



Akustik +
sylomer[®]
by getzner

BUILDING ACOUSTICS TIMBER 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 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.





Isolation of timber constructions

Why should you isolate Timber Floors?

EXAMPLES



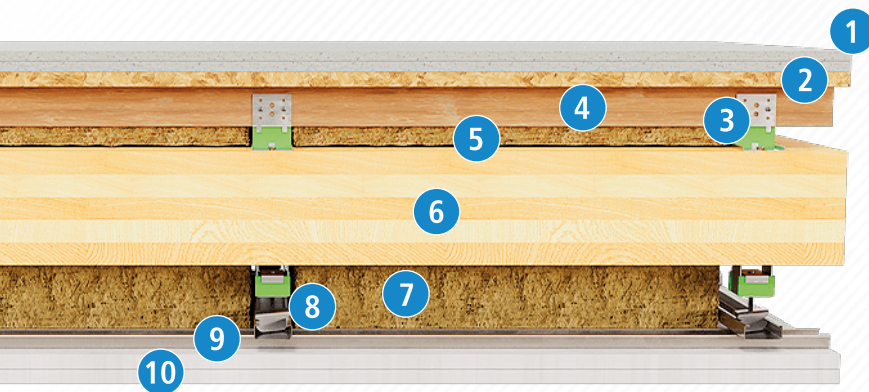
1 CLT 140mm

Reference Floor



Isolated Floor

Akustik + Sylomer® floor mounts



1 Gypsum fibre board 25mm (2X12,5mm)

2 OSB 18mm

3 AKUSTIK+SYLOMER® 25 FLOOR MOUNT

4 50mm wooden battens

5 Glass wool 75mm

6 CLT 140mm

7 Glass wool 75mm

8 Hanger AKUSTIK+SYLOMER® 30

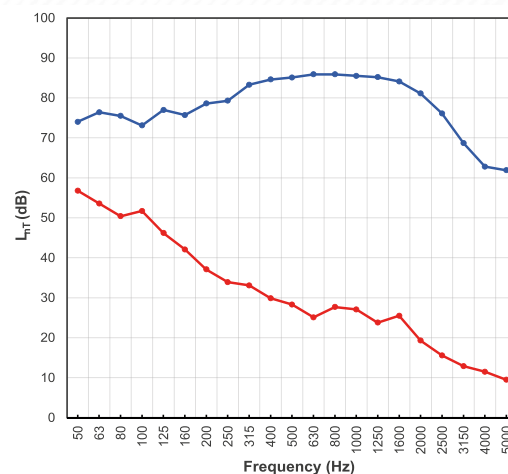
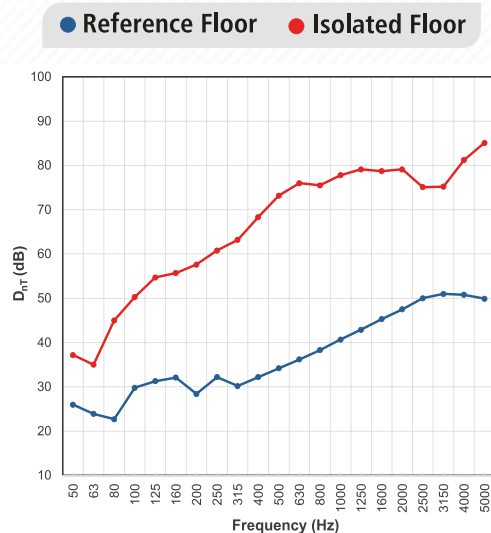
9 Profiles S47 17/6

10 2 laminated 18mm thick Plasterboard

Addition of floating floor mounts to bare cross laminated timber structure results in:

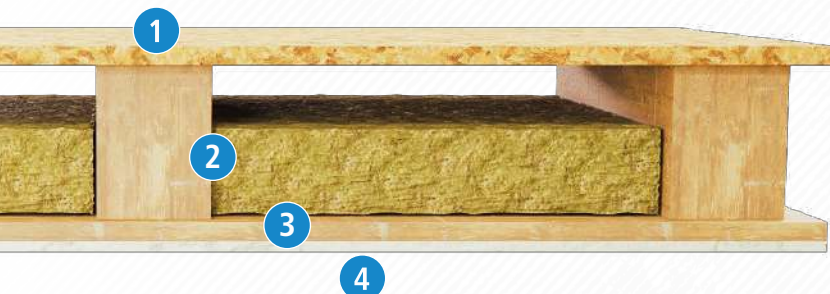
+33 dB
of airborne noise
reduction

-51 dB
of impact
noise





Reference Floor



1 22mm Chipboard

2 120x180mm section wooden beams

(100mm mineral wool between)

