

Akustik +
sylomer[®]
by getzner

HOTEL

ISOLATION OF
HOTELS

AMC
MECANOCAUCHO

ABOUT AMC MECANOCAUCHO

Aplicaciones Mecánicas del Caucho (AMC) is a company that designs and produces anti-vibration mounts as well as noise insulation composites for the industrial and building sectors.

Since 1969 we have been developing noise and vibration solutions for a wide range of applications. To meet the demands of each project our products combine the properties of different isolating materials such as rubber, metal, springs and Sylomer.

Our dedicated engineering team are on hand to offer technical support with vibration calculations and product advice. On our website akustik.com you will find access to an extensive range of technical data for our products as well as calculation tools such as our acoustic mount selector. This tool allows the input of your system specifications and provides a recommendation of ceiling and floor mounts to meet the requirements of your project. Our library of acoustic test data is also available to view using our dB finder tool, this details the acoustic data we have obtained for various ceiling, wall and floor systems.

With a wide variety of clients served from across the world, we are ready to provide you with a personalised acoustic solution to your problem.



1 MACHINERY ROOM



2 ROOFTOP POOL



AMC Solutions for Hotels

In a hotel, whether for leisure or work, the main objective is the **comfort and relaxation** of the guests. But **noise and vibrations** can cause **serious inconvenience**. They generate negative comments in the networks that lead to loss of customers. It is vital that the highest acoustic comfort is sought at **the design stage**.

