Además, incorpora elemento de FIXING al perfil de gran sencillez.	75	23865
 Akustik Sierra + Sylomer®75 Type B	Ventana fijada al techo mediante tuerca soldada M6. Además, incorpora elemento de FIXING al perfil de gran sencillez.	75	23866
 Akustik Sierra + Sylomer®30 Type A	Ventana fijada al techo mediante tornillo M6. Además, incorpora elemento de FIXING al perfil de gran sencillez.	30	23863
 Akustik Sierra + Sylomer®30 Type B	Ventana fijada al techo mediante tuerca soldada M6. Además, incorpora elemento de FIXING al perfil de gran sencillez.	30	23864

Akustik 1 Lateral + Sylomer[®]

NEW

Akustik 1 Lateral + Sylomer[®] (Posición estándar)

NEW



REF. AMC	(Kg) max. load	CODE
Akustik 1 Lateral + Sylomer [®] 30 Type A	30	23573
Akustik 1 Lateral + Sylomer [®] 75 Type A	75	23574
Akustik 1 Lateral + Sylomer [®] 30 Type B	30	23510
Akustik 1 Lateral + Sylomer [®] 75 Type B	75	23526

CEILING MOUNTS

Gran Akustik + Sylomer®: Models and dimensions

PRODUCT DESCRIPTION

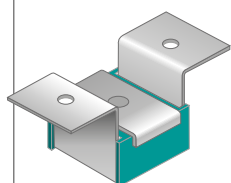
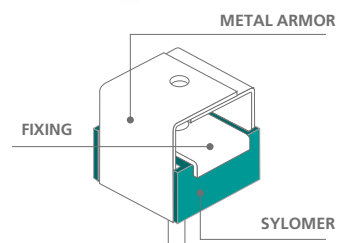
These antivibration mounts have been conceived for suspension from false ceilings, vibrating pipelines and machinery that has to be suspended.

The excellent properties of the Sylomer® microcelular polyurethane achieve elevated isolation values as opposed

to other mounts using rubber or cork, or a combination of both. These antivibration mounts are manufactured in two special mixes of Sylomer® to adapt better to the load of each application.

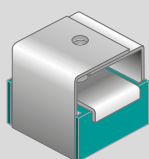
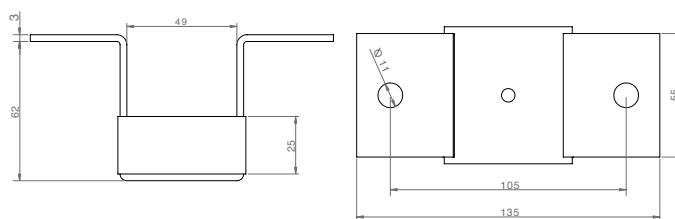
A great variety of fixing windows and elements facilitate installation and adapt better

to each type of job. Their rugged metal parts can withstand tensile stresses from 650 to 1000 Kg. They are supplied with an anticorrosive treatment that can withstand the toughest environments.



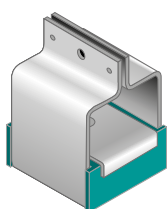
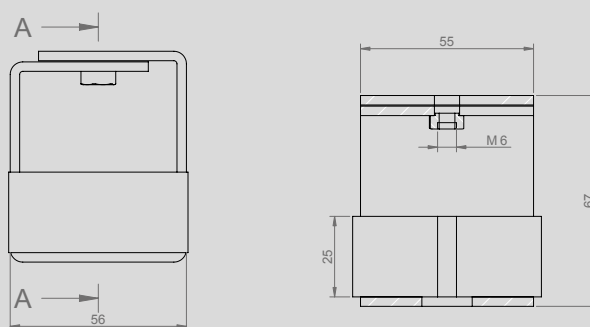
Gran
Akustik 1

It is secured to the ceiling with two holes.



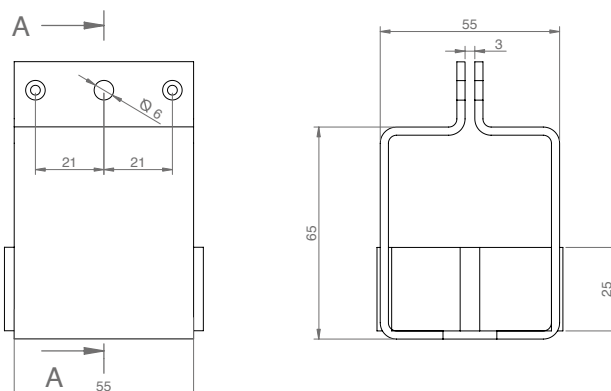
Gran
Akustik 2

It is secured directly to the ceiling by means of a screw.



Gran
Akustik 3

It is secured directly to the ceiling by means of one screw and to the "inverted double T" type profile thanks to the design of its metal armor.



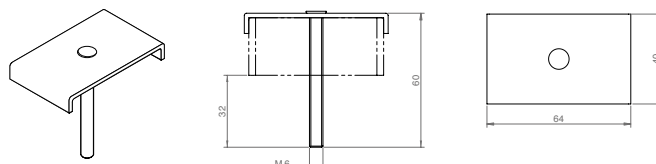
CEILING MOUNTS

Gran Akustik + Sylomer[®]: Models and dimensions

TYPE OF FIXING

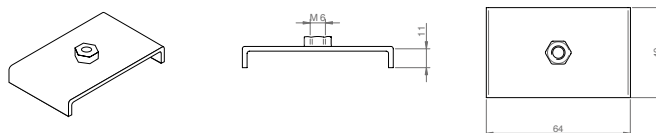
Type A

For installations where M6 male fixing is required, the recommended fixing is **Type A**.



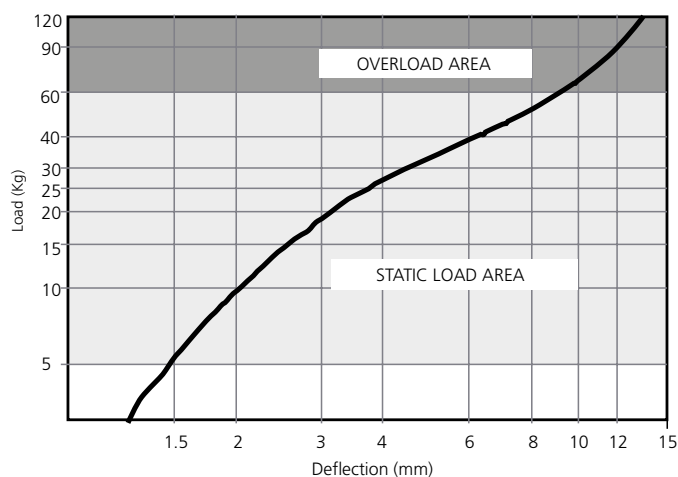
Type B

For installations where M6 female fixing is required, the recommended fixing is **Type B**.

