

PROJECT SOLUTIONS

Cross-talk silencers replace lined transfer elbows at a lower cost and improved performance.

PROBLEM: Acoustical duct lining

Lined transfer ducts are costly and do not have performance ratings.

SOLUTION: Cross-talk silencers

Vibro-Acoustics submitted acoustic performance for a variety of silencer sizes. These sizes were selected to pass the air quantities specified without excessive pressure drops. All pressure drops selected were less than 0.05 inches.

A table of cost comparisons revealed that the cross-talk silencers were approximately half the price of sheet metal elbows plus lining. The acoustic performance was doubled in the lower and mid-frequency range and equal in the higher. As a result the substitution was successfully completed.

ACOUSTICALLY LINED TRANSFER ELBOW LEGEND		
A	12" X 12"	0 - 500 CFM
B	26" X 12"	500 - 1000 CFM
C	18" X 16"	
D	40" X 12"	1000 - 1500 CFM
E	28" X 16"	
F	22" X 20"	
G	48" X 16"	1500 - 2500 CFM
H	40" X 20"	
I	32" X 24"	

The above sizes were specified for the airflow quantities listed. Locations were noted on the drawings. Lengths were to be determined from the drawing below.