ACOUSTIC ISOLATION OF HOTELS



2 POOL

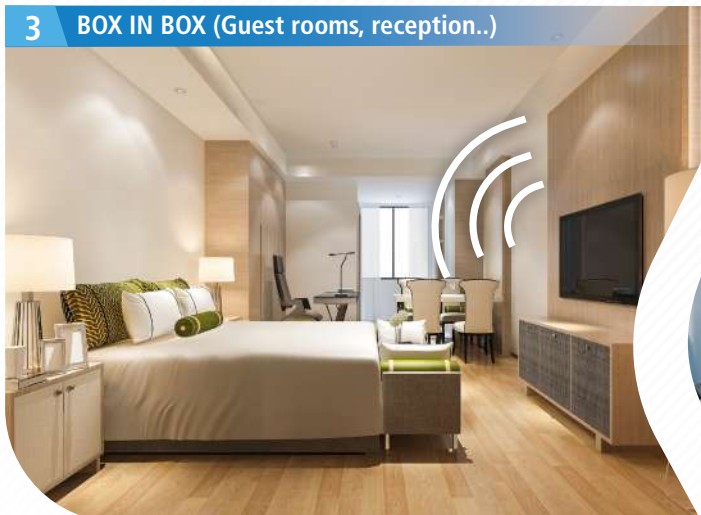
3 BOX IN BOX

4 GYM

1 MACHINERY ROOM



3 BOX IN BOX (Guest rooms, reception..)



4 GYM



MACHINERY ROOMS VIDEO



Machinery rooms in hotels

Solutions for noise and
vibration in hotel machine
rooms

Isolation of Hotels

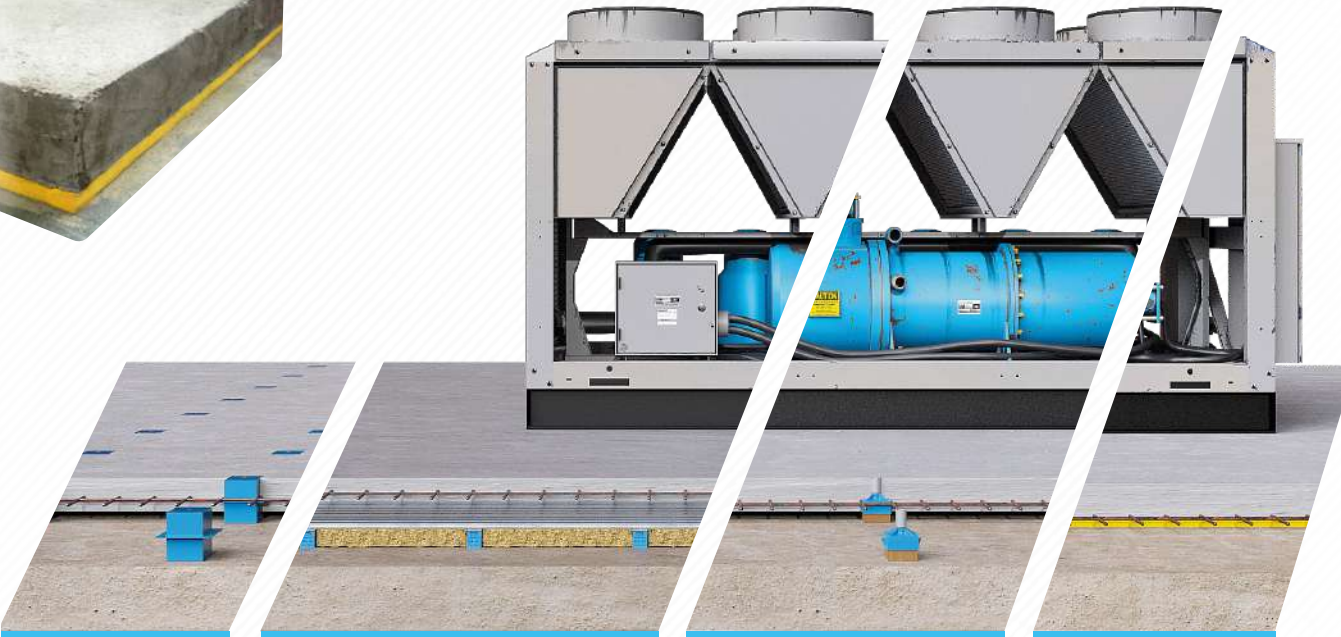
MACHINERY ROOM

FLOATING FLOOR

AMC Mekanocaucho offers **different solutions** for elastically decoupling floors.

SYLOMER

Sylomer is a microcellular polyurethane with very good insulation properties. It is placed under the entire surface of the slab. It is a stable and easy to install solution.



OPTION 1

OPTION 2

OPTION 3

OPTION 4

FZH2M + SYLOMER

FLOOR BLOCK

FZH + SYLOMER

SYLOMER



Isolation of Hotels

MACHINERY ROOM



To ensure **optimum vibration isolation** across the **entire frequency range** it is recommended that a **two stage system is implemented**, the advantages of this are:

First stage - Low frequencies are effectively isolated using spring mounts

Second stage - Medium-high frequencies are isolated with Sylomer

A reinforced concrete slab provides stability and a high mass which requires more energy to excite

