

PROJECT SOLUTIONS

Project: Charles Tupper Office Building
Application: Duct Silencers (Axial Fan Systems)

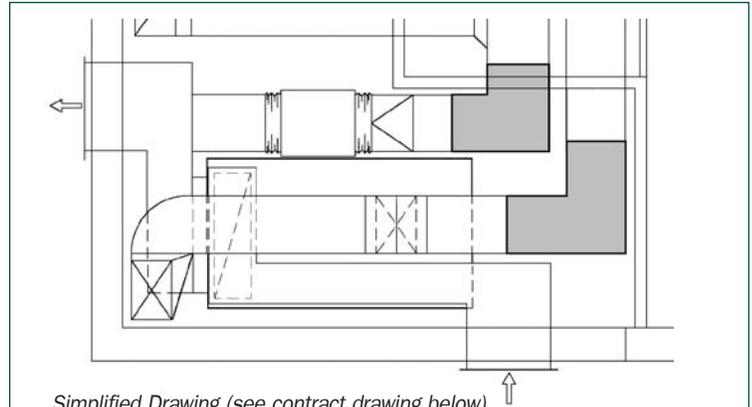
Existing office building upgrade to NC-35 uses Vibro-Acoustics' fit-the-duct silencers to reduce fan noise.

**PROBLEMS: Break-out noise
 Fit existing ducts**

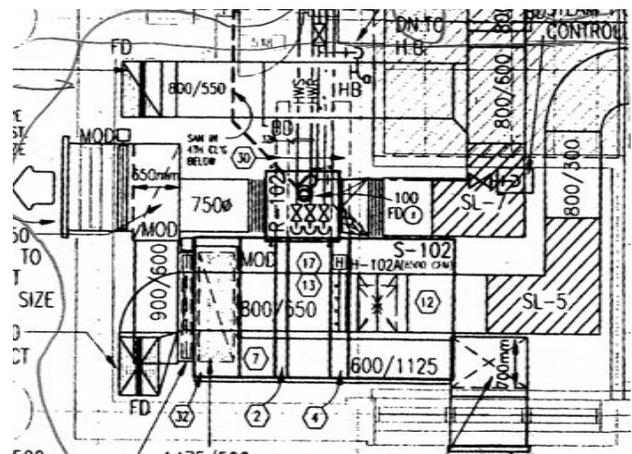
Fans and air handling units located in mechanical rooms adjacent to occupied spaces are scattered throughout the building. Return fans are axial type. Most existing ducts have elbow fittings in the occupied ceiling space adjacent to the mechanical room walls. Break-out noise from these duct regions was the most common and biggest problem.

SOLUTION: Elbow silencers with HTL walls

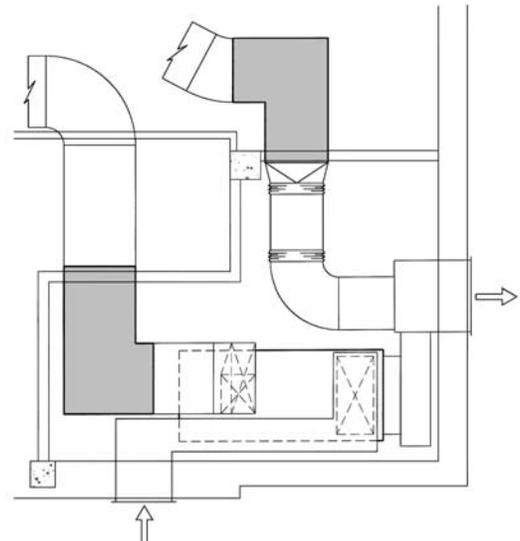
Most silencers are elbow type to fit the existing ductwork. To prevent break-out noise, silencers located at the mechanical room walls were supplied with higher transmission loss (HTL) walls.



Simplified Drawing (see contract drawing below)



Mechanical equipment room. Plan view.



Another example of elbow silencers installed at equipment room walls to reduce breakout noise.