

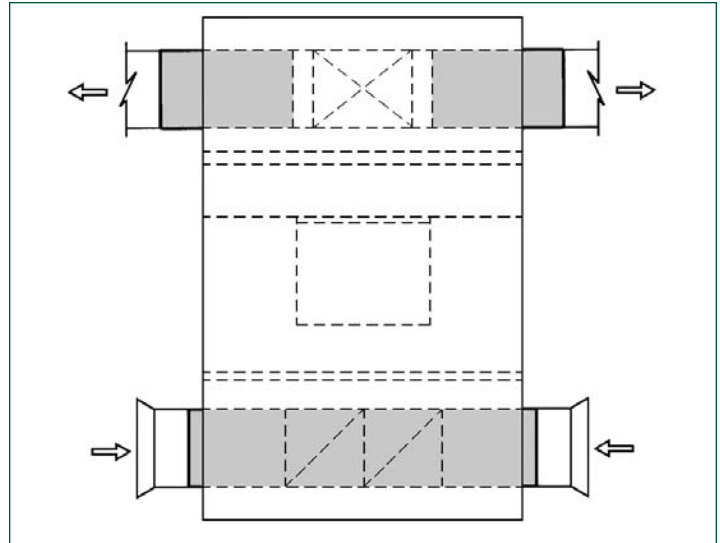
Noise control retrofit of 53 existing HVAC rooftop units helps convert high tech manufacturing space to offices.

PROBLEM: Rooftop unit noise

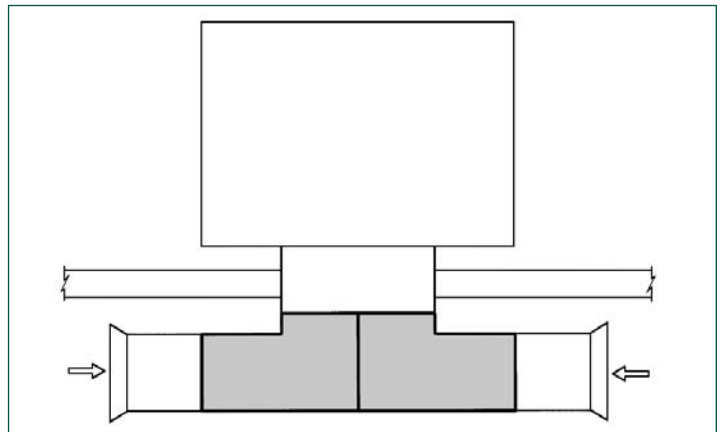
Noise levels exceeded NC-50 before treatment. There were strict limitations that the noise control treatment could not significantly reduce the air supply quantities nor add appreciable weight to the existing roof structure. (Subsequent to the original building design the structural code had been made more stringent.) A strict budget restraint also applied and the project was fast track.

SOLUTION: "T" silencer

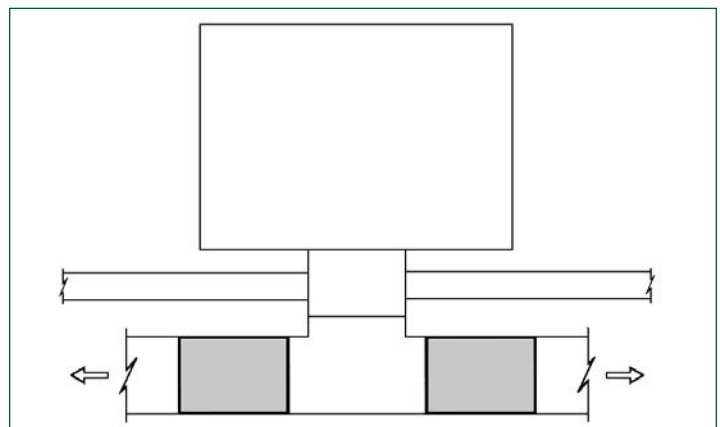
"T" silencers to reduce noise from the unit return and exhaust fans, were installed just below the roof line. On the less critical supply side, straight rectangular silencers were installed after the existing discharge "T". All silencers were selected for low pressure drops so that no changes to the existing units were necessary.



Plan view of rooftop unit shows connecting ducts and silencers.



End view shows return air "T" silencers (two elbow silencers back to back).



Other end view shows retrofit straight supply silencers installed into the existing ductwork.