Connecting pipes and ducts can be supported on the insulated slab

FIRST STAGE

1



2



SECOND STAGE



SWIMMING POOL INSULATION VIDEO



Swimming Pool

indoors and on rooftops

Solutions for noise
and vibration in hotel
swimming pools



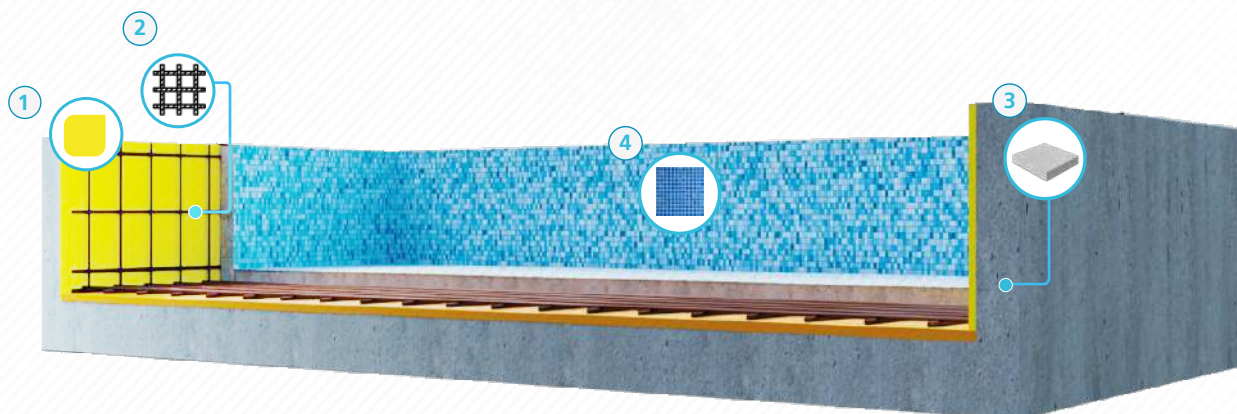
Isolation of Hotels

INDOOR AND ROOFTOP POOLS

If the swimming pool **is not properly insulated**, there can be a **high transmission** of noise and vibrations **to neighbouring flats**

AMC Mekanocaucho has the right tools to calculate and determine which Sylomer density is suitable for each pool. In addition, the customer can count on the advice of our technicians to avoid acoustic bridges.

Suspended **concrete vessel** with **Sylomer** on the entire surface.



- ① Sylomer ② Reinforced concrete ③ Vessel pool ④ Tile



The slab provides inertia to the system, making the system more stable and absorbing part of the vibrations.



The more **the vessel** has an edge, the more inertia it contributes to the system, i.e. the more stable it is and the more it absorbs part of the vibrations.

sylomer
by gotzner

Sylomer is a microcellular polyurethane with very good insulation properties.

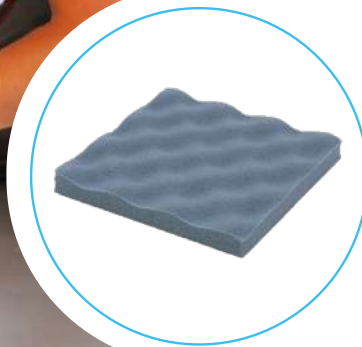


Isolation of Hotels

INDOOR AND ROOFTOP POOLS

Elastically suspending the swimming pool deck

In addition to correctly insulating the pool walls, we believe it is necessary to elastically suspend the pool deck. Depending on the support of the floor, the solution adopted will be in **CONTINUOUS SURFACE, STRAPS, or POINT SUPPORTS**.



Simple system for a floating slab with a small concrete compression layer.

Load capacity

up to 5000 kg/m²

Low-cost system with **50 mm Sylomer suspension**, reaching a natural frequency of around 8 Hz.

8 Hz

50mm
Sylomer



Flexible system with a wide range of load capacity and frequencies using different Sylomer thicknesses.

BOX-IN-BOX VIDEO INSULATION



Box in box in the hotel rooms

Noise and vibration
solutions for hotel
rooms

Isolation of Hotels

BOX IN BOX

AMC Mekanocaucho has a wide range of products for all types of joints and profiles.

Box in Box Solutions

To completely decouple the rooms where we have the noise of the equipment, gym room, bedrooms, restaurant etc. it is necessary to make a **Box in Box**. In addition to elastically decoupling the floor, it is also necessary to insulate the walls and ceiling.

