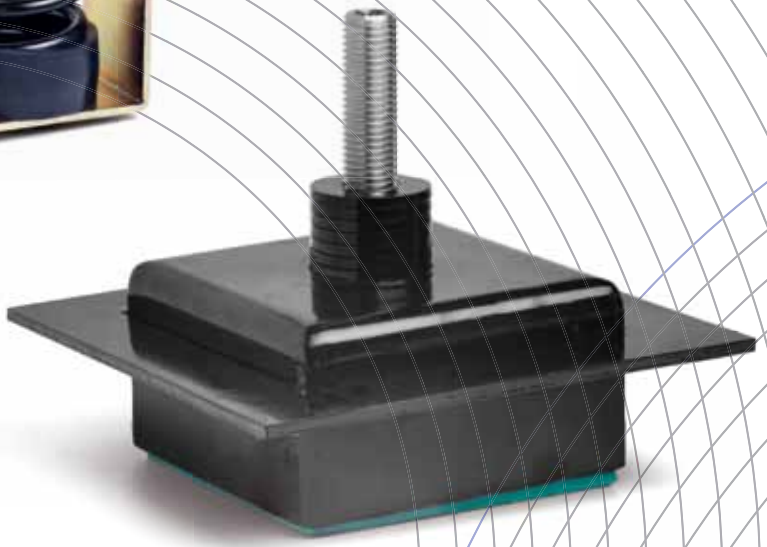
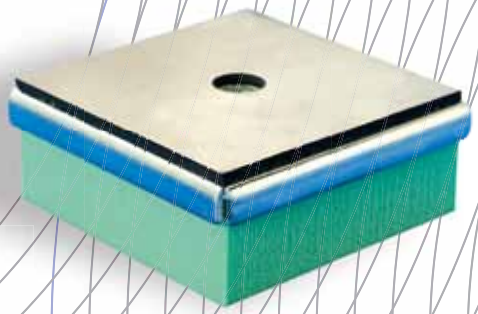
2012

Akustik + sylomer®

by getzner





MECANOCAUCHO

Aplicaciones Mecánicas del Caucho, S.A.

www.mecanocaucho.com

Contents

Factory of AMC-MECANOCAUCHO

Factory of sylomer® Austria.

AMC MECANOCAUCHO

by getzner sylomer®

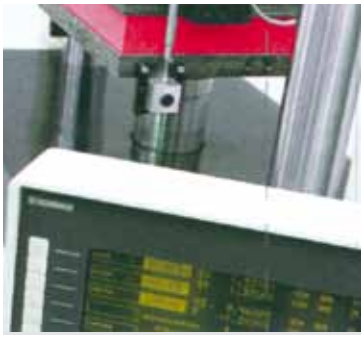
Akustik+Sylomer® is the trademark of a new solution for the anti-vibration mountings of false ceilings or vibrating elements that have to be suspended. They are used for the attenuation of vibrations, reducing structure-borne noise.

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.

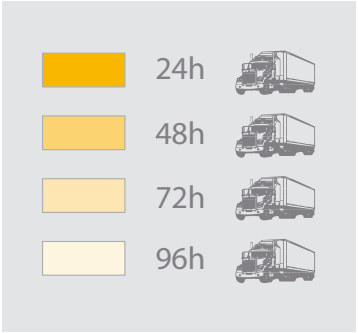
GETZNER Werkstoffe GmbH manufactures a prestigious anti-vibration material called Sylomer® whose main application has been the isolation of vibrations produced by railways. Operating from Austria since 1969, it is now the leader in its sector, and boasts totally cutting-edge technological facilities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

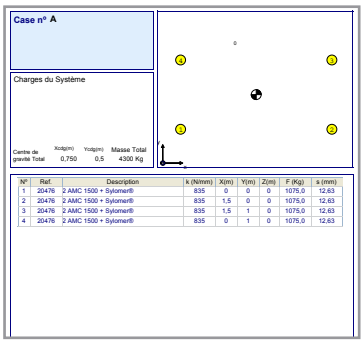
ENGINEERING

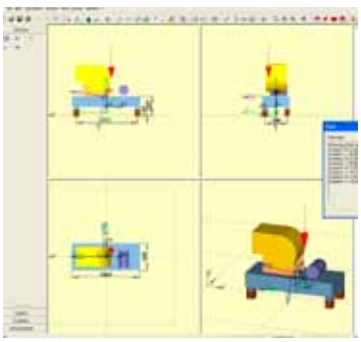


LOGISTICS



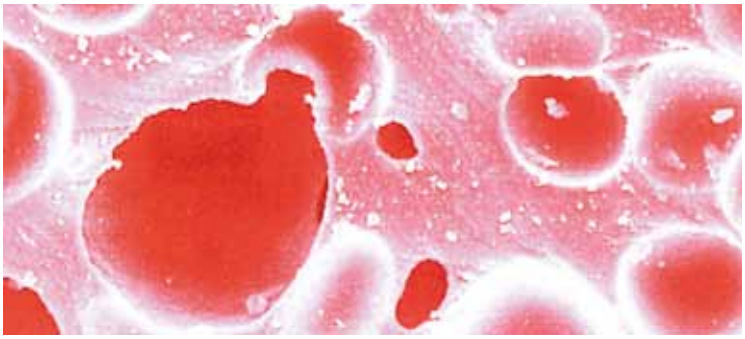
ANTIVIBRATION CALCULATIONS





EXPOSITION TOOLS FOR DISTRIBUTORS

< The cooperation of two great companies



QUALITY

We posses 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 first grade components.

SERVICE

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

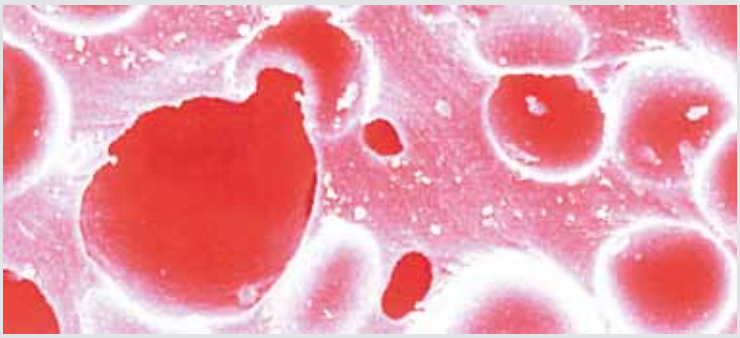
AMC-MECANOCAUCHO offers a wide range of exposition displays on store. Should you require one, do not hesitate to contact our sales dpt, so they can offer you the one that adapts better to your needs.

Akustik + sylomer by getzner

COMPARATIVE TESTS AT THE LABEIN TECHNOLOGY CENTRE

Akustik+Sylomer® is de 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 microcelular 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.

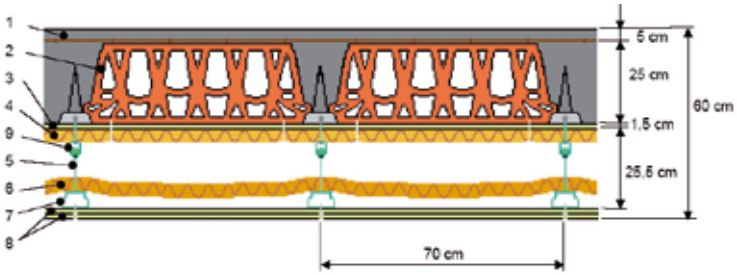
The secondary endpoint is to compare the Akustik+Sylomer® to another suspension with the same size-specific characteristics using high-resilience natural rubber from our Akustik 4 45 shore A standard series.

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 CENTRE

COMPARATIVE 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

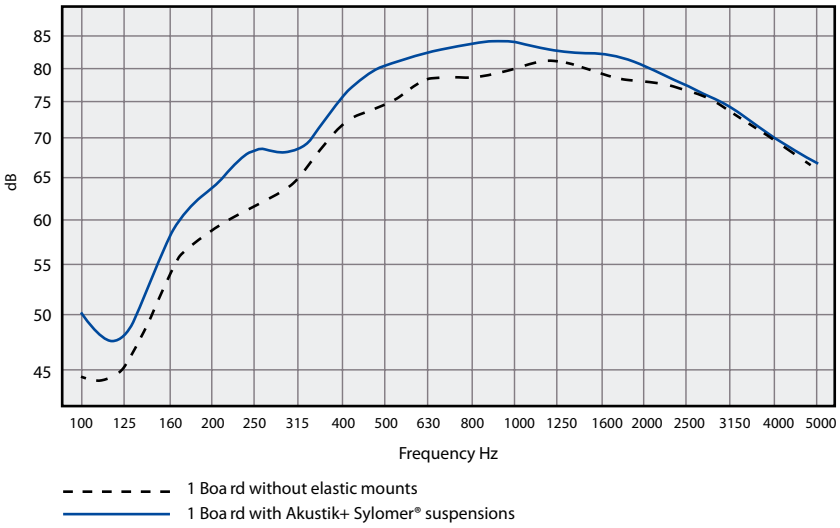
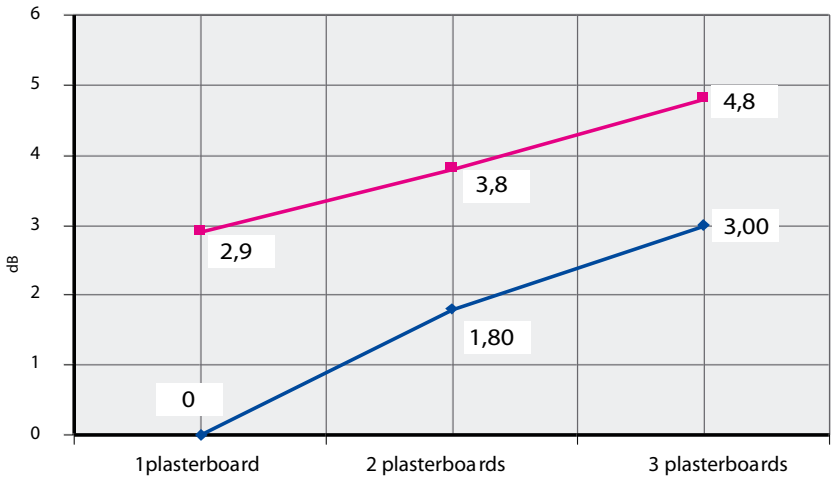


Table 1

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 withakustik+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.

