

**Akustik +  
sylomer**  
by getzner



**HIGH-PERFORMANCE  
FLOATING FLOORS**

**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](http://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.





# Floating Floor Mounts

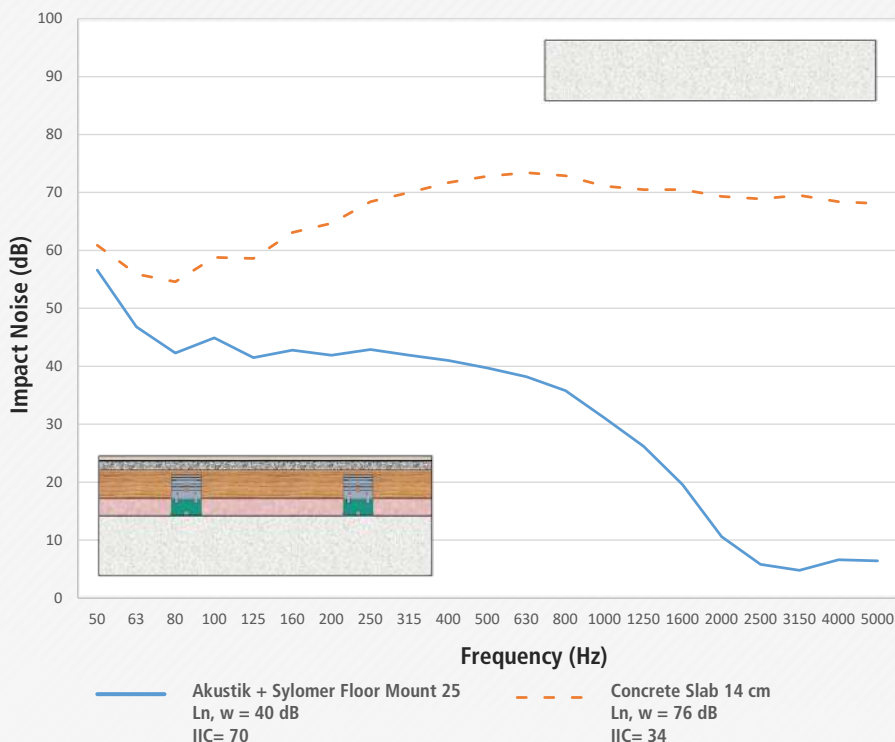
## Concrete structures

Acoustically insulated floating floors significantly reduce impact and airborne noise, creating a quieter and more peaceful environment. This can be especially important in multi-story buildings where upper floor disturbances can disrupt those below. Additionally, these floors improve thermal insulation, enhancing energy efficiency by maintaining a stable indoor temperature. Acoustically insulated floating floors are a practical and effective solution to achieve quieter and more comfortable spaces, making them increasingly popular in modern construction and renovation projects.



- 1 Gypsum fibreboard - 13mm
- 2 Gypsum fibreboard - 20mm
- 3 Wooden battens - 50x40mm
- 4 Akustik + Sylomer® 25 Floor mount
- 5 Mineral wool - 45mm
- 6 Concrete reference slab - 140mm

### Impact noise improvement when installed on a 140mm concrete slab:



**-36 dB**  
of impact  
noise

VIEW REPORT



# Floating Floor Mounts

## Wooden structures



In timber framed buildings, noise transmission is higher due to the natural frequency and lower mass of the structure. The need for a floating floor is even more crucial, creating an air gap between the floor and the floating floor helps to break the noise transmission path. A significant reduction in the propagation of impact and airborne noise can be achieved between different levels of the building and adjacent rooms.

