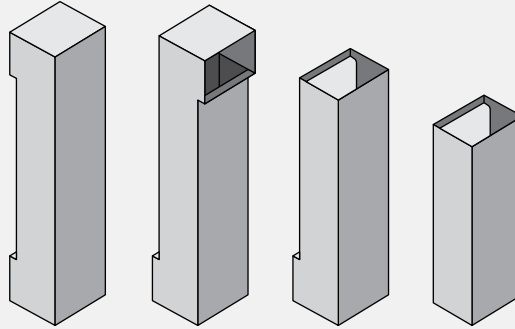


CT

Cross-Talk Silencers



Description

VIBRO-ACOUSTICS' CT SILENCERS are designed to reduce speech intrusion into adjacent rooms via connecting ducts and return and supply air openings. They use acoustic grade glass fiber as the principle sound-absorbing mechanism. Acoustical splitters, sometimes called baffles, are used for optimal mid-frequency range attenuation. Perforated metal protects the glass fiber from erosion by the airflow.

Applications

- > Where speech privacy and freedom from distraction is required and airflow is necessary
- > For private rooms (e.g. lawyers' and doctors' offices),
- > Offices, conference rooms, bathrooms, kitchens, halls
- > Typically located in ceilings, ducts, walls and even doors
- > Sensitive Compartmented Information Facility (SCIF Rooms)
- > Government offices like Police Stations, courthouses etc.
- > Military installations

Features and Benefits

- > Available in any cross-sectional dimensions to “fit-the-opening”
- > Common shapes include straight, elbow, “Z” and “U” configurations
- > Special applications available such as light troffer CT silencer
- > Standard lengths available: 24” and 30”; custom lengths also available
- > Low aerodynamic pressure drop for ease of door opening
- > Can be selected to minimize degradation of wall or barrier STC rating
- > 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

Cautions/When Not to Use CT Silencers

- > CT silencers are not intended to substitute for broad-band, high insertion loss silencers
- > Not intended for high volume or high velocity airflows
- > Pressure drops should be kept below 0.05” WG to allow for easy opening of doors.
- > Some critical applications like music rooms and sensitive Government/military applications may require a thorough analysis. Consider getting the services of a qualified acoustical consultant

Performance Data/Testing

Vibro-Acoustics’ 5th generation aero-acoustic laboratory was the first laboratory to be NVLAP accredited (Lab Code 100424-0) for the ASTM E-477 silencer test code. NVLAP is administered by the U.S. Dept. of Commerce.

Silencer Selection

Factors affecting selection include:

- > Degree of speech privacy required
- > Wall or barrier sound transmission class (STC rating)
- > Background noise levels in the receiving room
- > Short circuiting of sound paths through doors, holes for piping, electrical services, etc.
- > Adjoining opening size, shape and path length
- > Airflow rates to permit easy door opening

For the most economical selections call our application engineers at **1-800-565-8401**.

Standard Construction Features

- > Galvanized lockformed casing constructed to SMACNA standards
- > 3” slip connection at each end
- > Aerodynamically shaped, perforated galvanized nose at inlet
- > Perforated galvanized splitters
- > Splitters filled with acoustic grade glass fiber under minimum 15% compression

Other construction features vary depending on size, type, capacity and pressure of fan. Consult Vibro-Acoustics application engineers for information.

Special Construction Options

- > Special materials (e.g. stainless steel, aluminum)
- > Grilles or other terminal devices
- > Lockable access doors
- > Media protection: glass fiber cloth, film liner
- > Built in transitions
- > RF shielding to block cellular communication
- > Screens
- > Jail bars to prevent infiltration from adjacent rooms.
- > Flexible connectors with HTL cap to break metallic contact between rooms
- > For details of above and more special options see [Special Construction Options](#).