Contents

Presentation .................................................................................................................. Page 02

AKUSTIK + Sylomer®

Comparative tests at the Labein technology centre ................ Page 04
Behaviour at high and low frequencies ................................................ Page 07
Akustik + Sylomer® ................................................................. Page 08
Gran Akustik + Sylomer® ............................................. Page 14
SRS + Sylomer® ............................................................... Page 18
EP + Sylomer® Mounts .......................................................... Page 20
TSR + Sylomer® ............................................................... Page 24
FHZ + Sylomer® Floor Mounts ........................................ Page 26

Applications ................................................................................................................. Page 30
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 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 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 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-MECANOCARCHO 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.
COMPARATIVE TESTS AT THE LABEIN TECHNOLOGY CENTRE

Akustik+Sylomer® is a 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 airborne 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® 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 100 Hz and 5 KHz is that which is specified by the Basic Spanish Building Standard: NBE-CA 88 “Acoustic Conditions”.

The results and the descriptive reports can be downloaded free of charge from www.akustik.com
COMPARATIVE RESULTS OF THE TEST BETWEEN A SUSPENDED CEILING WITH AND WITHOUT AKUSTIK+SYLON®.

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
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

<table>
<thead>
<tr>
<th>RA sound isolation index</th>
<th>Without Akustik + sylomer® suspensions</th>
<th>With rubber suspensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 plasterboard</td>
<td>70.4 dB</td>
<td>70.8 dB</td>
</tr>
<tr>
<td>2 plasterboard</td>
<td>71.3 dB</td>
<td>70.3 dB</td>
</tr>
<tr>
<td>3 plasterboard</td>
<td>72.3 dB</td>
<td>71.3 dB</td>
</tr>
</tbody>
</table>

### Table 3

#### False ceiling with 1 plasterboard

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Akustik + sylomer®</th>
<th>Rubber</th>
</tr>
</thead>
<tbody>
<tr>
<td>160 Hz.</td>
<td>58.3 dB</td>
<td>57.5 dB</td>
</tr>
<tr>
<td>250 Hz.</td>
<td>68.4 dB</td>
<td>66 dB</td>
</tr>
<tr>
<td>500 Hz.</td>
<td>80.3 dB</td>
<td>79.1 dB</td>
</tr>
</tbody>
</table>

#### False ceiling with 2 plasterboards

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Akustik + sylomer®</th>
<th>Rubber</th>
</tr>
</thead>
<tbody>
<tr>
<td>160 Hz.</td>
<td>57 dB</td>
<td>56.9 dB</td>
</tr>
<tr>
<td>250 Hz.</td>
<td>70 dB</td>
<td>68 dB</td>
</tr>
<tr>
<td>500 Hz.</td>
<td>81.5 dB</td>
<td>81.1 dB</td>
</tr>
</tbody>
</table>

#### False ceiling with 3 plasterboards

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Akustik + sylomer®</th>
<th>Rubber</th>
</tr>
</thead>
<tbody>
<tr>
<td>160 Hz.</td>
<td>60.4 dB</td>
<td>58.5 dB</td>
</tr>
<tr>
<td>250 Hz.</td>
<td>69.4 dB</td>
<td>67 dB</td>
</tr>
<tr>
<td>500 Hz.</td>
<td>82.4 dB</td>
<td>81.1 dB</td>
</tr>
</tbody>
</table>
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® Mounds**

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 9.9 Hz. 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® Mounds at Low Frequencies**

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 20,000 Hz. 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.

**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.
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® microcellular 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 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.
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.