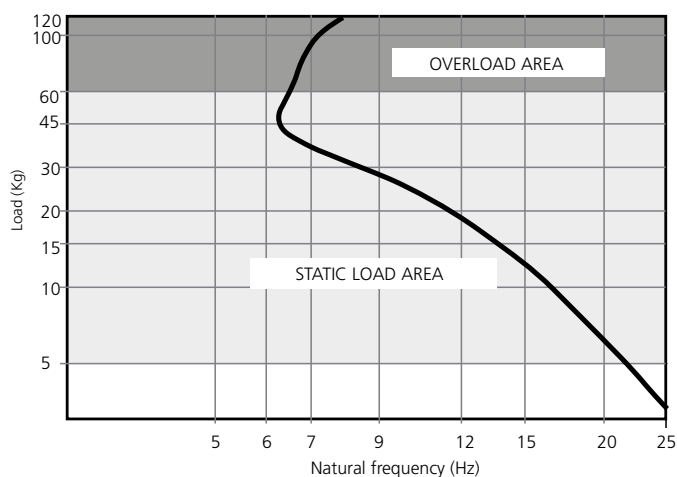


TYPES OF SYLOMER

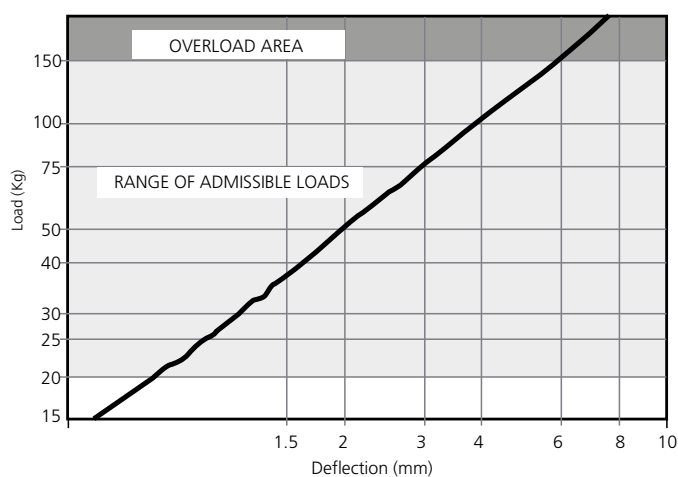
LOAD DEFLECTION GRAPH
Gran Akustik + Sylomer **60**



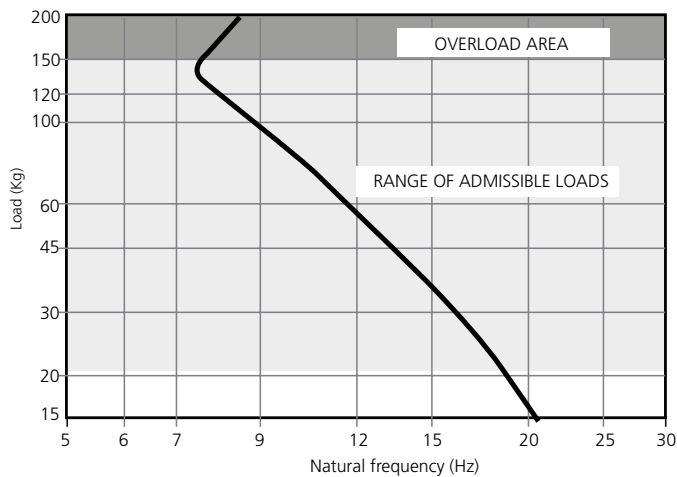
NATURAL FREQUENCY GRAPHS
Gran Akustik + Sylomer **60**



LOAD DEFLECTION GRAPH
Gran Akustik + Sylomer **150**

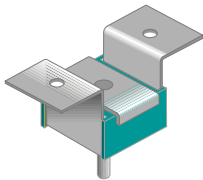
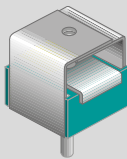
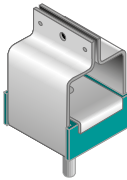
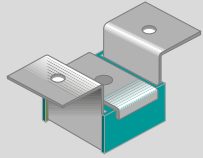
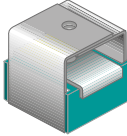
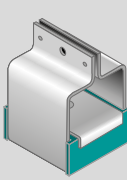


NATURAL FREQUENCY GRAPHS
Gran Akustik + Sylomer **150**



CEILING MOUNTS

Gran Akustik + Sylomer®: Range

REF. AMC	SUMMARY	(Kg) MAX. LOAD	CODE
 <p>Gran Akustik 1 + Sylomer®60 Type A</p>	It is secured directly to the ceiling by means of two holes and to the profile by means of a "type A" screw.	60	23601
 <p>Gran Akustik 2 + Sylomer®60 Type A</p>	It is secured directly to the ceiling by means of one screw and to the profile by means of a "type A" screw.	60	23605
 <p>Gran Akustik3 + Sylomer®60 Type A</p>	It is secured directly to the ceiling by means of one screw and to the "inverted double T" type profile thanks to the design of its metal armor.	60	23607
 <p>Gran Akustik 1 + Sylomer®60 Type B</p>	It is secured to the ceiling with two holes and to the profile by means of a "type B" female fixing.	60	23609
 <p>Gran Akustik 2 + Sylomer®60 Type B</p>	It is secured to the ceiling by a screw and to the profile by a "type B" female fixing.	60	23613
 <p>Gran Akustik 3 + Sylomer®60 Type B</p>	It is secured directly to the ceiling by means of a "Type B" female fixing and to the "inverted double T" type profile thanks to the design of its metal armor.	60	23615

CEILING MOUNTS

Gran Akustik + Sylomer[®]: Range

REF. AMC	SUMMARY	(Kg) MAX. LOAD	CODE
 <p>Gran Akustik 1 + Sylomer®150 Type A</p>	It is secured directly to the ceiling with two holes and to the profile by means of a "type A" male screw.	150	23617
 <p>Gran Akustik 2 Type A</p>	It is secured directly to the ceiling with one screw and to the profile by means of a "type A" screw.	150	23621
 <p>Gran Akustik3 + Sylomer®150 Type A</p>	It is secured directly to the ceiling by means of one screw and to the "inverted double T" type profile thanks to the design of its metal armor.	150	23623
 <p>Gran Akustik 1 + Sylomer®150 Type B</p>	It is secured directly to the ceiling by means of two screws and to the profile by means of a "type B" female fixing.	150	23625
 <p>Gran Akustik 2 + Sylomer®150 Type B</p>	It is secured directly to the ceiling by means of one screw and to the profile by means of a "type B" female fixing.	150	23629
 <p>Gran Akustik 3 + Sylomer®150 Type B</p>	It is secured directly to the ceiling by means of one "type B" female screw and to the "inverted double T" type profile thanks to the design of its metal armor.	150	23631