Table2

RA sound isolation index	Without Akustik + sylomer by getzner suspensions	With rubber suspensions
1 plasterboard	70.4 dB	70.8 dB
2 plasterboard	71.3 dB	70.3 dB
3 plasterboard	72.3 dB	71.3 dB

Table 3

False ceiling with 1 plasterboard		
Frequency	Akustik + sylomer by getzner	Rubber
160 Hz.	58.3 dB	57.5 dB
250 Hz.	68.4 dB	66 dB
500 Hz.	80.3 dB	79.1 dB

False ceiling with 2 plasterboards		
Frequency	Akustik + sylomer by getzner	Rubber
160 Hz.	57 dB	56.9 dB
250 Hz.	70 dB	68 dB
500 Hz.	81,5 dB	81.1 dB

False ceiling with 3 plasterboards		
Frequency	Akustik + sylomer by getzner	Rubber
160 Hz.	60.4 dB	58.5 dB
250 Hz.	69.4 dB	67 dB
500 Hz.	82.4 dB	81.1 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.

Sylomer® Low Loads

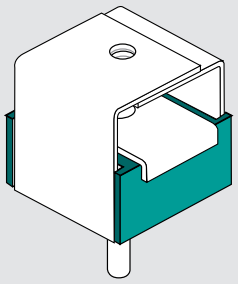


Fig.1

"Creeping" Behaviour

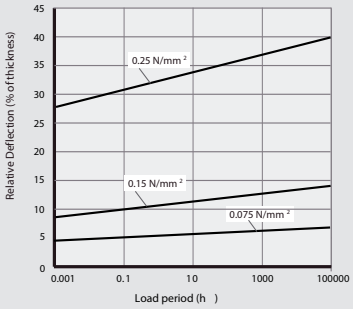
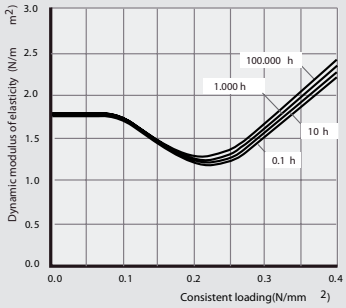


Fig.2

Dynamic modulus of elasticity at long term loading



Sylomer® High Loads

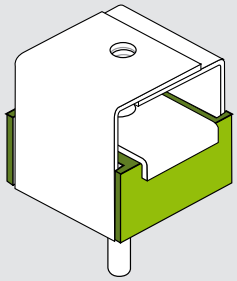


Fig.3

"Creeping" Behaviour

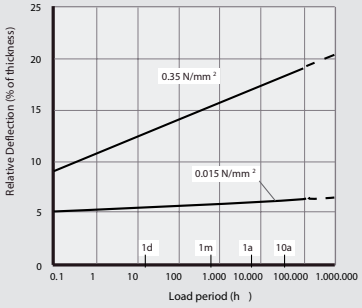
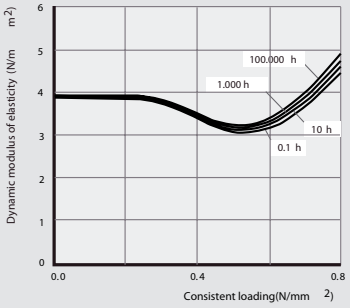


Fig.4

Dynamic modulus of elasticity at long term loading



Akustik + sylomer® by getzner

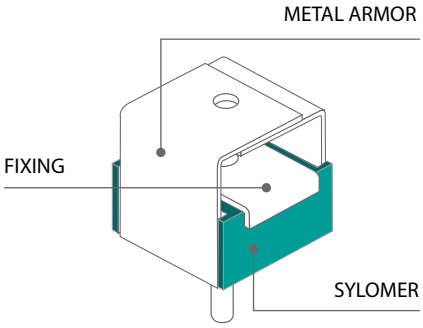
AKUSTIK + SYLOMER®: MODELS AND DIMENSIONS

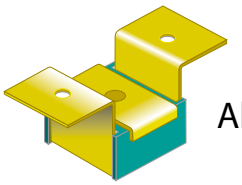
PRODUCT DESCRIPTION

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.

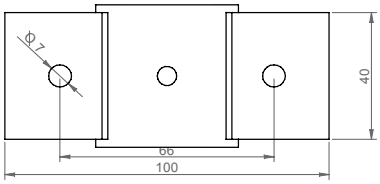
A great variety of fixing metal armors and elements facilitate installation and adapt better to each type of job. Their rugged metal parts withstand can tensile stresses from 650 kg to 1000 kg. They are supplied with an anticorrosive treatment that can withstand the toughest environments.

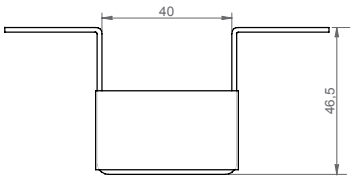


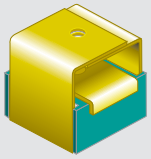


Akustik 1

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

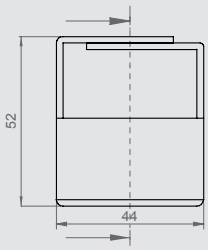


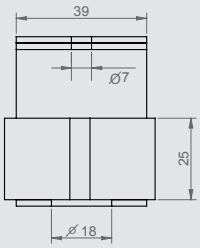


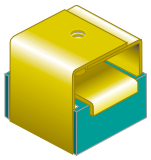


Akustik 3

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

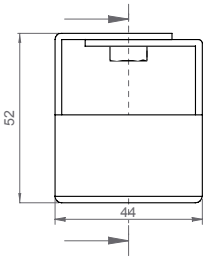


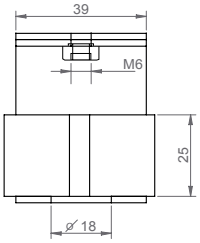


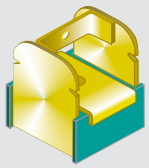


Akustik 4

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

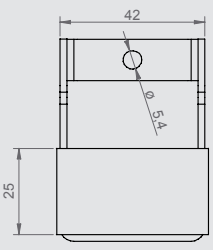


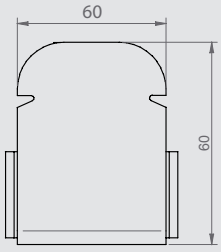


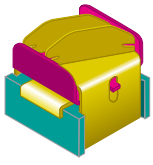


Akustik Rapid

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



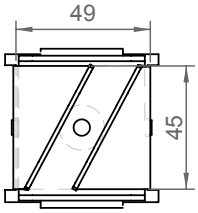


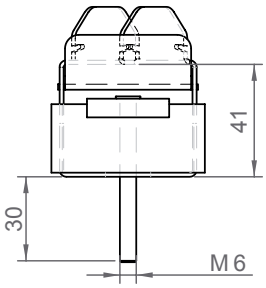


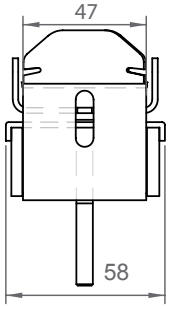
Akustik Safety

Its gravitational system guaranteescorrectinstallation and offers greater safety, preventing elements from becoming detached.

Thankstoitsdesign,themount will not attach to the profile if it is not installed properly. It preventspossibleslip-ups.Its45º forkeddesignmakesinstallation and removal easy and safe.







Akustik + sylomer®

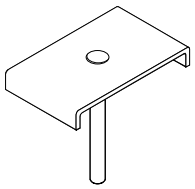
AKUSTIK + SYLOMER®: MODELS AND DIMENSIONS

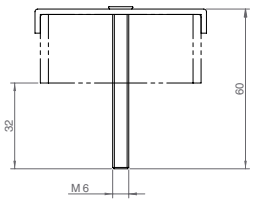
TYPE OF FIXING

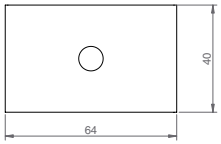
For installations where M6 male fixing is required, the recommended fixing is Type A.

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

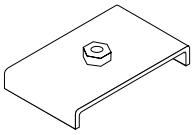
TYPE A

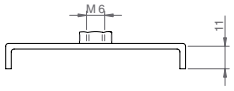


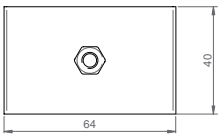


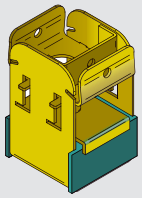


TYPE B



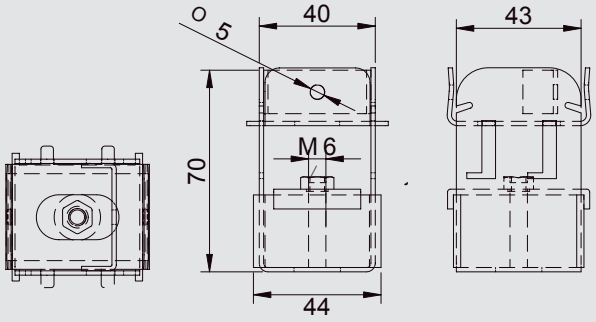


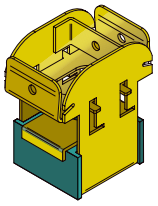




Akustik Super T47

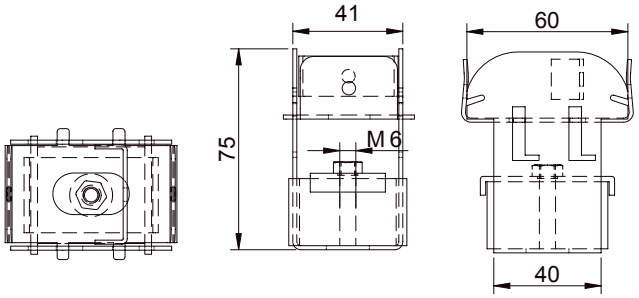
The "SUPER"security feature is adaptable to the different profiles existing on the market.



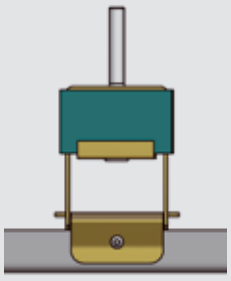


Akustik Super T60

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

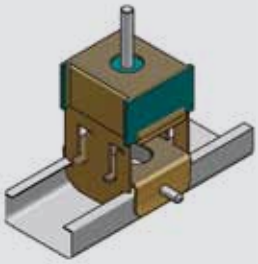


INSTALLATION STEPS OF AKUSTIK SUPER

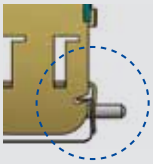


Detail A

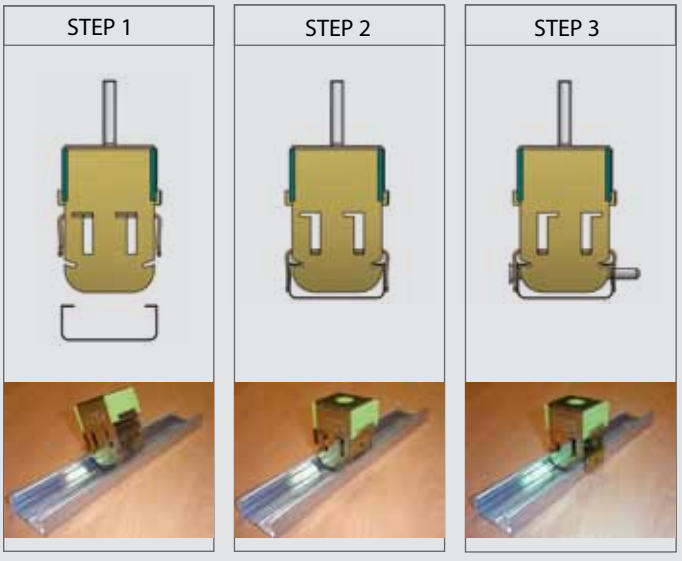
1• The security system is adaptable to different widths of profiles.



