acuphon

Architectural Acoustics

Acusorb® Muté

Product Range & Technical Details

Revision 1

Featuring Acusorb® Muté

Acusorb® Muté Range Introduction

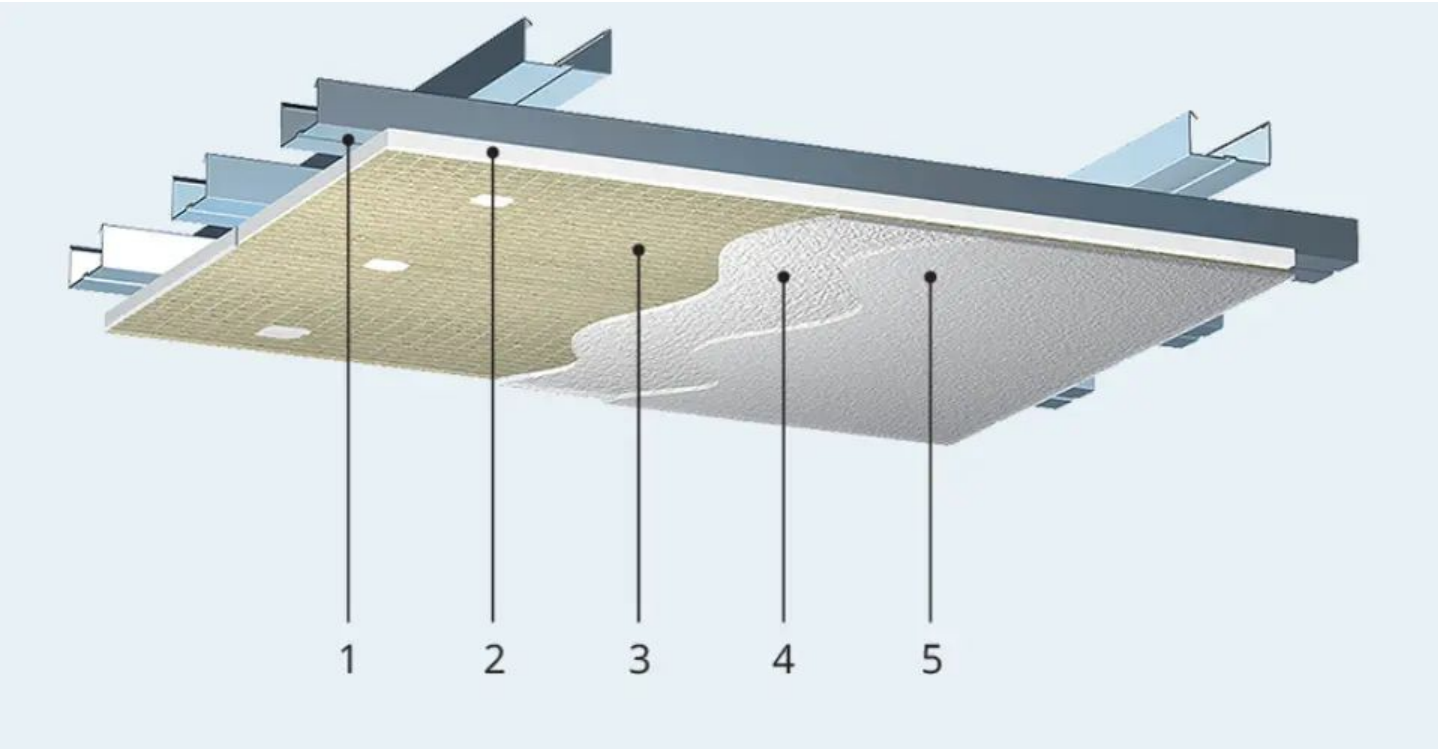
Product Overview

Acusorb® Muté is an extremely flexible seamless sound absorption system. It is a continuous acoustic cladding comprising a mineral fibre under-layer with a top-layer of micro-porous plaster. It's a unique spray-on coating made up of cellulose fibers incorporating a special additive offering a superior fire performance of B-s1-d0, the best of any cellulose spray products. This product was manufactured and designed specifically for acoustic and thermal insulation for those times when you need to achieve an excellent fire resistance that can be installed on flat, horizontal, vertical and pitched surfaces, vaulted ceilings and surfaces with irregular forms. It can be used to clad areas with infinitive areas without joints.

This acoustic seamless spray system is 'seamlessly' applied to walls and ceilings when oddly shaped, flat or curved. Our Acusorb® Mutés unique formulation means that once applied it acts as a membrane absorber dramatically reducing sound reflections thus dampening noise contributing to the space it's within.

