# TECH BUILT O O O

## Home Comfort System SPLIT AIR CONDITIONERS



# HOME SURVEY

How long do you plan to live here?

How quiet would you like your system to be?

Which rooms are too hot or too cold?

Who suffers from allergies or problems due to airborne dust, mold, pollen, viruses or dander?

How much would you like to reduce your energy bills?

How often is your system maintained?

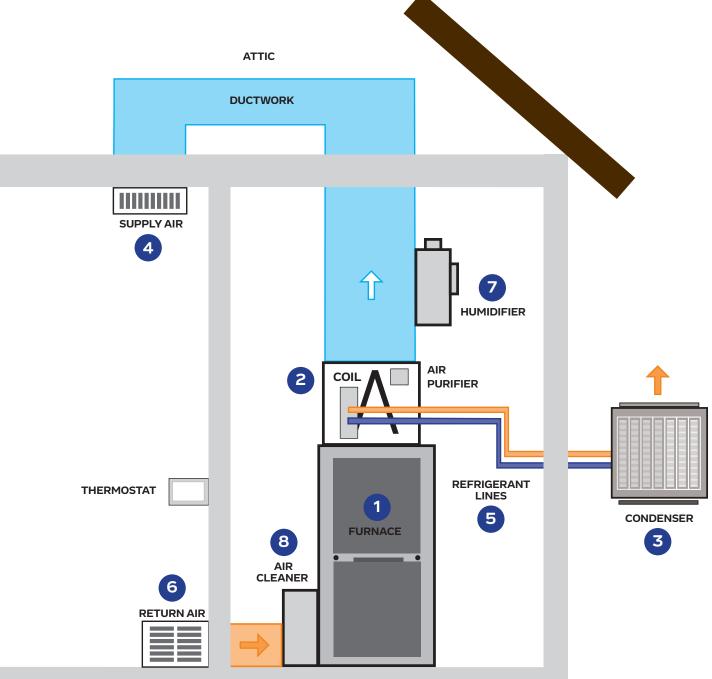
Would you like to reduce concerns of unplanned repair bills?

What would you like to see improved in your current system?

# HOW IT WORKS

- 1. Furnace component that circulates air and adds heat to the air by burning gas.
- 2. Coil transfers interior heat into the refrigerant lines and moves that heat outdoors.
- 3. Condenser removes heat from the house.
- 4. Supply Air sends into rooms after being heated or cooled.
- 5. Refrigerant Lines medium by which heat is transferred from one place to another.

- 6. Return Air returns air into the heating and cooling system.
- 7. Humidifier device that increases humidity.
- 8. Air Cleaner removes solid particulate matter such as dust, pollen, mold, and bacteria from the air depending on the type of filter and efficiency level.



# FAQS

### **CHOOSING A CONTRACTOR**

### Why Should I hire a licensed & bonded contractor?

While you're checking to see if companies are insured and bonded, don't forget to inquire about whether the contractor's particular trade requires a license. States often require specific licenses for particular trades, such as electrician, plumber or HVAC.

Bonding protects the consumer if the contractor fails to complete a job, doesn't pay for permits, or fails to meet other financial obligations, such as paying for supplies or subcontractors or covering damage that workers cause to your property.

### Why pull permits?

Building permits are required for most construction or remodeling projects, in order to ensure the safety of the work and its compliance with building, construction, and zoning codes.

### Why is proper installation important for my home's HVAC system?

Proper installation is the single most important factor of your new system's longevity and efficiency. An improperly installed system can lead to early system failures and higher energy consumption.

### SYSTEM SELECTION

### Does a bigger or smaller heating or cooling system offer better performance?

No. Oversized equipment can use up to 9% more energy and undersized systems do not generate enough airflow to fill your home. A properly sized system allows for maximum unit lifespan.

### What is the difference between gas/electric & a heat pump system?

A gas/electric system uses electricity to cool your home and gas and electricity to heat it; whereas a heat pump uses only electricity to both heat and cool your home.



### Should I repair or replace?

If your system is newer and under warranty we recommend repairing it. If your system is older, it is likely reaching the end of its lifespan, so repairing it may not be the best option and a newer system will likely be much more energy efficient.

### Why should I upgrade my air vents?

Upgrading to bar-type registers can increase airflow and decrease the pressure buildup on the system thereby extending the life of the equipment.

### INDOOR AIR QUALITY (IAQ)

### What does MERV mean?

MERV stands for minimum efficiency reporting value and signifies how effective a filter is at removing particles from the air. The higher the MERV the smaller the particle the filter can remove from the air.