**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**

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

2. The “SUPER” security system admits the possibility of inserting a blocking screw.
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.
<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>SUMMARY</th>
<th>(Kg) MAX. LOAD</th>
<th>REF.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akustik 1 + Sylomer®30 Type A</td>
<td>Metal armor of the Akustik 1 secured to the ceiling with two holes and an M6 male fixing type (Type A)</td>
<td>30</td>
<td>23501</td>
</tr>
<tr>
<td>Akustik 3 + Sylomer®30 Type A</td>
<td>Metal armor of the akustik 3 secured to the ceiling by an M6 screw and with a nut.</td>
<td>30</td>
<td>23503</td>
</tr>
<tr>
<td>Akustik 4 + Sylomer®30 Type A</td>
<td>Metal armor of the Akustik 4 secured to the ceiling by an M6 screw.</td>
<td>30</td>
<td>23505</td>
</tr>
<tr>
<td>Akustik Rapid + Sylomer®30 Type A</td>
<td>Metal armor of the Akustik rapid secured to the ceiling by an M6 screw.</td>
<td>30</td>
<td>23507</td>
</tr>
<tr>
<td>Akustik Safety + Sylomer®30 Type A</td>
<td>Metal armor of the Akustik Safety secured to the ceiling by an M6 screw.</td>
<td>30</td>
<td>23508</td>
</tr>
<tr>
<td>Akustik 1 + Sylomer®30 Type B</td>
<td>Metal armor of the Akustik 3 secured to the ceiling by a welded M6 nut.</td>
<td>30</td>
<td>23509</td>
</tr>
<tr>
<td>Akustik 3 + Sylomer®30 Type B</td>
<td>Metal armor of the Akustik 4 secured to the ceiling by a welded M6 nut.</td>
<td>30</td>
<td>23511</td>
</tr>
<tr>
<td>Akustik 4 + Sylomer®30 Type B</td>
<td>Metal armor of the Akustik Rapid secured to the ceiling by a welded M6 nut.</td>
<td>30</td>
<td>23513</td>
</tr>
<tr>
<td>Akustik Rapid + Sylomer®30 Type B</td>
<td>Metal armor of the Akustik Safety secured to the ceiling by an M6 screw.</td>
<td>30</td>
<td>23515</td>
</tr>
<tr>
<td>Akustik Safety + Sylomer®30 Type B</td>
<td>Metal armor of the Akustik Safety secured to the ceiling by a welded M6 nut.</td>
<td>30</td>
<td>23516</td>
</tr>
<tr>
<td>DESCRIPTION</td>
<td>SUMMARY</td>
<td>(Kg) MAX. LOAD</td>
<td>REF.</td>
</tr>
<tr>
<td>-------------</td>
<td>---------</td>
<td>----------------</td>
<td>------</td>
</tr>
<tr>
<td>Akustik 1 + Sylomer®75 Type A</td>
<td>Metal armor of the Akustik 1 secured to the ceiling with two holes and an M6 male fixing type (Type A).</td>
<td>75</td>
<td>23517</td>
</tr>
<tr>
<td>Akustik 3 + Sylomer®75 Type A</td>
<td>Metal armor of the akustik 3 secured to the ceiling by an M6 screw and with a nut.</td>
<td>75</td>
<td>23519</td>
</tr>
<tr>
<td>Akustik 4 + Sylomer®75 Type A</td>
<td>Metal armor of the Akustik 4 secured to the ceiling by an M6 screw.</td>
<td>75</td>
<td>23521</td>
</tr>
<tr>