WALL



EP 700 + SYLOMER®



EP 500 + SYLOMER®



SRS + SYLOMER®

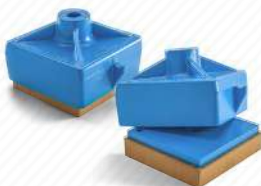


AKUSTIK SUPER T60 + SYLOMER®



AKUSTIK 1 NONIUS + SYLOMER®

FLOOR



FZH + SYLOMER®



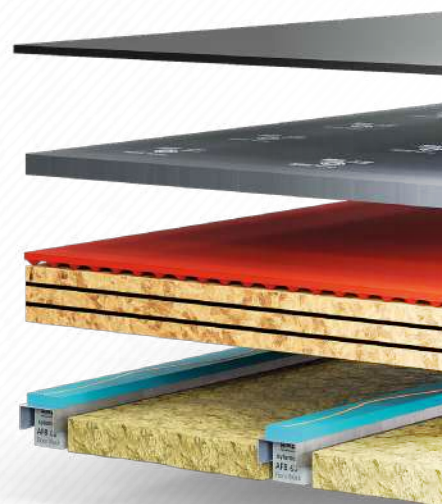
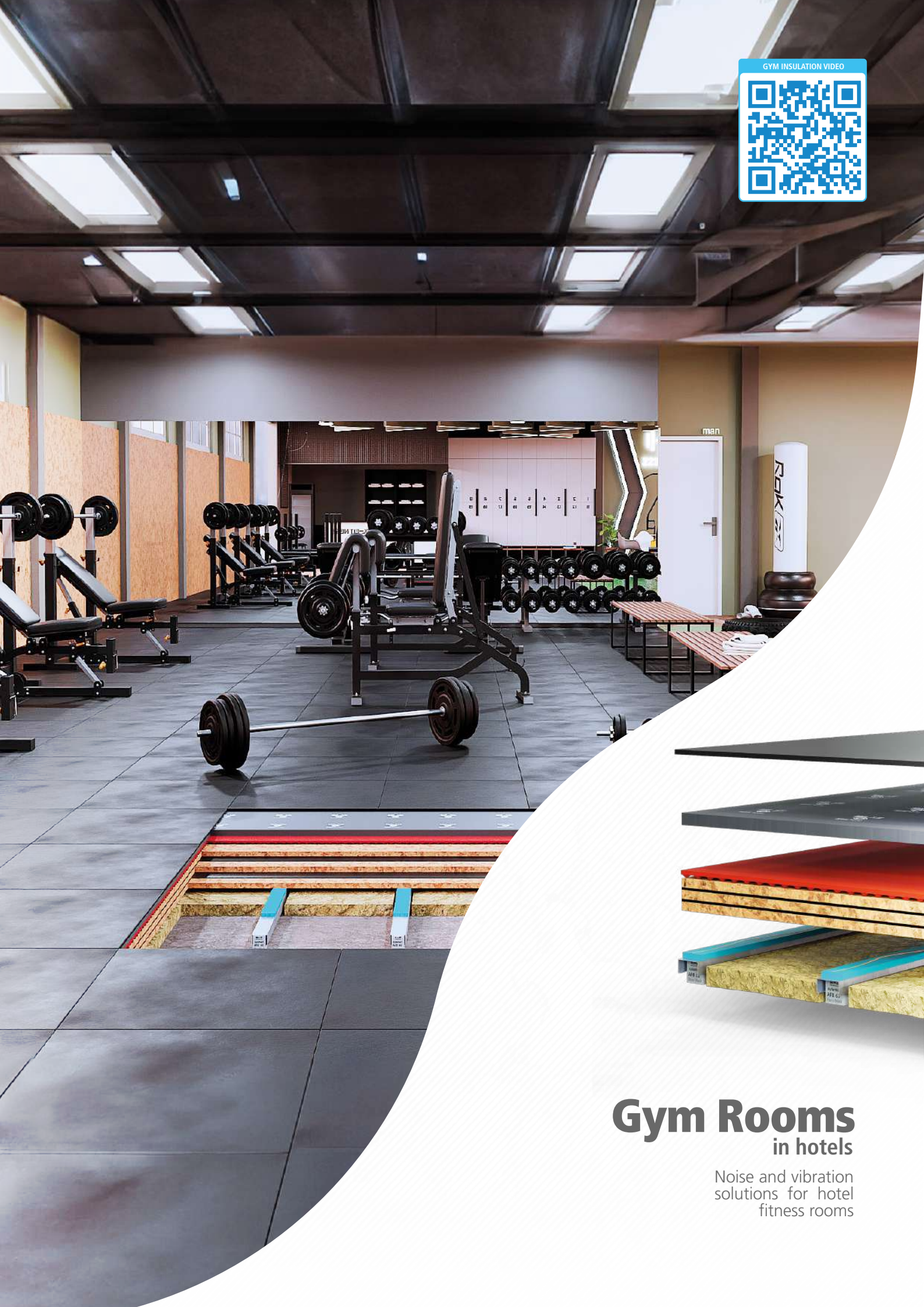
FLOOR BLOCKS



