



21CR Project 605-30030

## **Energy Savings Potential Of Flexible And Adaptive HVAC Distribution Systems For Office Buildings – Phase I**

Updated 25 June 2002

### **Objectives:**

- (1) Document the performance of installed developments in flexible and adaptive distribution systems in office buildings to accelerate the global adoption of effective innovations
- (2) Document the barriers and opportunities for both industry and professional practice in the development of innovative, flexible and adaptive HVAC distribution systems

### **Information/items resulting from this project:**

This project substantially advances the building design industry understanding and usage of energy efficient flexible and adaptive HVAC distribution systems. Effective innovations in flexible and adaptive HVAC distribution would be measured in terms of enhanced indoor air quality, occupant comfort and productivity, in terms of heating, cooling and lighting energy savings, and in reduced solid waste generation in the continuously evolving workplaces of the information age.

### **How results are likely to be applied:**

The results of this effort demonstrate the affordability, performance, reliability and professional commitment to flexible and adaptive distribution systems. Architects, engineers, and equipment manufacturers will be better positioned to champion flexible and adaptive approaches.

### **Research subcontractor:**

Carnegie Mellon University, Pittsburgh, PA (Principal Investigator: Vivian Loftness)

### **Status:**

This project was concluded in the second quarter of 2002 and a final report approved for release. The final report is available free for downloading from the ARTI website.

**Responsible 21CR Subcommittee:** System Integration