

### DESCRIPTION

Vibro-Acoustics® AP-MB silencers are expansion chambers which use a highly effective sound absorption material, MoldBlock Media™, that is inherently resistant to the growth of mold, mildew and fungi. MoldBlock Media™ is an environmentally friendly, Class A building material that is made from 100% natural fiber and does not contain any glass fiber.

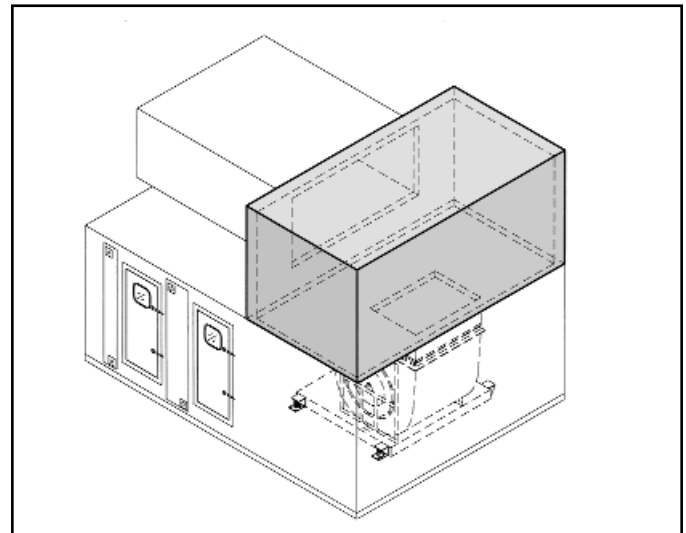
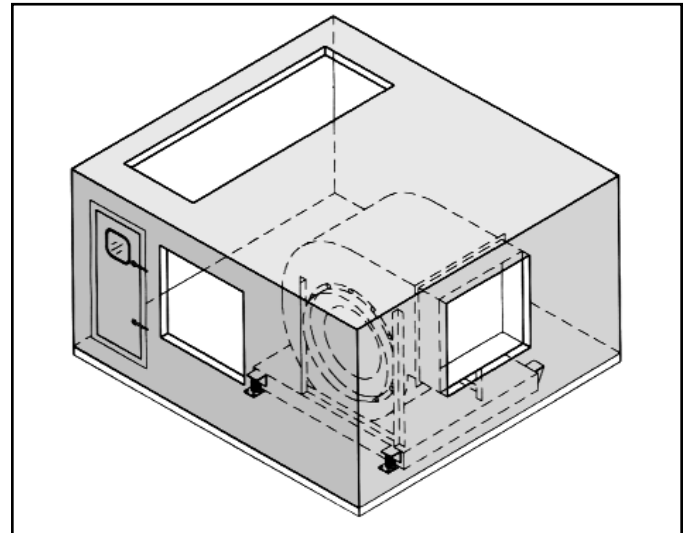
The most common lining thickness is 4" (100mm) for fan noise control. Thicker treatment of 6" (150mm) or even 8" (200mm) is more effective in the low frequency range. Intake AP-MB silencers may enclose a fan and include multiple inlet or discharge openings. Fan, coil or filter access via removable panels, panel sections or doors may be provided. Fan discharge AP-MB silencers may provide multiple discharge take-offs in varying directions.

### APPLICATION

- ◆ wherever glass fiber is not acceptable in duct and air handling systems
- ◆ as a superior alternative to glass fiber filled Acoustical Plenum silencers whenever mold, mildew or fungi growth is of concern such as in schools, hospitals, office buildings, etc.
- ◆ for low frequency attenuation
- ◆ integral to or in conjunction with air handling units
- ◆ when the noise needs to be contained at the source
- ◆ to help quiet noisy fan rooms

### FEATURES & BENEFITS

- ◆ **Inhibits Microbial Growth:** Every natural fiber used to manufacture MoldBlock Media™ is individually treated with an EPA registered, non-toxic, anti-microbial agent that offers excellent protection from mold, mildew and fungi. Since each fiber is individually treated, secondary manufacturing processes will not disturb or degrade the mold inhibiting qualities that occur when a material is only surface coated.
- ◆ **IAQ Friendly:** MoldBlock Media™ does not produce any harmful airborne particles that can permeate into HVAC systems and the surrounding environment causing health concerns.
- ◆ **No Off-Gassing:** Contains no formaldehydes, phenolic resins or other chemicals that can cause various reactions, irritations and health concerns.
- ◆ **LEED and Green Building Rating System Compatible:** The use of MoldBlock Media™ successfully contributes to earning credits in several of the USGBC's LEED Ratings program criteria.
- ◆ **Environmentally Safe / Friendly:** MoldBlock Media™'s natural fibers are 100% recyclable, reducing landfill waste. The manufacturing process of MoldBlock Media™ requires a mini-



mal amount of energy to manufacture aiding the environment with energy conservation and a reduction in pollution.