CEILING MOUNTS

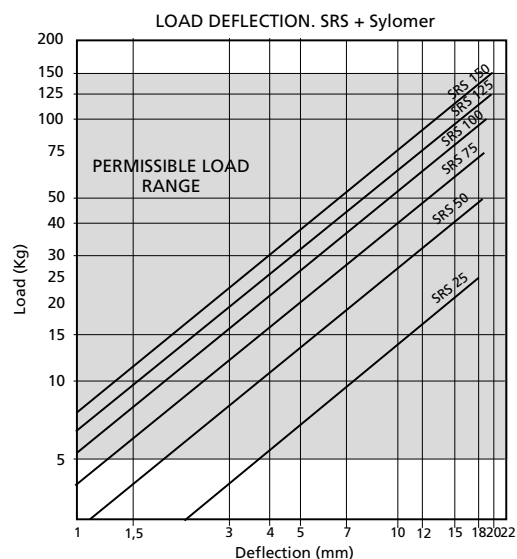
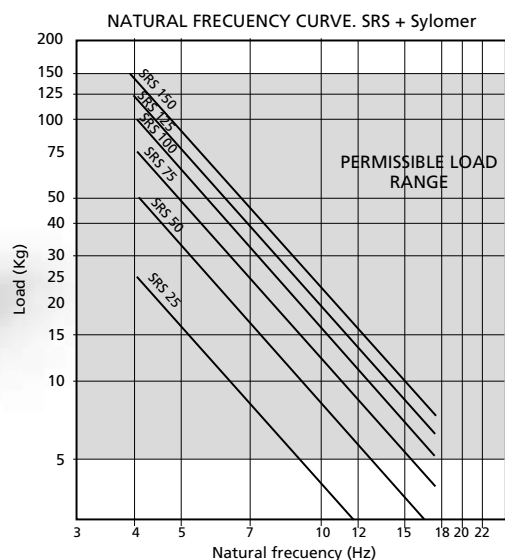
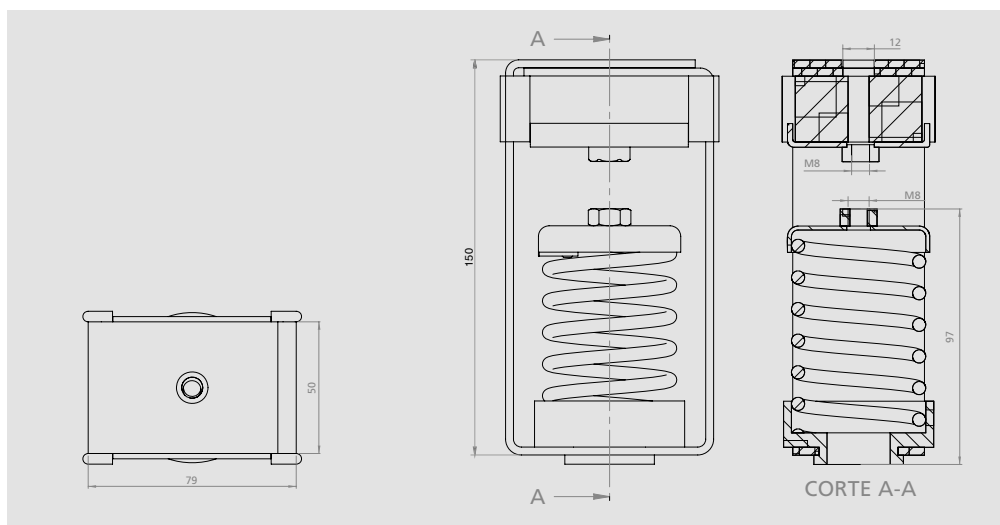
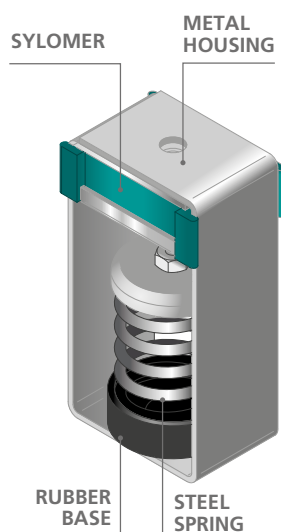
SRS + Sylomer®: Models and dimensions

PRODUCT DESCRIPTION

These antivibration mounts have been conceived for the suspension of suspended ceilings or machines that rotate at low frequency. The excellent properties of the Sylomer® microcellular polyurethane combined with the low stiffness of a steel spring achieve increased isolation values as opposed to other mounts using rubber or cork, or a combination of both.


These antivibration mounts are manufactured in 6 different steel spring models to adapt optimal for each application.

Their rugged metal parts withstand can tensile stresses. They are supplied with an anticorrosive treatment that can resist tensile stresses up to 1000Kg withstand the toughest environments.



CEILING MOUNTS

SRS + Sylomer[®]: Range

	REF. AMC	SUMMARY	(Kg). MAX.LOAD	CODE
	SRS 25 + Sylomer [®]	Sylomer+Steel spring combined hanger.	25	23546
	SRS 50 + Sylomer [®]	Sylomer+Steel spring combined hanger.	50	23547
	SRS 75 + Sylomer [®]	Sylomer+Steel spring combined hanger.	75	23551
	SRS 100 + Sylomer [®]	Sylomer+Steel spring combined hanger.	100	23548
	SRS 125 + Sylomer [®]	Sylomer+Steel spring combined hanger.	125	23549
	SRS 150 + Sylomer [®]	Sylomer+Steel spring combined hanger.	150	23550

WALL MOUNTS

EP + Sylomer®: Models and dimensions

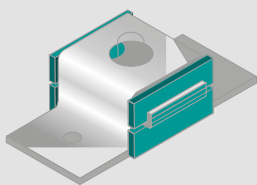
LOAD AMC DEL PRODUCTO

Range designed for the floating suspension of sound-proofed walls. Sylomer® avoids the transmission of vibrations while providing optimal acoustic results.

They have a "FAIL SAFE" rugged metal structure, which is overload-proof.

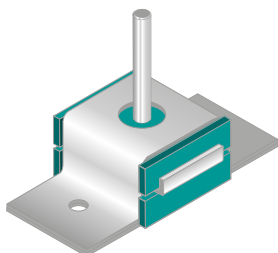
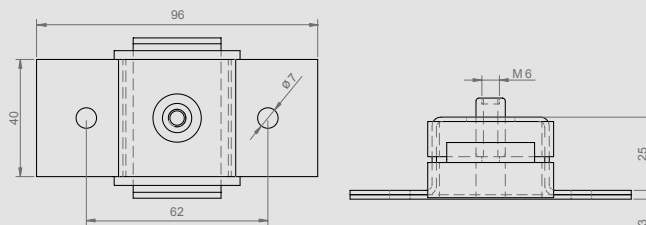
Recommended for applications where fire or impact resistance is necessary.

These mounts are also suitable for the isolation of vertical pipes, or any type of light-weight ducts that need to be isolated.



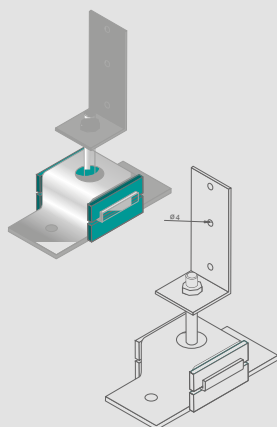
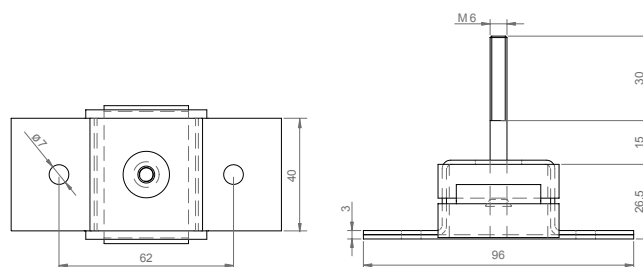
EP + Sylomer Type B

It is secured to the wall by means of two holes. It has a female M6 metal insert.



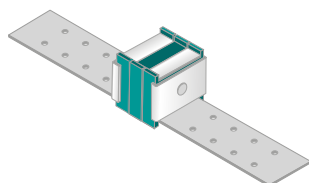
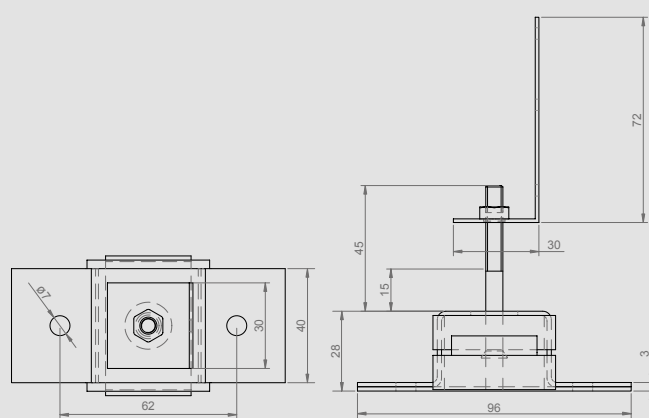
EP + Sylomer Type A

It is secured to the wall by means of two holes. It has a female M6 metal insert.



