

# UNDERFLOOR SERVICE DISTRIBUTION

by Tate Access Floors

Internal Revenue Service  
Kansas City, MO

## GOVERNMENT PROJECT

1.1 million gross sq ft  
1 million sq. ft. access floor  
600,000 sq. ft. UFAD  
400,000 sq ft. w&C only  
80% new construction, 20%  
renovation of a historic building

## PRODUCTS USED:

ConCore 1250  
Modular Wiring & Cable  
Underfloor Air



## Subject

### Internal Revenue Service

The 1998 Internal Revenue Service (IRS) Restructuring and Reform Act initiated a study that investigated how to better serve taxpayers and how to increase the productivity of existing processing service centers nationwide. The study recommended consolidating eight locations into one general campus for Kansas City's Service Center. As the IRS required over one million square feet of programming space, the biggest challenge for the project team was creating an economically efficient, environmentally responsible, healthy building while the major energy performance goal was to design the building to accommodate IRS's peak seasons, when more space is needed, without operating a mostly empty building year-round.

The campus was created by connecting an existing 1933 post office with a new 660,000 square foot addition. The 6 story post office (now the Pershing Building) was extensively renovated to house the administrative offices of IRS employees. Built onto the existing structure were 3 processing wings used to process returns. Energy efficiency was a focus of the campus design, and two major systems used to pursue this goal are a Web-based building automation system (BAS) for the entire facility and an underfloor air distribution (UFAD) system, which serves the Pennway Complex. The UFAD system presents more opportunity to increase energy efficiency by being able to run higher discharge air temperatures on the system, which by design saves energy. Also, the programming needs for IRS are unique because the organization operates at dramatically different capacities at different times of the year. An underfloor air system with multiple air handlers allows sections of the building to be turned off while maintaining an open floorplan. The underfloor wire and cable creates a flexible layout for future re-design. With a plug-n-play system, there is no rewiring necessary when associates and/or equipment is relocated. The IRS in Kansas City is definitely ready for the future.

*"Say I have a work group that needs to move its desks 3' feet in order to improve efficiencies. In a standard building, that might literally set 50 people right on top of the registers that were built for the area. With the UFAD system, we can lift up the floor tiles in that area and move the air diffuser below (which is actually a full VAV box) to where we need it in the floor. In a short period of time, we can reconfigure the registers to get the best air distribution for the new furniture configuration."*  
Joseph R. Campfield, Director of Building Operations

### TATE AUTHORIZED DEALER

C&C Group  
Lenexa, KS

### ARCHITECTURAL FIRM

BNIM 360 Architects  
Kansas City, MO

### GENERAL CONTRACTOR

JE Dunn Construction Group  
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### MECHANICAL ENGINEERING FIRM

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