



**TRANE®**

*Trane® Horizon™*

*Outdoor Air Units*

*Water-Source Heat Pumps*

*Air-Source Heat Pumps*

*Dedicated Outdoor Air Solutions*



**IR** Ingersoll Rand.

# Horizon Heat Pump Solutions

## Moisture Removal

Dedicated Outdoor Air System (DOAS) Units dehumidify outdoor air before it is introduced to a building's air delivery system. This results in tightly controlled humidity, a lightened latent load and improved overall energy efficiency. This piece of the HVAC puzzle isn't about temperature control, it's about moisture removal.

## Peerless Performance

Horizon DOAS Units with the WSHP option are the perfect companion for your Trane Axiom™ Variable Speed Water-Source Heat Pump, featuring highly efficient eFlex™ variable speed technology. An Axiom™ WSHP system with a ground loop installation can achieve up to 40 EER and deliver up to 60% energy savings.

## Comfort Zone

Horizon DOAS Units are often paired with Axiom WSHP systems in multi-tenant buildings to provide fresh supply air for comfort system zones.



*Trane® Horizon™ Dedicated Outdoor Air System Units, or DOAS Units, are a comprehensive line of dedicated outdoor air systems products for year-round dew point design applications. Water-Source Heat Pumps (WSHP) and Air-Source Heat Pumps (ASHP) are now available on all Horizon models, providing the opportunity for buildings to have a fully integrated and automated system comprised of the most sustainable, highest efficiency comfort technology available.*

## Broader Horizons

The introduction of WSHP and ASHP options expands the capabilities of the Horizon series, making it compatible with existing high performance Trane heat pump technologies. Cost effective renewable energy makes it the natural choice, whether you're planning a new building or upgrading a dated system.

- Renovations – choose the heat pump option appropriate for integration with your facility's existing heat pump system
- New construction – design a fully-integrated heat pump system from the ground up



## Personal Comfort

Horizon Heat Pump Units are designed to condition up to 100% Outdoor Air and can be fully integrated with building heat pump or terminal unit systems, and work well in a wide range of building types, including:

- Schools
- Dormitories
- Hotels/Lodging
- Apartments
- Condominiums
- Assisted Living
- Nursing Homes
- Military Barracks
- Commercial Food Service

## Performance Standards

Removing water from the air is referred to as dehumidification, and Integrated Seasonal Moisture Removal Efficiency is a detailed part-load, moisture removal efficiency calculation of how well a dedicated outdoor air solution performs in various conditions. With the development of AHRI 920, the certification program includes a dehumidification standard for up to 100 percent outdoor air and includes an equipment ISMRE (Integrated Seasonal Moisture Removal Efficiency) rating. Horizon™ Outdoor Air Units were proactively designed for alignment with this performance benchmark.

## Heat Pump Systems

Air and Water Source Heat Pump systems are two of the most sustainable, environmentally responsible ways to heat and cool buildings. Water Source Heat Pumps offer the added ability to design an outdoor air load using the building water loop to carry away condenser heat and maximize the benefits of the heat pump system's outstanding efficiencies and lower overall operating costs. All Horizon Air and Water Source Heat Pump Units are available with an

## Streamlined Installation

Trane® Horizon components are assembled, piped, wired and tested at the factory. This makes job site installation a straightforward process, ensuring faster setup, increased reliability and optimal performance.

## Service Agreements

Planned maintenance with Trane service agreements can keep your systems operating at peak efficiencies, conserving operating costs and supporting budget goals.

Energy Recovery Ventilator option to further enhance unit efficiency and energy savings.

## Installation Options

WSHP coil systems are a versatile technology with a number of installation applications, including:

- Boiler/cooling tower
- Ground loop (geothermal)
- Adjacent body of water

## Horizon Outdoor Air Units

The Horizon series of Outdoor Air Units offers a complete range of solutions.

Model	Tonnage	Airflow
OAB	3 to 9 Tons	500 to 3000 CFM
OAD	5 to 15 Tons	625 to 4,000 CFM
OAG	10 to 30 Tons	1000 to 7500 CFM
OAK	12 to 30 Tons	1500 to 9000 CFM
OAN	30 to 54 Tons	3750 to 13,500 CFM

## Virtual Configurations

Trane has the Building Information Modeling (BIM) objects to support your building design. Pre-populated physical and performance data unique to each product configuration save time, increase accuracy and simplify the construction process.



### Water-Source Heat Pumps

WSHP are ideal solutions for academic, commercial and institutional applications such as office buildings, hotels, healthcare facilities, schools, condominiums and apartments.



### Air-Source Heat Pumps

ASHP are well suited for commercial applications and can be coupled with Energy Recovery Ventilation (as shown) to maximize energy savings.

Visit [Trane.com/Horizon](https://www.trane.com/Horizon) to learn more about Horizon Outdoor Air Units.

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about **Horizon Outdoor Air Solutions**.



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