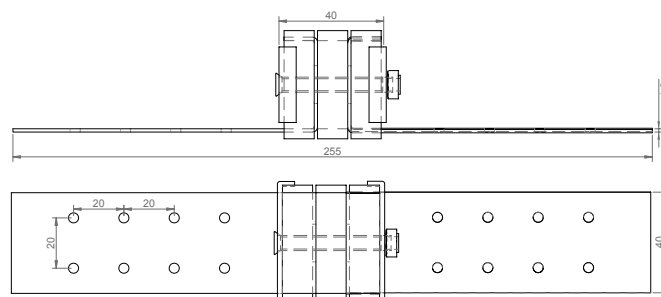
EP400 + Sylomer

It is secured to the wall by means of two holes. It has a male M6 metal insert and also an "L" welded nut for securing to the profile.



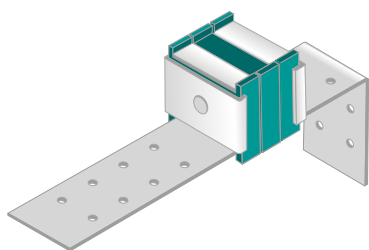
EP 600 + Sylomer

They are secured by two "predrilled" and easy-to-cut pins to facilitate their installation.



WALL MOUNTS

EP + Sylomer[®]: Models and dimensions

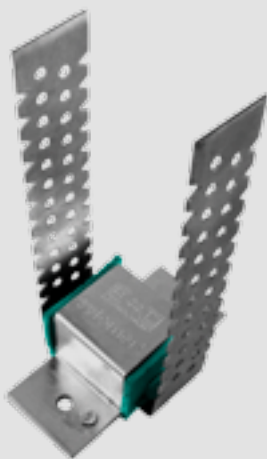
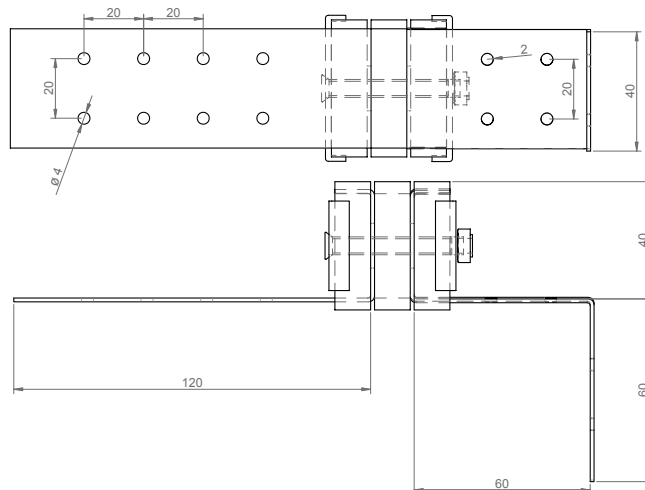


EP 650 + Sylomer

They are secured by two "predrilled" and bent pins to facilitate their installation.

This principle can be used to make a wide range of variants.

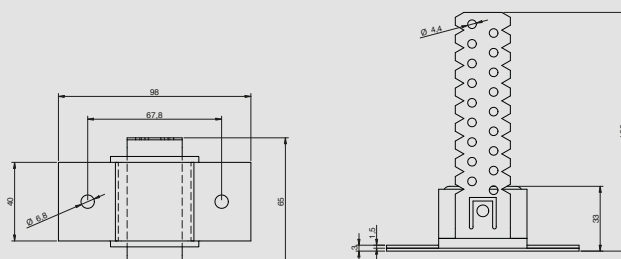
Contact us if you require a product more adapted to your building technique.



EP 700 + Sylomer

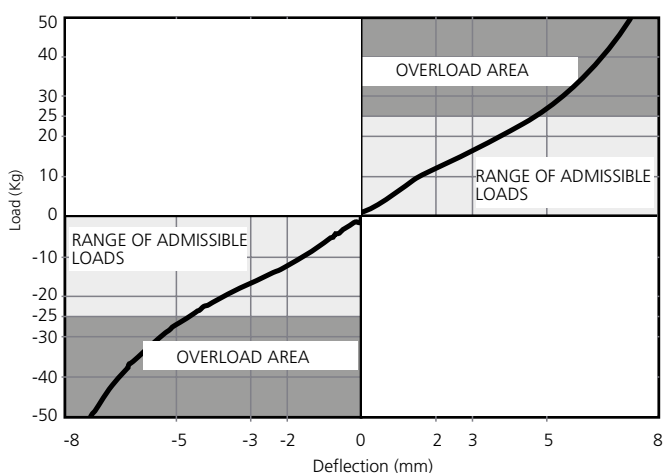
Soporte apto para sujetar perfiles Type C tanto en posición horizontal como en vertical.

Permite la colocación de techos inclinados de una forma rápida y sencilla. Además, permite su uso a tracción y compresión.

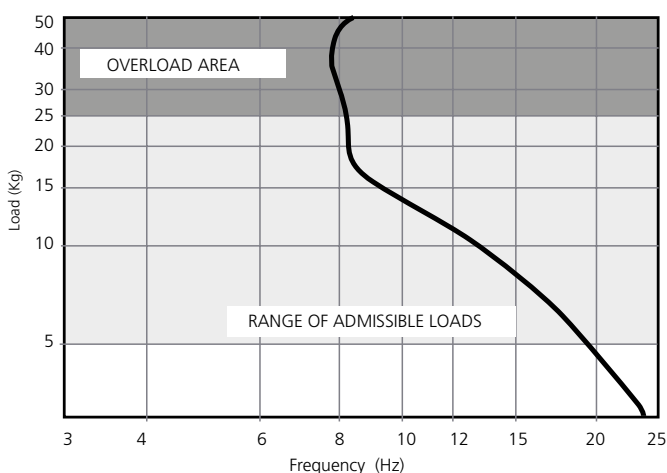


TECHNICAL CHARACTERISTICS

LOAD DEFLECTION GRAPH
EP Akustik + Sylomer 25

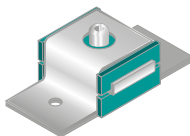
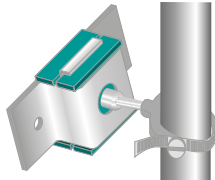
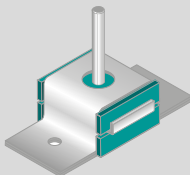

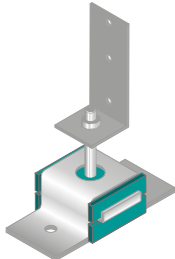

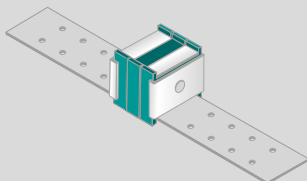
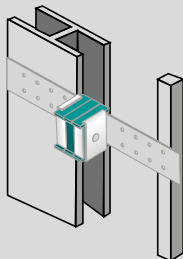
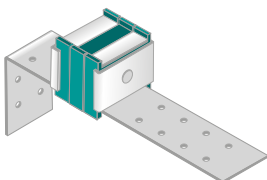
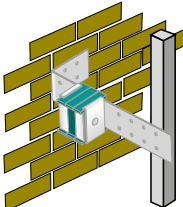


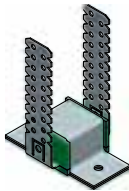
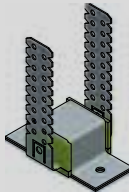
NATURAL FREQUENCY GRAPH
EP Akustik + Sylomer 25



WALL MOUNTS

EP + Sylomer®: Range

REF. AMC	SUMMARY	CODE
	EP + Sylomer Type B	 23701
	EP + Sylomer Type A	 23703
	EP400 + Sylomer	 23705
	EP 600 + Sylomer	 23707
	EP 650 + Sylomer	 23709

REF. AMC	(Kg). MAX. LOAD	CODE
 <p>EP 700 + Sylomer 30</p>	30	23711
 <p>EP 700 + Sylomer 75</p>	75	23712

AKUSTIK + AMC Mekanocaucho & AKUSTIK+sylomer[®]

AKUSTIK + sylomer[®] by getzner

WALL MOUNTS

EP + Sylomer[®]: Applications



Palacio Euskalduna Bilbao



Music School Helsinki

SOPORTES TSR + SYLOMER®

Models and dimensions

PRODUCT DESCRIPTION

The AMC-MECANOCAUCHO type TSR mounts incorporate a resilient polyurethane compound for antivibration purposes called Sylomer®.

