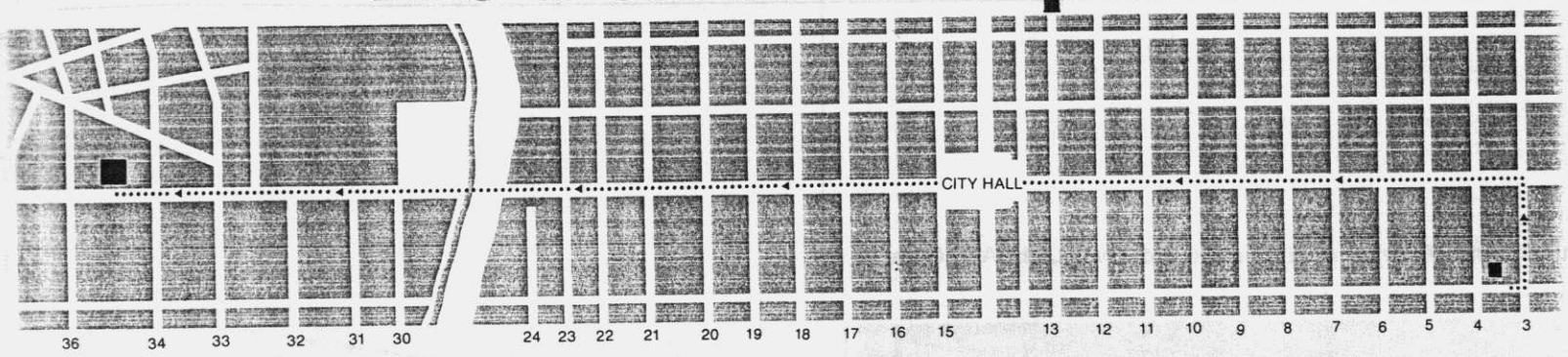
The Cross-Town Express



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Environmental Systems At New Headquarters Assure Year-Around Comfort

Anyone working in the Mall Building knows how hard it is to keep the office temperature at a comfortable level. You also know how cigarette smoke or other odors migrate from one floor to another and last a long time before they're cleared out by the 20-year-old ventilation system.

In just a few weeks, those discomforts will become a thing of the past. Our new building includes the latest in heating, cooling, and ventilation technology. What's more, the basic construction of the building itself fosters a maximum amount of comfort with the least possible expenditure of energy.

Building Design Keeps Weather Out, Comfort In

The square shape of the new building provides a great deal of inside space; at the same time, it reduces the amount of building surface that's exposed to the elements. The walls are solidly built, with alternating layers of masonry, insulating material, and dead air space (which also provides insulation). The roof, too, has been designed to prevent the escape of heated or cooled air into the atmosphere.

Windows constitute only one-fifth of the building's exterior surface. They are made of double-pane thermal glass, with a special coating added to the ones hit by direct sunlight. Adjustable vertical blinds have been installed on all windows so the amount of light and glare can be controlled. (The blinds also serve an acoustic purpose: they're made of a perforated material that helps to control sound.)

All this is a far cry from what we have now. Because the Mall Building was built when energy was inexpensive, little consideration was given to effective insulation. As a result, the L-shape used for the building is one which exposes a lot of surface to the outside relative to the amount of space it contains. And more than half of the extensive exterior surface is made up of single-pane, non-thermal windows. The resulting drafts and hot- and cold-spots we've all experienced need no further description here.

Multiple Thermostats, Compartmentalization Allow Exceptional Flexibility

Thirty-six thermostats--one for each 900 square feet--are installed on each floor of the ISI Building. The thermostats are tied into ductwork and blowers in a way that makes it possible to vary the temperature of the air entering any given location with an exceptional degree of precision. This means that each area will be better able to maintain a comfortable temperature despite differences in distances from windows, number of people in the area, air currents, and other factors that tend to make one area hotter or cooler than another. The use of multiple thermostats and compartmentalized ductwork even makes it possible for one area's temperature to be maintained above or below that of other nearby areas. Additionally, heating, cooling, and ventilation systems are completely independent from floor to floor. If one floor should ever run into a problem, the others won't be affected.

