

# Indoor Air Quality





# The most reliable and longest lasting in the industry.\*

Extreme is not even close to our approach to product testing. Cruel and unusual may be a better way to describe what a Trane endures to wear the badge. We push our systems and components to the limit and beyond, so you can rest easy knowing there's a Trane working hard day in day out to make your family comfortable — for a long, long time.



Trane Storefront La Crosse, Wisconsin 1891

### It started over a hundred years ago,

when Reuben and James Trane made the decision to stand out from the crowd. To build a comfort system like no other, using uncompromising quality, innovation and reliability. Today, their legacy is found in everything Trane makes, from our premium materials to our industry-leading technology to our extensive product testing under the harshest conditions. When you buy a Trane, you're buying a commitment from us, to you. A commitment to your total comfort, and your total peace of mind. Because that's what Reuben and James would have done.

Our Indoor Air Quality products must pass rigorous safety and reliability testing standards to wear the Trane badge. This testing chamber measures the effectiveness of our products to counteract typical indoor contaminants.



# We're not the only ones talking about Trane reliability.

- ✓ In 2016, Lifestory Research found that consumers recognized Trane as America's Most Trusted™ HVAC System for the second year in a row.\*\*
- ✓ Winner of the Dealer Design Award presented by Air Conditioning, Heating & Refrigeration NEWS, the industry's leading trade publication, for the fifth year in a row.
- Winner of the David Weekley Homes' prestigious Partners of Choice Award for Service and Product Performance.

 <sup>\*</sup> Independent 2012 HVAC Claim Study, Funded by Ingersoll Rand

<sup>\*\*</sup> Trane received the highest numerical score in the United States in the proprietary Lifestory Research 2016 America's Most Trusted™ Heating, Ventilation, & Air Conditioning (HVAC) System study. Study based on 17,878 surveys among residential consumers. Proprietary study results are based on experiences and perceptions of consumers surveyed between January and December 2015. For details see www.lifestoryresearch.com."



## A whole lot of fresh.

Trane FreshEffects™ Energy Recovery Ventilator provides a whole-house solution for fresh air ventilation. Trane FreshEffects exhausts stale indoor air and brings in fresh, preconditioned, outdoor air, so your home can be accleaner, more enjoyable place to live. Not only that, Trane FreshEffects also decreases the level of odors, chemical vapors and naturally occurring gases that become trapped in tightly sealed homes. Plus, with its quiet operation and durable components, you can count on fresh air from Trane FreshEffects for years to come.

- Consistently delivers fresh air while removing stale indoor air
- Quiet and efficient
- Ideal for homes with children

## TRANE FRESHEFFECTS™

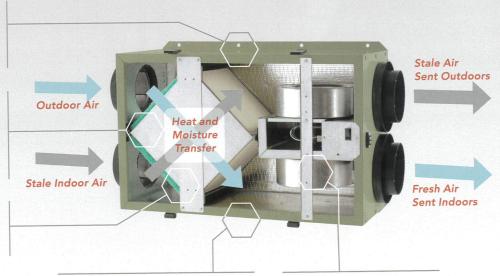


Flexible Mounting for easy installation in the attic, garage or basement, in virtually any position with minimal retrofitting required.

High Efficiency Crossflow
Energy Transfer Core recovers
heat and moisture from
the outgoing air during cold
weather. During hot, humid
weather, it pre-cools and
dehumidifies incoming air.

#### Slide-Out Filter

allows easy access for quick cleaning using an ordinary household vacuum cleaner.



**Powder-Painted Cabinet** for a smooth, durable, high-gloss appliance-like finish.

High-Performance Motor is engineered with permanently lubricated bearings for low maintenance and longer motor life.



Adjustable Control provides automatic timed ventilation, plus manual control for more ventilation if needed. Press the fan icon on the FreshEffects control to adjust runtime percentage per hour.

May also be controlled with Trane Nexia<sup>™</sup>-enabled connected controls.

# Welcome to cleaner and more energy efficient.

Today's homes are built to be more energy efficient than ever. By tightening your home's envelope, you also reduce air infiltration which traps in pollutants and allergens that are re-circulated through your heating and cooling system. Trane Perfect Fit™ Air Filters are the answer to help keep your air free from potentially harmful contaminants.

- Uses a premium 5" media filter
- Up to 15 times more effective than a disposable 1" filter
- Easily replaceable
- Cleans the air without reducing airflow efficiency
- Filters 100% of the air passing through it

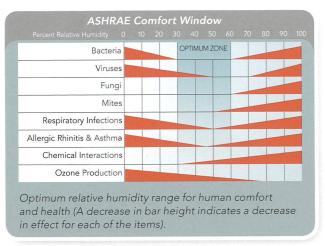
## TRANE PERFECT FIT™ **Effective Operating Range** 5" Media Filter Standard 1" Throwaway Filter Approximate particle size (microns) 100 50 Visible Through Light Microscope Common Household Air Contaminants Visible Through Light Microscope Visible Through Electron Microscope ATMOSPHERIC PARTICLES Smog Mist Tobacco Smoke SMOKE Cooking Smoke Trane Perfect Fit Air Filters are economical and effective Household Dust DUSTS at reducing a wide variety of indoor air contaminants. Pet Dander Hair Pollen **PARTICULATES** Mold Spores Skin Flakes Bacteria

# Total home humidity control.

Trane total home humidifiers add an important element of comfort to your indoor environment. Your air may be at the perfect temperature. It may be clean by using an efficient filter or air cleaner. However, without the proper humidity levels, it's not as comfortable as it could be. During winter months, or in hot, dry climates, the air in your home will lose most of its moisture. A Trane total home humidifier restores moisture levels to the air in your home, increasing your comfort while protecting your belongings and your family's health.