The TSR mounts can be fixed mechanically thanks to the central M8 threaded hole that is welded to a metal part that incorporates an anticorrosive coating (RoHs approved).

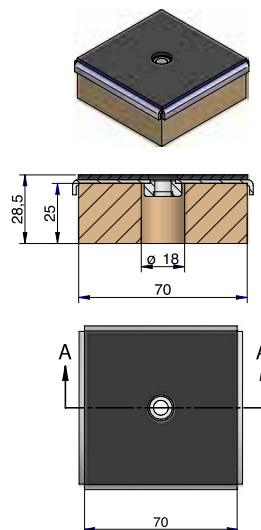
The above Chloroprene based rubber that is bonded to the metal acts as an anti skid surface, for those application where a mechanical fixation is not possible to be made. This layer provides an additional anticorrosive protection.

In order to match the application, 6 different densities are supplied.

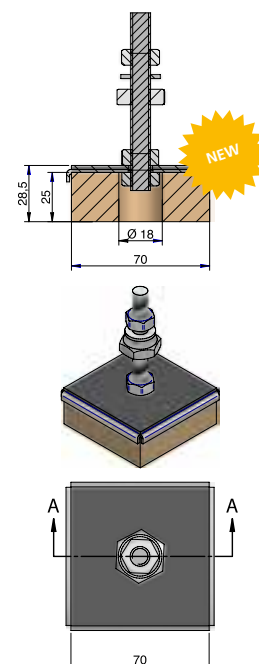


Type	Carga Min. Kg.	Carga Máx. Kg.	Frec. (Hz) Carga Min.	Frec. (Hz) Carga Máx.	CODE
TSR - 55 M8	10	25	24,1	11,4	157001
TSR - 110 M8	25	45	17,7	11,5	157002
TSR - 220 M8	45	75	16,3	11,3	157003
TSR - 450 M8	75	150	15,8	10,6	157004
TSR - 850 M8	150	250	14,6	11,3	157005
TSR - 1200 M8	250	420	11,3	8,7	157006
TSR - 55 M10	10	25	24,1	11,4	157008
TSR - 110 M10	25	45	17,7	11,5	157009
TSR - 220 M10	45	75	16,3	11,3	157010
TSR - 450 M10	75	150	15,8	10,6	157011
TSR - 850 M10	150	250	14,6	11,3	157012
TSR - 1200 M10	250	420	11,3	8,7	157013
TSR - 55 M12	10	25	24,1	11,4	157014
TSR - 110 M12	25	45	17,7	11,5	157015
TSR - 220 M12	45	75	16,3	11,3	157016
TSR - 450 M12	75	150	15,8	10,6	157017
TSR - 850 M12	150	250	14,6	11,3	157018
TSR - 1200 M12	250	420	11,3	8,7	157019
TSR-55 M8 + Kit Niv. M8x55	10	25	24,1	11,4	157101
TSR-110 M8+ Kit Niv. M8x55	25	45	17,7	11,5	157102
TSR-220 M8+ Kit Niv. M8x55	45	75	16,3	11,3	157103
TSR-450 M8+ Kit Niv. M8x55	75	150	15,8	10,6	157104
TSR-850 M8+ Kit Niv. M8x55	150	250	14,6	11,3	157105
TSR-1200 M8+ Kit Niv. M8x55	250	420	11,3	8,7	157106
TSR-55 M10+ Kit Niv. M10x90	10	25	24,1	11,4	157107
TSR-110 M10+ Kit Niv. M10x90	25	45	17,7	11,5	157108
TSR-220 M10+ Kit Niv. M10x90	45	75	16,3	11,3	157109
TSR-450 M10+ Kit Niv. M10x90	75	150	15,8	10,6	157110
TSR-850 M10+ Kit Niv. M10x90	150	250	14,6	11,3	157111
TSR-1200 M10+ Kit Niv. M10x90	250	420	11,3	8,7	157112
TSR-55 M12+ Kit Niv. M12x100	10	25	24,1	11,4	157113
TSR-110 M12+ Kit Niv. M12x100	25	45	17,7	11,5	157114
TSR-220 M12+ Kit Niv. M12x100	45	75	16,3	11,3	157115
TSR-450 M12+ Kit Niv. M12x100	75	150	15,8	10,6	157116
TSR-850 M12+ Kit Niv. M12x100	150	250	14,6	11,3	157117
TSR-1200 M12+ Kit Niv. M12x100	250	420	11,3	8,7	157118

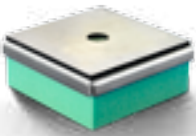
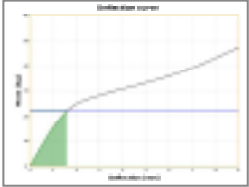
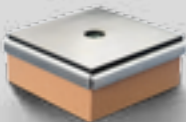
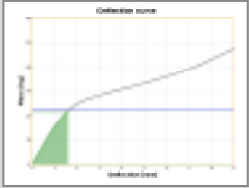

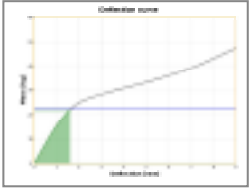
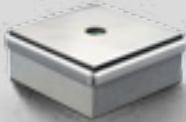
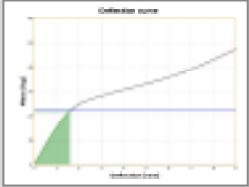
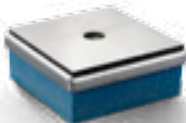
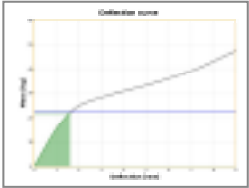
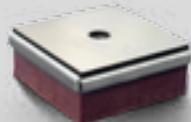
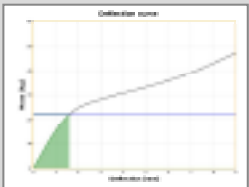
TSR sin Kit de Nivelación



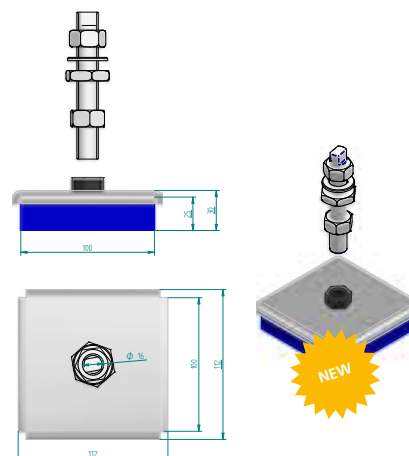
TSR con Kit de Nivelación





	REF. AMC	(Kg). MAX. LOAD	Deflection curve	CODE
	TSR 55 + Sylomer [®] Max. Kg. 25 Kg Deflection 2 mm Nat.Freq. 11,4 Hz K Dyn 0,13 kN/mm E Modulus 0,70 N/mm ²	25		157001
	TSR 110 + Sylomer [®] Max. Kg. 45 Kg Deflection 2,1 mm Nat.Freq. 11,5 Hz K Dyn 0,23 kN/mm E Modulus 1,25 N/mm ²	45		157002
	TSR 220 + Sylomer [®] Max. Kg. 75 Kg Deflection 2,1 mm Nat.Freq. 11,3 Hz K Dyn 0,38 kN/mm E Modulus 2,05 N/mm ²	75		157003
	TSR 450 + Sylomer [®] Max. Kg. 150 Kg Deflection 2,6 mm Nat.Freq. 10,6 Hz K Dyn 0,67 kN/mm E Modulus 3,61 N/mm ²	150		157004
	TSR 850 + Sylomer [®] Max. Kg. 250 Kg Deflection 2,8 mm Nat.Freq. 11,3 Hz K Dyn 1,27 kN/mm E Modulus 6,85 N/mm ²	250		157005
	TSR 1200 + Sylomer [®] Max. Kg. 420 Kg Deflection 4,1 mm Nat.Freq. 8,7 Hz K Dyn 1,24 kN/mm E Modulus 6,69 N/mm ²	420		157006