Detail B



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

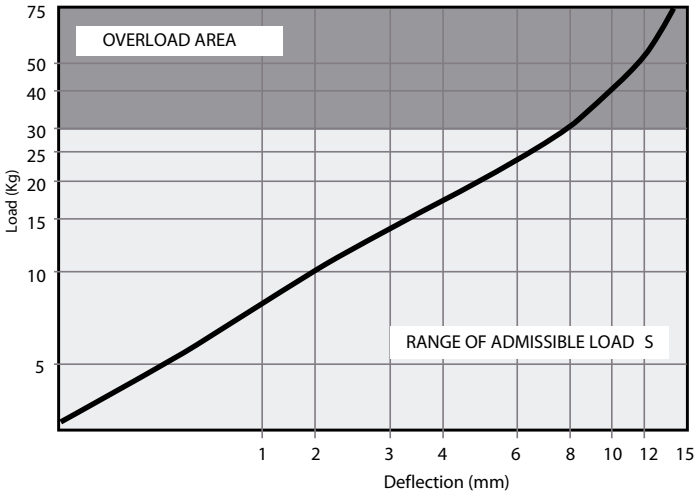


Akustik + sylomer®

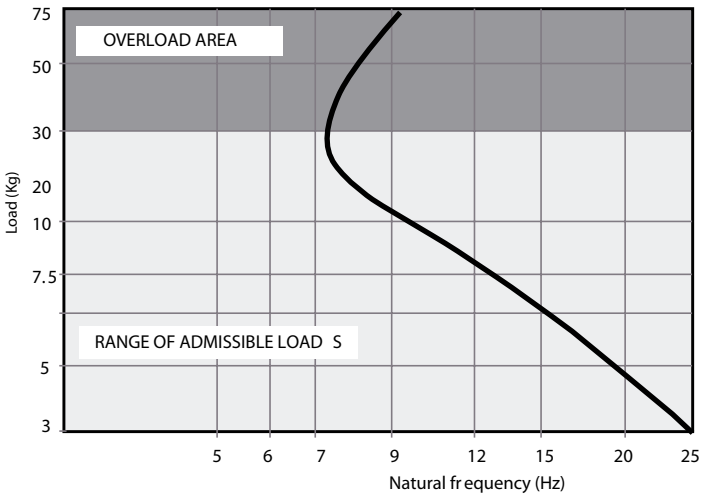
AKUSTIK + SYLOMER®: MODELS AND DIMENSIONS

TYPES OF SYLOMER

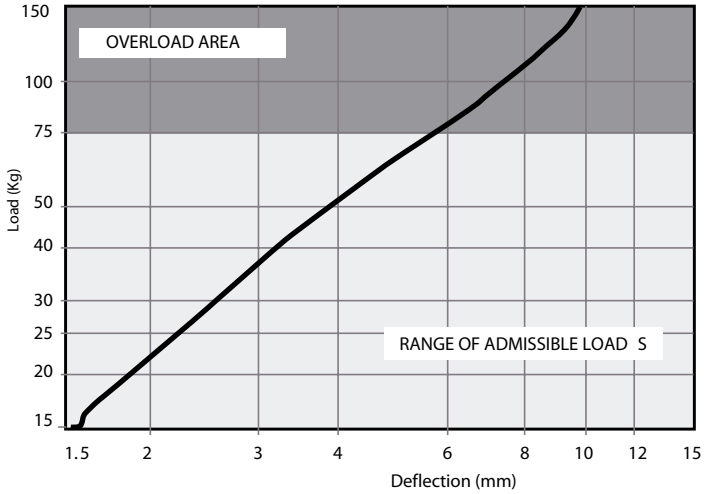
LOAD DEFLECTION GRAP H
Akustik + Sylomer 30



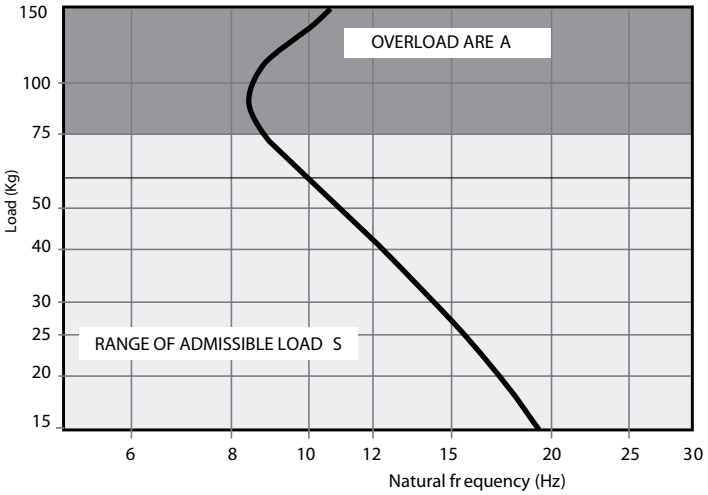
NATURAL FREQUENC Y
Akustik + Sylomer 30



LOAD DEFLECTION GRAP H
Akustik + Sylomer 75



NATURAL FREQUENC Y
Akustik + Sylomer 75

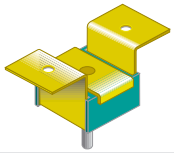
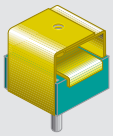
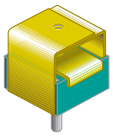
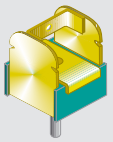
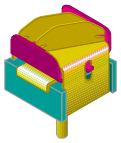
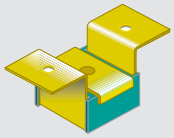
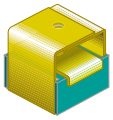
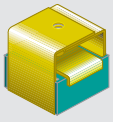
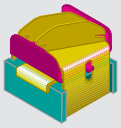


Application of an Akustik 4+Sylomer 30 type A.

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

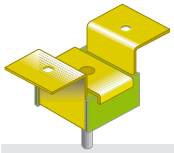
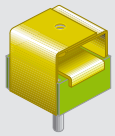
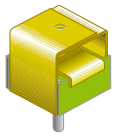
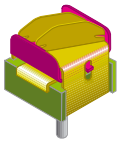
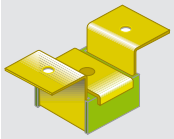
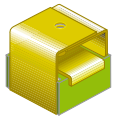
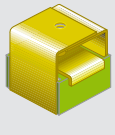
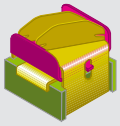
Akustik + sylomer®

AKUSTIK + SYLOMER®: RANGE

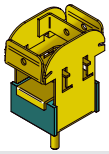
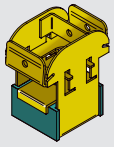
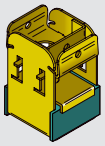
	DESCRIPTION	SUMMARY	(Kg) MAX. LOAD	REF.
	Akustik 1 + Sylomer®30 Type A	Metal armor of the Akustik 1 secured to the ceiling with two holes and an M6 male fixing type (Type A)	30	23501
	Akustik 3 + Sylomer®30 Type A	Metal armor of the akustik 3 secured to the ceiling by an M6 screwand with a nut.	30	23503
	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 Safety + Sylomer®30 TypeB	Metal armor of the Akustik Safety secured to the ceiling by a welded M6 nut.	30	23516

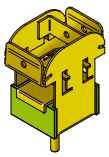
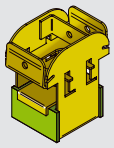
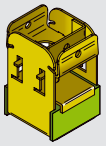
Akustik + sylomer

AKUSTIK + SYLOMER®: RANGE

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

AKUSTIK SUPER + SYLOMER®: RANGE

	DESCRIPTION	SUMMARY	(Kg) MAX. LOAD	REF.
	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

	DESCRIPTION	SUMMARY	(Kg) MAX. LOAD	REF.
	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 + sylomer® by getzner

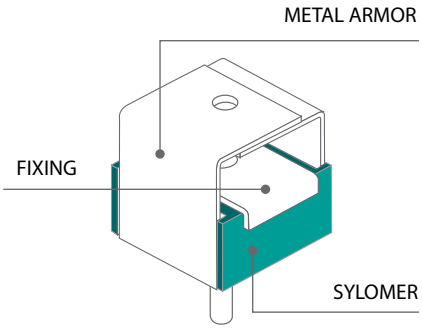
GRAN AKUSTIK + SYLOMER®: MODELS AND DIMENSIONS

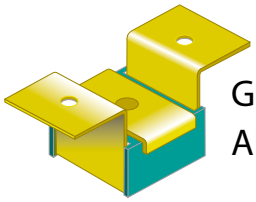
PRODUCT DESCRIPTION

These anivibration 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.

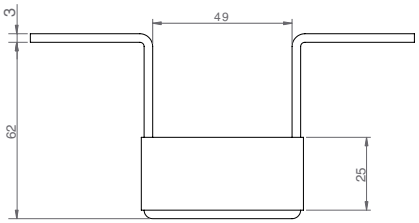
A great variery of fixing windows and elements facilitate installation and adapt better to each type of job. Their rugged metal parts can withstand tensile stresses from 650 to 1000 Kg. They are supplied with an anticorrosive treatment that can withstand the toughest environments.

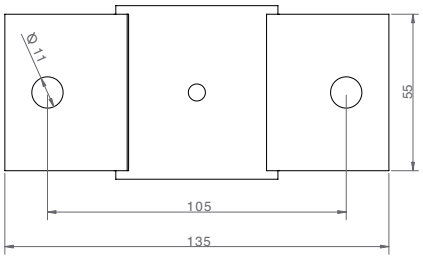


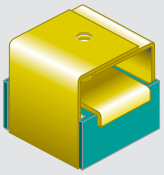


Gran Akustik 1

It is secured to the ceiling with two holes.

