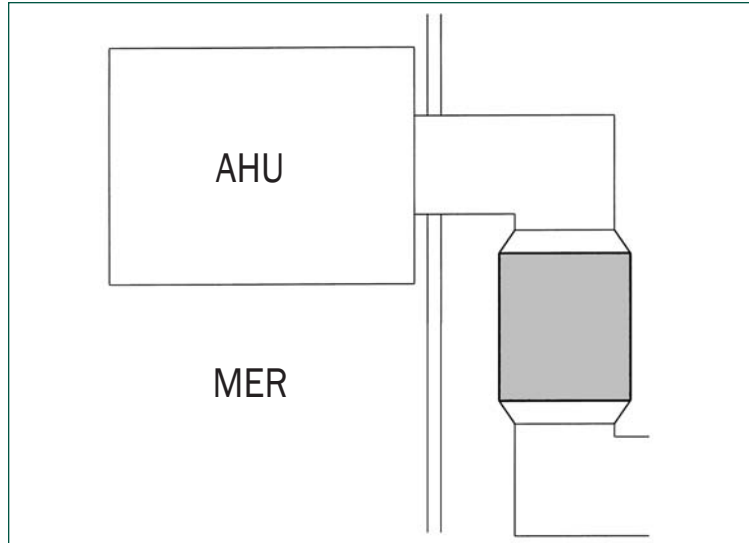


SILENCER APPLICATION SOLUTIONS

PROBLEM:

Compounded Problems

- ◆ Most HVAC systems have more than one problem to resolve when incorporating noise control. Multiple problems feed off each other to create a “systems” problem.
- ◆ ASHRAE’s best seller, “A Practical Guide to Noise and Vibration Control for HVAC Systems” advises that selecting system components without properly integrating them into the system is one of the top three causes of today’s noise problems.
- ◆ Most often, systems have ALL of the following problems to overcome when considering noise control:
 - matching silencers to duct connection sizes
 - low frequency noise
 - aerodynamic system effects (not enough straight duct runs to fit straight silencers)
 - breakout noise

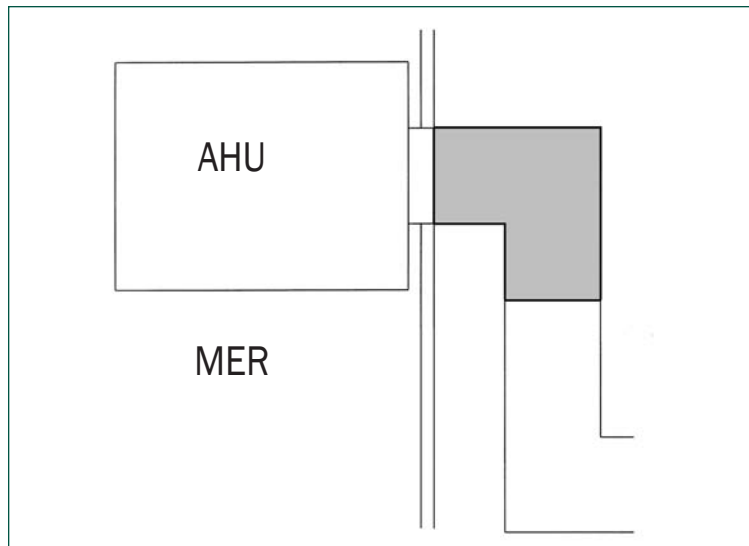


Low frequency breakout noise and excessive silencer pressure drop result from straight silencer with transitions located close to duct elbows.

SOLUTION:

The “Systems Approach”

- ◆ Always evaluate silencers as part of the system, not as a stand-alone component. Vibro-Acoustics, whenever given the opportunity, takes the “Systems Approach” to integrate the optimal noise control product into a quiet system.
- ◆ Fit-the-duct Silencers, Low Frequency Silencers, Elbow Silencers and Silencers with High Transmission Loss (HTL) casings are just a few of the products developed by Vibro-Acoustics to meet the complex, yet common, needs of the market place.



Fit-the-duct Elbow Silencer with HTL casing is located at Mechanical Equipment Room (MER) wall to stop breakout noise and minimize aerodynamic system effects.