No Change-Over Problems in Spring and Fall

Spring and fall tend to be the times when discomfort due to office temperature is the greatest. This is because most systems can only produce heating or cooling at any given time. And once the change is made from one to the other (usually on a predetermined date), it is difficult or impossible to change back for short periods of

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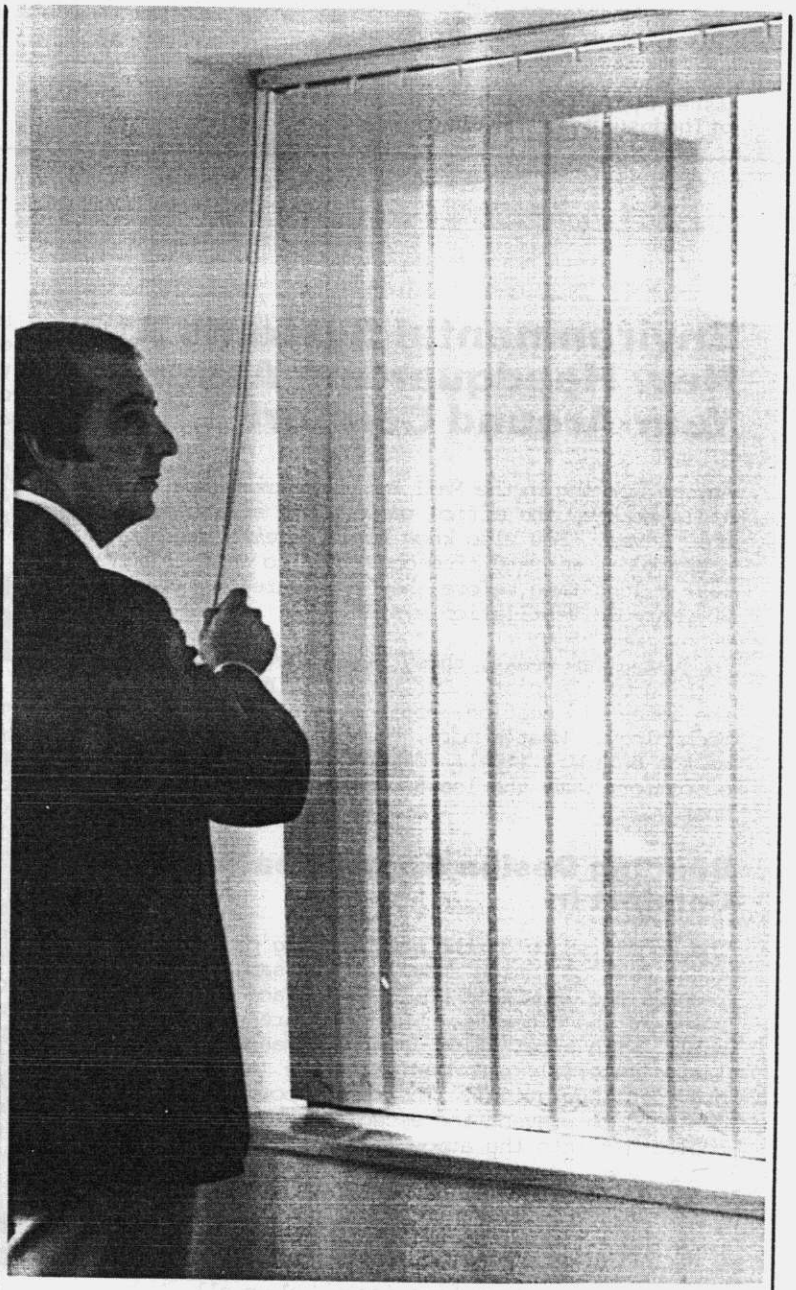
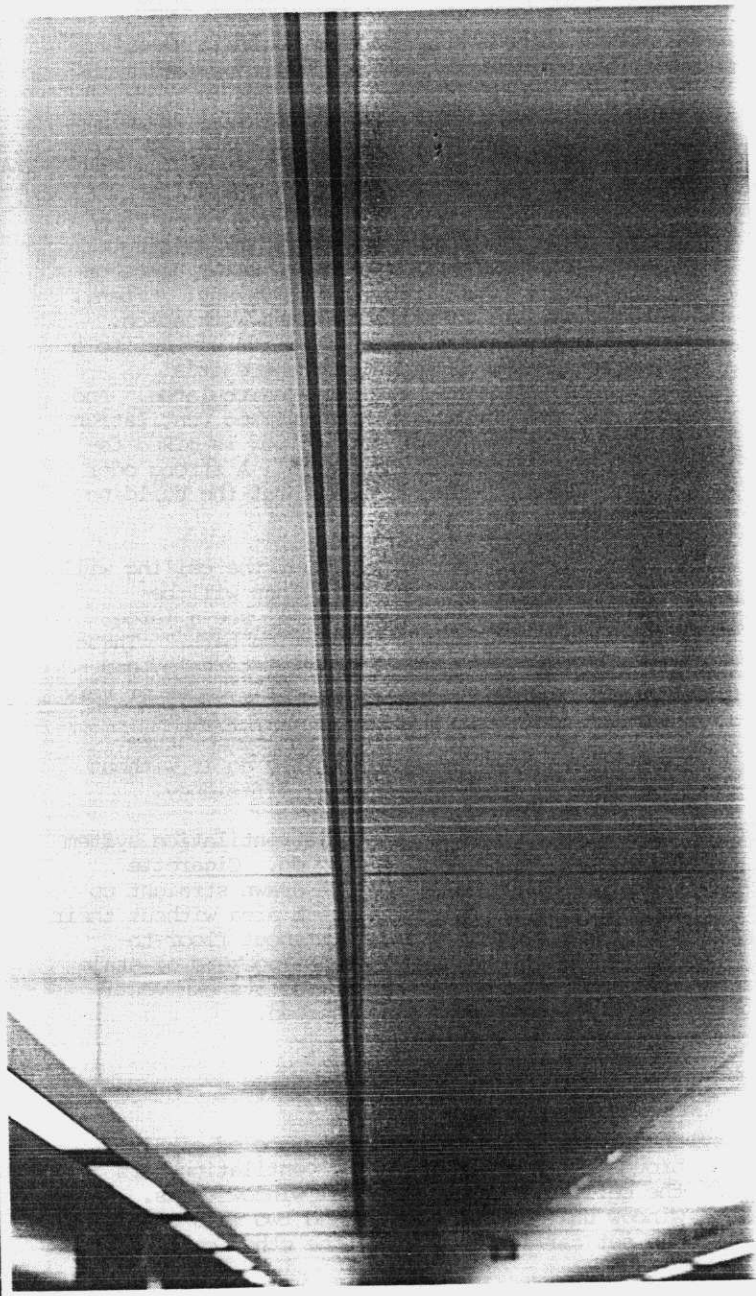
ertical Blinds Provide Additional Control Over Light And Glare