Type	Carga Min. (Kg)	Carga Máx. (Kg)	Frec. Natural Carga Min. (Hz)	Frec. Natural Carga Máx. (Hz)	CODE
TSR 100x100 SR_55 M16 + Kit Niv. M16x130	20	51	25,4	12,7	157071
TSR 100x100 SR_110 M16 + Kit Niv. M16x130	51	106	18,6	10,8	157072
TSR 100x100 SR_220 M16 + Kit Niv. M16x130	106	194	16,1	10,4	157073
TSR 100x100 SR_450 M16 + Kit Niv. M16x130	194	387	14,9	10	157074
TSR 100x100 SR_850 M16 + Kit Niv. M16x130	387	638	14,5	11,3	157075
TSR 100x100 SR_1200 M16 + Kit Niv. M16x130	638	993	12	9,5	157007



FLOATING FLOOR MOUNTS FZH + Sylomer®

LOAD AMC DEL PRODUCTO

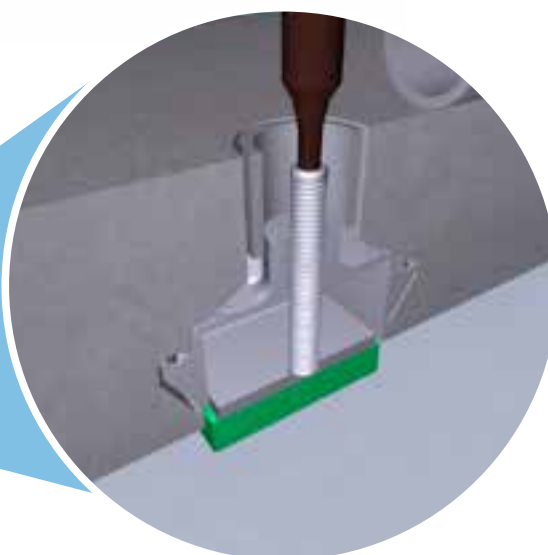
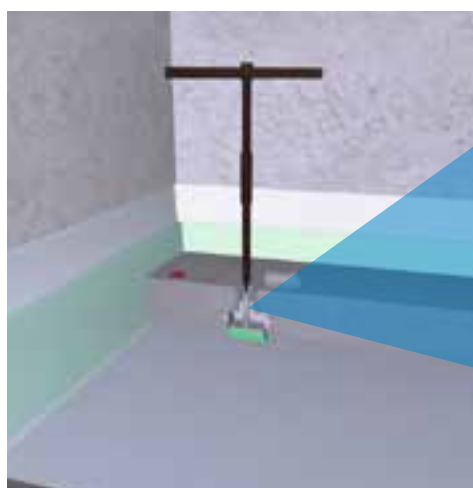
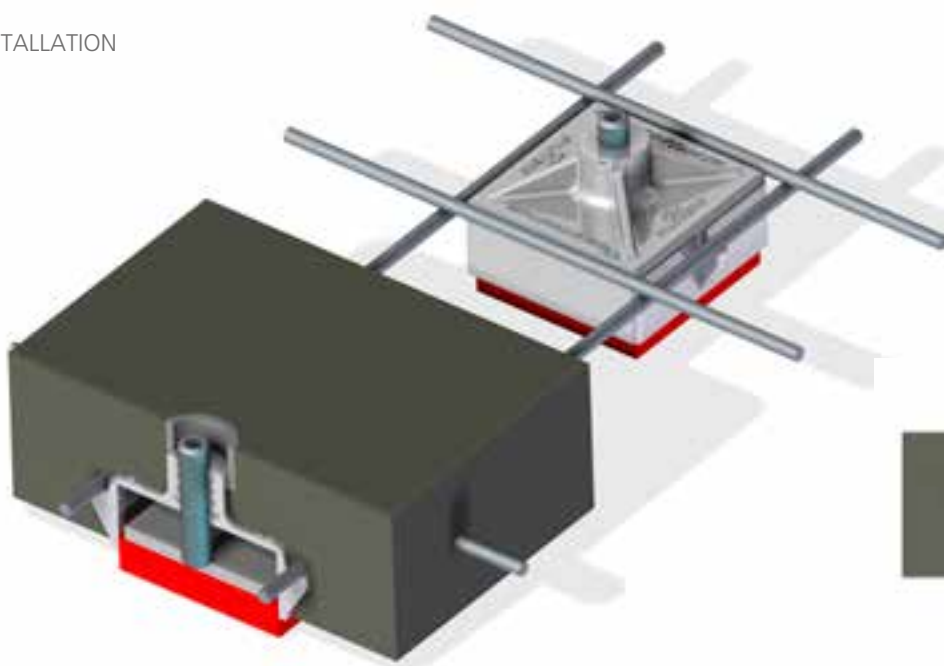
The goal of the system is to avoid the structure borne noise installing elastical mounts that are embedded in the concrete floating floor .The process of elevation is done once the concrete is dry.

The AMC-MECANOCAUCHO type FZH mounts incorporate a polyurethane elastomer called Sylomer®. This material offers optimal elastic and mechanical properties for the application.

The AMC-MECANOCAUCHO type FZH mounts can be manufactured in different densities of Sylomer to match the natural frequency needed on the application.

The process of leveling is simple and effective. The density of mount per m2 is 1.12 and the distance between the mounts is 0.9m.

INSTALLATION



FLOATING FLOOR MOUNTS

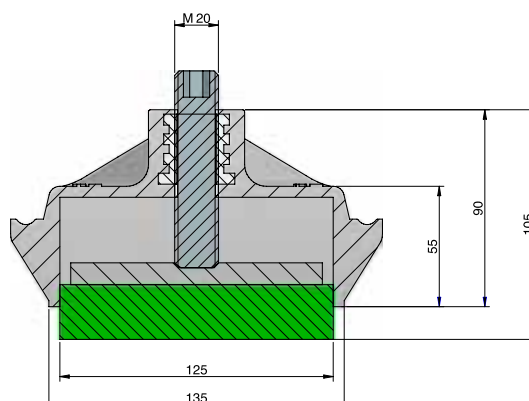
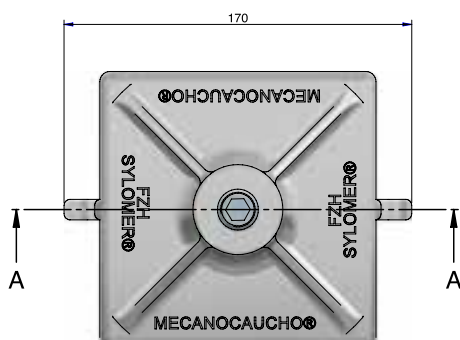
FZH + Sylomer[®]: Range

