Akustikabsorber

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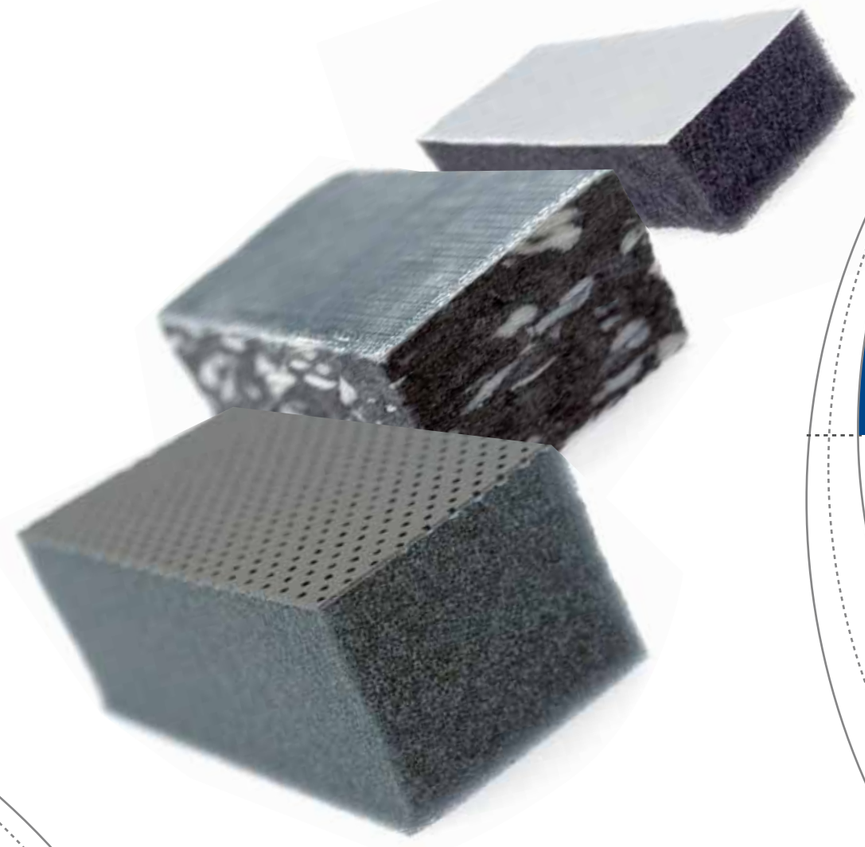

General Catalogue of acoustic isolation composites.

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MECANOCAUCHO
Aplicaciones Mecánicas del Caucho, S.A.
www.mecanocaucho.com

DET NORSKE VERITAS
CERTIFICAT DE SYSTÉME DE GESTION
APLICACIONES MECÁNICAS DEL CAUCHO, S.A.

AMC
MECANOCAUCHO

PRESENTATION

Since 1969 AMC MECANOCAUCHO® have been designing and manufacturing products for the attenuation of structural borne noise and vibration for a wide range of Industry.

In 1990, to compliment the structural borne aspect, AMC began to design and manufacture a range of AKUSTIKABSORBER® composites to attenuate Airborne noise.

QUALITY COMMITMENT

Only the very highest quality raw materials go into the manufacture of AMC manufactures high quality products, with state of the art machinery, to produce these effective, high quality composites.

All the products in this catalogue have been tested acoustically at the AMC laboratory; the results of these tests can be seen on each spec sheet.

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THE SOLUTION

Akustikabsorber products are materials designed to reduce reverberation and increase the attenuation between chambers.