AKUSTIK + SYLOMER® FLOOR MOUNT



GYM INSULATION VIDEO



Gym Rooms in hotels

Noise and vibration
solutions for hotel
fitness rooms

Isolation of Hotels

GYMS

FLOATING FLOOR

Gyms are a major source of noise and vibrations if they are not properly insulated. **AMC Mekanocaucho** offers solutions for different types of floors.



Gym Dry Floor

Dry floor system for the insulation of gyms.



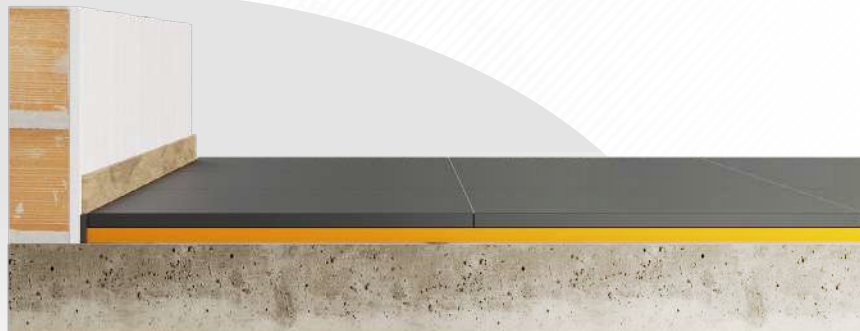
Wet Construction

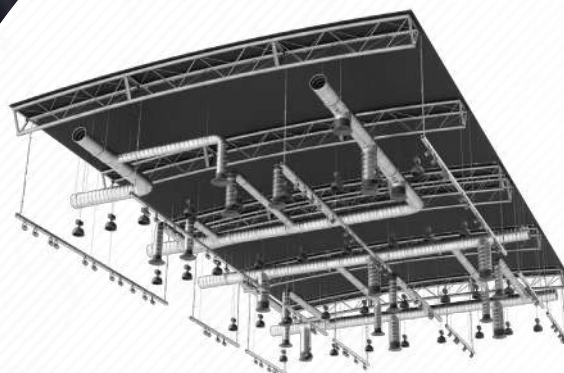
Concrete screed floors

Concrete screed system for the insulation of gyms.

Shock Absorb G-Fit

Interlayer material in finished floors for the insulation of gyms.