The Acusorb® Muté acoustic spray plaster is an environmentally friendly solution that offers optimal sound absorption (Class 'A' if required) with extensive resistance to fire (Class 0 to BS476 and B-s1,d0).

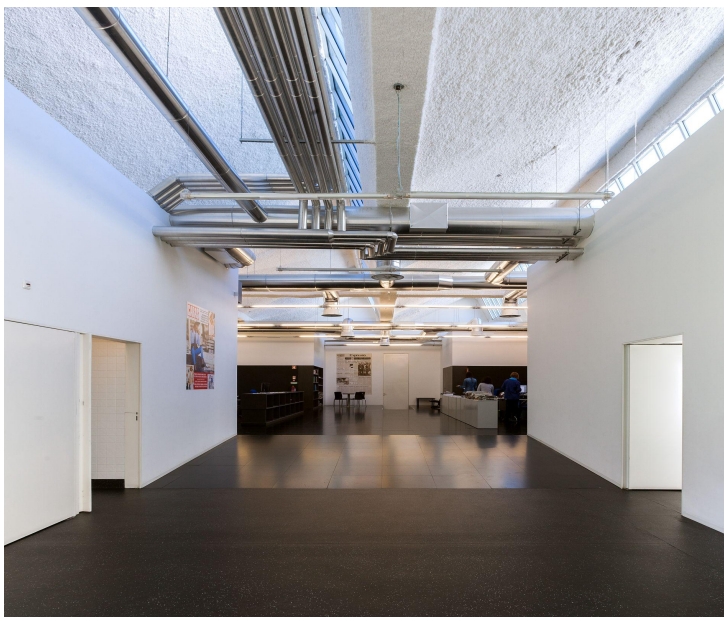
"A perfect acoustic solution for when clean lines and a contemporary feel is required"



1. Substrate
2. Acusorb® Muté Trim
3. Acusorb® Muté Mineral Glass
4. Acusorb® Muté Ultra Fine Base
5. Acusorb® Muté Ultra Fine Top

Reception Area
Ultra Fine Mute to ceiling

Office Space
Suspended Mute



Office Hallway
Mute Natural to ceiling substrate

SEAMLESS ACOUSTIC SPRAY PLASTER

Acusorb® Muté

Acusorb® Muté Seamless Acoustic Spray Plaster System. 'Class A' acoustic performance, perfect for areas where absorption doesn't need to be seen.

Possibilities: Impact mesh, double or triple for walls and ceiling applications

Description

Acusorb® Muté is an extremely flexible seamless sound absorption system. It is a non-perforated, continuous acoustic cladding consisting of a mineral fibre panel with a layer of micro-porous plaster made from marble powder. GypLine αw is a flexible panel and behaves as a membrane absorber providing excellent sound absorption through the entire frequency range. It is non-combustible (B-s1-d0) and can be installed on flat, horizontal, vertical and pitched surfaces, vaulted ceilings and surfaces with irregular forms. It can be used to clad areas with infinitive areas without joints.

The name Acusorb evokes the functionality of the product. Acusorb® Muté acoustic wall and ceiling seamless spray system has a structure that once applied acts as a membrane absorber reducing sound reflections making this product an excellent sound absorber. Acusorb® Muté dampens noise, absorbs airborne noise contributing to restful acoustics within educational, leisure, residential, industrial and public spaces.

This seamless and complete solution can be adapted to a wide range of rooms, from home use, office space to conference halls, auditoria, theatres, recreational sports and educational areas. The Acusorb® Muté acoustic system is environment friendly, fully recyclable and has natural components that offer optimal sound absorption with extensive resistance to fire. Surface applications include ceiling and wall coverage.

Acusorb® Muté is a high performing versatile sound absorbing seamless system, a system with excellent eco credentials. Our Acusorb® Muté insulation board enhances the energy performance of any building by optimising the thermal insulation of the building envelope. Acusorb® Muté is a contributing element of the exterior walls and/or the roof/ceiling assembly. Thermal Conductivity (ASTM C-177 @ 75 F on 6.0 PCF 0.22)

Our professional team are here to help you with any questions.