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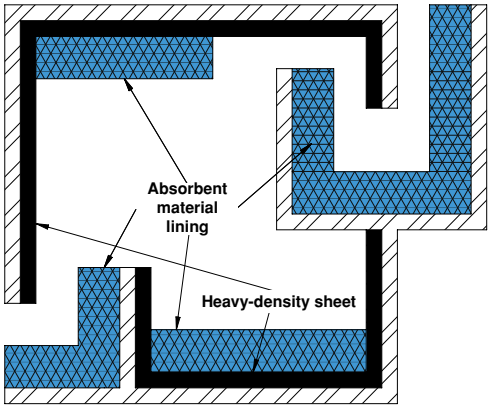
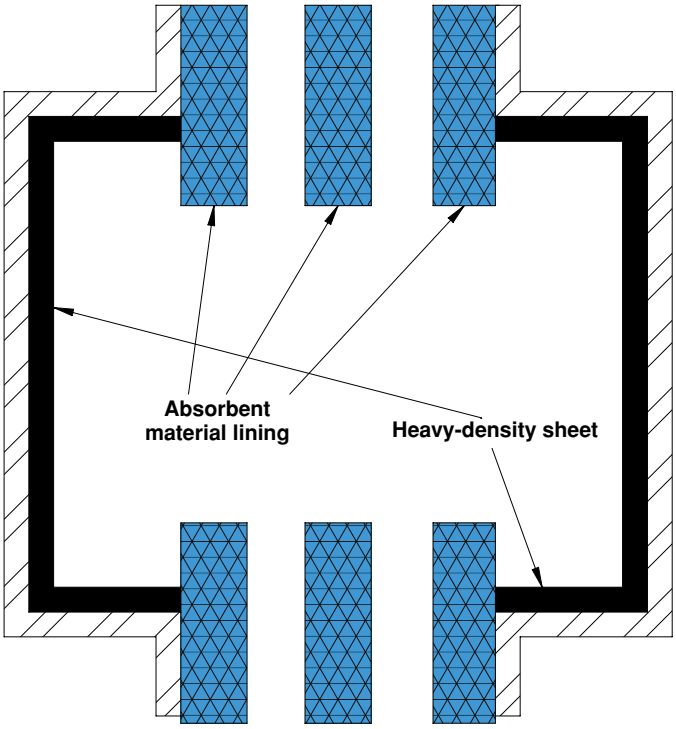
1 APPLICATIONS AND INSTALLATION GUIDE

AMC MECANOCAUCHO ® provides customers with its vast experience and know how in a wide variety of applications and installations.

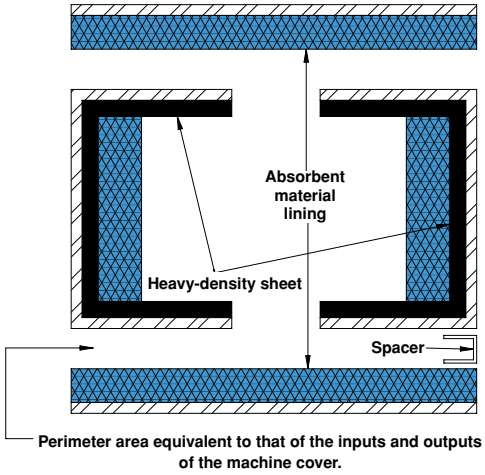
Examples of different cabin executions to reduce noise emission to the exterior while maintaining proper ventilation.



Encapsulated with single or double openings.



Speakers and silencers



Perimeter area equivalent to that of the inputs and outputs of the machine cover.

AMC engineering services

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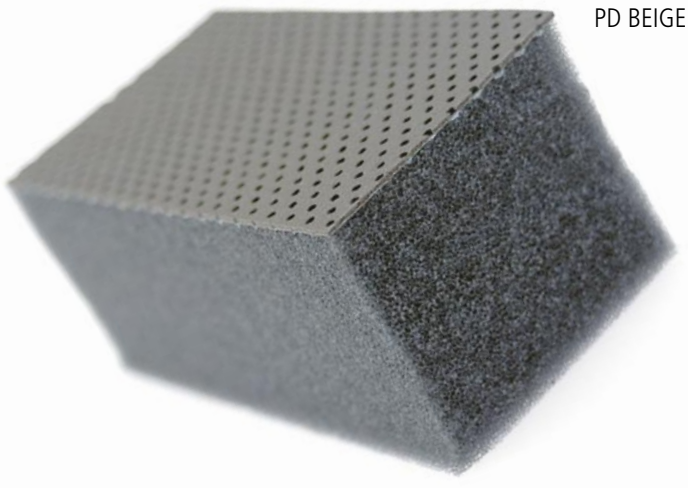
2 ACOUSTIC CHARACTERISTICS: KUNDT'S TUBE

Kundts Tube is very sophisticated standardized test equipment, behaviour in the absorbtion and isolation against a range of frequencies.

