



# Horizon<sup>®</sup> Dedicated Outdoor Air Systems

Bring the right amount of clean, fresh air into your building.

# Your Building Needs to Breathe

A dedicated outdoor air system (DOAS) conditions outside air brought into a building to optimize indoor air quality (IAQ) and manage thermal comfort in an energy-efficient way.

Typically, an HVAC system brings in unconditioned outdoor air and adds it to the recirculated air from the building's occupied spaces. The outdoor air must be conditioned along with the returned air before being ventilated through the building.

Sometimes, though, the dehumidification provided by an HVAC system alone can be inadequate, and humid air gets passed back into the building. Indoor air that's too humid can result in occupant discomfort, mold and microbial growth and even a shorter HVAC equipment life.

Many buildings require a DOAS not only to dehumidify outdoor air, but also to improve thermal comfort and take pressure off the system's primary air handler. Supplying as much as 100% outdoor air to the building, this equipment handles dehumidification independently from the rest of the HVAC system. Typically installed outdoors, a DOAS tempers outside air—filtering out common contaminants, controlling relative humidity and conditioning the air before it enters the building's HVAC.

In short, it's a more effective way to ensure the fresh, clean air needs of both your building and its occupants.

## **A Family of Solutions**

Trane offers a line of outdoor air systems to meet the performance needs of your building. Available in multiple energy-efficient system configurations—water source heat pumps, air source heat pumps, direct expansion or chilled water—the Horizon line of Trane outdoor air systems is designed to eliminate excess moisture, preventing discomfort and the health risks associated with many biological pollutants.



#### Trane<sup>®</sup> Horizon<sup>®</sup>

Designed for the most rigorous performance specs

For buildings that need 100% outside air and a dewpoint as low as 43°F to meet stringent indoor air quality (IAQ) requirements, Trane's Horizon DOAS offers the performance you expect from a market leader. Horizon is ideal for commercial buildings with high or fluctuating ventilation rates requiring conditioned outdoor air to maintain comfort and/or support the performance of other building systems.

Horizon DOAS is designed to supply conditioned outdoor air with as little energy as possible. In fact, our Integrated Seasonal Moisture Removal Efficiency (ISMRE) rating exceeds the minimum requirement from ASHRAE® 90.1, as rated by AHRI 920, delivering industry-leading performance.



#### Trane<sup>®</sup> Horizon<sup>®</sup> Flex<sup>™</sup>

**Application-specific solution** 

Not every building requires 100% outdoor air or such a low dewpoint. While our Horizon Flex unit can deliver 100% outdoor air, some customers find that their application requires more than what is delivered in a standard packaged rooftop unit but less than a 100% outdoor air. Choosing the Horizon Flex provides the IAQ your building requires at a first cost that's easier on your budget.

The Horizon Flex is designed to meet minimum EER and IEER efficiency standards, which means it's not only good for your budget, it's also good for our planet. Simply put, the Horizon Flex offers a more affordable alternative to Horizon while providing the quality you expect from Trane and the backing of the entire Trane organization.

## Which System is Right for You?

If you're unsure which Trane outdoor air system would be best for your situation, we're here to help. We can recommend the ideal Trane model for your climate, your building's needs and your budget. Regardless of the system you select, you can be assured that it's backed by Trane's industry-leading quality, service and expertise.

#### The Importance of Low Dewpoint Design

Your building contains recirculated and potentially contaminated air. Both offerings in the Horizon product line help address this issue by diluting recirculated indoor air with fresh outdoor air. They also simultaneously dehumidify that air to eliminate excess moisture, preventing discomfort and the health risks associated with mold and microbial growth.

Traditionally, a dewpoint of  $55^\circ$ F has been considered adequate for occupant comfort, but both systems in the Trane Horizon family exceed that standard, helping ensure a more comfortable space.

Horizon		
Max Airflow (CFM)	Tonnage	
3,000	3-9	
8,000	10-30	
13,500	30-60	
20,000	40-80	
	Max Airflow (CFM)           3,000           8,000           13,500	

≥ 43°F dewpoint

- Humidity control peak and off peak
- CDC recommended ventilation
- Best return on investment
- AHRI 920 Compliant
- Manufactured by Trane, a trusted HVAC partner for the past 100 years



Horizon Flex			
Model	Max Airflow (CFM)	Tonnage	
HAE	6,000	10-15	
<ul> <li>≥ 51°F dewpoint</li> </ul>			
Peak load humidity control			
Lower first cost			
AHRI 340/360 Certified			
<ul> <li>Manufactured by Trane, a trusted HVAC partner for the past 100 years</li> </ul>			



# To learn more about how a Horizon<sup>®</sup> outdoor air system can help your building, visit **trane.com/doas** or contact your Trane account manager.



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*.

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