

Special ridge vent silencers for a cogen plant reduce noise escaping from the turbine hall to the neighbourhood.

PROBLEM: Excessive pressure drop

A very low pressure drop had to be achieved since the turbine hall relies on convection to exhaust 450,000 CFM.

SOLUTION: "T" elbow silencers

Special "T" elbow silencers were supplied in 8' sections which were built into three - 100' long ridge vents. (A total of 48 silencers were supplied) A scale model was tested in the aero-acoustic laboratory.

PROBLEM: Environmental conditions

Design for a very long silencer life was necessary since it was built into the structure and is not accessible for replacement. Also, the installation is on the coast, exposed to salt air.

SOLUTION: Special silencer construction

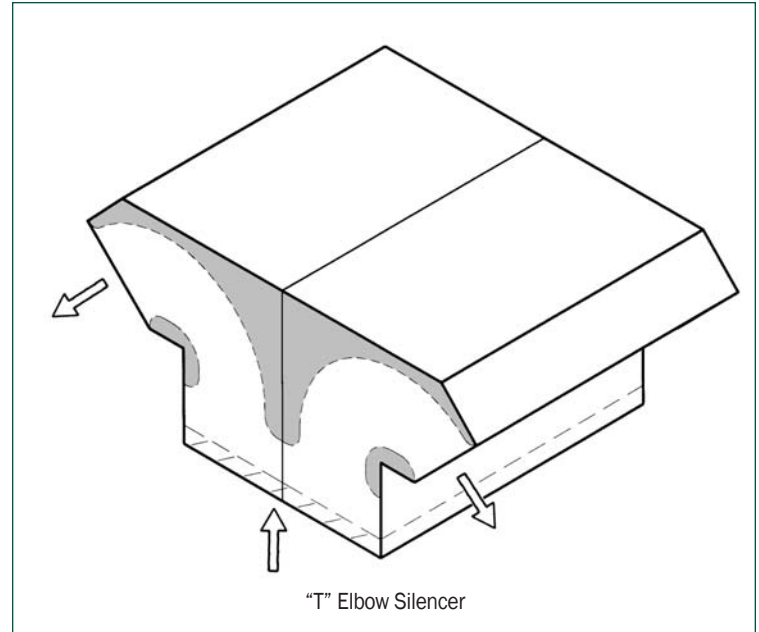
Special silencer construction included no welds to the galvanized sheet metal parts.

PROBLEM: Aesthetics

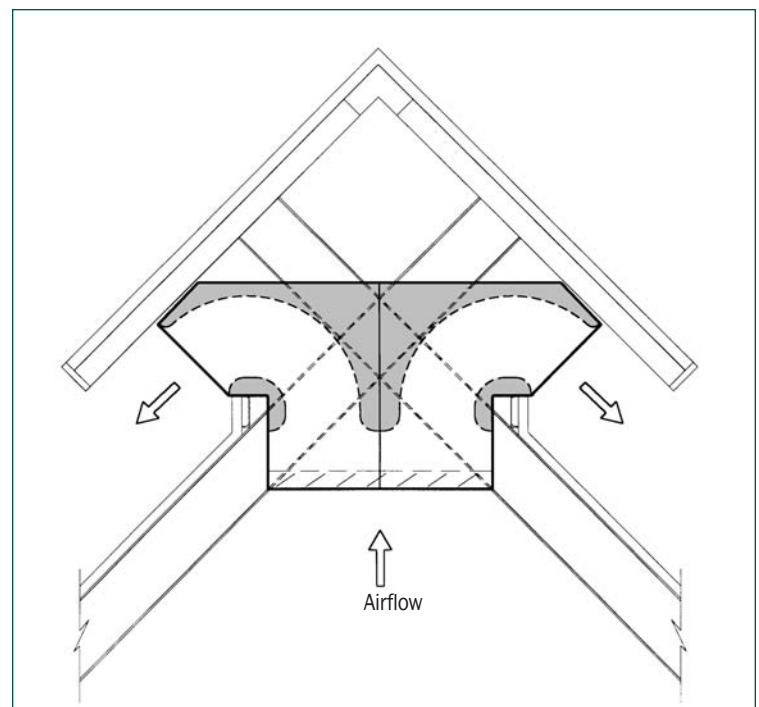
Aesthetics was another consideration since the silencers can be seen from the street.

SOLUTION: Special paint

Special black-out paint was applied to the discharge legs of all silencers.



"T" Elbow silencer 8 feet long is a modular section of silencing 100 feet long



Cross section of ridge vent silencing built into structure.