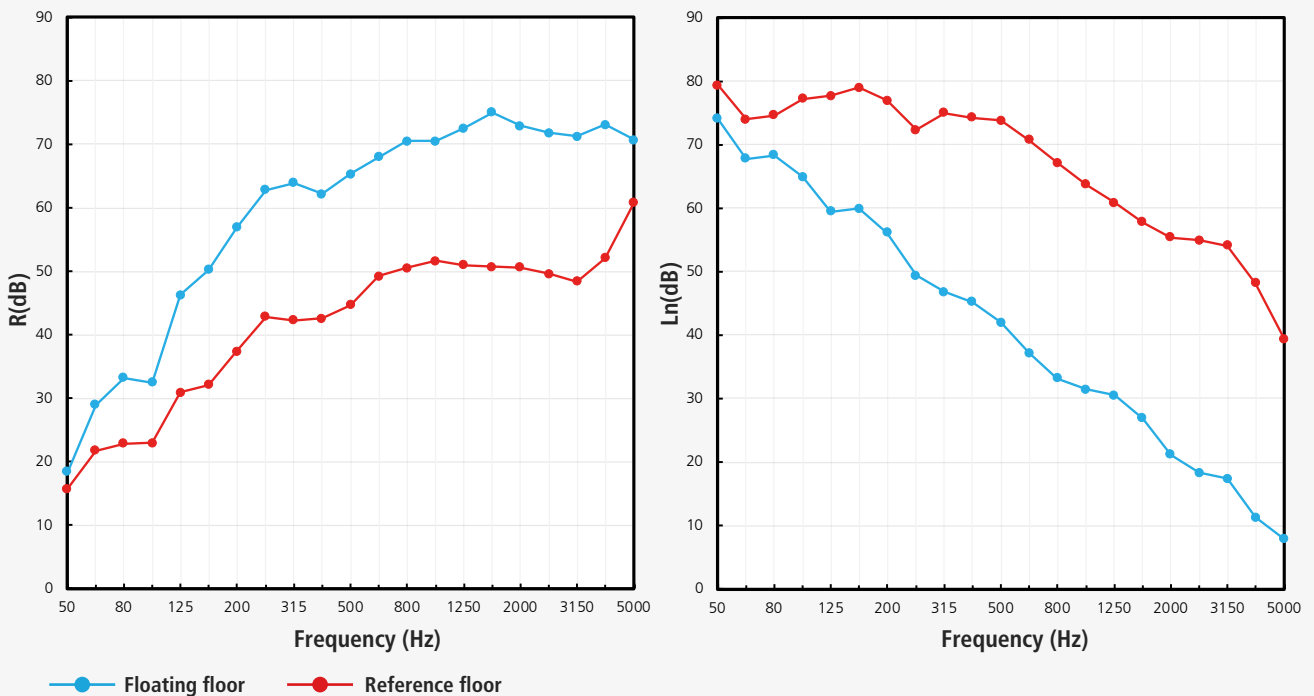
**+19 dB**  
Airborne Noise  
Reduction

VIEW REPORT



**-20 dB**  
Noise  
Impact

Impact noise improvement when installed on a light wooden structure:



# Floating Floor Mounts

## Floor Composition



The construction of a floor can be broken down into **four sections** and these elements can be viewed in the example schematic below of the **Sylomer Gym Dry Floor Pro**.

### 1 Cover

The **floor cover** is the visible layer of the floor that is subjected to impacts.

### 2 Impact absorber

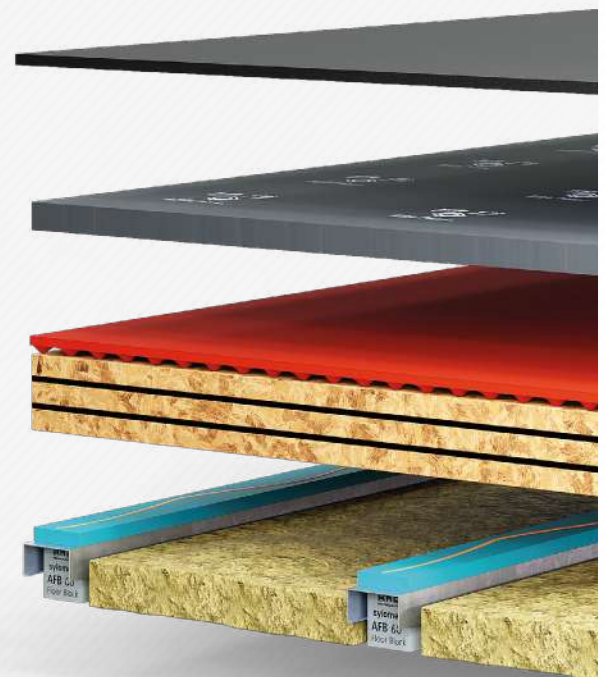
The properties of the **impact absorber** determine the time that the floor experiences impulses and thus the amount of structure borne noise is transmitted.