3 24mm wooden battens

4 Plasterboard

Cement Board H13 BR - 13mm 1

22mm Chipboard 2

50mm wooden battens 3

(Mineral wool between battens)

AKUSTIK + SYLOMER® FLOOR MOUNT 25 4

22mm Chipboard 5

120x180mm section wooden beams 6

(100mm mineral wool between)

24mm wooden battens + 1 gypsum board 7

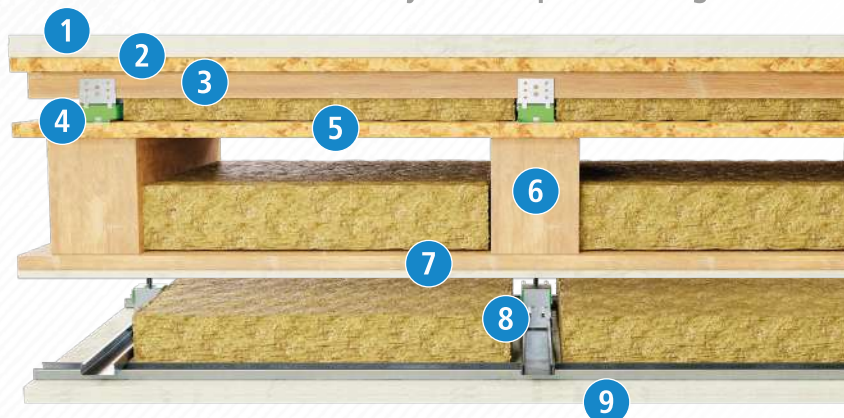
AKUSTIK + SYLOMER® SUPER T60 HANGERS 8

with a 280mm plenum (90mm of mineral wool)

2 laminated 12,5mm thick plasterboard 9

Isolated Floor

Akustik + Sylomer® floor mounts
Akustik + Sylomer Super T60 hangers



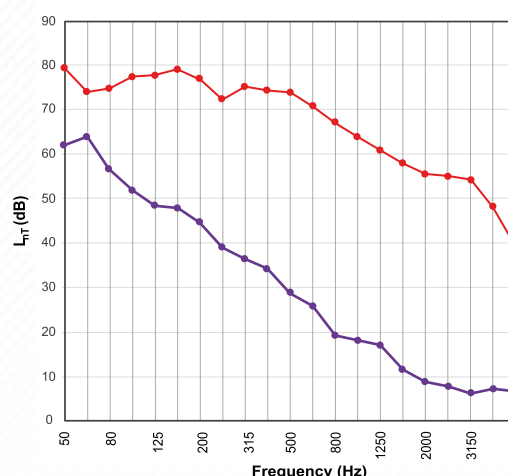
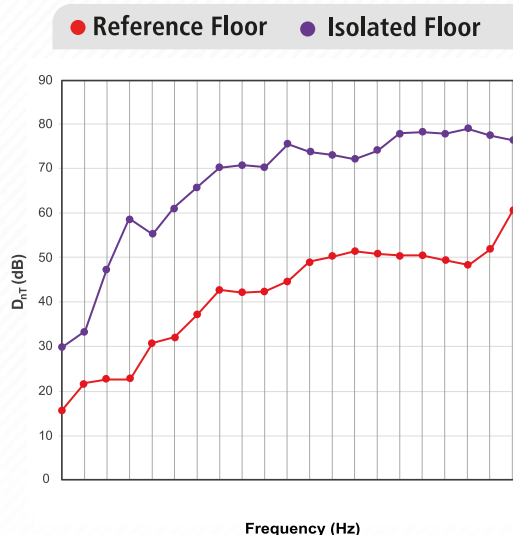
Addition of floating floor mounts to bare cross laminated timber structure results in:

+26 dB

of airborne noise reduction

-32 dB

of impact noise



Why should you isolate Timber Floors?