Cold Air Ducts in hotels

Solutions for noise and
vibration in hotel air ducts

Isolation of Hotels

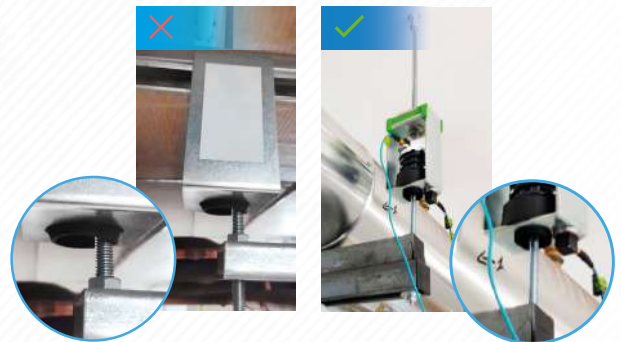
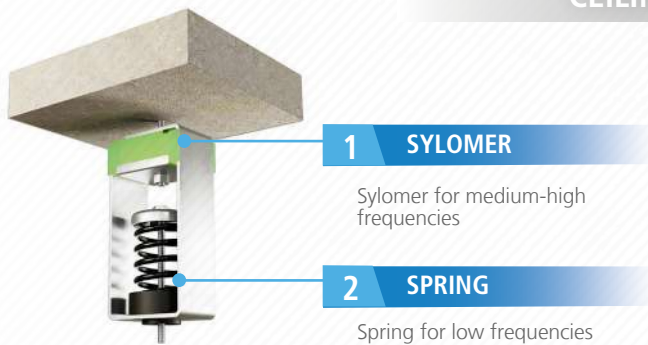
COLD AIR DUCTS

Air ducts Isolation

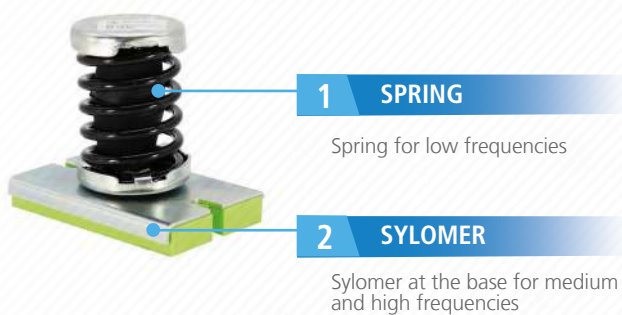
A **poorly insulated** duct transmits **vibrations and noise**. If the duct insulation is not well executed, the insulation of the entire **machine itself can be severely compromised**.

This page shows the different types of supports used for duct insulation.

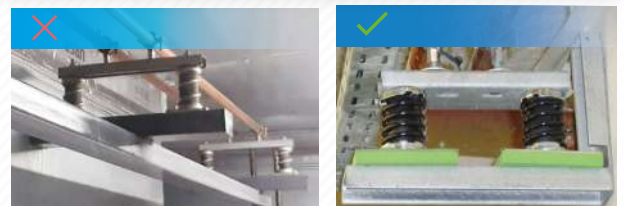
CEILING MOUNTS



BEARING MOUNTS



When it is not possible to suspend ducts from the ceiling, it is very typical to use spring-type support brackets to insulate the ducts. For this purpose, profiles are used to mount the springs.



WALL MOUNTS

EP + SYLOMER



AKUSTIK PIPE OMEGA

This anti vibration mount is made of Sylomer and we can make holes of different dimensions to suit each duct.





Rooftop in hotels

Noise and vibration solutions
for hotel rooftops

Isolation of Hotels

ROOFTOP

ROOFTOP INSULATION

It is a growing trend in hotels to have restaurants or chill out areas. If not properly insulated, music and the use of these areas lead to the transmission of noise and vibrations.

It is very important to elastically decouple the floor foundation, so that the roof can be completely insulated.

FLOOR

FULL-SURFACE SUPPORT

Sylomer



ONE-OFF SUPPORT

SISTEMA FLOOR BLOCK



SISTEMA "JACK UP"