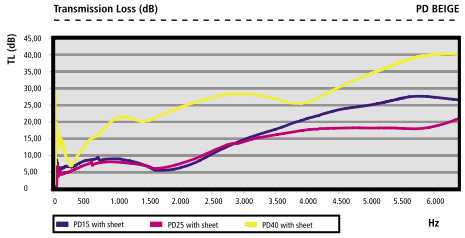
Kundt's tube measures transmission and absorption of a normal perpendicular impact wave.

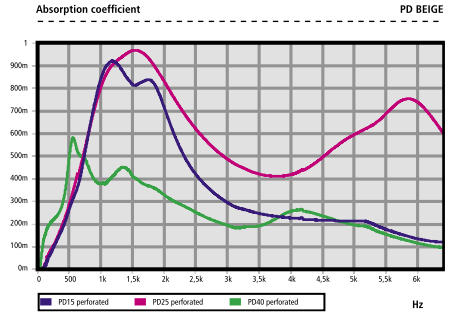
"If we compare the measurements attained in a reverberating or transmission chamber, the results will always be poorer in Kundt's tube, since all the waves produced in the tube are direct impacts".

Development of new products:
Knowing our client's specific needs, we develop new akustikabsorber composites.



PD BEIGE





AMC engineering services

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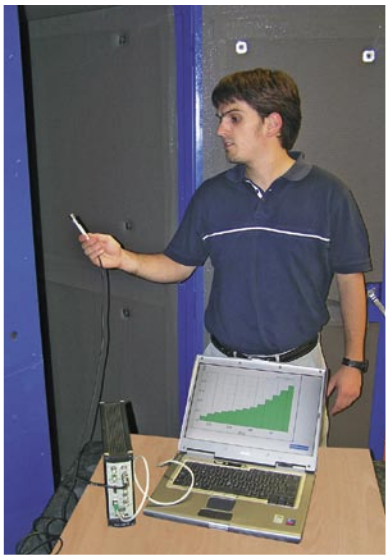
3 MEASUREMENTS

To effectively treat noise problems the rasnge of frequencies and sound levels must be identified. With that detailed information calculations can then be carried out to determine the best method and type of composite.

AMC MECANOCAUCHO ® applies its experience and know how in measuring and evaluating customers problems to successfully treat their applications by reducing machine produced noise and vibration emmissions.



AMC engineering services

ACOUSTIC KNOWLEDGE

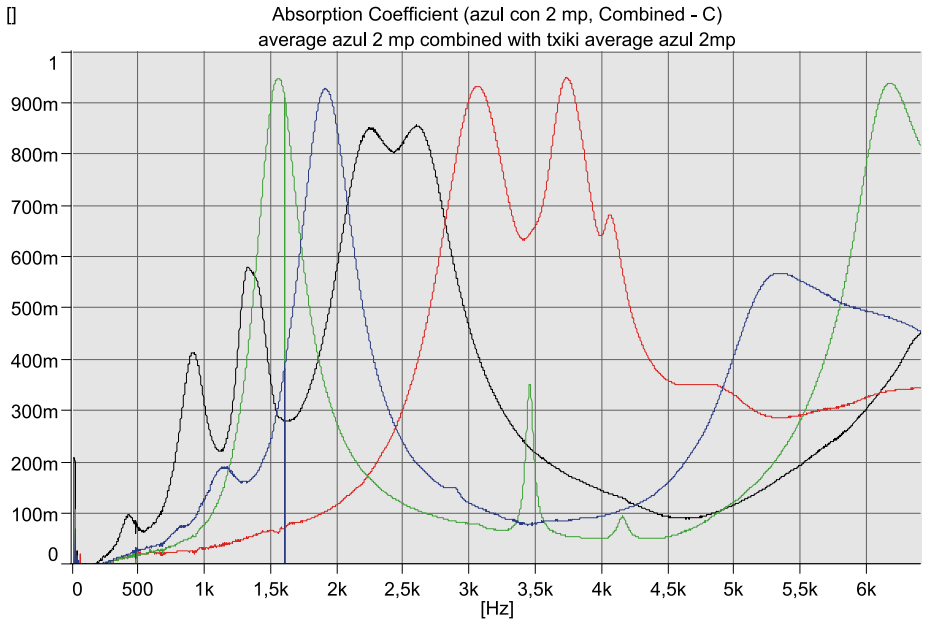
Reverberation time: The reverberation phenomenon is produced as a consequence of the consecutive bouncing of the sound wave on the walls of an enclosure. The reverberation time is the length of time needed for a sound pressure to decay 60dB in the enclosure or cabin.