Type	SUMMARY	(Kg) MAX. LOAD	FREC. a carga max. (Hz)	CODE
 FZH-33-25	Concrete embedded Jack up mounts, designed for the antivibration suspension of slabs.	140	11	176511
 FZH-33-37	Concrete embedded Jack up mounts, designed for the antivibration suspension of slabs.	140	8,6	176512
 FZH-39-25	Concrete embedded Jack up mounts, designed for the antivibration suspension of slabs.	240	11,1	176513
 FZH-39-37	Concrete embedded Jack up mounts, designed for the antivibration suspension of slabs.	240	8,5	176514
 FZH-45-25	Concrete embedded Jack up mounts, designed for the antivibration suspension of slabs.	490	10,4	176515
 FZH-45-37	Concrete embedded Jack up mounts, designed for the antivibration suspension of slabs.	490	8,1	176516
 FZH-51-25	Concrete embedded Jack up mounts, designed for the antivibration suspension of slabs.	800	11,8	176517
 FZH-51-37	Soporte diseñado para su colocación en suelos flotantes.	800	9,1	176518
 FZH-57-25	Soporte diseñado para su colocación en suelos flotantes.	1260	10,2	176519
 FZH-57-37	Soporte diseñado para su colocación en suelos flotantes.	1260	7,3	176520

VENTAJAS

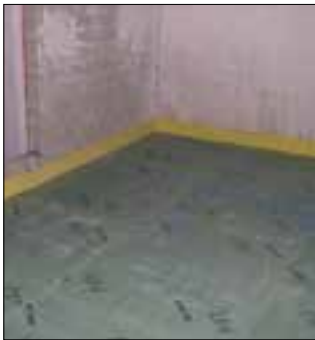
- **Poca altura de losa,** se consigue una eficiencia antivibratoria optima sin hacer recrecidos de mucha altura.
- Teniendo en cuenta que la altura disponible es muy limitada en muchos casos, se transforma toda altura disponible en losa de hormigón, añadiendo masa al sistema y consiguiendo reducir la frecuencia propia.
- **Gran aislamiento,** gracias a las características antivibratorias del Sylomer y a que se utiliza en tacos, se consiguen frecuencias propias muy bajas que proporcionan un aislamiento óptimo.
- **Rapidez de instalación,** sin colocación de tablero ni juntas entre tableros.
- **Economía,** ahorramos tiempo de montaje, no necesitamos tableros, ni tacos.
- **Safety,** evitamos la aparición de puentes acústicos, ya que al levantar la losa estamos 100% seguros que no ha habido ningún error al hacer la losa.
- **Facilidad y sencillez de montaje,** no hace falta ser un especialista para realizar este suelo.

CARACTERÍSTICAS



FLOATING FLOOR MOUNTS INSTALLATION FZH + Sylomer®

INSTALLATION STEPS



Conditioning the premise and installation of the mounts.



Installation of reinforced concrete.

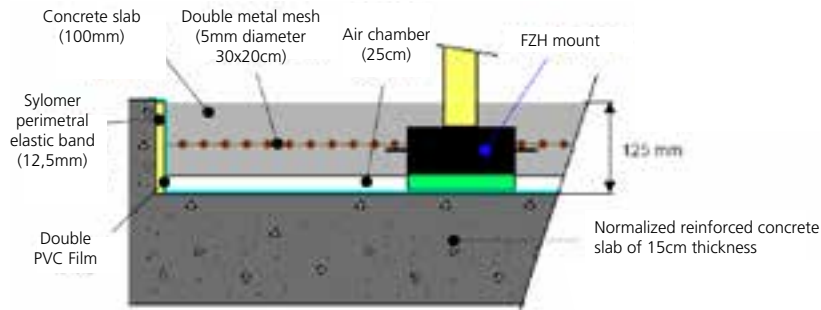


Levelling.



Height adjustment.

COMPARATIVE TESTS AT THE LABEIN TECHNOLOGY CENTRE



Reduction of impact noise on normalized slab according to UNE en ISO 140-8:1998

Weighted gain according to UNE-EN ISO 717-2:1997 $\Delta L_w (C_{1A})$: 34 (-11) dB

These results rely on the realized tests under an artificial source under Laboratory conditions (engineering method)
* $L_n \leq$ indicated value and $\Delta L \geq$ indicated value (measurement limits)

Laboratory measurements

Test specimen: Floating reinforced concrete slab of 100mm thickness, elevated at 25mm with a system of antivibration mounts as described on the above picture.

Employed supporting slab: Reinforced concrete slab of 15cm thickness, tested in 26/06/09 ($L_{n,0}$)

Volume of the receiving room: 64.7m³

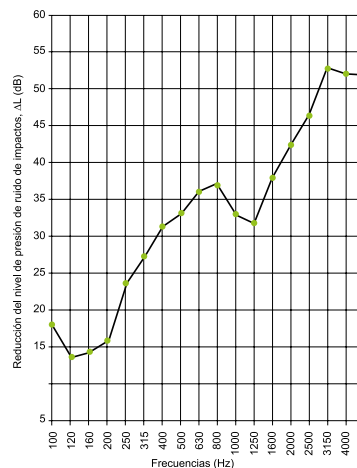
Volume of the source room: 53.6m³

Surface of the test specimen: 13.86m² (3.3x4.2m)

Estimated specific mass: 250Kg/m²

Chamber temperature: 17.3 C°

Chamber Hygrometry: 77%



f (Hz)	L_n (dB)	$L_{n,0}$ (dB)	ΔL (dB)
100	47,2	65,1	17,9
125	46,9	60,5	13,6
160	53,2	67,5	14,3
200	49,5	65,3	15,8
250	41,8	65,4	23,6
315	37,3	64,7	27,4
400	34,5	65,9	31,4
500	34,3	67,5	33,2
630	31,9	68,0	36,1
800	32,9	70,1	37,2
1000	37,3	70,4	33,1
1250	38,9	70,7	31,8
1600	32,5	70,5	38,0
2000	27,8	70,3	42,5
2500	22,9	69,3	46,4
3150	15,3*	68,1	52,8*
4000	14,1*	66,2	52,1*
5000	11,6*	63,9	52,0*
$L_{n,w} / L_{n,0,w}$		41	76

Airborne insulation according to UNE EN ISO 140-16:2007

Laboratory measurements according to UNE ISO 140-3:1995

Test specimen: Floating reinforced concrete slab of 100mm thickness, elevated at 25mm with a system of antivibration mounts as described on the above picture.

Employed supporting slab: Reinforced concrete slab of 15cm thickness, tested in 26/06/09 ($R_{without}$)

Volume of the receiving room: 64.7m³

Volume of the source room: 53.6m³

Surface of the test specimen: 13.86m² (3.3x4.2m)

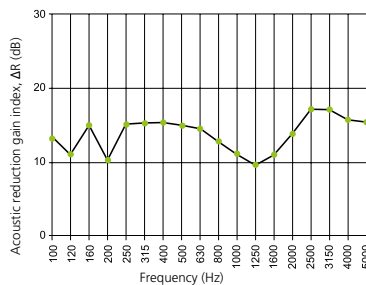
Estimated specific mass: 250Kg/m²

Chamber temperature: 17.3 C°

Chamber Hygrometry: 77%

Isolation gain indexes: ΔR_A : 13 dBA
 ΔR_{W-} : 13 dB
 $\Delta(R_W+C)$: 13 dBA
 $\Delta(R_W+C_{tr})$: 13 dBA

Evaluation based in laboratory measurements according to engineering method.
 * R_{with} and $\Delta R \geq$ indicated value (measurements limits).



