

# Trane DX Outdoor Air Unit

Fresh thinking in the marketplace



## IAQ and energy costs demand creative solutions

Owners and operators of hotels, restaurants, schools and other facilities are keenly aware of the need for fresh air in their buildings. They are concerned with the tremendous costs associated with building damage caused by airborne moisture. They understand that customers, students, parents and employees see moisture damage as evidence of an unhealthy environment. Building moisture can create negative experiences that reduce or eliminate return visits.

Trane has applied fresh thinking to outdoor air and ventilation related problems and proudly introduces the new Outdoor Air Unit (OAU). It's another example of the Trane commitment to offer solutions that deliver value and long-range applications and service support to ensure optimum performance and system life. Energy costs continue to rise -- making already tight operating budgets even more difficult to manage. The Trane OAU helps manage tight energy budgets by minimizing the energy required to optimize the outdoor air ventilation performance of your HVAC system.

#### Improved IAQ: Customers want it, codes demand it

Delivering good IAQ has many challenges including increased demands on ventilation rates required by building codes, fluctuating occupancy, and the especially difficult challenge of selecting equipment to perform at maximum outdoor air design conditions, and control space humidity and comfort at difficult part-load conditions. The Trane OAU is designed to meet these challenges and deliver good IAQ.

#### **Trane delivers solutions**

Customers, hotel guests and employees are very aware that indoor discomfort is unacceptable. They know that safe, comfortable environments exist and they demand no less. The Trane OAU solves these challenges with a code-compliant system to properly condition outdoor air, control humidity and deliver a safe, comfortable environment.

#### Comfortable temperature control, quiet operation

The Trane OAU provides seamless compatibility with Trane controllers, components and applications software. Trane Integrated Comfort Systems<sup>™</sup> (ICS) are sophisticated yet simple to operate. Factory commissioning means less field labor, lower startup costs, faster trouble-free installation, single-source responsibility and accurate operation from day one. The ICS approach simplifies building management by reducing operating and service expenses related to compatibility, programming and maintenance costs. The Trane OAU provides a quiet solution for most environments that can be typically installed on a rooftop over hotel corridors, retail spaces, restaurants, commercial kitchens, hallways or rest rooms.

### Next steps to higher efficiency

Effective dehumidification requires lower evaporator temperatures than typical comfort cooling. To maintain comfort, dehumidification systems must reheat this cooler air. The Trane OAU includes a modulating hot gas reheat option that uses recovered compressor heat rather than supplemental gas or electric heating systems to reheat air and maintain comfort in many applications.

Another energy saving OAU option is the Energy Recovery Ventilator (ERV). The ERV exhausts building air via the OAU, transferring energy to the incoming air to reduce heating costs in winter and cooling costs in summer.

#### How it works

Outdoor air is filtered to remove contaminants as it enters the OAU. Multiple filter options address exacting IAQ standards and security concerns related to airborne particulates. The OAU automatically controls dehumidification, cooling or heating functions based on outdoor air or space conditions. When outdoor air conditions permit, the OAU automatically operates in economizer mode. The OAU can supply treated air directly to a singles space, or, by ducting the OAU supply to the return of multiple conventional rooftop units, one OAU can provide a cost-effective method of meeting ventilation and comfort needs for multiple spaces.



The Trane OAU features stainless steel drain pans sloped in two directions, an Energy Recovery Ventilator (ERV) option, 2-inch double-wall panels, hinged access doors and DDC ReliaTel™ controls.



The OAU offers numerous heating options including modulating natural gas with 8:1 turn down, factory-installed dual-fuel options, scroll compressors, enhanced serviceability with slide-out fan section, and standard direct-drive fan with VFD.



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