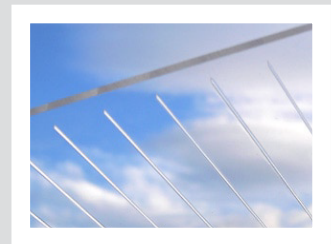


DeAmp Acrylic Series

The new generation in sound absorption



Long product lifetime

High acoustic performance

Absorption properties can easily be adjusted

Completely free of fibers and does not emit health impairing substances

No restrictions concerning moisture and the product is easily cleaned

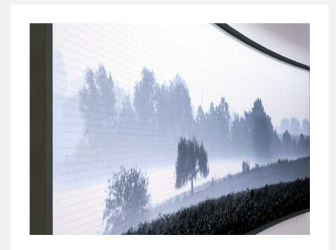
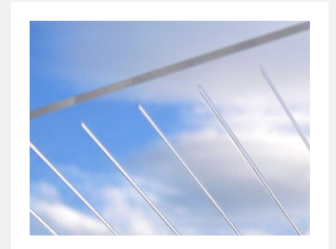
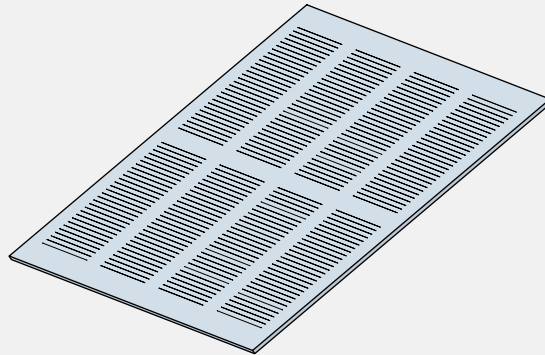
The absorbers can be transparent, printed on or delivered in a variety of colors

www.deamp.com

Panel Absorber

DeAmp panel absorbers are perfect for use in facilities with extensive use of glass, concrete and other hard surfaces. Our panels can be mounted directly on the wall, or in front of windows, pictures or light sources. It is also possible to print directly on the panels. DeAmp corner absorbers can be installed towards ceilings or walls and deliver excellent absorption performance compared to its limited size.

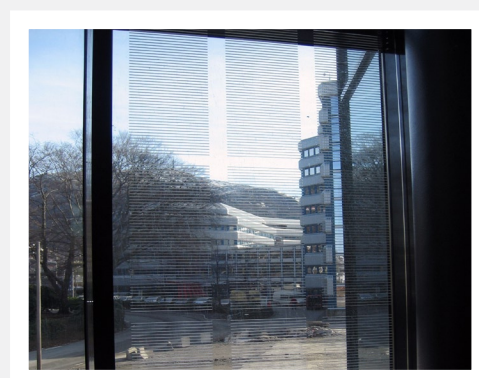
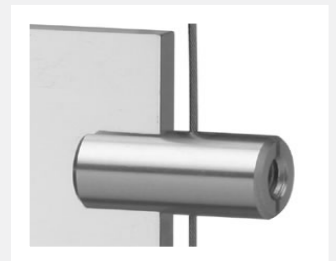
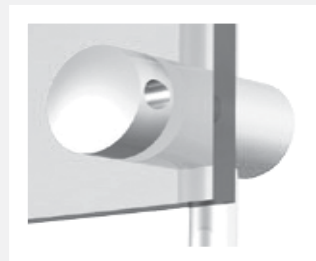
Product Options



Size	standard 600 x 600 mm customizations available
Maximum size	2000 x 3000 mm
Thickness	from 4 mm to 15 mm

Installation

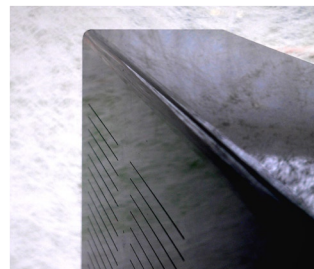
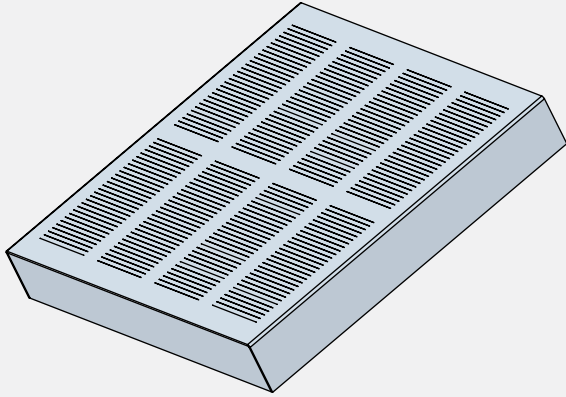
DeAmp panels can be mounted with exposed hardware as standoff pins or in wire systems. Customized solutions for mounting in front of light sources and window surfaces are also available.