<td>Akustik Rapid + Sylomer®75 Type A</td>
<td>Metal armor of the Akustik Rapid secured to the ceiling by an M6 screw.</td>
<td>75</td>
<td>23523</td>
</tr>
<tr>
<td>Akustik Safety + Sylomer®75 Type A</td>
<td>Metal armor of the Akustik 1 secured to the ceiling by a welded M6 nut.</td>
<td>75</td>
<td>23524</td>
</tr>
<tr>
<td>Akustik 1 + Sylomer®75 Type B</td>
<td>Metal armor of the Akustik 3 secured to the ceiling by a welded M6 nut.</td>
<td>75</td>
<td>23525</td>
</tr>
<tr>
<td>Akustik 3 + Sylomer®75 Type B</td>
<td>Metal armor of the Akustik 4 secured to the ceiling by a welded M6 nut.</td>
<td>75</td>
<td>23527</td>
</tr>
<tr>
<td>Akustik 4 + Sylomer®75 Type B</td>
<td>Metal armor of the Akustik Rapid secured to the ceiling by a welded M6 nut.</td>
<td>75</td>
<td>23529</td>
</tr>
<tr>
<td>Akustik Rapid + Sylomer®75 Type B</td>
<td>Metal armor of the Akustik Safety secured to the ceiling by an M6 screw.</td>
<td>75</td>
<td>23531</td>
</tr>
<tr>
<td>Akustik Safety + Sylomer®75 Type B</td>
<td>Metal armor of the Akustik Safety secured to the ceiling by a welded M6 nut.</td>
<td>75</td>
<td>23533</td>
</tr>
<tr>
<td>DESCRIPTION</td>
<td>SUMMARY</td>
<td>(Kg) MAX. LOAD</td>
<td>REF.</td>
</tr>
<tr>
<td>-------------</td>
<td>---------</td>
<td>----------------</td>
<td>------</td>
</tr>
<tr>
<td>Akustik Super T60 + Sylomer®30 Type A</td>
<td>Metal armor of the Akustik Super secured to the ceiling by an M6 screw.</td>
<td>30</td>
<td>23831</td>
</tr>
<tr>
<td>Akustik Super T60 + Sylomer®30 Type B</td>
<td>Metal armor of the Akustik Super secured to the ceiling by an M6 screw.</td>
<td>30</td>
<td>23832</td>
</tr>
<tr>
<td>Akustik Super T47 + Sylomer®30 Type A</td>
<td>Metal armor of the Akustik Super secured to the ceiling by an M6 screw.</td>
<td>30</td>
<td>23821</td>
</tr>
<tr>
<td>Akustik Super T47 + Sylomer®30 Type B</td>
<td>Metal armor of the Akustik Super secured to the ceiling by an M6 screw.</td>
<td>30</td>
<td>23822</td>
</tr>
<tr>
<td>Akustik Super T60 + Sylomer®75 Type A</td>
<td>Metal armor of the Akustik Super secured to the ceiling by an M6 screw.</td>
<td>75</td>
<td>23851</td>
</tr>
<tr>
<td>Akustik Super T60 + Sylomer®75 Type B</td>
<td>Metal armor of the Akustik Super secured to the ceiling by an M6 screw.</td>
<td>75</td>
<td>23852</td>
</tr>
<tr>
<td>Akustik Super T47 + Sylomer®75 Type A</td>
<td>Metal armor of the Akustik Super secured to the ceiling by an M6 screw.</td>
<td>75</td>
<td>23841</td>
</tr>
<tr>
<td>Akustik Super T47 + Sylomer®75 Type B</td>
<td>Metal armor of the Akustik Super secured to the ceiling by an M6 screw.</td>
<td>75</td>
<td>23842</td>
</tr>
</tbody>
</table>
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® microcellular 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.

