

Variable Air Retrofits



Update your property to compete

Inefficient existing air systems are holding you back

Aging air delivery systems from the 1970s and 80s often look and sound the same: thermostats that hiss and air compressors that run intermittently. Occupants are uncomfortable, which may impact productivity. Facility managers are discouraged by high energy and maintenance costs that reduce the viability of their building as an asset to the business, and the system controls don't provide the data needed to respond to occupant complaints.

We know the issues you're facing because we face them in our buildings too. The benefits of direct digital controls (DDC) are many but the changes needed to get there have been difficult to fund.

Upgrading makes sense... and has never been easier

Until now upgrading from pneumatic or analog electric to DDC controls, or from constant volume to variable volume meant major disruption of the building and its occupants: ceiling removed, wires run from new terminals to new zone sensors, duct changes. All that dust and disruption made it easy to put off your upgrade, until now.

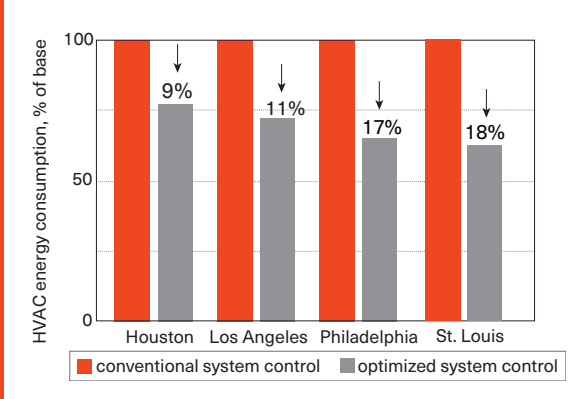
Upgrading an existing system to a Trane Intelligent Variable Air System can be a fast, trouble-free process. Wireless technology, retrofit dampers and pre-packaged controls reduce installation cost, time and inconvenience to building occupants—and Trane Air-Fi® Wireless System means less disruptive wiring installation, making future building changes easier.

Enhance rental space profitability

A reliable, trouble-free Trane Intelligent Variable Air System can help keep occupants comfortable and satisfied, reducing hot or cold complaints and tenant turnover—because with built-in, easy-to-understand dashboards, this system can give your operators essential information about efficiency and temperature. This information can help identify and resolve potential problems before building occupants are affected. For more peace of mind, Trane Intelligent Services can provide 24/7 remote monitoring, as well as continuous system analysis to help maintain the highest level of performance for the life of the system.

Along with the 10 percent to 20 percent energy savings from optimized controls, these advantages make your investment in a Trane Intelligent Variable Air System an investment in advanced technology—one that can help your property compete in the decades ahead.

Potential for 10 percent to 20 percent energy savings from optimized controls



This chart illustrates the potential energy savings from implementing the optimized control strategies of the Intelligent Variable Air System. These savings reduce operating costs and can help achieve points toward LEED® certification.

Retrofit VAV dampers reduce installation time.

Retrofit dampers are particularly well-suited for upgrading old pneumatic or non-communicating electronic controls to a data-rich, communicating DDC system. Your old VAV system can become a high-performance, Intelligent Variable Air System with minimal occupant disruption.

The Round-in/Round-out (RI/RO) VAV damper is a retrofit product designed to simplify upgrading existing, older VAV terminal units, or to upgrade existing constant volume systems to VAV systems. Relay kits allow reuse of the existing heating coil and/or terminal fan; only the controls and damper are changed.

Wireless simplifies upgrade.

Trane Air-Fi® Wireless eliminates the wire between equipment and system controllers, and between equipment controllers and zone sensors, for faster project completion, less disruption to building occupants, increased location flexibility, and life-cycle savings. Wireless mesh, maximum range, and ANSI/ASHRAE Standard 135-2016 (BACnet®/ZigBee®) provide reliable, expandable operation for the life of the building. For applications when a controls upgrade is needed without a damper change out, a preprogrammed VAV retrofit controller kit is also available.

Operator dashboards help sustain performance.

It's one thing for the controls installer to understand how to set up the system, but it's imperative that the operator understand how the system works. Standard apps and operator dashboards, supported by thorough documentation, take the mystery out of how your system works, so that you and Trane can keep it running optimally over the system's lifetime. Local or remote adjustments are made easy, and often can be done without the need for a technician or programmer.

In addition, Trane Intelligent Services can help sustain the system's high level of performance by warning the building owner of system malfunctions and translating data into actionable solutions for improving system performance.



Retrofit RI/RO damper installed in upstream duct



Retrofit RI/RO damper bolted to existing terminal



Wireless zone sensors



Interactive operator dashboards



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit trane.com or tranetechnologies.com.