EXAMPLES



TEST REPORT

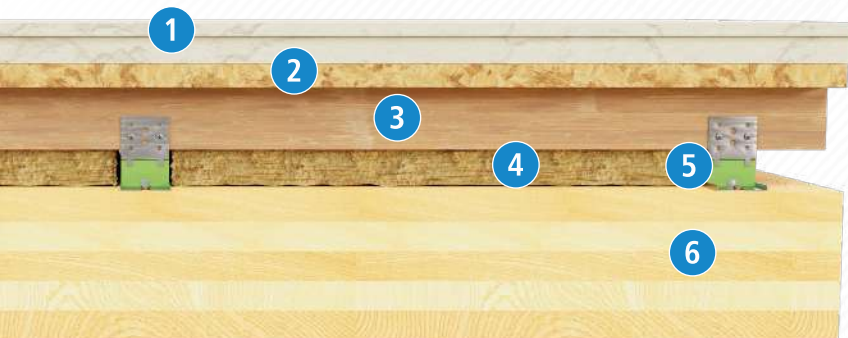
1 CLT 140mm

Reference Floor



Isolated Floor

Akustik + Sylomer® floor mounts



1 Gypsum fibreboard screed, Rigidur 25

2 OSB Board 22mm

3 Wooden battens 50x60mm

4 Mineral Wool

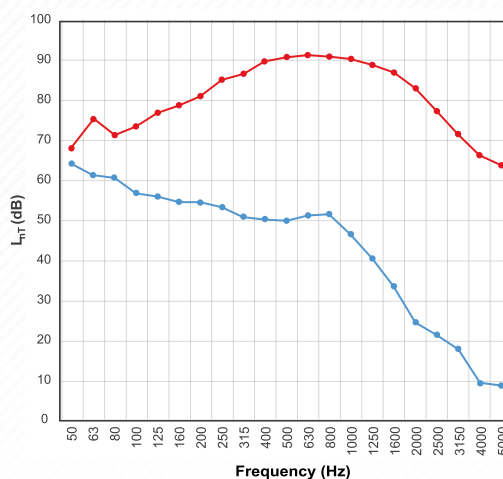
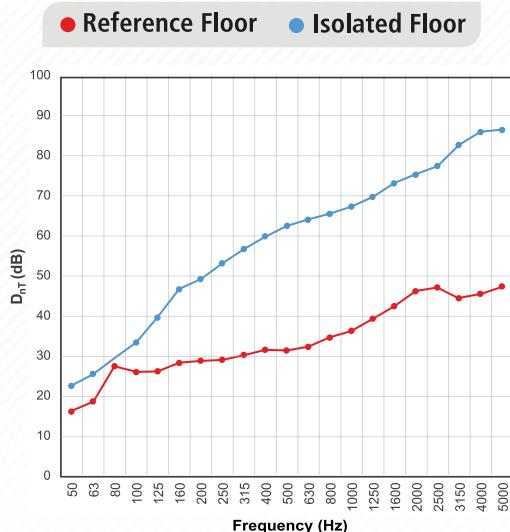
5 AKUSTIK + SYLOMER® FLOOR MOUNT 25

6 CLT 140mm

Addition of floating floor mounts to bare cross laminated timber structure results in:

+26 dB
of airborne noise
reduction

-41 dB
of impact
noise



Reference Floor



1 CLT 140mm



Isolated Floor

Akustik + Sylomer® floor mounts

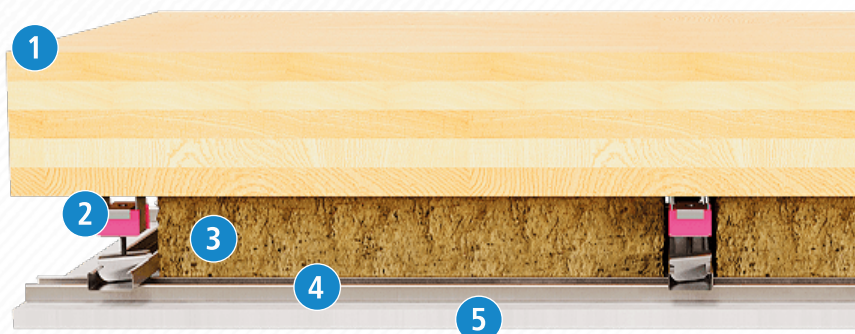
CLT 140mm 1

AKUSTIK 1+SYLOMER®15 2

Mineral Wool 3

Profiles S47 17/6 4

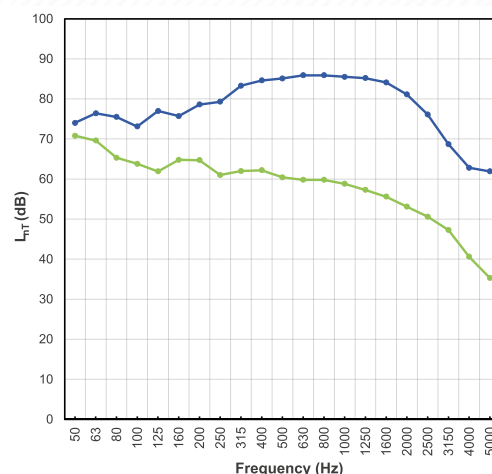
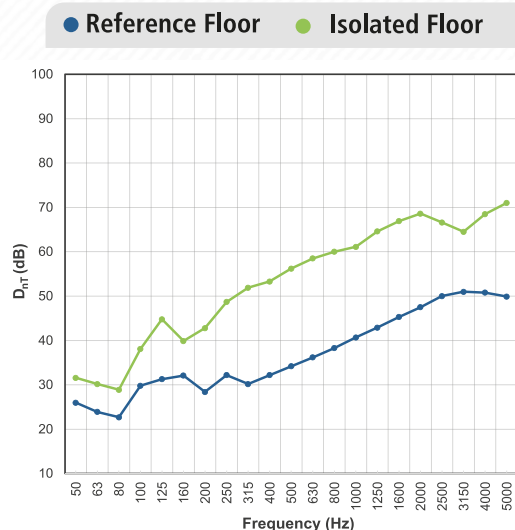
1 laminated 18mm thick plasterboard 5



Addition of floating floor mounts to bare cross laminated timber structure results in:

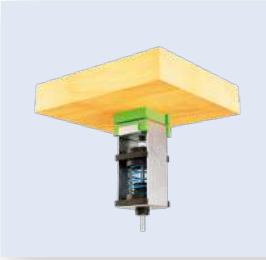

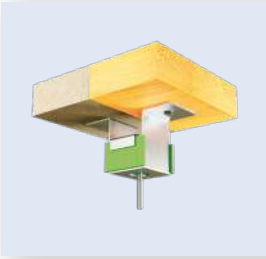



+20 dB
of airborne noise
reduction

-25 dB
of impact
noise



Why should you isolate Timber Floors?

ACOUSTIC HANGERS FOR CEILING

| | Maximum Load Range (kg) | Natural Frequency Range (Hz) | Minimum Space Required (mm) | |
|---|----------------------------|---------------------------------|--------------------------------|---|
|  | 5 - 60 | 3 - 4 | 112 | <div>ST + Sylomer®</div>  |
|  | 15 - 75 | 7 - 11 | 47 | <div>Akustik 1 + Sylomer®</div>  |
|  | 25 - 150 | 3 - 4 | 150 | <div>SRS + Sylomer®</div>  |



Why should you isolate Timber Floors?

FLOOR MOUNTS AND WALL TIES

Maximum Load
Range (kg)

Natural Frequency
Range (Hz)

Minimum Space
Required (mm)