### 3 Impact damper

The **impact damper** layer is composed of a series of wood panels and damping pads that work to reduce the amplitude of the transmitted vibration.

### 4 Support structure

Finally, the **support structure**, in this case composed of Sylomer blocks surrounded by mineral wool insulation, serves as the base of the floor and determines the natural frequency of the system.



# Floating Floor Mounts

## Dry or Wet construction?

There are different floating floor construction methods, and the choice between **dry** and **wet** construction depends on the specific project requirements and considerations.

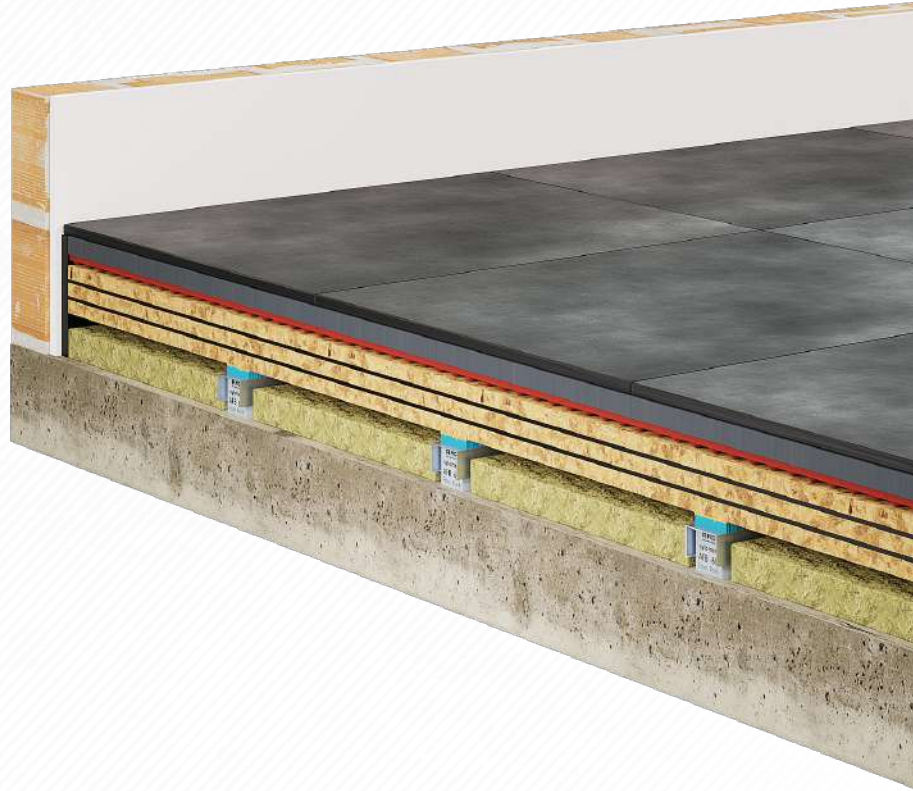
### Dry Construction

#### Advantages

- Faster installation
- No drying time
- Lower environmental impact
- Flexibility and adaptability to different gym layouts

#### Disadvantages

- Higher initial costs



### Wet Construction

#### Advantages

- Higher inertia on floating slab
- Superior sound insulation
- Cost effective
- Even load distribution

#### Disadvantages

- Longer construction time
- Higher environmental impact
- Limited flexibility for future layout modifications

# Floating Floor Mounts

## Why & Where



### FZH2M + SYLOMER

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.



MORE INFO



INSTALLATION VIDEO

### AKUSTIK + SYLOMER FLOOR MOUNTS

A floating floor mount specifically designed for use with wooden battens, they are manufactured in three special mixes and thickness of Sylomer® to adapt better to the load of each application.



MORE INFO



### AFS + SYLOMER

Akustik+Sylomer® Floor Spring AFS have been conceived for the suspension of floating floors where high performance is required at low frequencies.