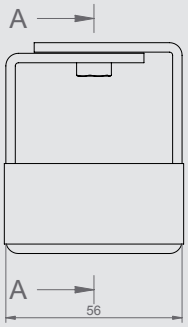


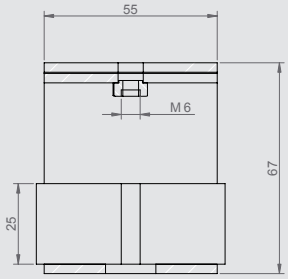


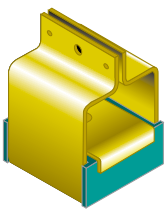


Gran Akustik 2

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

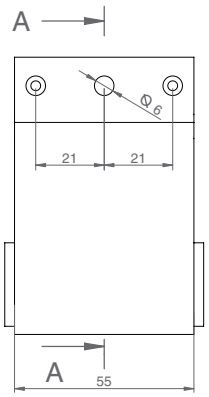


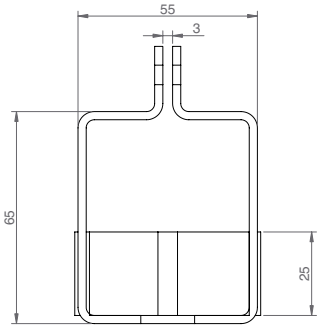




Gran Akustik 3

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.





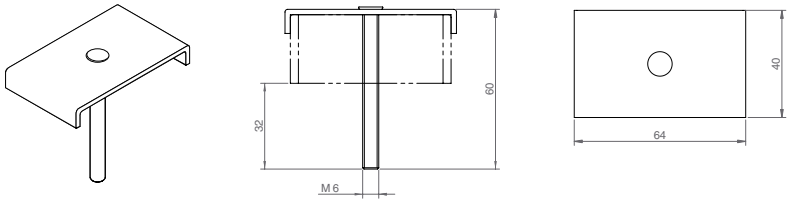
GRAN AKUSTIK + SYLOMER®: MODELS AND DIMENSIONS

TYPE OF FIXING

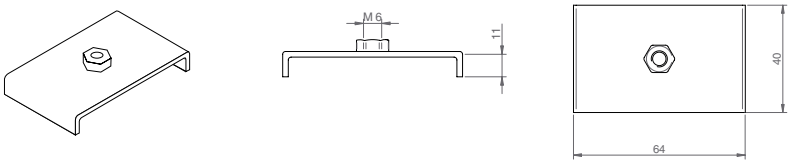
For installations where M6 male fixing is required, the recommended fixing is Type A.

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

Type A

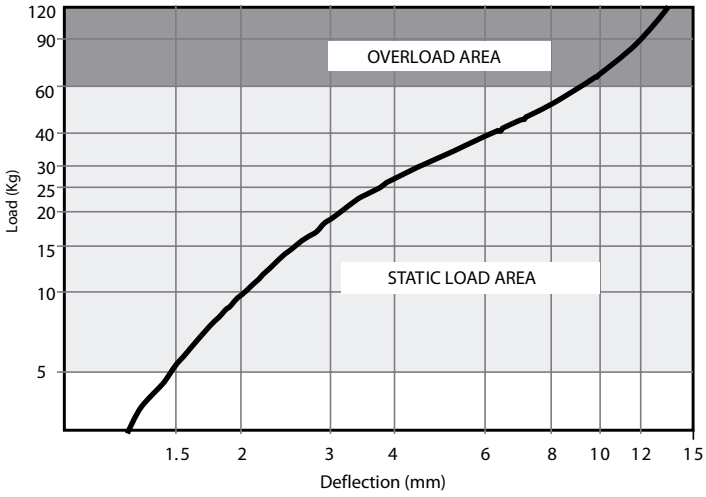


Type B

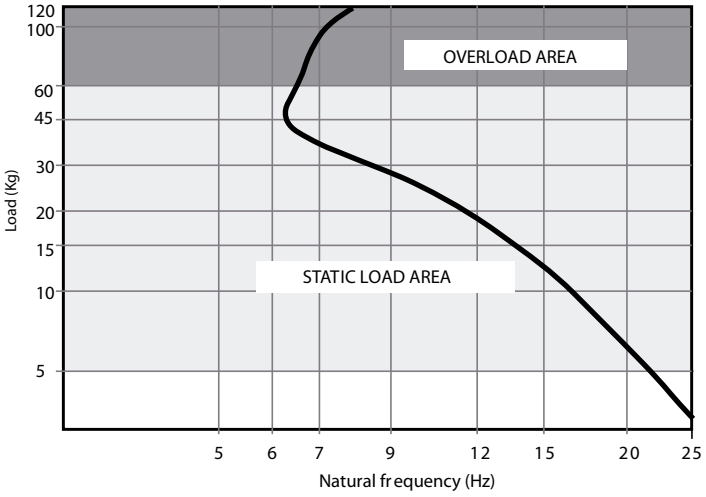


TYPES DE SYLOMER

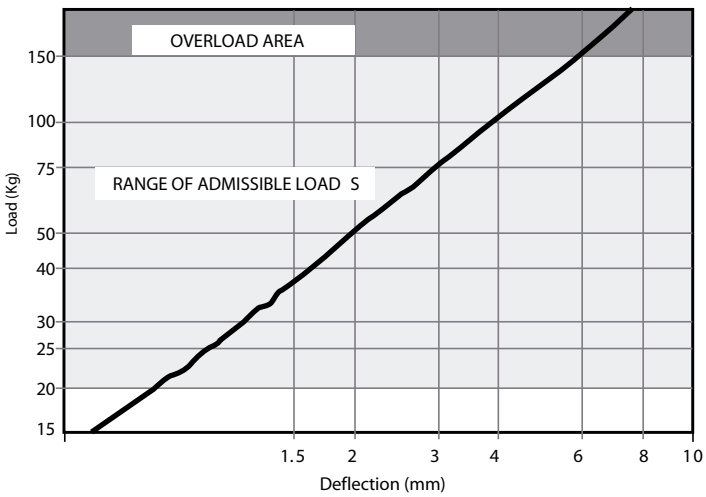
LOAD DEFLECTION GRAP H
Gran Akustik + Sylomer 60



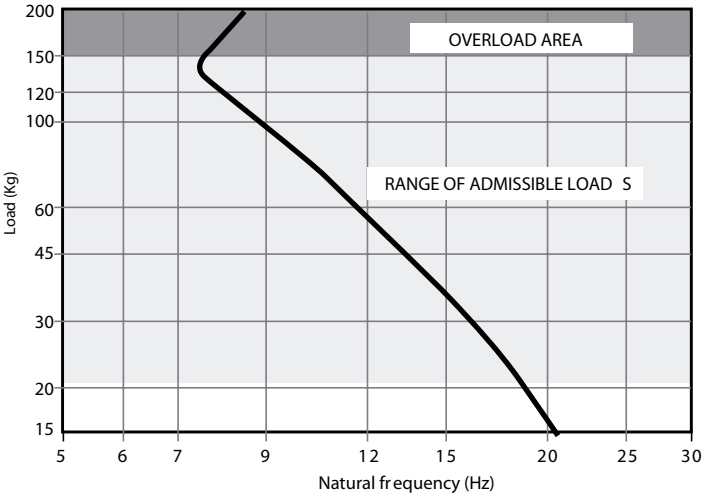
NATURAL FREQUENCY GRAPHS
Gran Akustik + Sylomer 60



LOAD DEFLECTION GRAP H
Gran Akustik + Sylomer 150

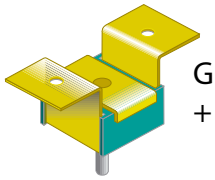
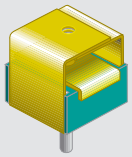
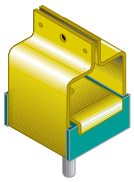
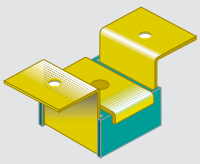
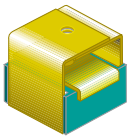
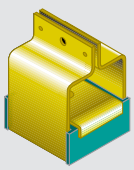


NATURAL FREQUENCY GRAPHS
Gran Akustik + Sylomer 150

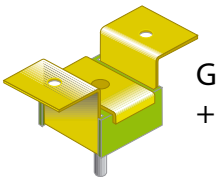
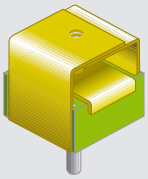
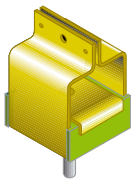
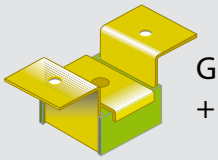
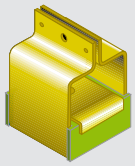


Akustik + sylomer by getzner

GRAN AKUSTIK + SYLOMER®: RANGE

	DESCRIPTION	SUMMARY	(Kg) MAX. LOAD	REF.
	Gran Akustik 1 + Sylomer®60 Type A	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
	Gran Akustik 2 + Sylomer®60 Type A	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
	Gran Akustik3 + Sylomer®60 Type A	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
	Gran Akustik 1 + Sylomer®60 Type B	It is secured to the ceiling with two holes and to the profile by means of a "type B" female fixing.	60	23609
	Gran Akustik 2 + Sylomer®60 Type B	It is secured to the ceiling by a screw and to the profile by a "type B" female fixing.	60	23613
	Gran Akustik 3 + Sylomer®60 Type B	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

GRAN AKUSTIK + SYLOMER®: RANGE

	DESCRIPTION	SUMMARY	(Kg) MAX. LOAD	REF.
	Gran Akustik 1 + Sylomer®150 Type A	It is secured directly to the ceiling with two holes and to the profile by means of a "type A" male screw.	150	23617
	Gran Akustik 2 Type A	It is secured directly to the ceiling with one screw and to the profile by means of a "type A" screw.	150	23621
	Gran Akustik3 + Sylomer®150 Type A	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
	Gran Akustik 1 + Sylomer®150 Type B	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
	Gran Akustik 2 + Sylomer®150 Type B	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
	Gran Akustik 3 + Sylomer®150 Type B	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

