

Professional Series 13-16 SEER high-efficiency AIR CONDITIONERS AND HEAT PUMPS, AIR HANDLERS AND COILS

NuTone





Fixed-Speed, Variable-Speed, Single-Stage and Two-Stage

## For your life. style. home.™

From standard efficiency air conditioners, to the most efficient split system available, NuTone heating and cooling systems can clean your air, adjust indoor temperatures by room and control humidity. All while saving you money. Plus, NuTone offers industry-leading product warranties on furnaces, air conditioners, heat pumps and more. You can trust NuTone to comfort your life, style and home.

• Long-lasting peace of mind. Every air conditioner and heat pump is triple checked at each manufacturing stage, for an average of 144 quality checks as your unit is built. In addition, all electrical and mechanical components are 100% fired and tested on the manufacturing line. When your contractor arrives, you can be sure that only the highest quality air conditioner or heat pump is being delivered to your home.

- **Total comfort.** Great airflow and quiet performance are part of the NuTone comfort equation.
- Designed for easy care. Smooth and practical lines make your NuTone air conditioner or heat pump attractive on the outside. All units are finished with a silicone protective polyurethane finish. This step protects your unit from corrosion 50% more than standard outdoor finishes.
- **Built to last.** From a long-lasting motor to the one-piece orifice, your unit will provide years of trouble-free and reliable service.

Scroll compressor for quieter operation—fewer working parts than reciprocating piston compressors, longer service life and reliability.

16 SEER products feature a two-stage Ultra-Tech scroll compressor. Two-stage technology allows your air conditioner or heat pump to operate at the most efficient level for total indoor comfort regardless of the outside temperature.

- 2 Heavy duty motor—provides maximum high-speed efficiency for improved air flow capacity long-lasting durability and quiet operation. It is completely protected from rain and snow, and requires no maintenance.
- A Stylish jacket—full-metal, louvered jacket protects coil from impact of flying debris due to mowing, golf balls, hail and other hazards
  - **B** Solid construction—galvanized steel for added strength and durability, featuring silicone-protected 1.5 mil polyurethane finish that provides superior corrosion resistance, 50% better protection than standard outdoor finishes
- One-piece top with integrated fan orifice designed for maximum air flow and minimum noise

air conditioner cutaway view shown





### Our 13-16 SEER air conditioners and heat pumps.

Cooling performance is measured by a Seasonal Energy Efficiency Ratio (SEER). The higher the SEER rating, the more efficiently your unit operates. Increased efficiency translates into savings in utility costs.

Heat pumps are also measured by Heating Seasonal Performance Factor (HSPF) for heating performance. The higher the HSPF, the lower your utility bills.

|  | Extra High<br>Efficiency | High<br>Efficiency | Standard<br>Efficiency | Heat Pump<br>Efficiency | Two-Stage    | Variable-<br>Speed Indoor | -Energy<br>ENERGY ST |
|--|--------------------------|--------------------|------------------------|-------------------------|--------------|---------------------------|----------------------|
| 16 SEER<br>Air Conditioner<br>& Heat Pump    | •                        |                    |                        | 8.5-9.0<br>HSPF         | $\checkmark$ | <b>~</b>                  | All mode             |
| 14/15 SEER<br>Air Conditioner<br>& Heat Pump |                          | <b>V</b>           |                        | 8.0-8.5<br>HSPF         |              | Optional                  | Select mo            |
| 13+ SEER<br>Air Conditioner<br>& Heat Pump   |                          |                    | $\checkmark$           | 8.0 HSPF                |              | Optional                  |                      |

## Heat Pump or Air Conditioner?

Depending on the climate you live in, a heat pump may be ideal for your family. Heat pumps work similarly to a conventional air conditioner with one big exception – they also provide heat in the winter. You can save 30% to 60% on energy usage during the winter months by switching to a heat pump.

### How much will you save?



Annual costs based on 36,000 Btu unit, 1500 cooling load hours, and .08/kwh. Actual costs may vary depending on climate conditions, energy rates and patterns of usage.