Fully open



Fully closed and adjusted for maximum blockage of exterior light

Adjusted for minimum blockage of exterior light



Typical Ventilation Bar

time. Thus, cold air often pours out of ventilators on a spring day when the outside temperature is near freezing.

With the system at the new building we will be able to heat or cool our work areas with no change-over. In fact, it will actually be possible to heat one area while simultaneously cooling one nearby. Say goodbye to sweaters in June and fans in October!

No Stale Air

The Mall Building's air circulation comes from small vents at various points in the ceiling. Sometimes, the air flow can make paper dance on desks; other times, there's hardly any. Often, there's no vent at all in a given work space. Moreover, stale air has to find its way out to a single location on each floor where it's exhausted, filtered, and then recirculated. And with the Mall Building's centralized ventilation system, stale air from every floor is mixed together before it's recirculated. A strong odor on any floor can spread throughout the building that way.

At our new building, a glance at the ceiling will provide quick evidence that things will be different. In the ceiling you'll see a large number of unobtrusive "ventilation bars." These are placed at frequent, regular intervals, and every work station will be directly under or very near one of them. The bars gently pump in fresh, filtered air at the right temperature. They also remove "old" air. They do it without causing a stir, and with great efficiency.

The open plan design lets this ventilation system do the job it was designed to do. Cigarette smoke and other odors will be drawn straight up and out of each individual work area without their spilling over into others. Without floor-to-ceiling walls, there will be no pockets of stale air. And because each floor has its own ventilation system, odors can't spread.

Energy-Efficient Systems

In our new building, heated or cooled air is brought to work areas by the ventilation bars in the ceiling and by individual window units. Each window unit contains a fan and two sets of pipes. One set carries hot water, the other cold water. Both the hot and the cold water are continually pumped through well-insulated pipes deep in the walls. When a unit needs to heat or cool a work area, it automatically lets the right kind of water into its radiator. The unit's fan then blows either hot or cold air into the area. When a unit doesn't have to heat or cool, it continues to circulate air, but it shuts off the water to the radiator. Thus, the energy that would have been used to unnecessarily heat or cool the water for the radiator is saved.

Besides saving energy in heating and cooling the air, our new building will also make hot water efficiently. Most office buildings (including the Mall) use one central hot-water boiler that serves washrooms and other facilities on every floor. A lot of energy is wasted that way since heated water tends to cool while sitting in long runs of pipe. That's why you sometimes have to run the water at the Mall Building several minutes before it flows warm. The washrooms on each floor of our new building have their own hot-water heaters. With just a short distance to travel from heater to tap, there will be little chance for the water to cool.

Some Windows Can Be Opened

Unlike most modern offices which have all their windows sealed shut, in our building it will be possible to open at least one window in just about every area. Thus, in the unlikely event of a prolonged failure of the heating or cooling systems, we can get some help directly from Mother Nature. The ability to open certain windows will also provide additional exits and entrances to the building during any emergency. (It should be noted, however, that a key must be used to open the windows and proper authorization must be obtained first.)

Greater Comfort Means Greater Efficiency

No one can work at top efficiency if the temperature is uncomfortably hot or cold. And drafts from windows or air vents are a bother, if not a real health hazard. No matter where you'll be working in our new headquarters, you'll find few if any problems like these to prevent you from performing to the best of your abilities.