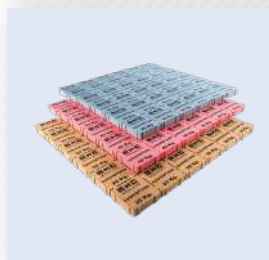
25 - 100

9.5 - 12.5

27

FLOOR MOUNT

Akustik+Sylomer®
Floor mount



20 - 160

10 - 15

12

FLOOR MOUNT

Sylomer® anti
vibration Pad



35 - 160

8 - 14

50

FLOOR MOUNT

Floor Blocks



30

≥ 8

72



60

≥ 15

21.5



15 - 75

≥ 8

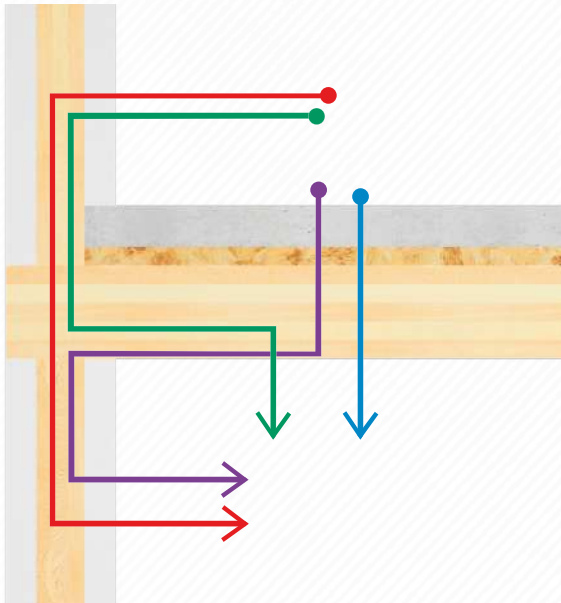
33



Why should you isolate Timber Floors?

ISOLATION OF WOODEN STRUCTURES

4 TRANSMISSION PATHS TO BE TREATED



1. DIRECT THROUGH THE SLAB

2. FROM THE WALL THROUGH THE SLAB

3. STRAIGHT THROUGH THE WALL

4. FROM THE SLAB THROUGH THE WALL

In order to properly isolate wooden structures from unwanted noise and vibration, the four transmission paths above must be considered. In the following pages the step-by-step instructions are outlined for how to complete this task. A video with these instructions can be viewed by scanning the QR code.



Why should you isolate Timber Floors?