MORE INFO



# Floating Floor Mounts

## Technical info

	Maximum Load (Kg)	Natural Frequency Range (Hz)	Minimum Space Required (mm)	
	25 - 100	9.5 - 12.5	27	<b>Akustik+Sylomer Floor mount</b>
<b>AFS + Sylomer</b>	25 - 150	3.5 - 8	103	
	10 - 820	8 - 12	25	<b>Sylomer Pad</b>
<b>AFB Sylomer Floor Block</b>	35 - 160	8 - 14	50	
	50 - 400	12 - 20	28	<b>BF Floor Bearings</b>
<b>FZH + Sylomer</b>	140 - 960	8 - 14	90	
	915 - 2409	3.5 - 8	150	<b>FZH Spring + Sylomer</b>
<b>TSR</b>	7.5 - 3900	7.5 - 13.5	31	



# Calculation Tools

## App & Website

Acoustic Hanger  
Selection Website Tool

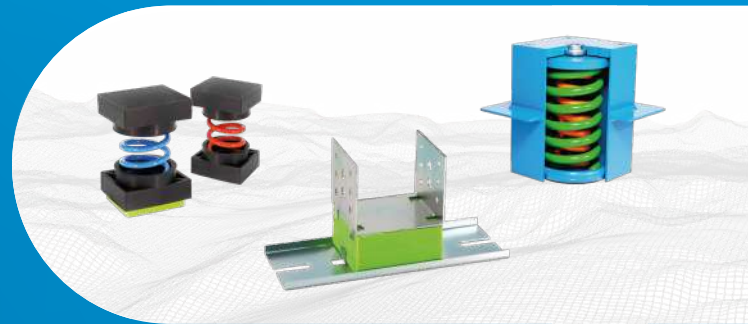


Download the Acoustic  
Hanger Pro Phone App!



### ACOUSTIC HANGER PRO

The acoustic hanger pro selection tool (on our website and phone app) provides you with a recommendation on acoustic hangers and floor mounts for your personalised system characteristics.



### ACOUSTIC HANGER PRO

Inserting the basic elements of your application the app allows you to select the correct solution according to your Budget or natural frequency requirement. The app will ask you basic technical information such as weight per sqm, distance between hangers/mounts and required natural frequency. Once this data is inserted the app will provide you a calculation, datasheets and videos of installation procedure.

[Download the instructions](#)

[User Tutorial](#)

Location

**CEILING**

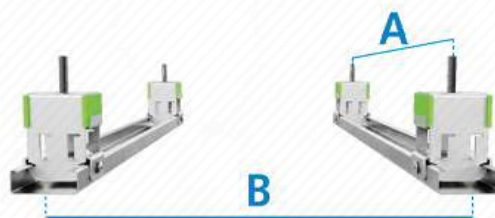
FLOOR

Metric

**METRIC**

IMPERIAL

Load



Distance between points

A (cm)

B (cm)

Isolation/Price **Balanced** ▾

I know the natural frequency

Material

**RUBBER**

**SYLOMER**

**SPRING**

**CONTINUE**

## AKUSTIK DB FINDER

Another useful tool on our website, the dB finder, contains a catalogue of acoustic testing data for various ceiling, wall, and floor structures. You can utilise this data to visualise how effectively various isolation systems work in order to better understand how to address your particular acoustic problems.



### Akustik dB Finder



**Filter reports**

Filter

Reset filters

SEARCH

Name

**POSITION**

Ceiling

Floor

Floor & Ceiling

Wall

**CONSTRUCTION ?**

Material of the Structure

Concrete

Wood

Ceramic Vault

List

1 records have been found

Order

**NRC Canada**

Configuration C2 + F1

More details

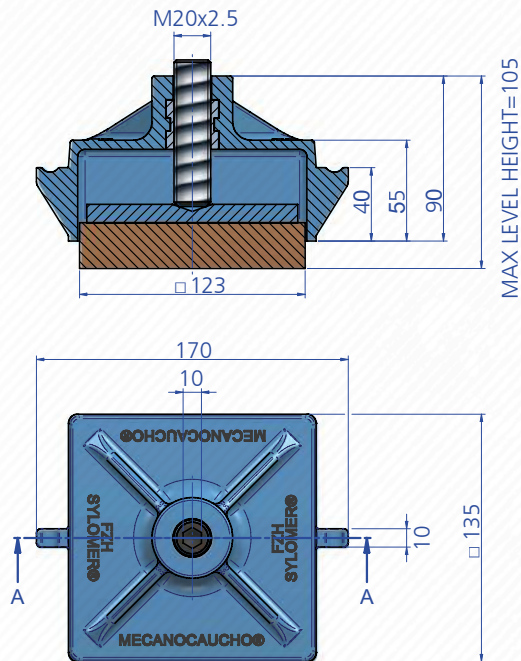
Acoustic results | Solution Data | Each floor

