Delta~dB

Sound Damping Coating

Designed to reduce excessive sound from structural or mechanical noise, Delta~dB Sound Damping Coating is a flexible, enviro-friendly product that bonds directly to a wide range of surfaces. Comprised of noise suppressants encased in an acrylic binder, Delta~dB is easily applied via brush, roll or spray methods.

Sound travels two ways – through structure and through the air. To reduce sound energy's conversion from structurally transmitted energy to airborne sound waves, you need to dampen vibration effects on the surface. Delta~dB employs its sound-damping technology, suppressing vibration movement through the sound path. This suppression basically reduces or "kills" the sound prior to its airborne transmission.

Its unique chemistry and proven Dispersion^{2TM} technology allow Delta~dB to pack more sound-suppression materials into a flexible adhesive coating. The result is greater reduction of sound transmission at lower dry film weights compared to traditional damping solutions. In addition, application is normally 3-4 times faster than standard cut-and-paste-type damping materials. With Delta~dB, equipment surfaces are always viewable, so inspectability is never an issue like it is with conventional wraps and bulky sound insulation. And because the coating bonds directly to all clean surfaces, there's no risk of adhesion loss or water entrapment that can lead to corrosion under insulation.

Delta~dB can be applied to carbon and stainless steel (carbon steel requires a primer), aluminum, brass, fiberglass, plastic, and many other surfaces. A typical application of just two coats provides the most cost-effective sound damping control, but additional coats can be applied as needed. Delta~dB is enviro-friendly, with no toxic ingredients or volatile organic compounds (VOCs). It's water-based, so clean-up is easy with just soap and water.

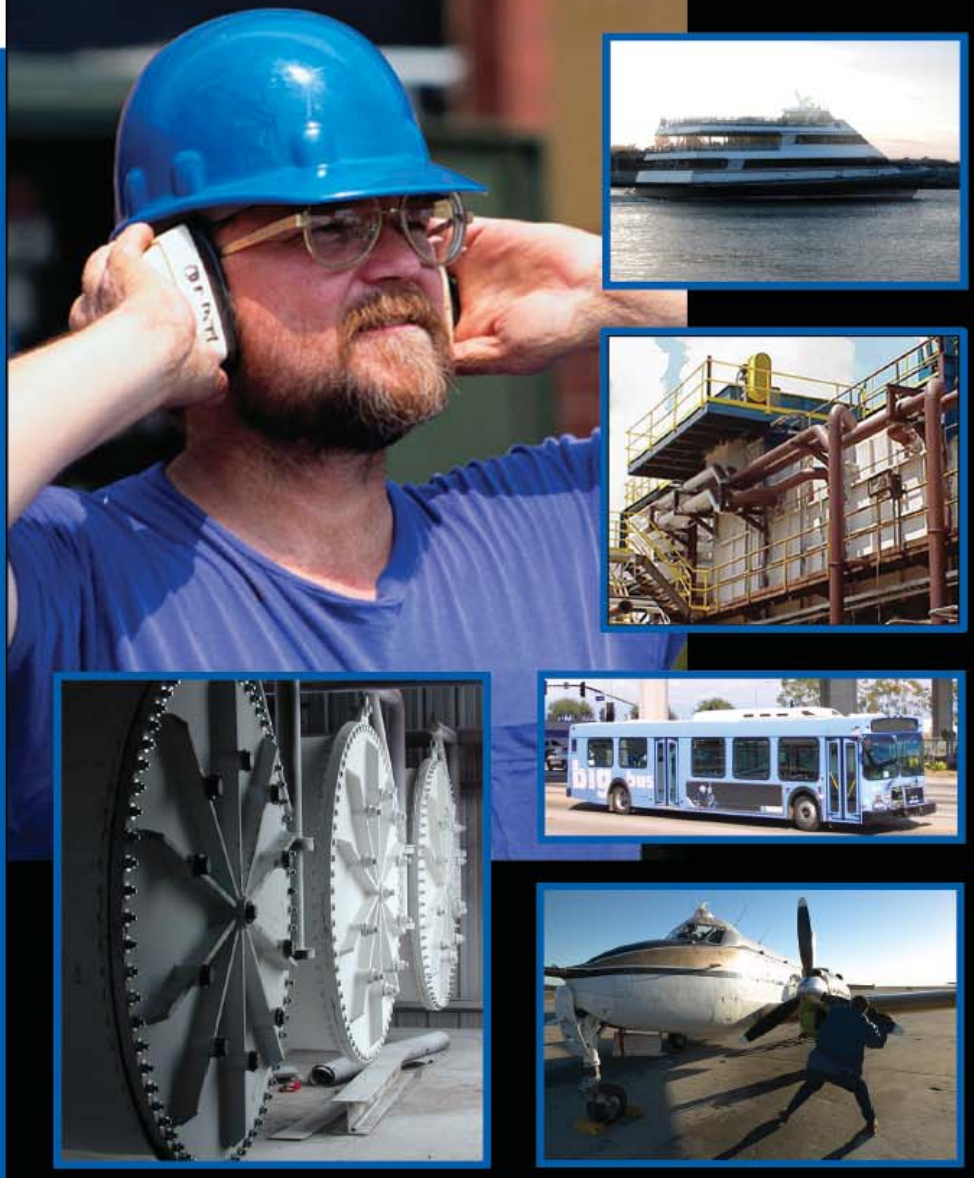
Delta~dB is a Class A (1) fire retardant coating approved for use on cars, buses, trains, boats and large industrial complexes. Combining Delta~dB with Delta T Marine thermal insulation coating achieves dramatic sound reduction and thermal qualities.

