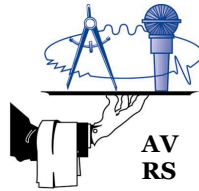


Product Data Sheet



RoomDamp² (Viscoelastic Damping Compound)

A/V RoomService, Ltd.

**Noise Control & Sound Quality Solution
For Floors, Ceilings and Walls**

Introduction

The use of viscoelastic compounds to control structure borne sound vibrations is a well-known science that has been in existence for many decades. Choosing a quality vibration damping product can be a wise decision to significantly improve both the noise control and sound quality of your listening environment. But sifting through all the various product claims and data can be confusing and elusive. For this reason (2) important questions are highlighted to help clarify the science of vibration damping and why **RoomDamp²** is one of the most cost efficient and effective choices for the control of sound vibration and sound quality:

1. Why does the use of viscoelastic damping compounds make sense for both noise control and sound quality?
2. What are the performance features, benefits, and design considerations of **RoomDamp²**?

When sound energy strikes the surface of a partition assembly, energy is transferred into the surface sheet material in the form of bending waves. Untreated, structural waves propagate sound energy

throughout the floor, ceiling or wall assemblies to other rooms.

RoomDamp² utilizes **constraint layer damping** technology to force bending waves to induce shear-deformation within a thin applied layer of **RoomDamp²**.

It is these cyclic deformations occurring throughout **RoomDamp²** that accelerate energy loss through damping in the form of heat dissipation.

Noise Control

RoomDamp² absorbs structural vibrations to significantly reduce noise transmission between rooms.

*Partition assemblies applied with **RoomDamp²** reduce noise levels up to an additional 40% compared to untreated wall assemblies.*

Not only are rooms quieter for living or sleeping, but the full dynamic range of the listening environment is captured.

*NAVLAP Certified Laboratory Tests show **RoomDamp²** is equivalent to competitive viscoelastic products.*

NAVLAP Certified Tests per ASTM E 90 for 24" on center 2x6 Wood Studs with R-13 cavity insulation and double layer 5/8" Type X drywall on both sides indicate:

Comparative Test Results		
Wall Type	STC	Product Cost/Sq.Ft
2x6 Std Wd Stud Wall:	STC-44	NA
2x6 Wall Using Leading Damping Product:	STC-52	\$0.73
2x6 Wall Using RoomDamp² :	STC-53	\$0.54*

* **RoomDamp²** savings of over 27% based on 55 oz. per 4x8 sheet

Sound Quality

RoomDamp² reduces partition resonances and room reverberation times resulting in a fast, dynamic, articulate sounding room. Untreated room partitions resonate & store sound energy, both of which is then re-radiated back into the listening space later in time. They also reflect lower frequency sound energy back into the room. For any critical listening environment, these delayed and reemerged sound energies distort the original sound signal making the room sound slow, muddy and droning.

RoomDamp² reduces re-radiated sound energy by dissipating and absorbing wave deformations that impinge upon & within the partition. Rooms sound fast and articulate with the use of **RoomDamp²** in the partition assembly.

Description

RoomDamp² is an easy to apply, water soluble, high performance viscoelastic compound designed to effectively dissipate structural vibrations between layers of drywall or engineered wood products such as plywood or OSB.

Equivalent in noise control performance to other higher priced damping compounds, **RoomDamp²** cost as much as 27% less.

Uses

RoomDamp² is excellent for both residential and commercial noise control and sound quality applications.

RoomDamp² easily covers the entire drywall or plywood surface using a standard paint roller.

As a result, **RoomDamp²** more effectively absorbs sound vibrations over the entire application surface area.

FEATURES AND BENEFITS

RoomDamp² provides:

- ✓ Equal acoustical performance for less cost
- ✓ Reduces Noise Transmission
- ✓ Improves Sound Quality
- ✓ Increase STC ratings
- ✓ Damps Surface Layer Resonance
- ✓ Reduces Impact Vibrations
- ✓ Reduces reverb times
- ✓ Maintains acoustical performance over time
- ✓ Easy to apply using a simple paint roller
- ✓ No special guns or applicators required
- ✓ Class A Fire Rated
- ✓ Mildew & Water Resistance
- ✓ Less odor
- ✓ Easy water clean-up
- ✓ Little to no waste

RoomDamp² is excellent for both wood and metal frame constructions and damps vibrations in raised floorings, platforms and stages.

INSTALLATION

A thin layer of **RoomDamp²** is applied to the back of the second layer of drywall or engineered wood (plywood or OSB) using a low nap paint roller.

Fasten the second layer of sheathing or gypsum board (per board manufacture's instructions) over the 1st layer area within 10 minutes of applying **RoomDamp²**.

Coverage: Approximately 55 to 60 oz of **RoomDamp²** is recommended for a typical 4'x 8' sheet area (32 sq.ft.).



A standard 5-gallon (18.9 Litter) bucket of RoomDamp² covers up to 370 sq.ft. Or over (11.5) 4'x 8' sheets. Competitors costs per sq/ft as high as \$0.81 vs. RoomDamp² cost at \$0.54. A 34% cost reduction.

Store & apply RoomDamp² between 40-120°F (5-49°C) Do not allow to freeze in bucket. Store sealed in a cool place out of sunlight
Clean up: warm water

Applicable Standards

ASTM E90 – 04 and Classification of Rating Sound Insulation ASTM E413-04. Test Method conforms explicitly to ASTM and NVLAP requirements.

ASTM E84 Fire Resistance Rating: Class A

Always check local building codes regarding local requirements affecting installation of all building components.

Warranty

Warranty/Limitations of Liability:

A/V RoomService, Ltd. warrants that this product shall perform as presented when stored and used as directed. If this product is proven defective, the exclusive remedy shall be to refund the purchase price of or to replace the defective product. A/V RoomService, Ltd. shall not otherwise be liable for loss or damages, whether direct, indirect, special, incidental or consequential. A/V RoomService, Ltd. disclaims all other warranties, whether expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose.

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