SOUND SYSTEMS

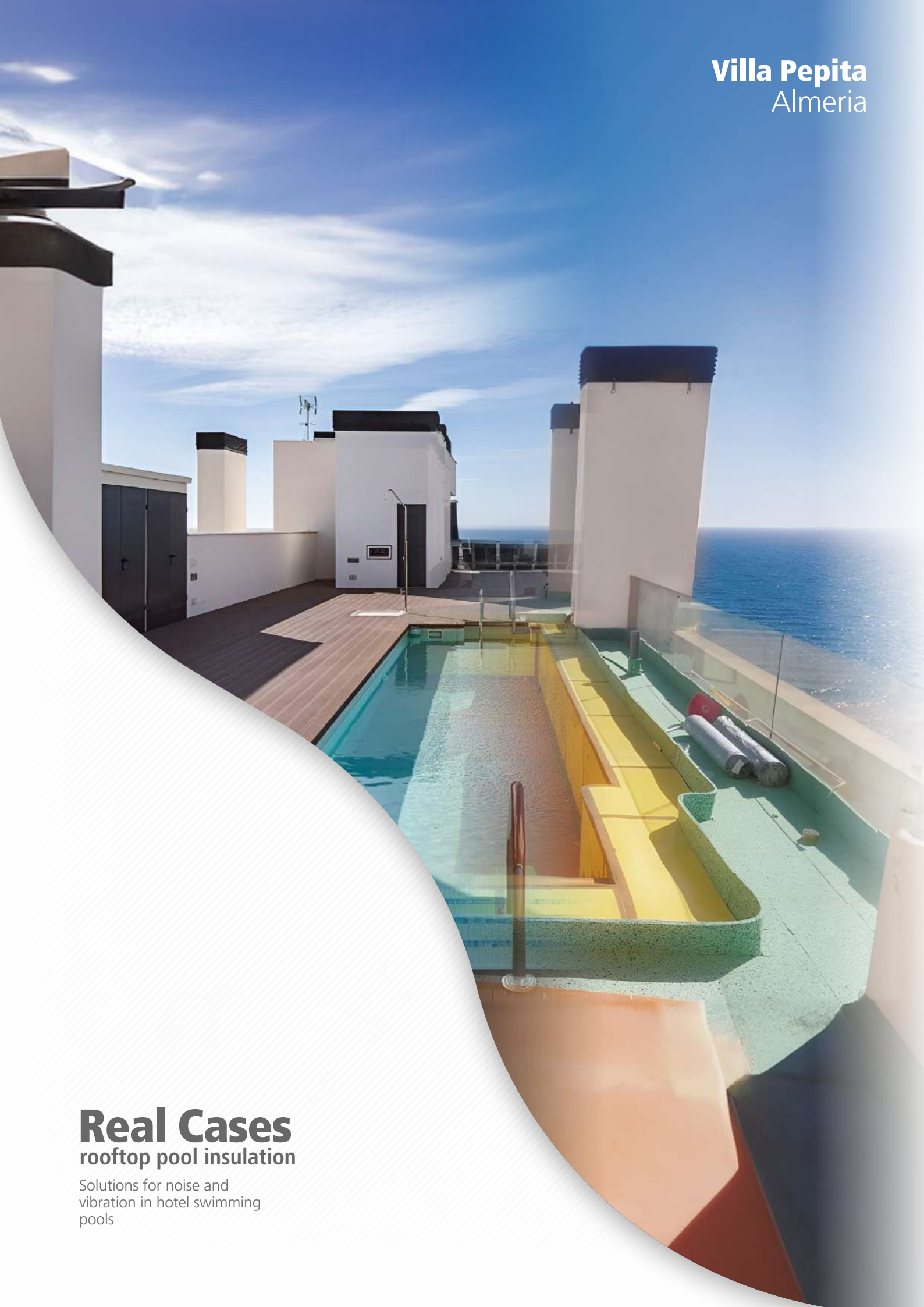
Spring type mounts are very suitable for low frequency isolation.

The Sylomer at the base helps to isolate mid-high frequencies.



Real Cases rooftop pool insulation

Solutions for noise and
vibration in hotel swimming
pools



Wellington Hotel

Madrid

VIDEO REAL CASE



Real Cases in hotels

Noise and vibration solutions for
hotel fitness rooms

Real Cases rooftop pool insulation

Solutions for noise and
vibration in hotel swimming
pools



Waldorf Astoria New York

REAL CASE VIDEO



Real Cases in hotels

Solutions for noise and
vibration in machinery of
hotels

Calculation Tool

Web & App

Vibration Isolator Pro Web Selector Tool

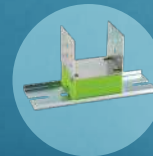


Download Vibration Isolator Pro!