f (Hz)	R_{with} (dB)	$R_{without}$ (dB)	ΔR (dB)
100	48,4*	34,8	13,6*
125	53,7*	42,6	11,1*
160	54,6*	39,6	15,0*
200	58,1*	47,6	10,5*
250	63,0	47,7	15,3
315	67,6*	52,3	15,3*
400	70,4*	54,9	15,5*
500	71,0*	56,0	15,0*
630	72,3*	57,7	14,6*
800	72,8	59,8	13,0
1000	72,0	60,8	11,2
1250	71,9	62,2	9,7
1600	74,9	63,8	11,1
2000	80,8*	66,8	14,0*
2500	87,5*	70,3	17,2*
3150	91,2*	74,1	17,1*
4000	91,9*	76,1	15,8*
5000	92,3*	76,9	15,4*
$R_W (C; C_{tr})$		72 (-2; -7)	58 (-2; -7)
R_A		70,9	57,5

APPLICATIONS



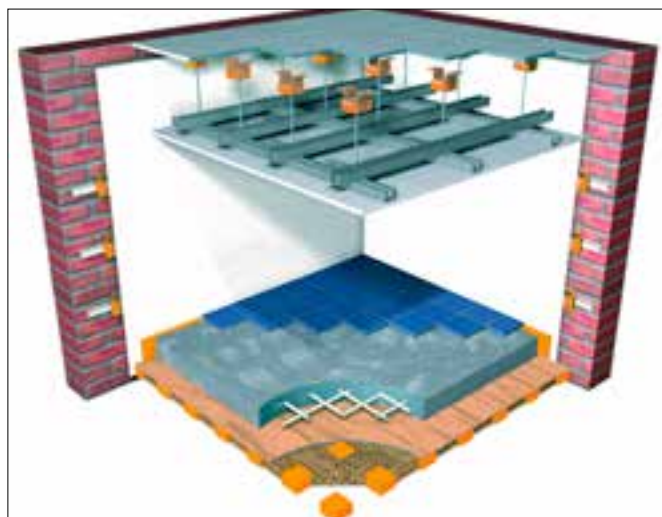
Alfortville Recording Studio.



Sheraton Casablanca Hotel.



Ep+Sylomer Type 2.



AKUSTIK Super T-60+Sylomer 30 type B
used on a recording studio.



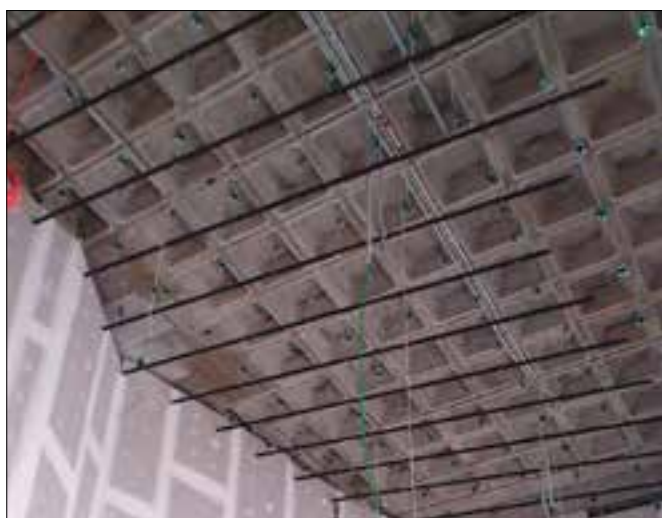
Akustik Super T60 + Sylomer 30 Type B en estudios de grabación
HIGAIN USURBIL.



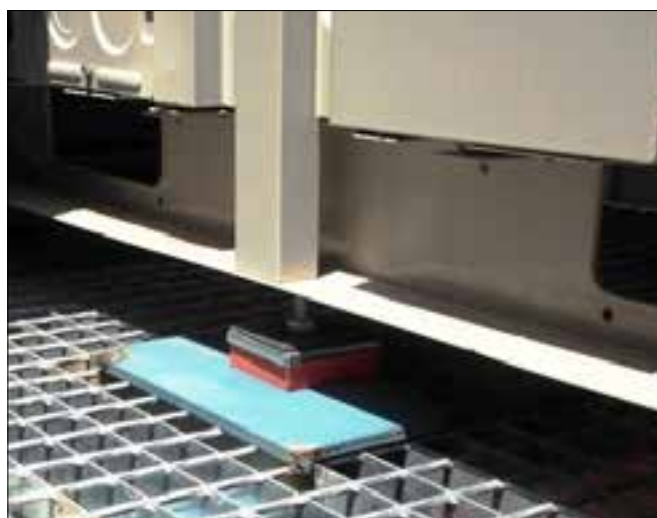
Conservatorio Madrid.



Cerveceria finlandia.



Caixa Forum Zaragoza.



Instalación soporte TSR+Sylomer®.



Instalación soporte FZH+Sylomer® en estudio de música.



Instalación soporte FZH+Sylomer®.

AMC REFERENCES IN THE WORLD OF SOUND

FRANCE, ITALY, SPAIN, UNITED KINGDOM, PORTUGAL, FINLAND, GREECE...

Project: BIBLIOTHEQUE
NATIONALE DE France
Country: France

Project: CINEMA PATHÉ ECHIROLLES
Country: France

Project: CINEMA NEF CHABANT
Country: France

Project: CINEMA PATHÉ BELLE EPINE
Country: France

Project: CINÉMA PATHÉ LIEVIN
Country: France

Project: CINEMA PATHÉ LAGARDE
Country: France

Project: CINEMA PATHÉ EVRY
Country: France

Project: CINEMA PATHÉ IVRY
Country: France

Project: CINEMA UGC LUDRES
Country: France

Project: ADIDAS STORE
Country: France

Project: CLUB MED STORE
Country: France

Project: CENTRE CULTURAL
ST MEDARD
Country: France

Project: THEATRE BARBEY
Country: France

Project: CINEMA UGC TALENCE
Country: France

Project: CINEMA MK2 TOLBIAC
Country: France

Project: CINEMA UGC CRETEIL
Country: France

Project: CINEMA PATHÉ BESANÇON
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Project: CINEMA PATHÉ LINGOTTO
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Project: MAISON
DES MUSIQUES AMPLIFIÉES
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Country: France

Project: ZARA INDITEX
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Country: Spain

Project: FORUM BARCELONA
Country: Spain

Project: TERRA MITICA
Country: Spain

Project: CINEMA MAJESTIC
Country: France

Project: JDC CENTER LA SOULAIE
Country: France

Project: TEATRO ANESIS
Country: Greece

Project: RECORDING STUDIO
Country: Finland

Other Projects: BARS, DISCOTHEQUES,
CAFETERIAS, MUSEUMS, LIBRARIES,
SHOPS, PUBS.
Country: Spain, France, United
Kingdom, Italy, Portugal, Finland and
Greece.



NUEVOS MUESTRARIOS PARA LAS GAMAS DE AKUSTIK

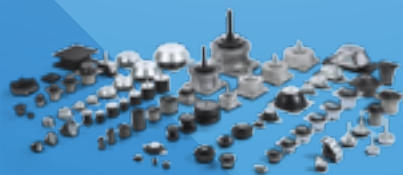


Expositor Akustik
en punto de venta.



Expositor TSR+ Sylomer®
de sobremesa en punto de venta

A.M.C. CATALOGUES



AMC-MECANOCAUCHO SUPPORTS

Reliability and savings in machinery isolation



VIBRABSORBER + MOUNTS

by getzner
sylomer®

Anti-vibratory solution



Granab® Golvregelsystem

Acoustic and technical
floor for building



AKUSTIKABSORBER

Technical Absorbents



by getzner **sylomer**®

Microcellular polyurethane
especially conceived for
vibration isolation



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