PROJECT SOLUTIONS

William Davis Computer Center

Application: Stacks

VIBRO-ACOUSTICS®
A Swegon Group company

CHALLENGE

> Aesthetics
> Energy Consumption

Fans were located in the penthouse atop a glass atrium. Connecting ducts were not allowed to pass through the atrium. However they were to be a very visible part of the architecture. In addition, all ductwork inside the building is exposed.

Since the building was to be in use continuously, silencing was to require minimum pressure drop and energy consumption.

Air supply stacks are an aesthetic component of the architectural design of a university computer facility.

SOLUTION

SPECIAL STACKS, CLP SILENCING SYSTEMS AND SILENCER RETURNS

14 vertical air stacks, 7 on each side of the building, were designed and supplied by V-A to be external to the atrium, structurally self supporting and follow the contour of the atrium glass. Each stack was fabricated from 3/16 inch steel plate and has thermal and vapor barriers. Both skins were stringently tested to ensure there was no leakage. Each entire assembly was supplied in one piece.

Silencing consists of an acoustic glass fiber liner running the full length of each stack and protected by a perforated metal liner. There were no center pads or splitters to add pressure drop.