CONSTRUCTION



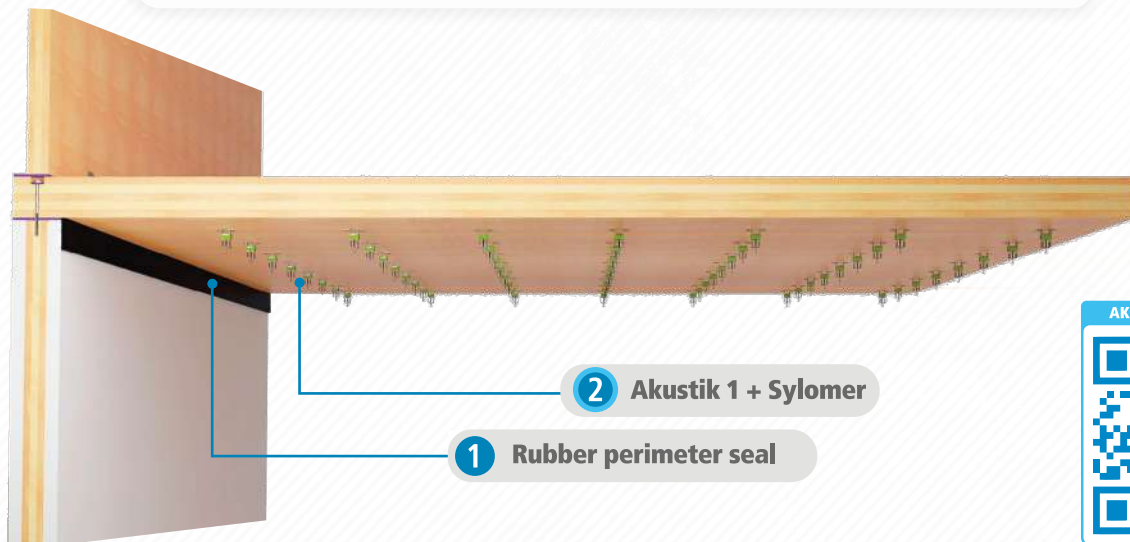
Rubber perimeter seal



Akustik + Sylomer®
Acoustic Hanger

CONSTRUCTION OF SUSPENDED CEILING

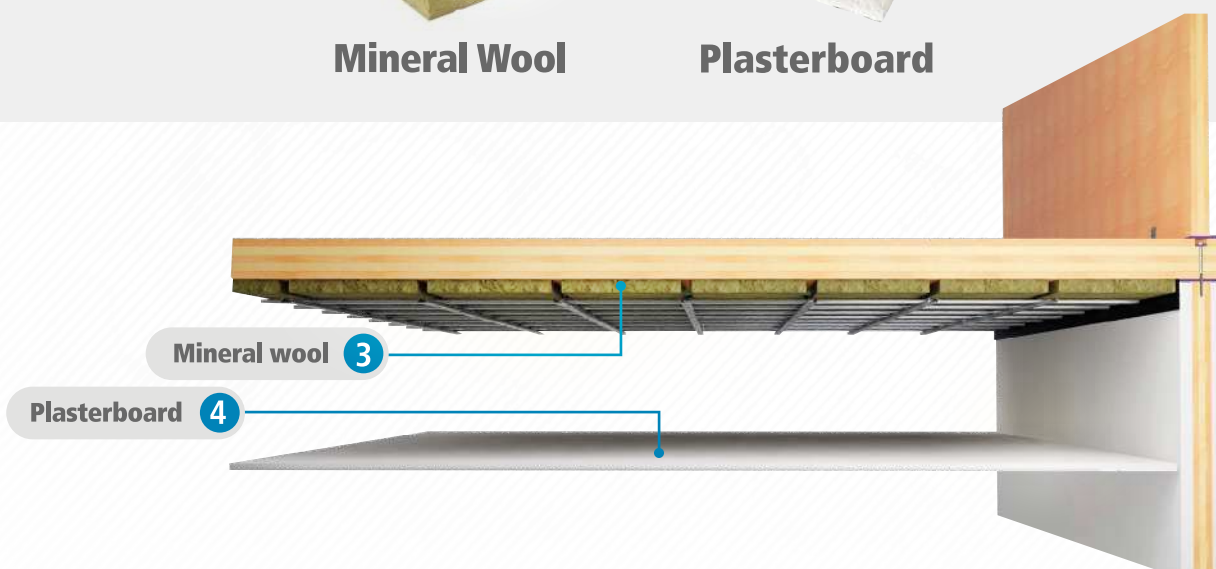
Construct the suspended ceiling using Akustik + Sylomer hangers, with a mineral wool layer in between the base floor and the ceiling board.



Mineral Wool



Plasterboard



Why should you isolate Timber Floors?

CONSTRUCTION



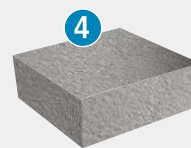
Rubber perimeter seal



**Akustik + Sylomer®
FLOOR MOUNT**



Mineral Wool



Dry floating floor

CONSTRUCTION OF THE FLOATING FLOOR

Construct the floating floor using Akustik + Sylomer mounts, with a mineral wool layer in between the base floor and the floorboard.



Why should you isolate Timber Floors?

