

PROJECT SOLUTIONS

Project: Pickering Community Center
Application: Duct Silencers (Centrifugal Fan Systems)

Special silencers for community center save space, energy and consultant's design time.

**PROBLEMS: Insufficient straight duct
 Insufficient duct length**

There were no straight runs of duct for the installation of standard silencers. In addition, duct runs were short between the air handling units and the sports facilities surrounding the large mechanical room.

SOLUTION: "Fit-the-duct" silencers

Fit-the-duct silencers were supplied. One was a round to rectangular transitional elbow silencer shown in the photo.

PROBLEM: No redesign time

There was no time to redesign the mechanical room and compromise the design so that standard silencers could be applied.

SOLUTION: Special "fit-the-duct" silencers

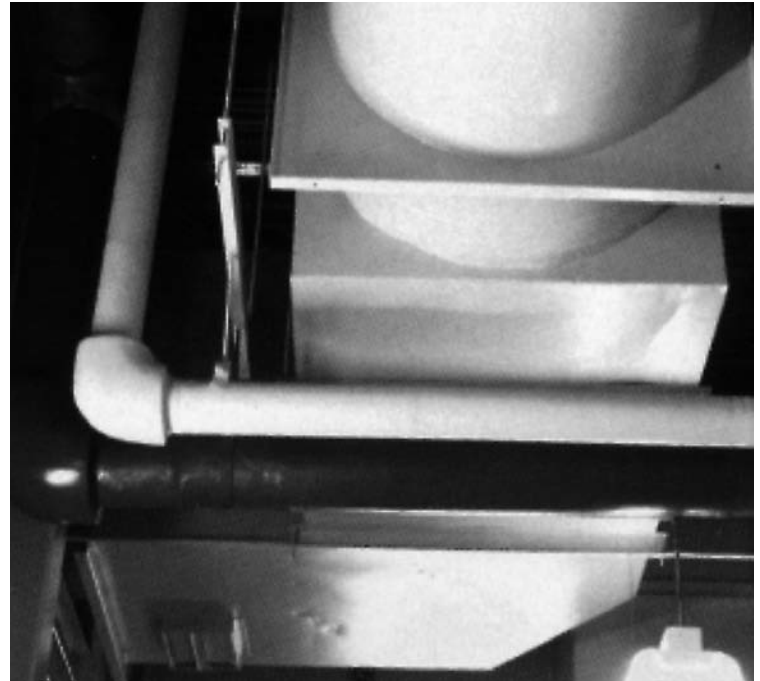
The application of special fit-the-duct silencers saved critical design time. The optimum design for AH unit access, avoiding stratification etc. did not have to be compromised.

PROBLEM: Energy consumption

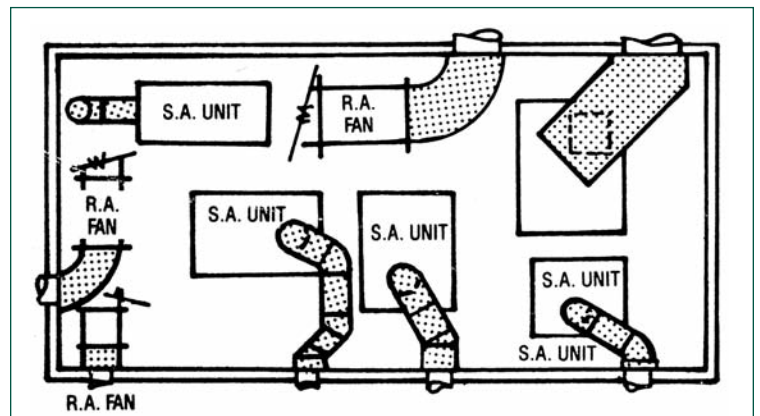
Energy conservation was important since the sports facility is open for long hours each day, seven days a week.

SOLUTION: "EX," RLP and CLP silencers

Low pressure drop silencing was applied, including straight through type without splitters and centerpods wherever possible.



The photo shows a round to rectangular elbow transition silencer for the axial fan.



Plan view of mechanical room showing location of silencers to "fit the ducts."