Akustik + sylomer® by getzner

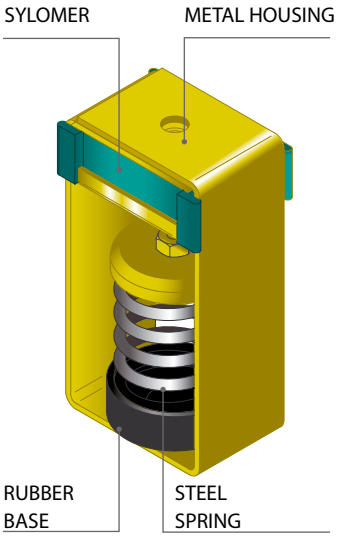
SRS + SYLOMER®: MODELS AND DIMENSIONS

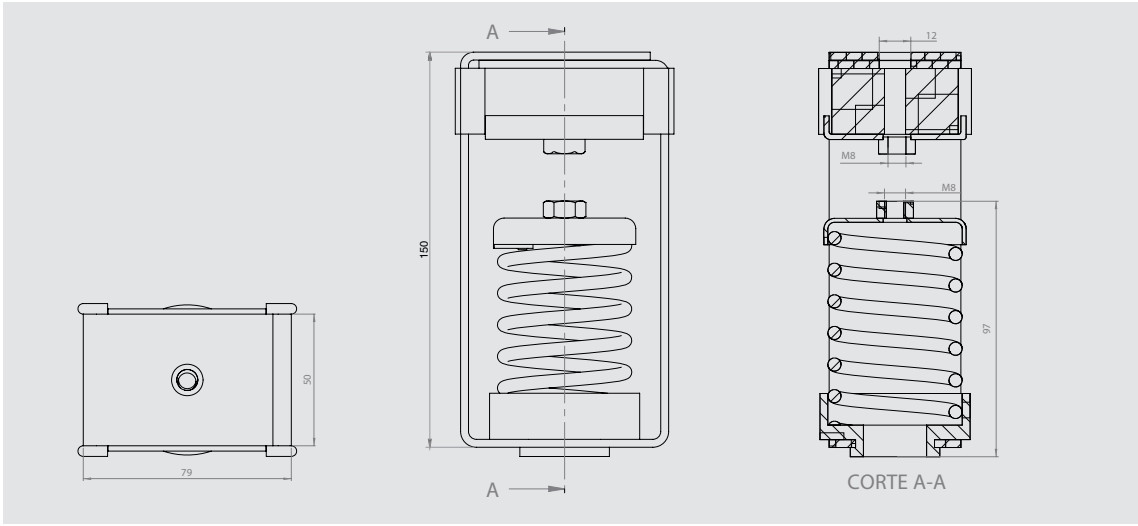
PRODUCT DESCRIPTION

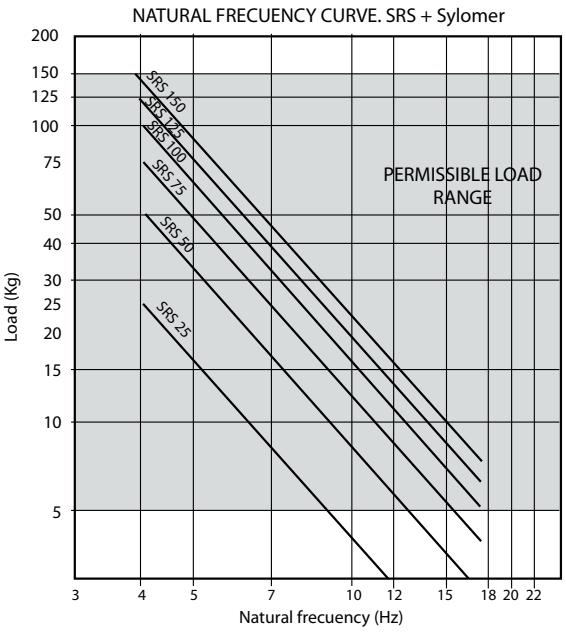
These antivibration mounts have been conceived for the suspension of suspended ceilings or machines that rotate at low frequency. The excellent properties of the Sylomer® microcelular polyurethane combined with the low stiffness of an steel spring achieve increased isolation values as opposed to other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

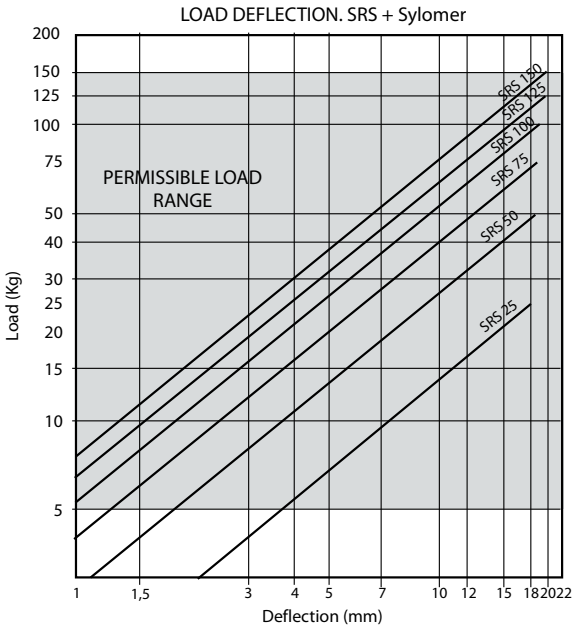
These antivibration mounts are manufactured in 6 different steel spring models to adapt optimal for each application.

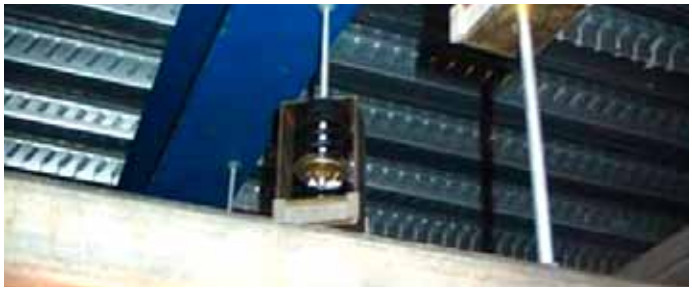
Their rugged metal parts withstand can tensile stresses. They are supplied with an anticorrosive treatment that can resist tensile stresses up to 1000Kg withstand the toughest environments.



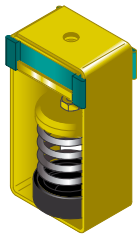
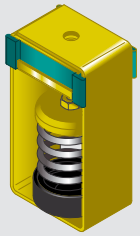
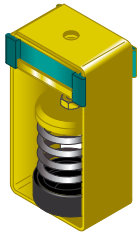
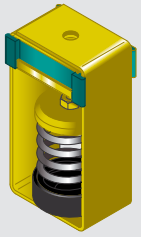
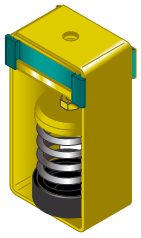
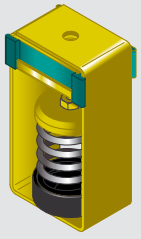








SRS + SYLOMER®: RANGE

	DESCRIPTION	SUMMARY	(Kg). Max.Load.	REF.
	SRS 25 + Sylomer®	Sylomer+Steel spring combined hanger.	25	23561
	SRS 50 + Sylomer®	Sylomer+Steel spring combined hanger.	50	23561
	SRS 75 + Sylomer®	Sylomer+Steel spring combined hanger.	75	23561
	SRS 100 + Sylomer®	Sylomer+Steel spring combined hanger.	100	23561
	SRS 125 + Sylomer®	Sylomer+Steel spring combined hanger.	125	23561
	SRS 150 + Sylomer®	Sylomer+Steel spring combined hanger.	150	23561

EP + SYLOMER® MOUNTS: MODELS AND DIMENSIONS

PRODUCT DESCRIPTION

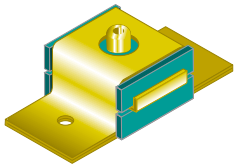
Range designed for the floating suspension of soundproofed walls. Sylomer® avoids the transmission of vibrations while providing optimal acoustic results.

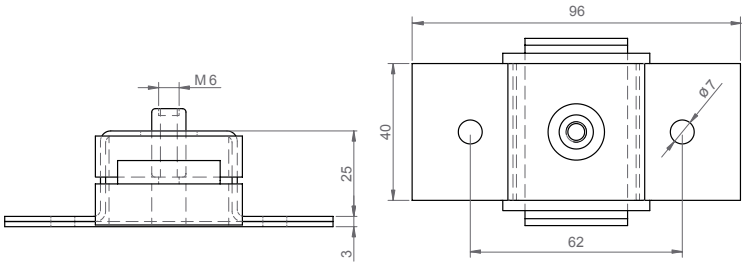
They have a "FAIL SAFE" rugged metal structure, which is overload-proof. Recommended for applications where fire or impact resistance is necessary.

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

EP + Sylomer Type B

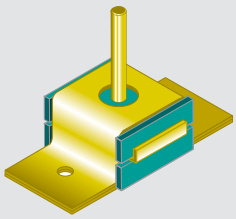
It is secured to the wall by means of two holes. It has a female M6 metal insert.

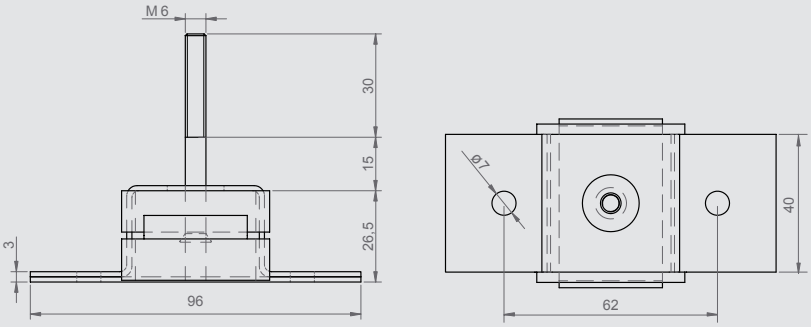




EP + Sylomer Type A

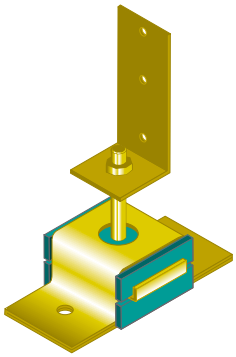
It is secured to the wall by means of two holes. It has a female M6 metal insert.

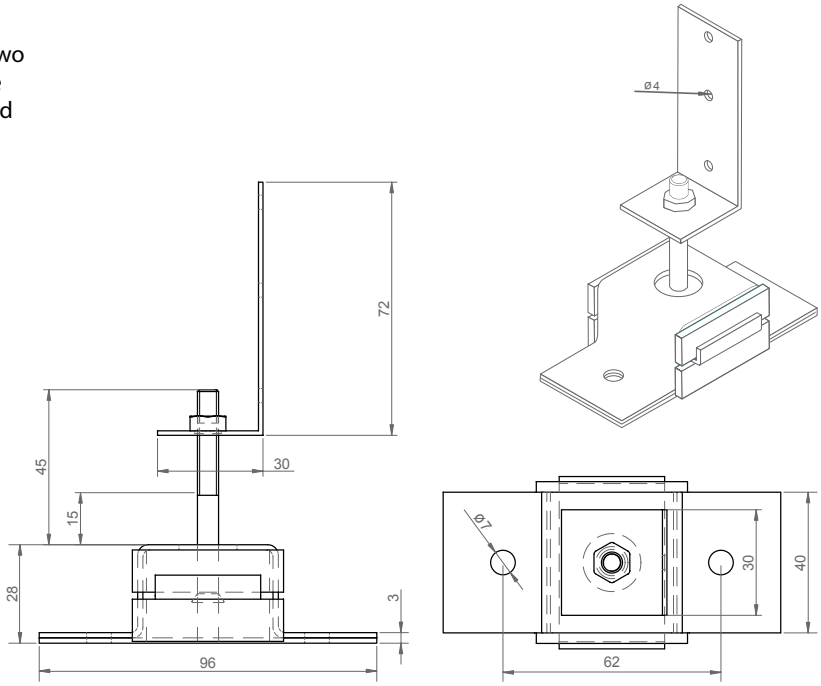




EP400 + Sylomer

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.