CLT Constructions

CEILING



FLOOR



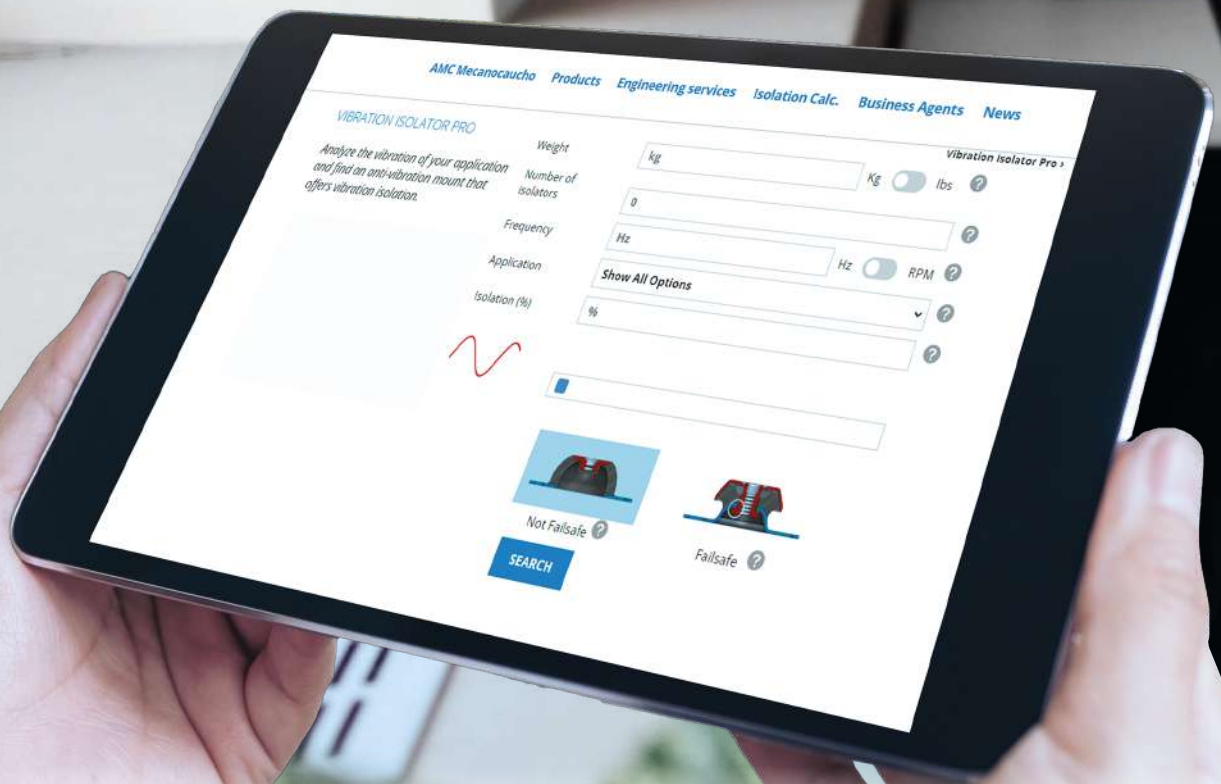
WALLS



REFERENCES AND REAL PHOTOS

Akustik+Sylomer® acoustic hangers provide an extraordinary performance on **wooden structures**.





Akustik dB Finder

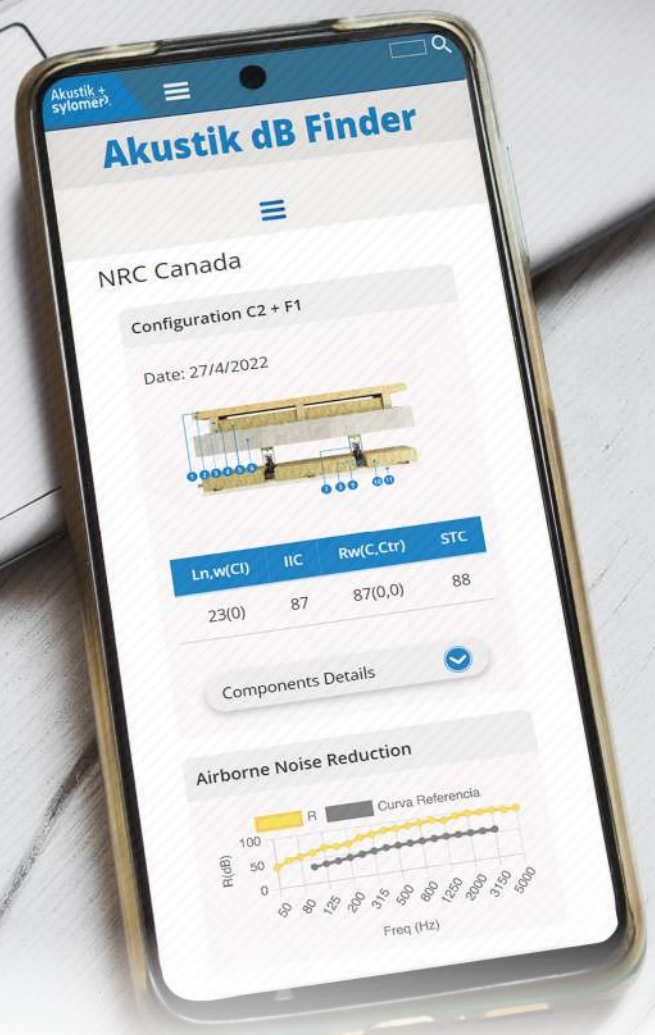
Apps y Web

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