# The benefits of a variable-speed system.

A single-stage air conditioner is sized to cool your home on the hottest day of the year. It delivers 100% of its cooling capacity at all times. When you install a NuTone air conditioner or heat pump with an indoor section featuring a variable-speed motor, you'll experience better comfort and lower utility costs.

A NuTone variable-speed system automatically maintains its programmed level of air flow regardless of dynamic changes in static pressure. Static pressure will change with a dirty air filter, zoning changes and obstructed supply registers as an example. Better indoor air quality is achieved quietly and inexpensively by setting the motor to run continuously at reduced airflow levels between cooling cycles. The NuTone variable-speed system also operates quieter than conventional motors, while reducing temperature swings, indoor moisture, and hot spots.

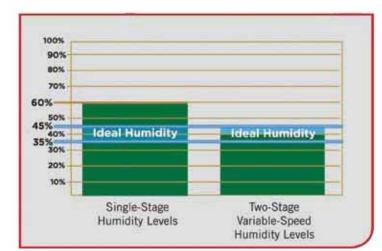


NuTone 15 and 16 SEER air conditioners and heat pumps utilize a variable-speed indoor unit.

# The benefits of two-stage cooling with variable-speed.

Two-stage cooling products maintain a more consistent comfort level throughout your home. During the first stage, which is about 80% of the time, the unit will use about 68% of its cooling capacity. It will always start in the first stage and attempt to meet the cooling demand.

# Two-stage cooling provides better indoor comfort.



This reduced capacity is enough to efficiently cool your home on mild summer days. When the temperature rises the air conditioner or heat pump automatically adjusts itself and enters the second stage to meet the increased cooling demand.

A two-stage air conditioner or heat pump paired with a variable-speed indoor unit runs for longer cycles and will remove up to six times more moisture than a conventional unit. The result is a more comfortable environment even at a higher thermostat setting. Thanks to two-stage technology the temperature in your home will only vary a couple of degrees and you will experience quiet comfort. The unique variable-speed motor decreases fan noise. Since the fan operates slower during the low-stage cooling demand, it produces less noise. In fact, in most installations it is practically silent. The variable-speed also allows the motor to ramp up to speed slowly, eliminating uncomfortable temperature swings. Efficient operation is what twostage, variable-speed cooling is all about.

# Breathe Easy, Save Big

Running a cooling system continuously on a thermostat's "fan setting" has obvious benefits. Besides optimizing indoor air comfort, a variable-speed system uses 80% less electricity over conventional motors. Ultimately, this can add up to hundreds of dollars in savings each year. So you can breathe easier, especially when utility bills come due.

## **Energy definitions.**

#### SEER—Seasonal Energy Efficiency Rating

Measures cooling performance on air conditioners, heat pumps and gas/electric package product. **HSPF—Heating Seasonal Performance Factor** 

It is a measure of the average number of Btu of heat delivered for every Watt-hour of electricity used by the heat pump over the heating season. As ratings increase, so does unit efficiency.

## Helping to save Mother Earth.

Awarded by the U.S. Department of Energy and the Environmental Protection Agency for helping to conserve energy, promote cleaner air, and prevent global warming. To qualify, air conditioners and heat pumps must have a Seasonal Energy Efficiency Ratio (SEER) rating of 14.5 or higher and an Energy Efficiency Ratio (EER) of 12.0 or higher. Heat pumps are also ENERGY STAR<sup>®</sup> rated by a Heating Seasonal Performance Factor (HSPF) of 8.2 or higher. Ratings 25% more energy efficient than standard models. All NuTone air conditioners and heat pumps feature the latest environmentally-friendly refrigerant technology, R-410A.





## The inside story.

An outdoor unit is only the half of a split-system. The air handler is the inside half of the system. Working in tandem, outside and inside units must be matched in size and efficiency for best results. Failing to replace an indoor unit, or mismatching components, can significantly undermine a new air conditioner's or heat pump's performance.