Mascoat PRODUCTS

www.Mascoat.com

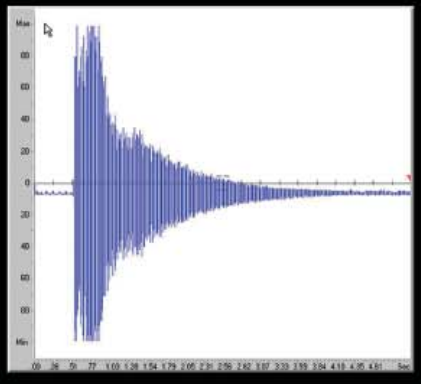
The Best Choice for Sound Environments

Delta~dB Quiets Even the Noisiest Sounds

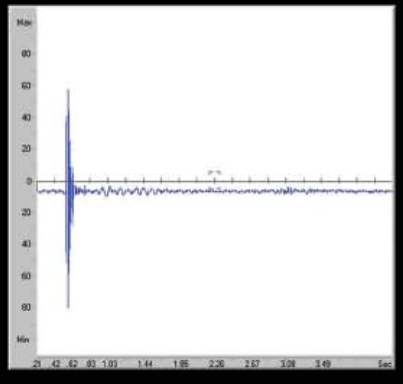


Uncoated Surface vs Coated Surface

Below are two indentical surfaces in a before and after study. The graphics depict the sound waves expressed in Decibels over time. The left graphic shows the uncoated surface vs. the right graphic showing the coated surface (at 40 mils or 1.0 mm).



Control - Bare steel surface



Test surface - Steel with 40 mils dft Delta dB in two coats

Delta~dB

Sound Damping Coating

Brief Tech Data:

Packaged:	5 gallon pails or 55 gallon drums
Color:	Black, Grey, Off-White, White
Odor:	Little to none
Base:	Water based acrylic
VOC:	0.0 lbs/gal
Shelf Life:	1 year
WPG (wet):	13.35 lbs
Weight dry:	0.005 lbs/ft2 @1 mil 0.300 lbs/ft2 @60 mils
Spec. Grav. (wet):	1.60
Volume solids:	58%
Weight Solids:	84%
Viscosity:	4200 cp
Hardness:	Good to great
Flexibility:	Great, capable of free film bend of 1/8" dia without cracking at 20 mils DFT
Adhesion:	5B
Coat thickness:	20-40mils (0.5-1.0mm) per coat
Max coat:	No upper limitation as long as each coat does not exceed 40 mils wet.
Dry time (80°F):	25 min @ 20 mils wet
Application Temp:	50°-250° F (10°-110°C)
Recoat:	30-120 mins
Cure time:	24-72 hours

Sold by:

SOUND DAMPING EFFECTS USING COATINGS

Decrease in Decibels vs. Frequency

Frequency Hz	188	366	585	881	1000	3000	5000
60 mils Delta~dB	9.3	11.5	10.7	11.6	10.8	10.9	11
40 mils Delta~dB	4.0	5.8	5.3	5.7	5.7	5.7	5.8
Delta~dB + Delta T Marine	10.2	11.8	11.7	12.9	12.9	12.9	12.9
Plain panel (no coating)	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Explanation: *The numbers above show a decrease in decibels across the various frequencies of vibrational movement. The coatings demonstrate a very positive effect on damping of the surface. All tests were performed on like aluminum surfaces according to Loss Beam Factor Test performed at Noise Control Engineering.*

Note: *A plain aluminum panel that shows no damping or sound loss effects was used as the control for the test. Delta~dB and Delta T Marine is a typical system of both sound and thermal insulation. Delta T Marine is also a product of Mascoat Products USA.*

How Does The Coating Work?

Sound transfer is based upon three factors: the sound source (where the sound originates), the sound path (the vehicle that transfers the sound) and the sound receiver (how we perceive the sound). To control sound, it is vital to control at least one of these factors. Because in most cases it is difficult to control the source, controlling the sound transfer path is vital.

Delta~dB incorporates special anti-vibrational fillers with a sound absorption resin. This formulation suppresses the vibrational movement through the sound path, retarding sound/vibration transfer through the path. By controlling the vibration, less sound is transmitted through the surface.

Typical Uses: Delta~dB is an excellent lightweight material that can be applied to almost any surface to dramatically reduce road structural noise. Easily applied to the interior or exterior of a vehicle, Delta~dB dampens noises before they are released into the car, truck, bus, etc. Because the coating stays flexible when dry, its adhesion on vibrating surfaces is significantly better than typical glue-on damping materials.

Other Applications: Delta~dB can also be used on industrial and other equipment that produce high noise levels due to structural translation. The coating can be applied directly to most surfaces to lower noise prior to airborne release. Where noise level safety is concerned, Delta~dB is a very cost-effective, low-effort solution.

Applying Delta~dB: The coating can be applied via airless, conventional, brush or roller.

Surfaces: Delta~dB can be applied directly to almost any surface. Carbon steel requires a primer.

Application Rate: Delta~dB can be applied to 25-40 mils wet film thickness. Thinner coats promote faster dry times. Typical application is 2-3 coats.

For a complete list of approvals, please call 800.549.0043 or 713.465.0304

DeltadB - 01005

Mascoat PRODUCTS

Leaders in Insulating Coating Systems