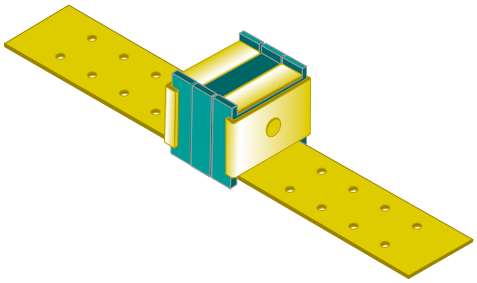


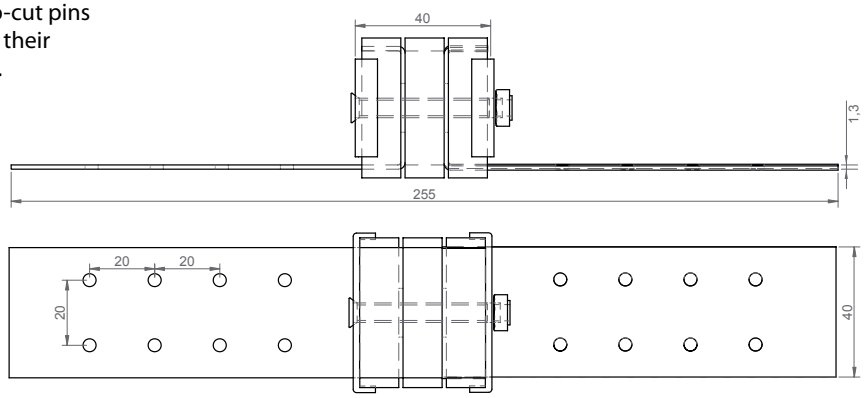


EP + SYLOMER® MOUNTS: MODELS AND DIMENSIONS

EP 600 + Sylomer

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



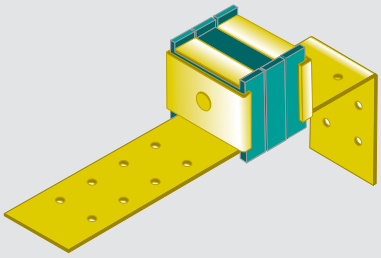


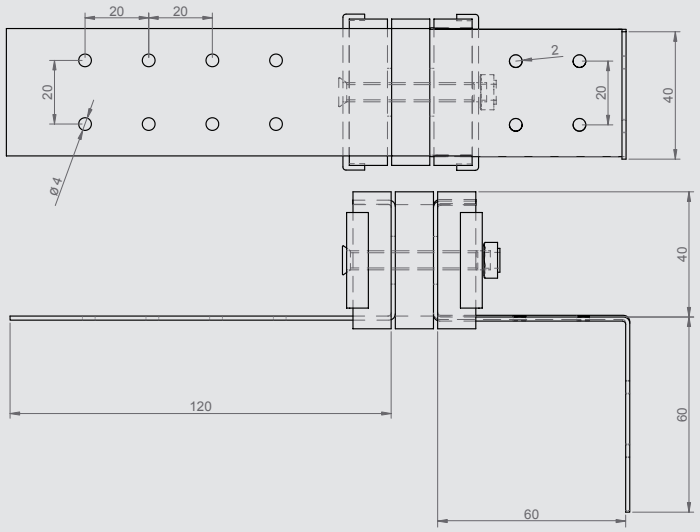
EP 650 + Sylomer

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.

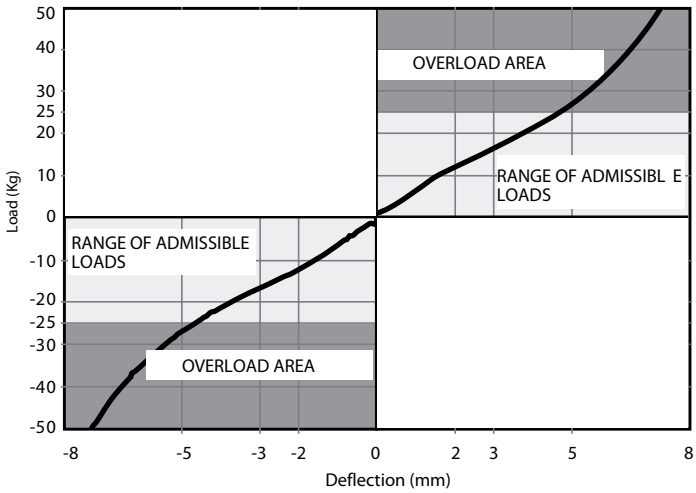
Contact us if you require a product more adapted to your building technique.



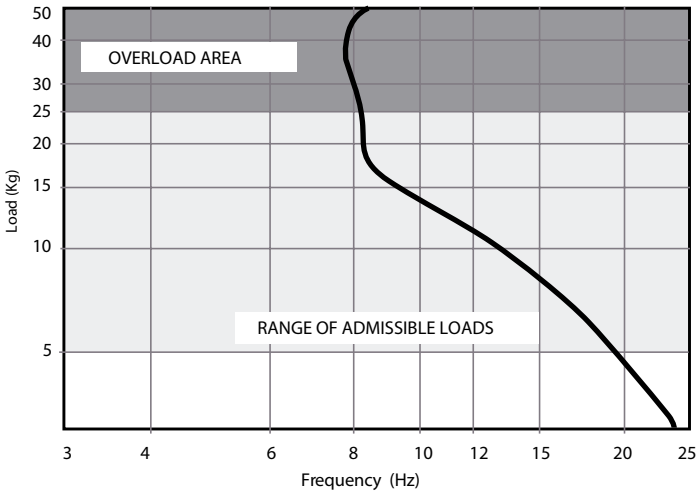


TECHNICAL CHARACTERISTICS

LOAD DEFLECTION GRAP H
EP Akustik + Sylomer 25

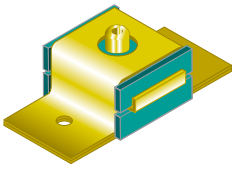
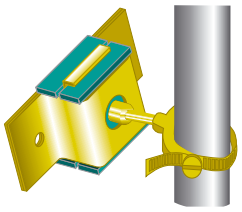
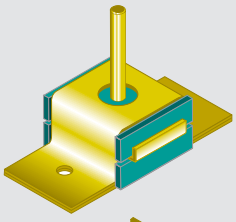
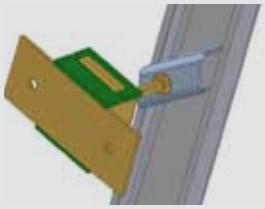
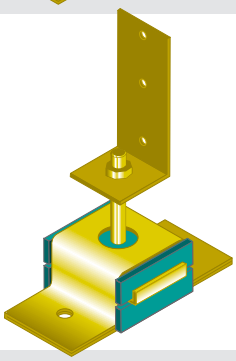
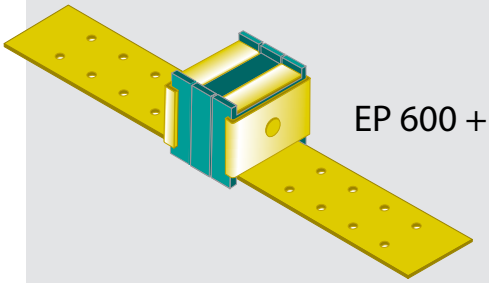
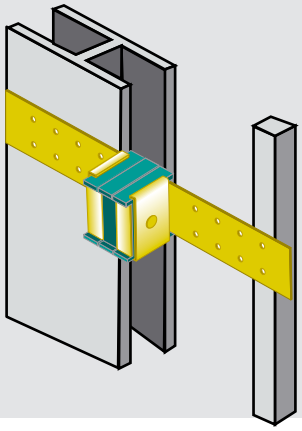
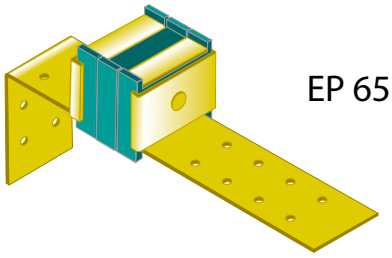
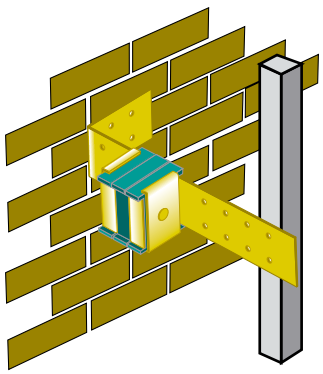


NATURAL FREQUENCY GRAP H
EP Akustik + Sylomer 25



Akustik + sylomer by getzner

EP + SYLOMER® MOUNTS: RANGE

DESCRIPTION	DESCRIPTION ASSEMBLY EXAMPLES	(Kg) MAX. LOAD	REF.
 EP + Sylomer Type B		25	23701
 EP + Sylomer Type A		25	23703
 EP400 + Sylomer		25	23705
 EP 600 + Sylomer		25	23707
 EP 650 + Sylomer		25	23709

EP + SYLOMER® MOUNTS: APPLICATIONS

Palacio Euskalduna Bilbao

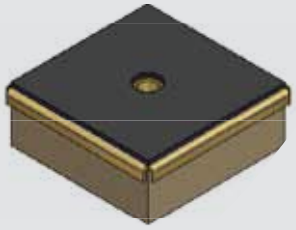
Music School Helsinki

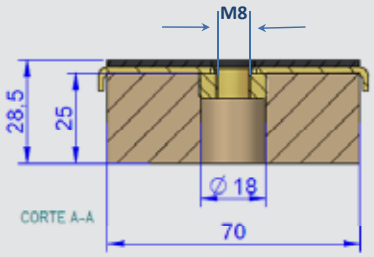
TSR + SYLOMER®: MODELS AND DIMENSIONS

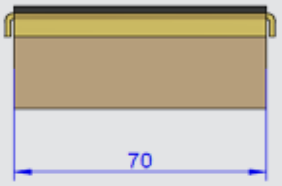
PRODUCT DESCRIPTION

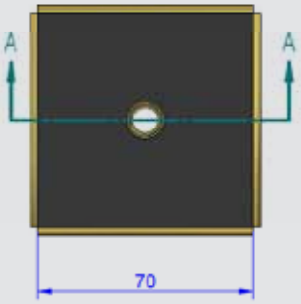
The AMC-MECANOCAUCHO type TSR mounts incorporate a resilient polyurethane compound for antivibration purposes called Sylomer®.
The TSR mounts can be fixed mechanically thanks to the central M8 threaded hole that is welded to a metal part that incorporates an anticorrosive coating (RoHs approved).