FInish Options

Acoustic Plaster

Acusorb® Muté Spray Acoustic Plaster - **Natural** - An elegant surface with some roughness resulting from the application of only one coat of plaster

Acusorb® Muté Spray Acoustic Plaster - **Medium** - A smoother surface resulting from the troweling

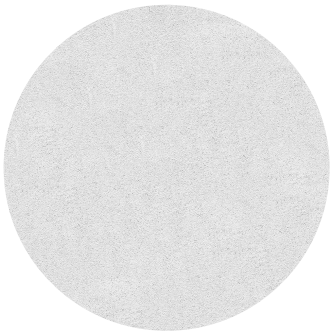
Acusorb® Muté Spray Acoustic Plaster - **Ultra-Fine** - A very smooth and silky surface - It's application consists two thin layers of Acusorb® Muté spray acoustic plaster spaced by a drying period between the two coats, troweling both coats and sanding.

The three Acusorb® Muté spray acoustic plaster finishes are dirt-resistant, anti-static, microporous and can be sanded with a Luminous Reflectance Factor up to 93%.

Standard colours are off white and can be coloured with a pigment to RAL or NCS colours.

Acoustic Boards

Mineral wool must be produced using a minimum of 40% recycled material and reused waste products used during manufacture. The wool must meet the requirements of Note Q of the European Regulation 1272/2008, which ensures that the fibers are bio soluble. Board thickness available: 20/25/40mm (3/4 / 1 / 1 ½")



Acusorb® Muté Ultra Fine
Ultra smooth finish
Compared to 200 Grit

Acusorb® Muté Medium
Smoothed finish
Compared to 100 Grit

Acusorb® Muté Natural
Rough Natural Finish
Compared to 50 Grit

Acusorb® Muté Mineral Glass
High performance absorption core

Acoustic Performance

Sound Absorption Coefficient Studied Data - (In accordance with BS EN ISO 354)

AcuSorb® Mute 23	System Thickness (mm)	Sound Absorption Coefficient Studied Data - (In accordance with BS EN ISO 354) Octave Bands (Hz)								Building Regulations Absorber Classification When tested to BS EN ISO 11654-1997
		125	250	500	1k	2k	4k	α_w	NRC	
20mm Acusorb® Muté Mineral Glass 3mm Acusorb® Muté	23mm	0.06	0.23	0.71	0.95	0.99	0.98	0.55	0.72	**D**

AcuSorb® Mute 28	System Thickness (mm)	Sound Absorption Coefficient Studied Data - (In accordance with BS EN ISO 354) Octave Bands (Hz)								Building Regulations Absorber Classification When tested to BS EN ISO 11654-1997
		125	250	500	1k	2k	4k	α_w	NRC	
25mm Acusorb® Muté Mineral Glass 3mm Acusorb® Muté	28mm	0.10	0.50	0.85	0.85	0.80	0.80	0.82	0.83	**C**

AcuSorb® Mute 43	System Thickness (mm)	Sound Absorption Coefficient Studied Data - (In accordance with BS EN ISO 354) Octave Bands (Hz)								Building Regulations Absorber Classification When tested to BS EN ISO 11654-1997
		125	250	500	1k	2k	4k	α_w	NRC	
40mm Acusorb® Muté Mineral Glass 3mm Acusorb® Muté	43mm	0.15	0.93	0.96	0.96	0.94	0.95	1	0.95	**A**

Technical Properties

Product Reference	Acusorb® Muté
Finishes	Natural / Smooth / Ultra Fine
Standard Colours	Natural off White / Grey
Average Fibre Length	500 µm
Average Fibre Thickness	35 µm
Composition	Cellulose Content - 90% Oxide Ash (850 °C, 4h) - 10%
PH Value	6.5 - 8.5
Fire Classification	Class B2 - DIN 4102
Fire Additives	Boron Compounds
Sound Absorption - 44mm	α = 1.0
Density of Cavity Insulation	60kg/m³
Density of Spray Solution	40kg/m³
Bulk Density (In accordance with DIN EN ISO 60)	70 g/l - 100 g/l
Thermal Conductivity	λD = 0.041 W/(m x k)
Water Vapour Diffusion Resistance @ 30kg/m³	µ = 19
Water Vapour Diffusion Resistance @ 40kg/m³	µ = 2.0
Water Vapour Diffusion Resistance @ 70kg/m³	µ = 2.1
Flow Resistance @ 30kg/m³	2 kPa s/m²
Mould Resistance	No Breeding Ground for Fungal Growth, Level 0 as per EN ISO 846
Resistance to Fungi	Not Attackable
Toxic/Pathogen	No
Asbestos Crystalline Silica Free State	Lacking
Drying Time	4 to 5 Days
ETA	13/0410