	Ln,w(Cl)	IIC	Rw(C,Ctr)	STC
Solution	23(-)	87	87(-)	88

# Technical info

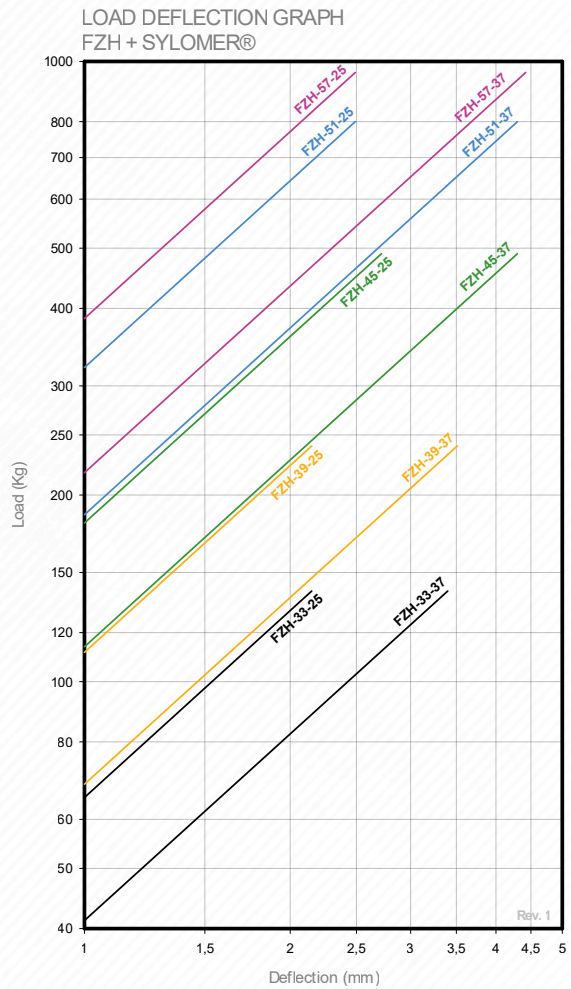
## Part Properties and Drawings

By visiting [akustik.com](http://akustik.com), you can access individual part drawings as well as elastic property data.



MAX LEVEL HEIGHT= 105

Info



	Type	SUMMARY	LOAD kg MAX	FREQ. Hz MAX Load	Code	Weight (kg)	BIM		
	FZH-33-25	Concrete embedded Jack up mounts, designed for the antivibration suspension of slabs.	140	11	176511	1,12	↓		
FZH + SYLOMER® FLOATING FLOOR MOUNTS					Code	DWG	STP	IFC	RFA
	FZH-33-25		176511	176511.dwg	176511.stp	176511.ifc	176511.rfa		
	FZH-33-37		176512	176512.dwg	176512.stp	176511.ifc	176511.rfa		
	FZH-39-25		176513	176511.dwg	176511.stp	176511.ifc	176511.rfa		
	FZH-39-37		176514	176512.dwg	176512.stp	176511.ifc	176511.rfa		
	FZH-45-25		176515	176511.dwg	176511.stp	176511.ifc	176511.rfa		
	FZH-45-37		176516	176512.dwg	176512.stp	176511.ifc	176511.rfa		
	FZH-51-25		176517	176511.dwg	176511.stp	176511.ifc	176511.rfa		
	FZH-51-37		176518	176512.dwg	176512.stp	176511.ifc	176511.rfa		
	FZH-57-25		176519	176511.dwg	176511.stp	176511.ifc	176511.rfa		
	FZH-57-37		176520	176512.dwg	176512.stp	176511.ifc	176511.rfa		

# Technical info

## Installation Videos



INSTALLATION  
INSTRUCTIONS



# Music School



Tiana, Spain  
Akustik + Sylomer®  
Floor Mount

Link to CASE STUDY



# University



San Sebastian, Spain  
FZH + Sylomer®  
EP 400 and EP 600

Link to CASE STUDY



## Cultural Building

## References Case Studies



Chasseneuil-du-poitou,  
France  
FZH + Sylomer®

Link to CASE STUDY



## Bar Lounge



Paris France  
FZH + Sylomer®

Link to CASE STUDY





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.



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