Silencing systems for large air handling unit are squeezed into existing mechanical room of high tech manufacturer.

PROBLEM: High velocity airflow

High duct velocities resulted from the limited space between the air handling unit and the existing steel above. The unit was so close to the occupied space that only 8' of double elbows existed at one return.

SOLUTION: Special silencing systems

Complex aerodynamic silencing systems were designed to use all the length between the unit and the adjacent occupied space. In addition the space between the structural steel was utilized to expand the silencer outside body dimensions. This accommodated the much higher velocities without excessive pressure drops and generated noise.

Special rectangular to oval transitional silencers were supplied for connection to some distribution ductwork.

The overall design was conceptualized by the consulting engineer. It was Vibro-Acoustics' responsibility to design the internals of the silencing systems to achieve the best noise criteria and pressure drop possible in the existing space.

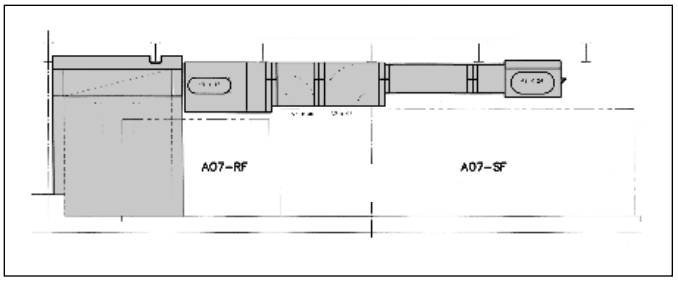
PROBLEM: Limited space and fast delivery

Because of the space limitations and the fast track schedule a quick assembly design was required.

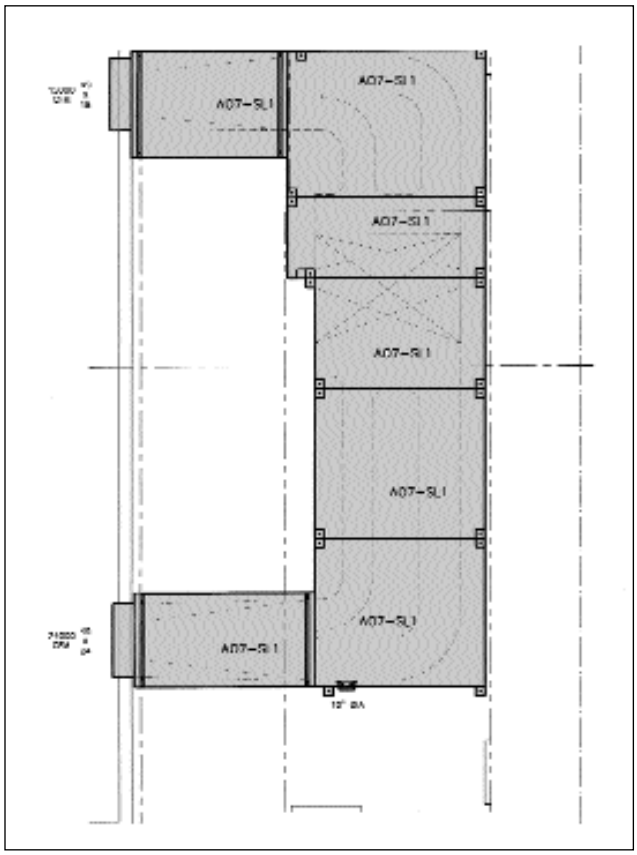
SOLUTION: Special Construction and Fast Delivery

Silencer sections were designed to bolt together on site and hanging brackets were built into the flanges. Construction was class 2 - 16 gauge and all external seams continuously welded.

The first product was shipped in two weeks and the order was completed in eight.



Side Elevation: 3 - 18,000 lb. silencers, designed as systems in modular form, are installed over air handling units. Note the oval connections for the distribution duct work.



Plan View