An air handler consists basically of a blower, an inside coil, and optional auxiliary electric heating strip. In the cooling mode, as air flows over the indoor coil, heat and humidity are drawn out. It's the air handler's job to then circulate conditioned air throughout the house. Ultimately, performance varies as a result of the blower motor choice.





# **13-16 SEER AIR HANDLERS** Fixed-Speed and Variable-Speed

# NuTone air handlers.

Our air handlers are quality constructed with galvanized steel for added strength and durability.

- Silicone-protected 1.5 mil polyurethane finish for superior corrosion resistance, 50 percent better than standard finishes.
- Multi-poise can be used in horizontal, upflow and downflow configurations.
- Engineered for easy access minimizes service time.

|                            | Fixed-Speed<br>Motor | Variable-Speed<br>Motor | Improved<br>Dehumidification |
|----------------------------|----------------------|-------------------------|------------------------------|
| 13/14 SEER<br>Air Handlers | $\checkmark$         |                         |                              |
| 14-16 SEER<br>Air Handlers |                      | <b>V</b>                | <b>~</b>                     |

## 14-16 SEER variable-speed air handlers.

Our variable-speed air handlers are designed for NuTone two-stage cooling outdoor products. Variable-speed extra highefficiency 16 SEER and 9.0 HSPF ratings are possible when matched to select NuTone air conditioners and heat pumps.

- Multi-poise can be used in horizontal, upflow, downflow and vertical applications.
- Engineered for easy-access minimizes service time.



# INDOOR COILS

Cased and Uncased

## NuTone evaporator coils.

## Quality, Durable, Energy-Efficiency, Value and Comfort.

These are the things you expect from a NuTone product, and they're exactly what you'll get with our indoor coils.

Would you ever buy a new car, and ask to have your old tires be put on it? Probably not. Similarly, when you buy a new heat pump or air conditioner, should you use your old indoor coil? Definitely not. Here's why: An old, dirty, coil designed for a less efficient product, will prevent your outdoor unit from performing at the optimum efficiency, and may even damage your new air conditioner or heat pump compressor. Also, a coil designed for a different brand has not been matched or tested with your new system so efficiency ratings and performance can also be effected.

# Typical cased indoor coil



Typical uncased indoor coil

# NuTone 10-Year Limited Warranty

#### **10-Year All Parts**

When a product is truly built to exacting standards of quality and durability, the manufacturer's confidence is reflected in its warranty. NuTone heating and cooling products offer one of the best warranties in the business— 10 years on all parts when product is registered. See warranty details for more information.

#### **1-Year NuTone Quality Pledge**

The NuTone Quality Pledge on Professional Series split system air conditioners and heat pumps guarantees that we will replace your unit if the compressor (the most important part of your air conditioner and heat pump) fails in the first year of ownership, when installed with a matched indoor coil or air handler.

#### Limited Lifetime Heat Exchanger Warranty

When you register your new NuTone furnace or gas/electric packaged system, we will also extend the heat exchanger warranty from 20 years to the limited lifetime heat exchanger warranty.

#### **10-Year on Air Handlers & Coils**

When you install and register your new NuTone air handler or coil with your new NuTone system, we will also extend the warranty to the 10 Year Limited Parts Warranty.

#### **10-Year on Indoor Air Quality Products & Zoning Products**

When you install and register any of our NuTone Indoor Air Quality or Zoning with your new NuTone system, we will also extend the accessory warranties to the 10 Year Limited Parts Warranty.

#### **Warranty Registration**

To assure you take advantage of these longer warranties, register your system within 60 days of installation (or within 60 days of occupancy of a new residentially constructed home with these products) at www.nutonehvac.com. See warranty details for more information.

#### **Extended Warranty Protection**

While your NuTone warranty covers parts, it does not cover the cost of labor charged by your contractor for service and repair. However, extended labor protection plans are available to cover labor costs associated with repairs. Your contractor may offer various coverage plans; we recommend you look for the Contractors' Preferred Protection Plan brand approved for NuTone.



\* Warranties not registered default to 5 years.

Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps must be matched with appropriate coil components to meet ENERGY STAR criteria. Ask your contractor for details or visit www.energystar.gov.





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