Basic concepts of acoustics within Industry:
When calculating or designing the isolation of a room or a vehicle cabin the following concepts are important.

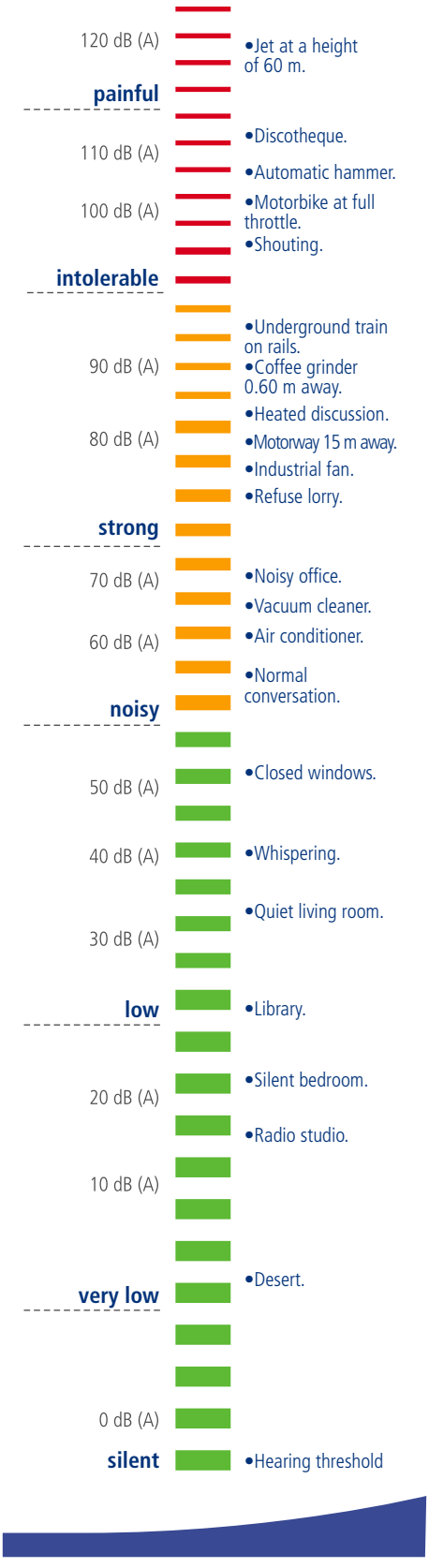
1.-ABSORPTION:
It is of interest to place absorbent materials to reduce the emission levels of the room, by absorbing part of the interior walls' reflections, the level within will always be less, therefore there is less to isolate.

2.-ISOLATION:
Mass always plays an important role when isolating a wall, according to the mass law, when mass is doubled the acoustic isolation increases 6dB.

All isolation panels have a critical frequency that depends on the panel's mass and rigidity. The panel's damping coefficient will determine how much the isolation will be reduced at this point, the higher the damping the lower the reduction.