Box Absorber

DeAmp box absorbers are very easy to install without the need for any additional suspension or mounting system. They are suitable in small installations or as building blocks in larger installations. In addition they can be customized with printing and fitted for home theater use.

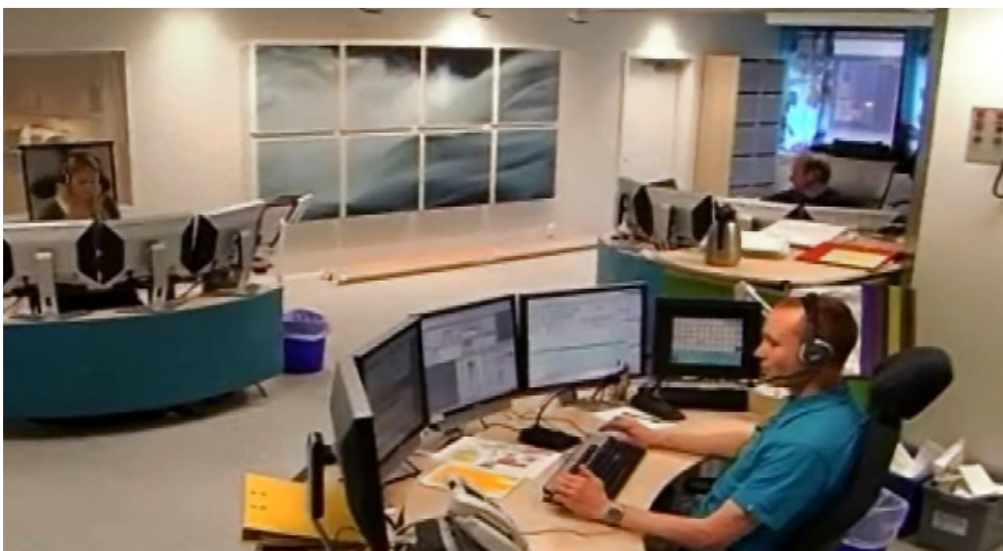
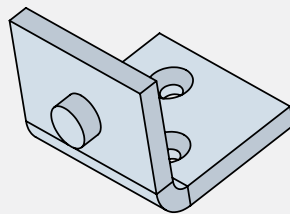
Product Options



Height	700 mm
Width	700 mm
Depth	100 mm

Installation

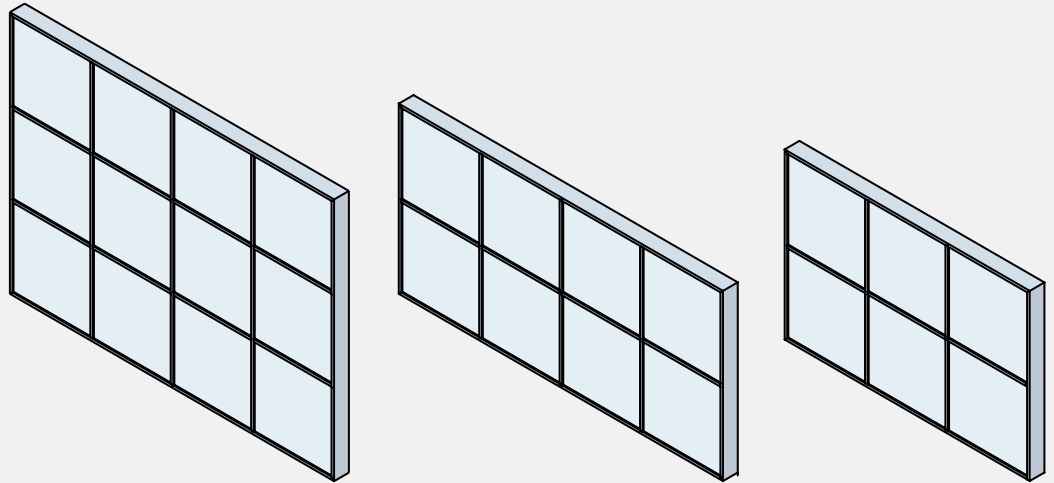
DeAmp box absorbers can be mounted directly on wall surfaces or in front of windows. The box absorbers are easily installed with prefabricated suspension brackets.



