

MODULAR VAV SYSTEMS

BULLETIN



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Therma-Fuser VAV is featured in an article about "Reinventing HVAC Design for Green Buildings" in the January/February 2002 issue of Environmental Design & Construction.

The front page of the article pictures one of our favorite Therma-Fuser jobs-767 Third Avenue (See 80.5PJ1089).

Therma-Fuser VAV is included in a list of sustainable HVAC system features beyond natural ventilation and raised floor distribution systems. Others featured are:

- Night Sky Radiant/Evaporative Cooling System
- Free Cooling
- Radiant Heating and Cooling
- Low Cost/Low Energy Pumping Systems
- Low-Face-Velocity Air Handlers
- Dedicated Outside Air Handlers

The Therma-Fuser portion of the article is copied below.

Therma-Fusers

In principle, more sustainable buildings provide occupants better comfort and more control over temperature and air conditions, resulting in improved health and productivity. One of the often-touted benefits of underfloor air distribution systems is the ability of each occupant in the space to control the temperature in his or her direct area. Another approach affords the same control with a conventional overhead ducting system. Acutherm's Therma-Fuser, an often-overlooked product, has been around for over 23 years, and enables individual temperature control of the area served by that device (see Figure 3). This technology allows for the elimination of variable air volume (VAV) boxes that are common in HVAC systems today. In addition to providing local control, these units allow much lower pressure drop (i.e., resistance to the airflow) in the ducting system. Typically 1 inch w.g. of pressure drop can be shaved off of the total fan system pressure drop. In most buildings this can save up to 25% in fan energy.

VAV air diffusers are most widely used in U.S. East Coast office buildings. The Ziff Davis headquarters building in New York has over 1,200 Therma-Fusers.

Locate a copy of the magazine in your engineer's office and show them the article.