

SILENCER SHEETS

DESCRIPTION

Vibro-Acoustics' EX model silencers are designed so that the absorptive materials are partially outboard of the airstream. This increases the silencer's air passage, lowering the pressure drop without reducing the acoustic performance or increasing the acoustic performance without increasing the pressure drop. EX-RD and EX-RED silencers use acoustic grade glass fiber protected by perforated metal. EX-RFL and EX-REFL silencers incorporate a film liner between the perforated metal and the glass fiber. EX-RNM and EX-RENM silencers do not use glass fiber and are completely void of any fill material.

APPLICATION

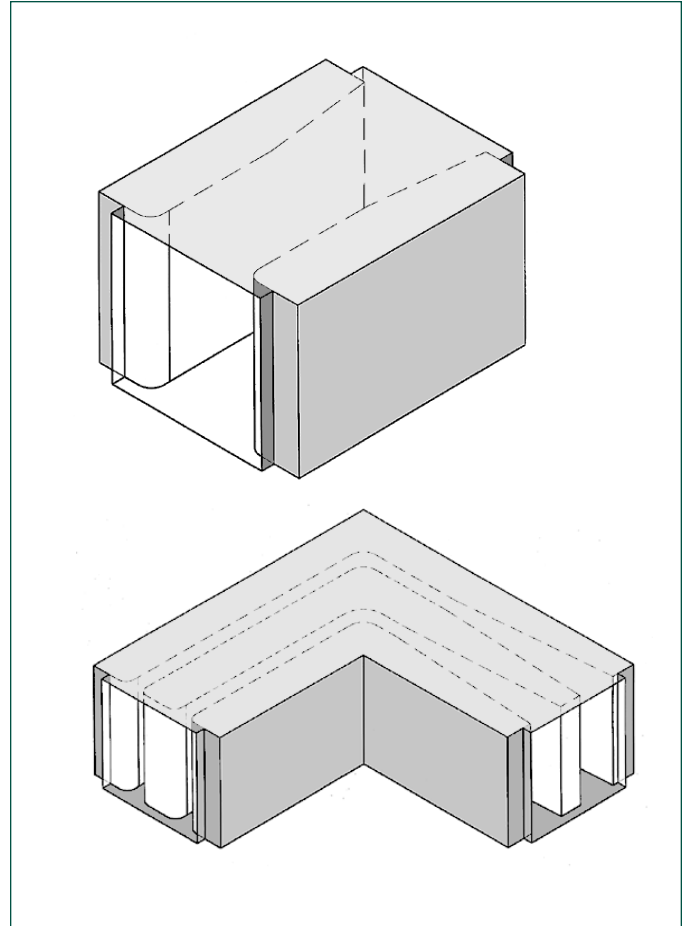
- ◆ high duct velocity systems (see SAS 7)
- ◆ average duct velocity systems when more low frequency insertion loss is required at no additional pressure drop
- ◆ on the receiver side of valves, dampers, terminal boxes, etc.

FEATURES AND BENEFITS

- ◆ external acoustical media allows lower pressure drops without degrading the silencer's low frequency insertion loss (see SAS 7 and 8)
- ◆ available in any cross-sectional dimensions to "fit-the-duct"
- ◆ can incorporate notches to facilitate cross-over beams, pipes, ducts, etc.
- ◆ can be selected to suit the acoustic, space, or energy-cost requirements
- ◆ construction quality and aerodynamic design optimized to give reliable performance, best acoustics, lowest pressure drop and lowest overall cost
- ◆ available in Dissipative (EX-RD and EX-RED), Film Lined (EX-RFL and EX-REFL) and No-Media (EX-RNM and EX-RENM) options

CAUTIONS / WHEN NOT TO USE EX SILENCERS

- ◆ when there is absolutely no room outside the duct connection size (e.g. tight shafts)
- ◆ when there is not enough duct length consider using Fan Silencers (SS10 and SS11)
- ◆ when break-out noise is of prime concern EX silencers may be appropriate selections. They may require mass/stiffness added to their outer casing (see HTL Silencers (SS7))



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TESTING

Vibro-Acoustics' 4th generation aero-acoustic laboratory was the first laboratory to be NVLAP accredited for the ASTM E-477 silencer test code. NVLAP is administered by the U.S. Dept. of Commerce. See the Aero-Acoustic Laboratory Section.

SILENCER SELECTION AND LOCATION

Vibro-Acoustics' EX Silencers need to be carefully selected to optimize performance. Call 1-800-565-8401 for custom selections by our application engineers.

STANDARD CONSTRUCTION FEATURES

Consult the Standard Construction Features of the Silencer Type using the external acoustic media.

SPECIAL CONSTRUCTION OPTIONS

- ◆ heavier gauge casings and perforated metal
- ◆ continuously welded casings
- ◆ special materials e.g. stainless steel, aluminum
- ◆ flanges
- ◆ access doors
- ◆ media protection: glass fiber cloth
- ◆ high transmission loss (HTL) casings to prevent break-out/break-in noise
- ◆ built-in transitions
- ◆ removable splitters
- ◆ flow measuring stations
- ◆ for details of above and more special options see Special Construction Options (pg. 3.33 to pg. 3.37).

TO SPECIFY

See example specification located in the Selection/Specification section.