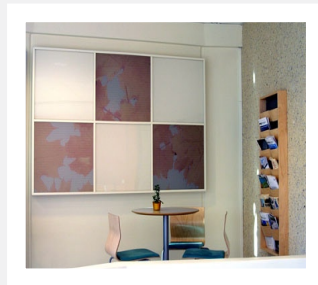
Framed Wall Absorber

DeAmp framed wall absorbers are perfect for small renovation projects or as supplementary product to acoustical ceiling tiles. It is also suitable in buildings where acoustical ceiling tiles can not be used. DeAmp framed wall absorbers can be mounted directly on the wall or used in front of windows or light sources to create a stylish effect. The product is compounded of our standard 600 x 600 mm acrylic panels and prefabricated MDF frameworks. Panels and frameworks are available in various colors and customized sizes.

Product Options

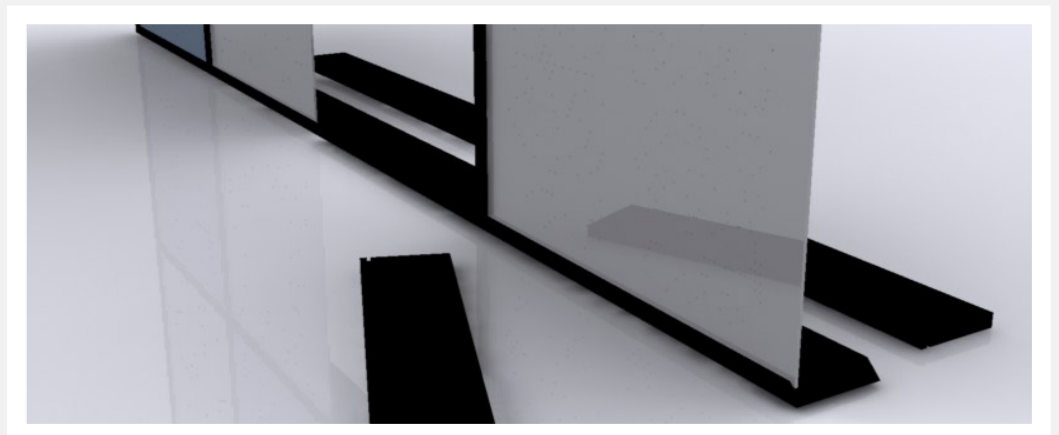


Height	1816 mm	1217 mm	1217 mm
Width	2415 mm	2415 mm	1816 mm
Depth	110 mm	110 mm	110 mm

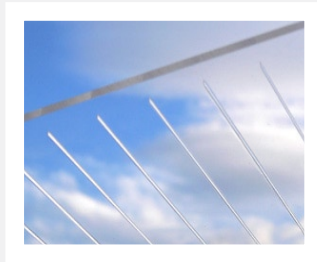


Assembly

The framework is easy to assembly and install, and only basic tools are required.



Color Scheme



DeAmp acrylic series is available in transparent acrylics, frosted and in a wide range of colors. Our acrylic panels can also be engraved or printed on. DeAmp acrylic series has excellent UV resistance.

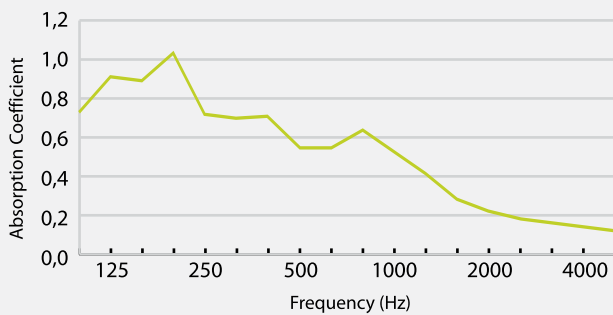
Technical Data

Material	cast acrylic (PMMA) ¹⁾	
Thickness	from 4 mm to 15 mm	
Size	customizations available	
Color	colored, transparent or translucent	
Sound absorption	NRC 0.45 to 0.55	
Flammability	UK, BS 476 Part 7 - Class 3 DIN 4102 - B2 ¹⁾ NFP 92-507 - M4	UL94 - HB ISO 11925-2 - E

¹⁾ Also available in PETG with flammability class B1 (DIN 4102) / class 1Y (UK, BS 476 Part 7)

Sound Absorption

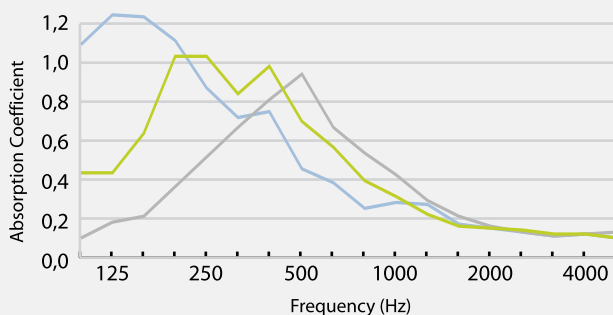
The absorption coefficient is adjustable to the desired frequency area.