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.

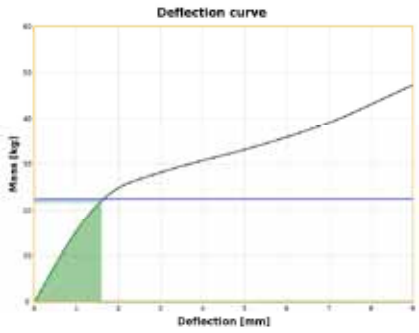




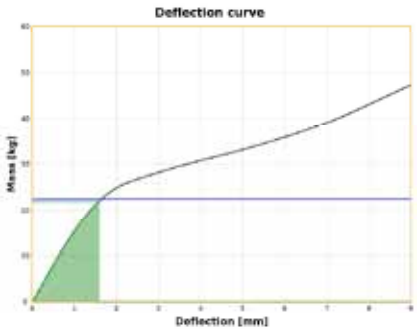




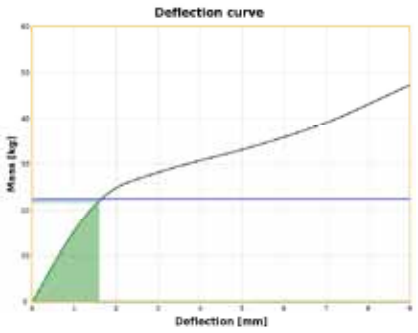
TSR 55



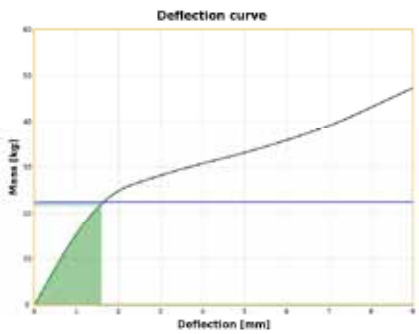
TSR 110



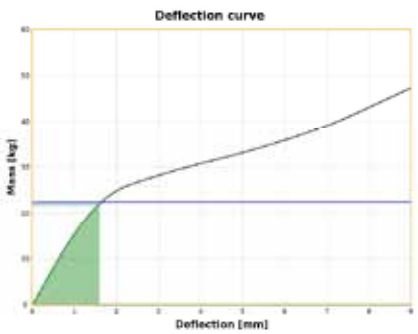
TSR 220



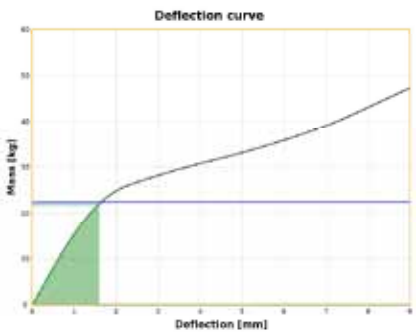
TSR 450



TSR 850

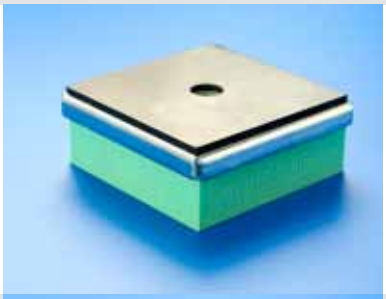
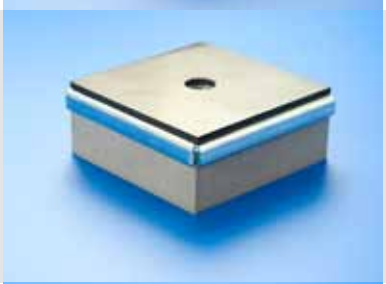
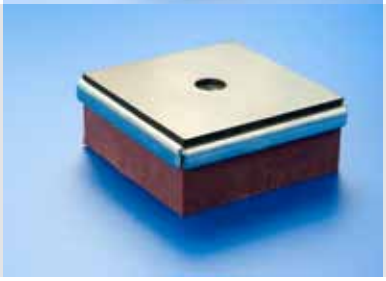


TSR 1200



Akustik + sylomer®

TSR + SYLOMER®: RANGE

DESCRIPTION		SUMMARY			(Kg). Max.Load.	REF.
	TSR 55 + Sylomer®	Max. Kg. 25Kg K Dyn 0,16 kN/mm	Deflection 1,6mm E Modulus 0,87 N/mm²	Nat.Freq. 13,6Hz	25	157001
	SRS 110 + Sylomer®	Max. Kg. 45Kg K Dyn 0,23 kN/mm	Deflection 2,1mm E Modulus 1,25 N/mm²	Nat.Freq. 11,5Hz	45	157002
	SRS 220 + Sylomer®	Max. Kg. 76Kg K Dyn 0,38 kN/mm	Deflection 2,1mm E Modulus 2,03 N/mm²	Nat.Freq. 11,2Hz	76	157003
	SRS 450 + Sylomer®	Max. Kg. 156Kg K Dyn 0,67 kN/mm	Deflection 2,7mm E Modulus 3,58 N/mm²	Nat.Freq. 10,4Hz	156	157004
	SRS 850 + Sylomer®	Max. Kg. 259Kg K Dyn 1,28 kN/mm	Deflection 2,9mm E Modulus 6,9 N/mm²	Nat.Freq. 11,2Hz	259	157005
	SRS 1200 + Sylomer®	Max. Kg. 420Kg K Dyn 2,05 kN/mm	Deflection 4,6mm E Modulus 11,04 N/mm²	Nat.Freq. 11,1Hz	420	157006

FZH + SYLOMER® FLOOR MOUNTS

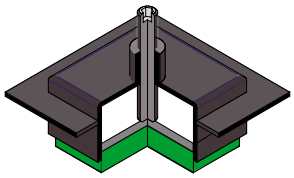
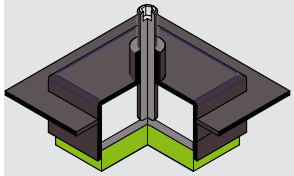
PRODUCT DESCRIPTION

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.

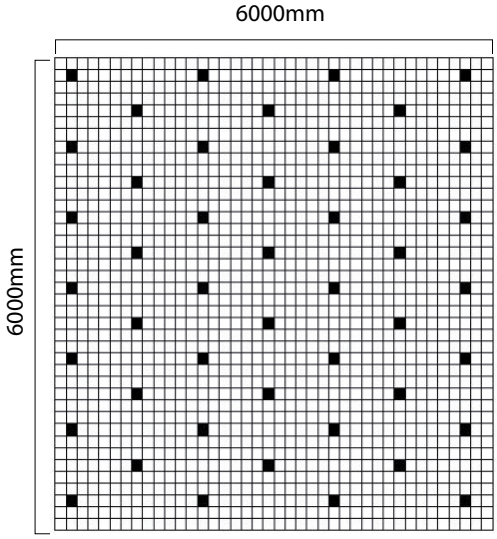
The AMC-MECANOCAUCHO type FZH mounts can be manufactured in different densities of Sylomer to match the natural frequency needed on the application.

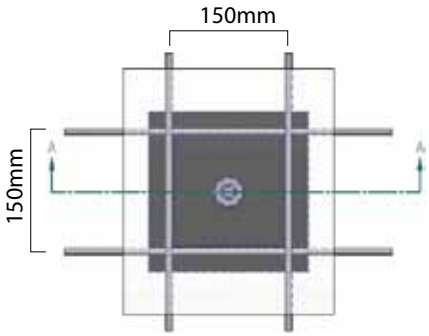
The process of leveling is simple and effective. The density of mount per m^2 is 1.12 and the distance between the mounts is 0.9m.

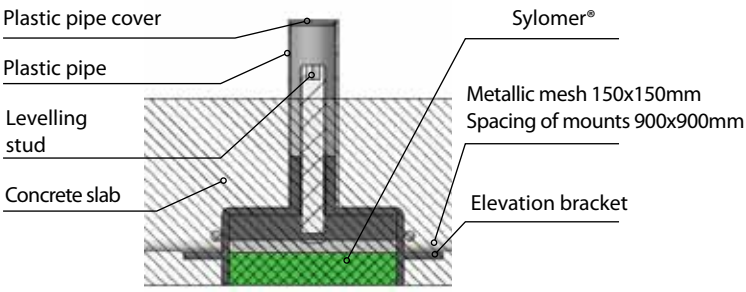
	DESCRIPTION	SUMMARY	(Kg) MAX. LOAD	REF.
	FZH mounts + Sylomer®280	Concrete embedded Jack up mounts, designed for the antivibration suspension of slabs.	280	176500
	FZH mounts + Sylomer®480	Concrete embedded Jack up mounts, designed for the antivibration suspension of slabs.	480	176500

INSTALLATION

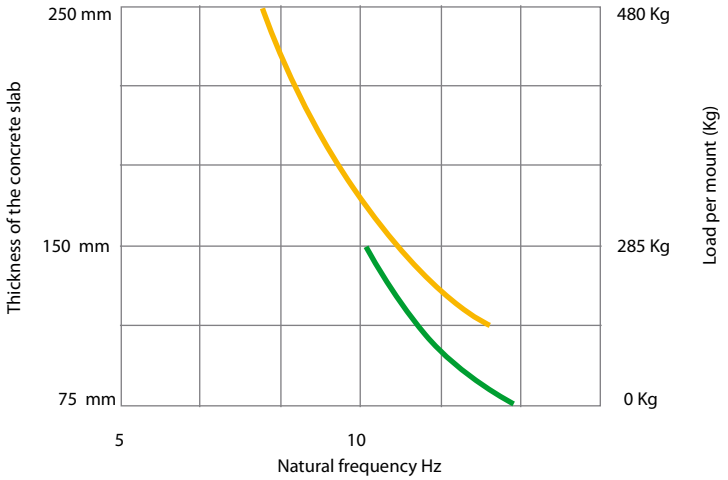
The technical dpt of AMC-MECANOCAUCHO can advise on the optimum installation of these mounts.







