

PROJECT SOLUTIONS

Project: Niagara Courthouse Theater
Application: AHU Silencers (Axial Fans)

Theater air conditioning addition requires NC-25 but has no traditional space for fans and silencers.

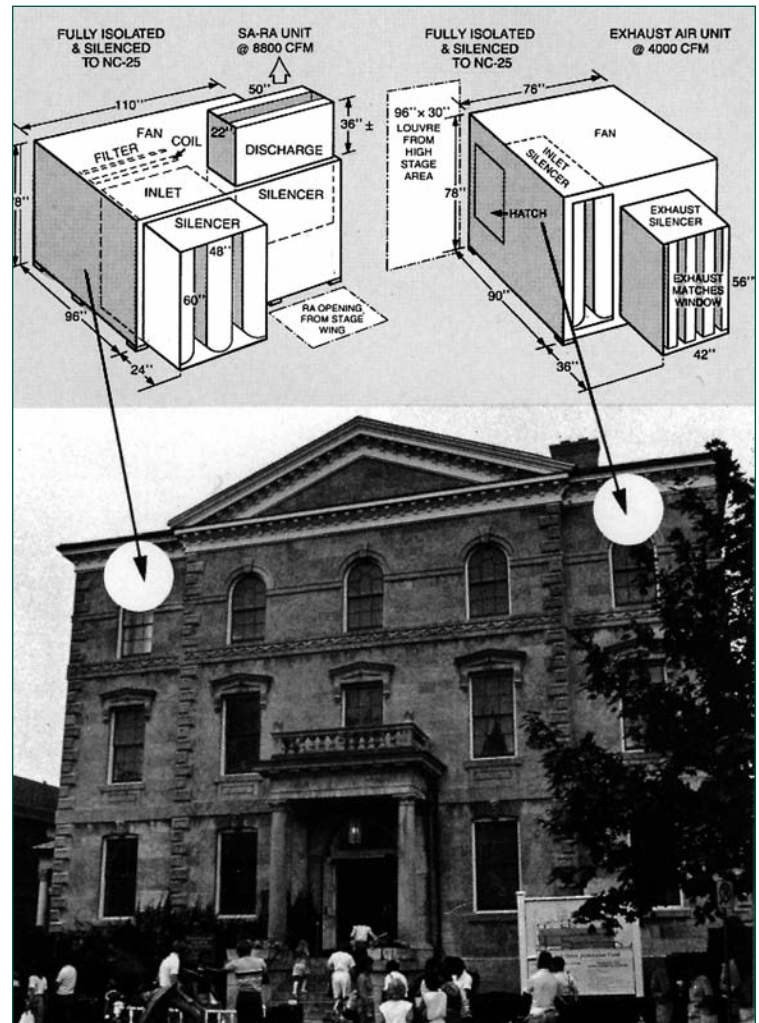
PROBLEM: Fans in occupied space

An historic courthouse building was to be converted to a theater but there was no internal traditional space for the air conditioning ductwork and equipment. Also, fans could not be placed on the roof because of structural limitations.

SOLUTION: Fan/silencer packages

Vibro-Acoustics proposed fan-silencer packages for both the supply and exhaust be located in the upper stage corners. These units would be within 15 feet of the actors on stage. Budget pricing was submitted for three noise criteria: NC-20, 25 and 30. Packages included fans, silencers, enclosures, coils and filters.

NC-25 was chosen which Vibro-Acoustics guaranteed and NC-22 was achieved. (The spotlight dimmer made more noise than the quiet air conditioning units.)



Vibro-Acoustic retrofit air conditioning units for "Courthouse theater" were located in upper stage corners are achieved NC-22. Note how the silencers are recessed into the units due to severe space limitations.