

UNDERFLOOR SERVICE DISTRIBUTION

by Tate Access Floors

Syracuse University Data Center
Syracuse, NY
Completed 2009

DATA CENTER PROJECT

12,000-square-foot facility
6,000 square feet of raised-floor
data center space

PRODUCTS USED:

CCN1500
GrateAire Air Flow Panels
Glass Display Panels
Bolted Stringer Understructure



Subject

SYRACUSE UNIVERSITY DATA CENTER

Syracuse University has been named one of the 2010 Green 15 by GDC's InfoWorld for its innovative Green Data Center. The annual Green 15 award recognizes the 15 most innovative IT initiatives of organizations around the world that have embraced green technology to drive projects and develop products aimed at boosting energy efficiency, trimming waste, and reducing or eliminating the use or the production of harmful substances. A collaboration of SU, IBM and New York State, the GDC has been hailed as one of the world's greenest computer centers, designed to use about 50 percent less energy than a typical data center. The \$12.4 million, 12,000-square-foot facility (6,000 square feet of infrastructure space and 6,000 square feet of raised-floor data center space) was completed in early December 2009 and became fully operational in April 2010. The GDC is used by SU as its primary computing facility and by IBM as a showcase to demonstrate how energy-efficient technologies can reduce energy costs and environmental impact.

The Syracuse University Green Data Center is equipped with 40" floor heights to provide the necessary space for multiple functions. The primary cooling method used in the data center is rear door heat exchangers mounted to each rack. These units directly cooled the hot air from the IT equipment, and return it into the space at the required temperature for equipment to take back in reheat, and pass back again through the rear door heat exchanger. The raised floor is used to route the chilled water lines from the facility to the rear door units in a safe manner. The racks in the space are also a large consumer of electricity, and the power cabling is passed from the power distribution unit, via power whips under the floor to each rack. Finally the raised floor space is also used as a means of backup cooling. CRAH units are installed around the perimeter of the facility, and can provide additional or redundant cooling to the mission critical IT hardware in case of other cooling system loss of capacity.

Tate[®]

TATE AUTHORIZED DEALER
Henderson-Johnson
Syracuse, NY

ARCHITECTURAL FIRM
VIP Architectural Associates, PLLC
Syracuse, NY

GENERAL CONTRACTOR
VIP Structures, Inc.
Syracuse, NY

ENGINEER
Towne Engineering
Syracuse, NY