**PRODUCT DESCRIPTION**

- The ceiling with two holes.
- It is secured directly to the ceiling by means of a screw.
- 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.

**METAL ARMOR**

**SYLOMER**

**FIXING**

**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.

TYPES DE SYLOMER

LOAD DEFLECTION GRAPHS
Gran Akustik + Sylomer 60

NATURAL FREQUENCY GRAPHS
Gran Akustik + Sylomer 60

LOAD DEFLECTION GRAPHS
Gran Akustik + Sylomer 150

NATURAL FREQUENCY GRAPHS
Gran Akustik + Sylomer 150
### GRAN AKUSTIK + SYLOMER®: RANGE

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>SUMMARY</th>
<th>(Kg) MAX. LOAD</th>
<th>REF.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gran Akustik 1 + Sylomer®60 Type A</td>
<td>It is secured directly to the ceiling by means of two holes and to the profile by means of a “type A” screw.</td>
<td>60</td>
<td>23601</td>
</tr>
<tr>
<td>Gran Akustik 2 + Sylomer®60 Type A</td>
<td>It is secured directly to the ceiling by means of one screw and to the profile by means of a “type A” screw.</td>
<td>60</td>
<td>23605</td>
</tr>
<tr>
<td>Gran Akustik 3 + Sylomer®60 Type A</td>
<td>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.</td>
<td>60</td>
<td>23607</td>
</tr>
<tr>
<td>Gran Akustik 1 + Sylomer®60 Type B</td>
<td>It is secured to the ceiling with two holes and to the profile by means of a “type B” female fixing.</td>
<td>60</td>
<td>23609</td>
</tr>
<tr>
<td>Gran Akustik 2 + Sylomer®60 Type B</td>
<td>It is secured to the ceiling by a screw and to the profile by a “type B” female fixing.</td>
<td>60</td>
<td>23613</td>
</tr>
<tr>
<td>Gran Akustik 3 + Sylomer®60 Type B</td>
<td>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.</td>
<td>60</td>
<td>23615</td>
</tr>
<tr>
<td>DESCRIPTION</td>
<td>SUMMARY</td>
<td>(Kg) MAX. LOAD</td>
<td>REF.</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>----------------</td>
<td>------</td>
</tr>
<tr>
<td>Gran Akustik 1 + Sylomer®150 Type A</td>
<td>It is secured directly to the ceiling with two holes and to the profile by means of a “type A” male screw.</td>
<td>150</td>
<td>23617</td>
</tr>
<tr>
<td>Gran Akustik 2 Type A</td>
<td>It is secured directly to the ceiling with one screw and to the profile by means of a “type A” screw.</td>
<td>150</td>
<td>23621</td>
</tr>
<tr>
<td>Gran Akustik3 + Sylomer®150 Type A</td>
<td>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.</td>
<td>150</td>
<td>23623</td>
</tr>
<tr>
<td>Gran Akustik 1 + Sylomer®150 Type B</td>
<td>It is secured directly to the ceiling by means of two screws and to the profile by means of a “type B” female fixing.</td>
<td>150</td>
<td>23625</td>
</tr>
<tr>
<td>Gran Akustik 2 + Sylomer®150 Type B</td>
<td>It is secured directly to the ceiling by means of one screw and to the profile by means of a “type B” female fixing.</td>
<td>150</td>
<td>23629</td>
</tr>
<tr>
<td>Gran Akustik 3 + Sylomer®150 Type B</td>
<td>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.</td>
<td>150</td>
<td>23631</td>
</tr>
</tbody>
</table>
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.
<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>SUMMARY</th>
<th>(Kg). Max.Load.</th>
<th>REF.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRS 25 + Sylomer®</td>
<td>Sylomer+Steel spring combined hanger.</td>
<td>25</td>
<td>23561</td>
</tr>
<tr>
<td>SRS 50 + Sylomer®</td>
<td>Sylomer+Steel spring combined hanger.</td>
<td>50</td>
<td>23561</td>
</tr>
<tr>
<td>SRS 75 + Sylomer®</td>
<td>Sylomer+Steel spring combined hanger.</td>
<td>75</td>
<td>23561</td>
</tr>
<tr>
<td>SRS 100 + Sylomer®</td>
<td>Sylomer+Steel spring combined hanger.</td>
<td>100</td>
<td>23561</td>
</tr>
<tr>
<td>SRS 125 + Sylomer®</td>
<td>Sylomer+Steel spring combined hanger.</td>
<td>125</td>
<td>23561</td>
</tr>
<tr>
<td>SRS 150 + Sylomer®</td>
<td>Sylomer+Steel spring combined hanger.</td>
<td>150</td>
<td>23561</td>
</tr>
</tbody>
</table>
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 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 GRAPH**
EP Akustik + Sylomer 25