NOISE THERMOMETER



SPECIFICATIONS

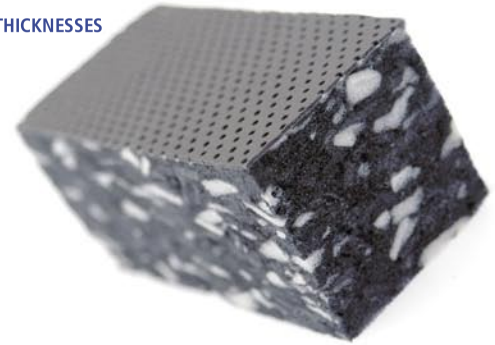
AGLO D

20mm

40mm

Beige perforated PVC facing and bound polyurethane foam with a density of 150 Kg/m³.

BY ITS THICKNESSES



Overall air-borne noise isolation use

Measurements according to UNE-EN ISO 140-3 standard (December 1995) Acoustic Isolation of Construction Materials in Laboratory Measurements.
Corresponds completely with ISO 140-3(1995) standard.
Cancels and substitutes UNE 74-040/3 (1984) standard.
Calculations according to NBECA88.

DESCRIPTION	R' (dB)
AGLO D-20 ON 2mm SHEET	23
AGLO D-40 ON 2mm SHEET	23

BY ITS COMPOSITION

Composition: Beige perforated PVC facing and bound polyurethane foam with a density of 150 Kg/m³.

BY ITS APPLICATIONS

Applications: Lining interior of soundproof cabins and vehicles, good absorption.

Thicknesses: 20mm 40mm

Formats: 2000x1000mm Sheets.

BY ITS ROLL OR SHEET FORMAT

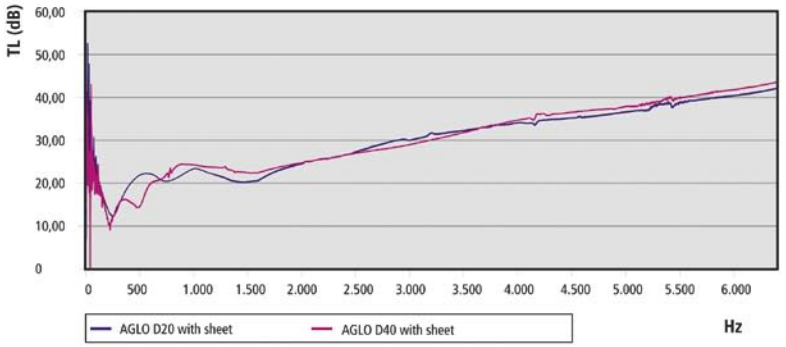
Consult for roll manufacturing.

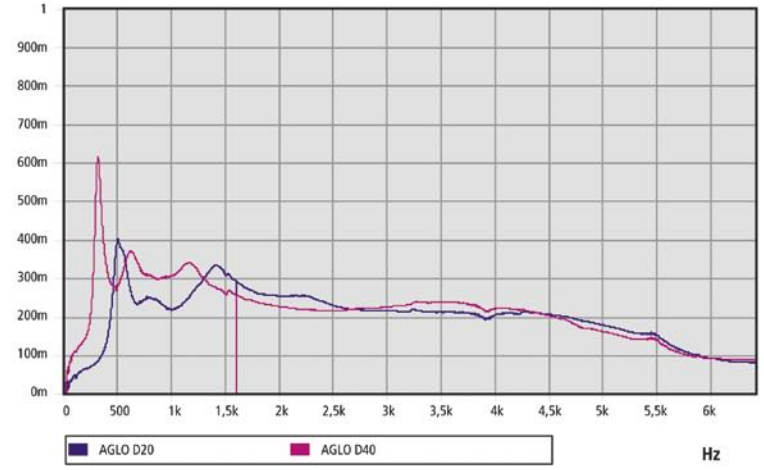
DESCRIP.	FORMAT	SELF-ADHESIVE	REF.
AGLO D 150/20	■	-	28300
AGLO D A 150/20	■	Y	28302
AGLO D 150/40	■	-	28301
AGLO D A 150/40	■	Y	28303

BY SELF-ADHESIVE OR NOT

BY ITS ISOLATION VALUES

Transmission Loss (dB) — AGLO D



BY ITS ABSORPTION COEFFICIENT

Absorption coefficient — AGLO D