- ◆ **Acoustically equivalent to fiberglass:** HVAC silencers and acoustic panels containing MoldBlock Media™ have equivalent acoustical and aerodynamic performance to the same products that utilize fiberglass.
- ◆ Available in factory assembled or "knock-down" construction
- ◆ Panel connections may be "tongue and groove" (for strength), "H-section" or "internal flange butt" type (for ease of panel removal)
- ◆ Various panel sizes and thicknesses
- ◆ Good quality seals to resist moisture, air and noise leakage

## SILENCER SHEETS

- ◆ Made in sections to fit ceiling space and can incorporate notches to facilitate cross-over beams, pipes, ducts, etc.
- ◆ Factory designed and manufactured removable panels, access sections, windows and doors
- ◆ Thick panel construction (4" (100mm) or greater) available for extra low frequency attenuation
- ◆ Heavier gauge or composite construction available to minimize breakout noise
- ◆ Can be selected to suit the acoustic, space or energy-cost requirements

### COMPARISON OF FEATURES

FEATURE	MoldBlock Media™	FIBERGLASS
Individual Fibers Treated with Anti-Microbial Agent	YES	NO
Made from Natural Fibers	YES	NO
Mostly Recycled Content	YES	NO
No Off-Gassing or VOC Concerns	YES	NO
Environmentally Friendly	YES	NO
Does Not Contain Formaldehyde	YES	NO
Reduces Indoor Air Quality Issues	YES	NO
Requires Less Energy to Manufacture	YES	NO
No Itch/Irritation	YES	NO

### CAUTIONS/WHEN NOT TO USE AP-MB SILENCERS

- ◆ When absorptive media of any type is not acceptable. For these critical applications consider Vibro-Acoustics® No-Media Acoustical Plenum silencers which are void of any fibrous material. (No-Media AP silencers generally have lower insertion loss performance.)

### PHYSICAL PROPERTIES (of MoldBlock Media™)

PROPERTIES	PERFORMANCE	TEST METHOD
Surface Burning Characteristics (Fire Hazard Classification)	Flame Spread 10 (Class 1) Smoke Developed 50 (Class 1)	ASTM E 84 UL 723
Corrosion Resistance	Pass	ASTM C 739
Fungi Resistance	Pass – No Growth	ASTM C 739
Bacteria Resistance	Pass – No Growth	ASTM C 739

### SILENCER SELECTION

Vibro-Acoustics AP-MB silencers need to be carefully selected to optimize performance. Call 1-800-565-8401 for custom selections and proposal drawings by our application engineers.

### STANDARD CONSTRUCTION FEATURES

- ◆ Solid galvanized skin
- ◆ Perforated galvanized liner
- ◆ MoldBlock Media™ under minimum 15% compression with thickness usually ranging from 2–8" (50–200mm) depending on acoustic performance required and space available
- ◆ Panel connection type available as "tongue and groove", "H-section" or "internal flange butt"
- ◆ Internal stiffening to panel

### SPECIAL CONSTRUCTION OPTIONS

- ◆ Heavier gauge skins and perforated metal
- ◆ Special materials e.g. stainless steel, aluminum
- ◆ Access doors, openings
- ◆ Removable panels or panel sections
- ◆ Windows
- ◆ High transmission loss (HTL) construction to prevent breakout/break-in noise
- ◆ Aerodynamic, acoustical splitters
- ◆ Special finishes
- ◆ Floor gratings
- ◆ Structural support systems (hanging or floor mounted)
- ◆ Integration of components e.g. filter racks, coil racks

### TO SPECIFY (for inclusion in any HVAC silencer or Acoustic Plenum specification)

"Acoustic Media: Media shall be Vibro-Acoustics® MoldBlock Media™ containing 100% natural cotton fibers treated with an EPA registered, non-toxic borate solution, "flash dried" to actively inhibit the growth of mold, mildew, bacteria and fungi. Media shall not contain any formaldehydes, phenolic resins or Volatile Organic Compounds (VOC's) that can off-gas and/or cause health concerns. Media shall be 100% recyclable. Media shall comply with UL181 and NFPA 90A. MoldBlock Media™ shall be packed with a minimum of 15% compression during silencer assembly. Media shall not cause or accelerate corrosion of aluminum or steel. Glass fiber and rock-wool are not acceptable alternates."