**NATURAL FREQUENCY GRAPH**
EP Akustik + Sylomer 25
## EP + SYLOMER® MOUNTS: RANGE

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>DESCRIPTION ASSEMBLY EXAMPLES</th>
<th>(Kg) MAX. LOAD</th>
<th>REF.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP + Sylomer Type B</td>
<td></td>
<td>25</td>
<td>23701</td>
</tr>
<tr>
<td>EP + Sylomer Type A</td>
<td></td>
<td>25</td>
<td>23703</td>
</tr>
<tr>
<td>EP400 + Sylomer</td>
<td></td>
<td>25</td>
<td>23705</td>
</tr>
<tr>
<td>EP 600 + Sylomer</td>
<td></td>
<td>25</td>
<td>23707</td>
</tr>
<tr>
<td>EP 650 + Sylomer</td>
<td></td>
<td>25</td>
<td>23709</td>
</tr>
</tbody>
</table>
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.
<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>SUMMARY</th>
<th>(Kg). Max.Load.</th>
<th>REF.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSR 55 + Sylomer®</td>
<td>Max. Kg. 25Kg K Dyn 0,16 kN/mm Deflection 1,6mm E Modulus 0,87 N/mm²</td>
<td>25</td>
<td>157001</td>
</tr>
<tr>
<td>SRS 110 + Sylomer®</td>
<td>Max. Kg. 45Kg K Dyn 0,23 kN/mm Deflection 2,1mm E Modulus 1,25 N/mm²</td>
<td>45</td>
<td>157002</td>
</tr>
<tr>
<td>SRS 220 + Sylomer®</td>
<td>Max. Kg. 76Kg K Dyn 0,38 kN/mm Deflection 2,1mm E Modulus 2,03 N/mm²</td>
<td>76</td>
<td>157003</td>
</tr>
<tr>
<td>SRS 450 + Sylomer®</td>
<td>Max. Kg. 156Kg K Dyn 0,67 kN/mm Deflection 2,7mm E Modulus 3,58 N/mm²</td>
<td>156</td>
<td>157004</td>
</tr>
<tr>
<td>SRS 850 + Sylomer®</td>
<td>Max. Kg. 259Kg K Dyn 1,28 kN/mm Deflection 2,9mm E Modulus 6,9 N/mm²</td>
<td>259</td>
<td>157005</td>
</tr>
<tr>
<td>SRS 1200 + Sylomer®</td>
<td>Max. Kg. 420Kg K Dyn 2,05 kN/mm Deflection 4,6mm E Modulus 11,04 N/mm²</td>
<td>420</td>
<td>157006</td>
</tr>
</tbody>
</table>
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.

### PRODUCT DESCRIPTION

**FZH + SYLOMER® FLOOR MOUNTS**

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>SUMMARY</th>
<th>(Kg) MAX. LOAD</th>
<th>REF.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FZH mounts + Sylomer®280</td>
<td>Concrete embedded Jack up mounts, designed for the antivibration suspension of slabs.</td>
<td>280</td>
<td>176500</td>
</tr>
<tr>
<td>FZH mounts + Sylomer®480</td>
<td>Concrete embedded Jack up mounts, designed for the antivibration suspension of slabs.</td>
<td>480</td>
<td>176500</td>
</tr>
</tbody>
</table>

### INSTALLATION

The technical dpt of AMC-MECANOCAUCHO can advise on the optimum installation of these mounts.
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
FZH + SYLOMER® FLOOR MOUNTS

INSTALLATION STEPS

Conditioning the premise and installation of the mounts.

Installation of reinforced concrete.

Levelling.

Height adjustment.
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 Cº
Chamber Hygrometry: 77%

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 ($R_{\text{WITHOUT}}$)

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 Cº
Chamber Hygrometry: 77%
AKUSTIK +

APPLICATIONS

Alfortville Recording Studio.

Sheraton Casablanca Hotel.

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: CINEMA 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
Country: France

Project: CINÉMA LES AMBASSADEURS
Country: France

Project: CASA DA MUSICA
Country: Portugal

Project: CINEMA MAIASHOPPING
Country: Portugal

Project: PALACIO EUSKALDUNA
Country: Spain

Project: BALLUARTE AUDITORIO DE NAVARRA
Country: Spain

Project: TEATRO LICEO DE BARCELONA
Country: Spain

Project: LAUREN CINEMA THX
Country: Spain

Project: AC HOTELES
Country: Spain

Project: LAUREN CINEMA THX
Country: Spain

Project: MULTICINES VALDEPEÑAS
Country: Spain

Project: CENTRO COMERCIAL MIRAMAR
Country: Spain

Project: MAX CENTER CINES
Country: Spain

Project: CINES CORTE INGLES LISBOA
Country: Portugal

Project: CINES CARREFOUR ALICANTE
Country: Spain

Project: CENTRO COMERCIAL VIGO
Country: Spain

Project: CENTRO COMERCIAL BOULEVARD
Country: Spain

Project: STUDIO DE TÉLÉVISION NANTES
Country: France

Project: ZARA INDI TEX
CONRENCE HALL
Country: Spain

Project: FORUM BARCELONA
Country: Spain

Project: TERRA MITICA
Country: Spain

Project: CINEMA MAJESTIC
Country: France

Project: JDC CENTER LA SOULAI E
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.