Suspension height, H (mm):

- Layer 1: 110 mm ²⁾
- Layer 2: 130 mm

This figure shows the absorption coefficient using double layers mounted 110 mm and 130 mm from the noise reflecting surface.



Suspension height, H (mm):

- 197 mm ²⁾
- 97 mm ²⁾
- 54 mm ²⁾

This figure shows the absorption coefficient when the absorbing panel is placed respectively 197, 97 and 54 mm from the noise reflecting surface behind.

H (mm)	125	250	500	1000	2000	4000	NRC
■ 110 / 130 ²⁾	0.90	0.71	0.54	0.52	0.22	0.14	0.50
■ 54 ²⁾	0.19	0.52	0.94	0.43	0.17	0.13	0.50
■ 97 ²⁾	0.44	1.03	0.70	0.32	0.16	0.13	0.55
■ 197 ²⁾	1.24	0.87	0.46	0.29	0.16	0.13	0.45

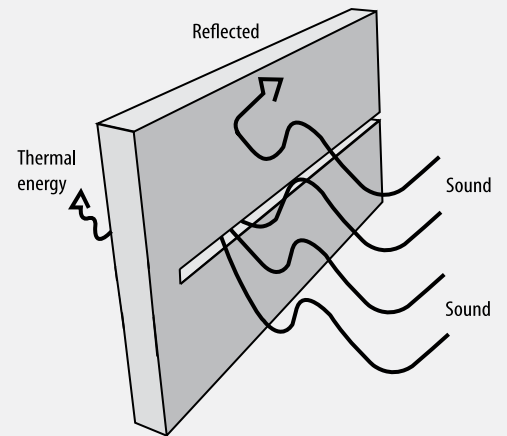
²⁾ Measured results from tests performed by SINTEF ICT according to ISO 354 nad ISO 11654.

The New Generation in Sound Absorbing

DeAmp is developing and marketing fiber free acoustical ceilings and walls in hard materials like metal and plastic. We offer the most affordable solution covering all demands for customers with a desire for smart design, high acoustic quality and a healthier indoor environment.

Unique Patented Technology

DeAmp's technology is developed during 10 years of research at SINTEF and The Norwegian University of Science and Technology. The technology is based on the well-known acoustic principle Helmholtz resonator. DeAmp's unique technology utilizes laser cut micro slits to perforate the surface. When sound waves, defined as compressed air, hit the perforated surface an overpressure arises on the front of the panel. To equalize the pressure, the compressed air is forced through the micro slits, and viscous forces between the very narrow slit and the air causes friction. Hence the sound waves are absorbed and transformed into heat without use of any porous fiber-materials. The technology is internationally patented by DeAmp.



Excellent Esthetical Properties

Our sound absorbers offer excellent esthetical properties treasured by architects. We offer clean and smooth surfaces and a wide variety of colors and surface finishes. DeAmp's absorbers can be anodized, painted, engraved or printed on, and because they are fiber free they can be transparent, translucent or colored. Panels can be mounted in traditional ceiling suspensions, directly on walls, as panel elements in office furniture systems or stand alone partition walls.

The Healthy Alternative

Fiber free sound absorbers ensure a better indoor environment, especially for children and people with respiratory disorders. The products do not emit fiber particles, nor do they collect dust in the slits. They do not absorb moisture, which can lead to fungi and rot, and they are easy to clean with water based products. These benefits reduce costs related to sick leave, loss of productivity and maintenance of facilities.

Recyclability

DeAmp acrylic products can be recycled fully into monomer and are environmentally friendly.

High Light Reflection

The laser cut micro perforated slits are less than 0.2mm wide and therefore barely visible at a normal distance from the absorbers. They cover less than 1% of the panel surface and consequently over 99% of the material is left as a reflecting area. By utilization of the reflecting or transparent surfaces, DeAmp panels can lead the light into the room, something which has been difficult with traditional sound absorbers. Exploitation of daylight reduces lighting costs, and improves the users' well-being.

Sound Absorption

Compared to the best porous absorbers, micro perforated products perform somewhat poorer in higher frequencies. However, higher frequencies are more easily absorbed by furniture, people and surface elements in the room. Therefore excellent acoustic conditions can still be achieved based on the high absorption at low and middle frequencies. Scientific measurements from our reference projects show that values are below the required reverberation time for the whole frequency band.



References

Tide, one of Norway's largest privately owned public transportation companies, recently moved to their new office locations in Bergen, Norway. They used innovative interior solutions to create an efficient and pleasant open office landscape. The glass window facade is soundproofed and DeAmp's perforated wall panels absorb sound within the open office landscape. The wall panels are also part of the visual expression created in the building.

More reference projects available on our website: www.deamp.com



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