VIBRATION ISOLATOR PRO

By using the isolation calculator from the AMC Mecnocauchó website, you can obtain a mount recommendation for your system given the inputs seen below. Through this, you can get a better understanding of what mount types would work best for you.



AMC Mecnocauchó Products Engineering services Isolation Calc. Business Agents News

VIBRATION ISOLATOR PRO

Analyze the vibration of your application and find an anti-vibration mount that offers vibration isolation.

Weight Kg ☐ lbs ?

Number of isolators ?

Frequency Hz ☐ RPM ?

Application ?

Isolation (%) % ?



☐ 

 Not Failsafe ?

 Failsafe ?

Akustik dB Finder

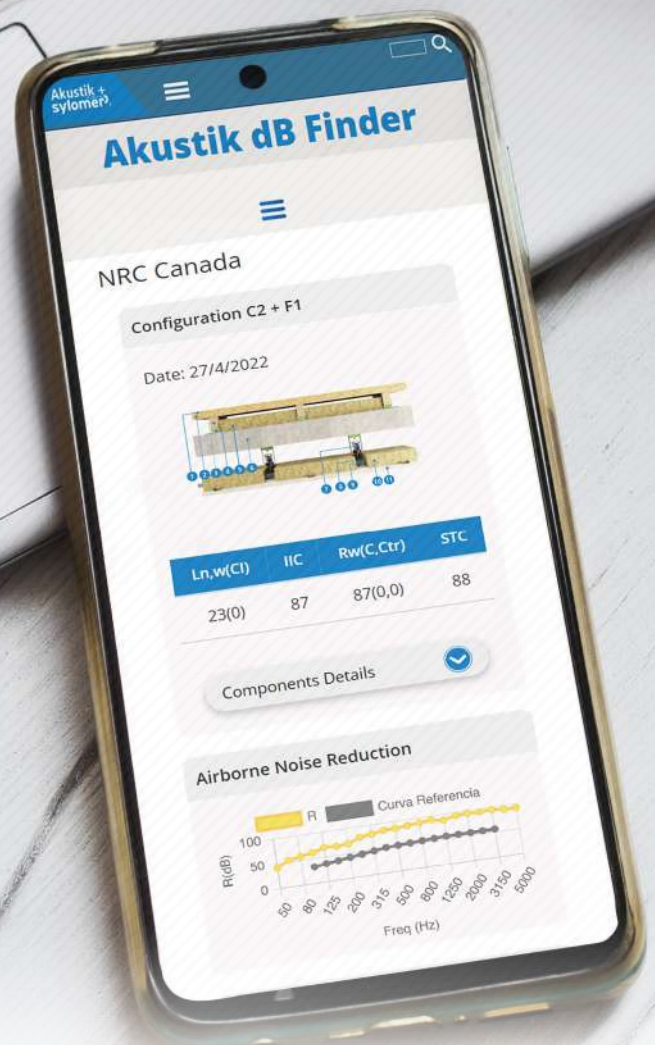
Apps y Web

AKUSTIK DB FINDER

Let your phone discover the main disturbing frequencies of your application. The integrated accelerometers of your phone are capable of making an FFT measurement where you will be able to see what are the main frequencies that you need to isolate.



Akustik dB Finder





Our **expertise** lies in the **Building** and **industrial acoustics field**, with a dedicated **technical department**. We have skilled engineers situated across various countries who are prepared to comprehend your specific situation and offer suitable solutions. Don't hesitate to **get in touch with our main office** or **explore our websites** and social media platforms.



Aplicaciones Mecánicas del Caucho S.A.

sales@amcsa.es / +34 943 69 61 02

www.mecanocaucho.com

www.akustik.com