#### Why is indoor humidity important?

Having the optimum amount of humidity in your indoor air can impact your health. Either too much or too little can lead to the rise of unhealthy airborne particulates.



Source: "Criteria for Human Exposure to Humidity in Occupied Buildings"-Sterling, et al and other ASHRAE Studies.

### STEAM HUMIDIFIERS

#### Electrode Type Steam Canister means fast, easy, low cost maintenance.\*

Six Different Capacities In One Unit to satisfy any application from 11.5 gallons per day to 34.6 gallons per day.

## Automatic Shut Down

after 72 hours of inactivity; unit will drain to eliminate standing water.

## Easy Mounting Flexibility to

your existing duct work or can be remotely mounted.

#### Choose Precise Relative **Humidity % Settings** based on your needs and outdoor conditions. Works

with Trane Nexia<sup>™</sup>-enabled controls without the need for additional controls.

Humidity "On Demand" uses your current system blower to distribute humidified air throughout your home without a call for heating from your furnace or heat pump.

#### Five-Year Standard Warranty includes all functional Parts.

Extended Warranty available.

All Inclusive Package means there is nothing else to purchase. Includes manual humidistat and blower relay. Nexia-enabled control is optional.



#### What is relative humidity and how does it impact my home?

As the outside temperature drops, so does the relative humidity inside your home which means less moisture and drier air. This chart suggests appropriate indoor relative humidity settings that a Trane humidifier can help achieve in your home, bringing you greater comfort and welcome relief from dryness.

Outdoor Temperature (°F)	Indoor Relative Humidity
+40°	45%
+30°	40%
+20°	35%
+10°	30%
0°	25%
-10°	20%
-20°	15%

Relative humidity settings are based on double-pane windows or single-pane windows with storm windows. These settings reduce the likelihood of condensation forming on the windows inside a home.

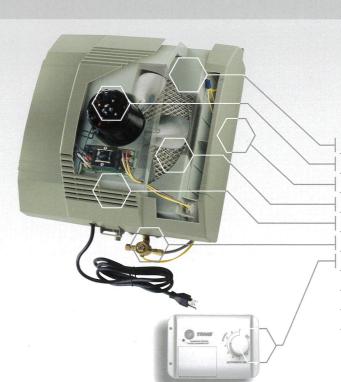
# Recommended Gallons of Humidity Per Day

Humidifier Sizing Chart (8' Ceilings)					
1000 ft <sup>2</sup>	4.3	8.6	12.7		
1500 ft <sup>2</sup>	6.4	12.8	19.1		
2000 ft <sup>2</sup>	8.5	17.0	25.5		
2500 ft <sup>2</sup>	10.6	21.3	31.8		
3000 ft <sup>2</sup>	12.7	25.4	38.1		
4000 ft <sup>2</sup>	17.0	34.0	51.0		
5000 ft <sup>2</sup>	21.2	42.6	63.6		
Structure Tightness	Tight	Average	Loose		

A family of four will add two gallons of humidity per day through everyday activities like cooking, bathing and washing.

Source: AHRI Air Conditioning, Heating, and Refrigeration Institute GPD = Gallons Per Day Guideline F 2008

## **EVAPORATIVE HUMIDIFIERS**



	Power	Large Bypass	Small Bypass
Flow-Through Design	•	•	•
Built-In Fan	•		
Durable, Rust-Resistant Housing	•	•	•
Replaceable Pad	•	•	•
Bypass Damper		•	•
Controlled Moisture Distribution	•	•	•
Automatic Control	•	•	
Manual Control			•
Outdoor Sensor Option	•	•	
Evaporative Capacity (gallons per day)	18	16.8	12

Warranty Protection

Five-Year Limited Warranty On Functional Parts With Registration\*

\* Registered Limited Warranty terms are available when you register within 60 days of installation. You can register online at Trane.com or by phone at 800-554-6413, otherwise Trane's Base Limited Warranty terms will apply. Base Limited Warranty information on specific products can be found on Trane.com.







We Encourage

Through Technician Certification by NATE

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Ingersoll Rand (NYSE:IR) advances the quality of life by creating comfortable, sustainable and efficient environments. Our people and our family of brands—including Club Car®, Ingersoll Rand®, Thermo King® and Trane®—work together to enhance the quality and comfort of air in homes and buildings; transport and protect food and perishables; and increase industrial productivity and efficiency. We are a \$13 billion global business committed to a world of sustainable progress and enduring results.