TYPES OF SYLOMER®



CREEPING AND LONG-TERM BEHAVIOUR

Sylomer® 280

Fig.1

"Creeping" Behaviour

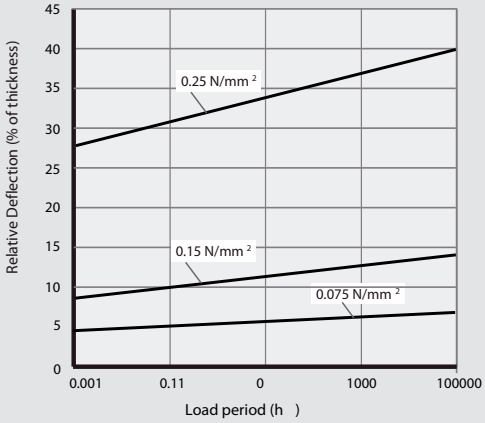
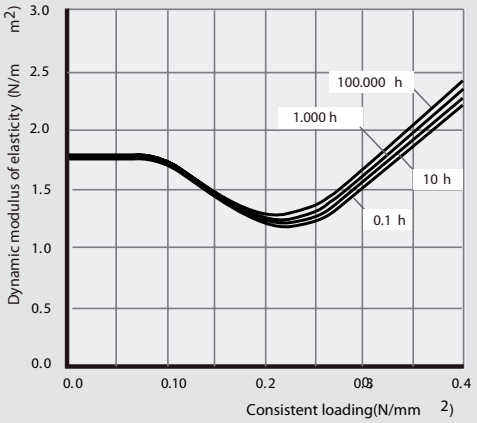


Fig.2

Dynamic modulus of elasticity at long term loading



Sylomer® 480

Fig.3

"Creeping" Behaviour

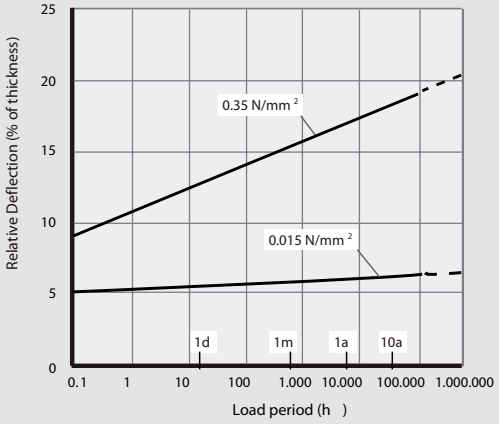
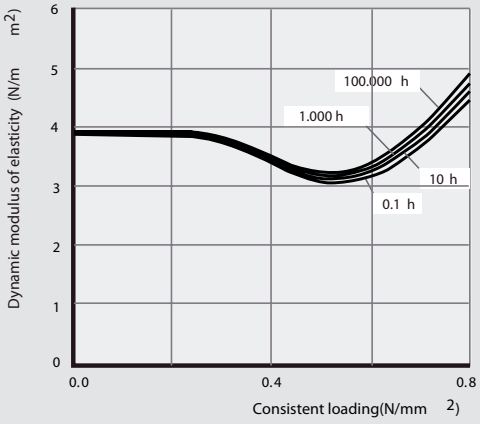


Fig.4

Dynamic modulus of elasticity at long term loading



Akustik + sylomer by getzner

FZH + SYLOMER® FLOOR MOUNTS

INSTALLATION STEPS



Conditioning the premise and installation of the mounts.



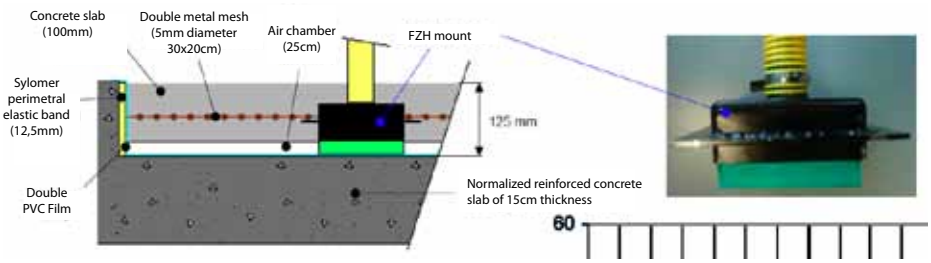

Installation of reinforced concrete.




Levelling.


Height adjustement.

COMPARATIVE TESTS AT THE LABEIN TECHNOLOGY CENTRE



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

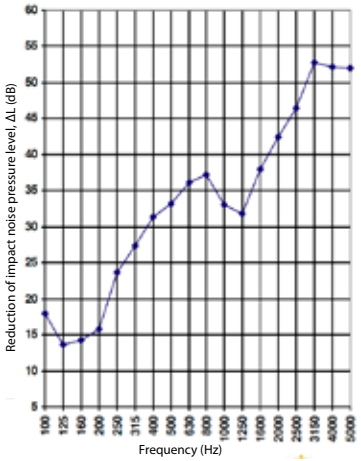
Laboratory measurements

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: 64.7m^3
Volume of the source room: 53.6m^3
Surface of the test specimen: 13.86m^2 (3.3x4.2m)
Estimated specific mass: 250Kg/m^2
Chamber temperature:17.3 C°
Chamber Hygrometry: 77%

Weighted gain according to UNE-EN ISO 717-2:1997 ΔL_w ($C_{I,\Delta}$): 34 (-11) dB

These results rely on the realized tests under an artificial source under Laboratory conditions (engineering method)
* Ln ≤ indicated value and ΔL ≥ indicated value (measurement limits)



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-	63,6	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

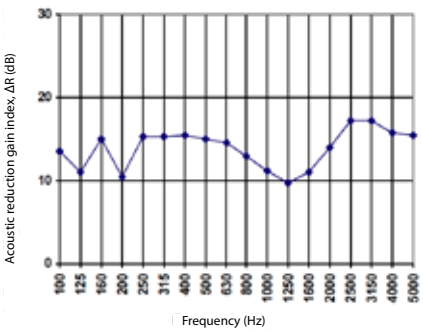
Test specimen: Floating reinforced concrete slab of 100mm thickness, elevated at 25mm with a system of antivibration mounts as described on the above picture.
Employed supporting slab: Reinforced concrete slab of 15cm thickness, tested in 26/06/09 ($R_{WITHOUT}$)

Volume of the receiving room: 64.7m^3
Volume of the source room: 53.6m^3
Surface of the test specimen: 13.86m^2 (3.3x4.2m)
Estimated specific mass: 250Kg/m^2
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

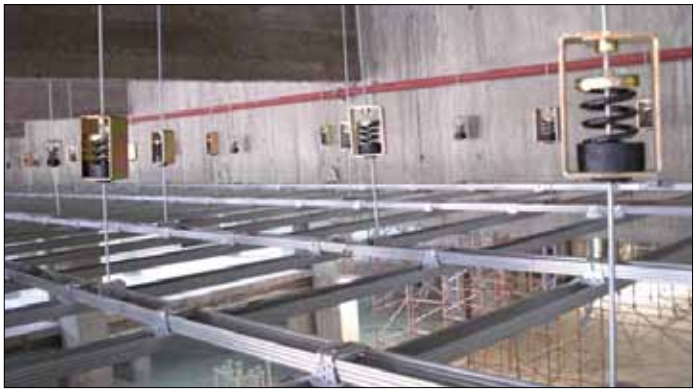
Evaluation based in laboratory measurements according to engineering method.
* R_{With} and ΔR ≥ indicated value (measurements limits).



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

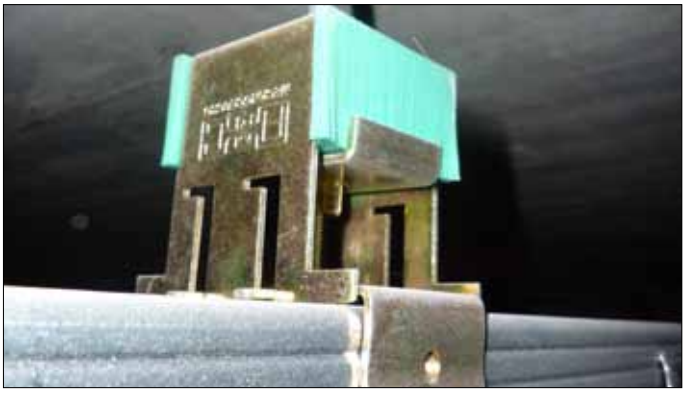
Alfortville Recording Studio.



Sheraton Casablanca Hotel.

Ep+Sylomer Type 2.

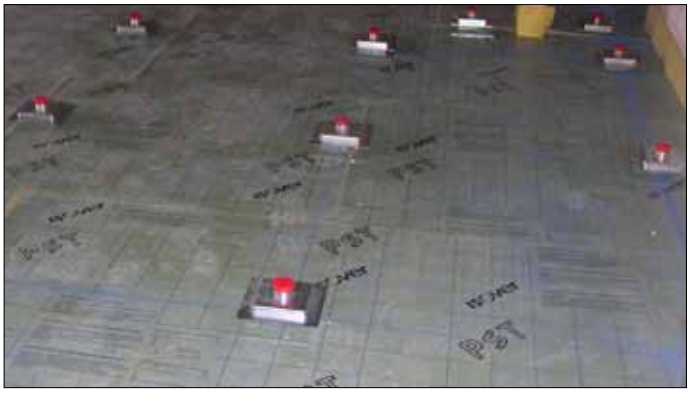
AKUSTIK Super T-60+Sylomer 30 type B
used on a recording studio.



APPLICATIONS

Bier House in Finland.

Application of Akustik+Sylomer mounts
with different plasterboard beams.



FZH mounts being installed on a recording studio that is on the last floor of an Appartment block.

FZH mounts being levelled on a recording studio that is on the last floor of an Appartment block.

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
Country: France

Project: CINEMA PATHÉ LINGOTTO
Country: Italy

Project: MAISON
DES MUSIQUES AMPLIFIÉES
Country: France

Project: ALOUETTES
ARDIN ALFORTVILLE
Country: France

Project: PÉPINIÈRE D'ENTREPRISES
FRICHE BELLE DE MAI
Country: France

Project: AGF ASSURANCE OFFICES
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Project: CINÉMA LES AMBASSADEURS
Country: France

Project: CASA DA MUSICA
Country: Portugal

Project: CINEMA MAIASHOPPING
Country:Portugal

Project: PALACIO EUSKALDUNA
Country: Spain

Project: BALUARTE AUDITORIO DE
NAVARRA
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Project: TEATRO LICEO DE BARCELONA
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Project: LAUREN CINEMA THX
Country: Spain

Project: AC HOTELES
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Project: LAUREN CINEMA THX
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Country: France

Project: JDC CENTER LA SOULAIE
Country: France

Project: TEATRO ANESIS
Country: Greece

Project: RECORDING STUDIO
Country: Finland

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

MECANOCAUCHO

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