### Should I purchase a whole home humidifier?

A whole home humidifier can be a great way to increase the humidity level in your home. Proper humidity levels are important as they reduce static electricity, dry skin, chapped lips and scratchy throats.

### What is the proper indoor humidity level?

Generally, a good range is 40-50% humidity.

### What is fresh air ventilation system?

Fresh air ventilation systems remove stale air from your home and bring in fresh air automatically. These systems reduce carbon monoxide (CO), formaldehyde and help remove odors from the home.

### Should my ductwork be upgraded?

There are several factors that determine if your ductwork needs to be upgraded. If the ductwork is damaged and/or leaking, adding insulation will reduce the amount of heating or cooling loss in your attic lowering your overall energy consumption.

### Should I have my air ducts cleaned?

We can inspect your ductwork and make a recommendation on whether or not it needs to be cleaned.



### What do UV lights do?

They are designed to be installed in the coil and are intended to reduce mold and bacteria buildup on the coil.

### COST

### What rebates are available?

Rebates offered vary by region. Be sure to check with your local utility companies for current offers.

### How can I reduce my energy bill?

Air conditioners with a higher SEER2 (Seasonal Energy Efficiency Ratio) ratings will consume less power. Systems with a higher AFUE (Annual Fuel Utilization Efficiency) will cost less to heat your home in the winter.

Sealed ductwork prevents air leaks. The national average suggests, most US homes waste up to 35% of their cooling costs through leaking ducts. This dissipated airflow equals \$35 wasted for every \$100 spent.

### Why is there no set price?

Every home has different requirements as to what needs to be done to provide the ultimate level of comfort.

### **FURNACE**

### How does a variable-speed furnace benefit me?

Variable speed furnaces have many benefits. Just like your car, it is able to speed up or slow down whenever needed instead of running at full speed all the time. Variable speed furnaces provide the ultimate in energy savings and noise reduction. Variable speed furnaces are an important choice when you are looking to pair your system with indoor air quality (IAQ) products as they allow the furnace an energy efficient way to circulate the air in your home through the air cleaning products.

### How does a two-stage furnace work?

Two-stage heating means the furnace has two levels of heat output: high for cold winter days and low for milder days. Since the low setting is adequate to meet household heating demands 80% of the time, a two-stage unit runs for longer periods and provides more even heat distribution



### INSTALLATION

*Can I move my air conditioner to a different location?* Most likely your air conditioner can be moved to a more convenient location.

### How long does an install take?

Each job varies based on how complex it is, but generally it takes one to two days to complete a system replacement.

### WHY IS IT IMPORTANT TO MAINTAIN MY AIR CONDITIONER AND FURNACE WITH A SERVICE AGREEMENT?

Service agreements help extend the life span of a heating and air conditioning system by ensuring it runs at maximum efficiency. A typical service agreement includes two visits per year. One tune-up in the springtime prepares your air conditioning system for the summer, and one in the fall prepares your heater for the winter. Properly maintaining your system can have a significant impact on your utility bills and the life of your system. Ask for details about the service agreement options available to you.

A maintenance agreement provides peace of mind since your system will be properly serviced on schedule.

### Don't get caught in the heat without your air conditioner. Sign up for a service agreement today!

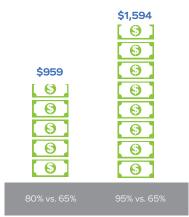


# LOWER YOUR ENERGY BILLS WITH A NEW HIGH EFFICIENCY SYSTEM

### COOL YOUR HOME FOR LESS

Seasonal Energy Efficiency Ratio (SEER2) is the rate by which all air conditioning and heat pump energy efficiency is measured. In the world of cooling, the higher the SEER2, the better the efficiency and the lower your energy bills.





### APPROXIMATE THREE-YEAR HEATING SAVINGS.

### **HEAT YOUR HOME FOR LESS**

Annual Fuel Utilization Efficiency (AFUE) measures the amount of heat actually delivered to your house compared to the amount of fuel supplied to the furnace. For example, a furnace that has an 80% AFUE rating converts 80% of the fuel to heat - the other 20% is vented out your roof as wasted money. The higher the AFUE rating, the better the energy efficiency and the less money you waste.

Most systems 15 years or older are rated around 65% AFUE. Upgrading to a Einstein modulating furnace rated at 97% AFUE can save around \$1,694 a year on energy costs. And of course, as the cost of natural gas rises, you'll save even more.

\*Conversion of SEER vs SEER2 Source: California Energy Commission

Current Air Conditioner Efficiency: Cooling based on 36,000 BTUh at 1,500 hours annual operation with the National Average electric rate of \$.25/kW. Seasonal Energy Efficiency Ratio (SEER2): The total cooling of a central unitary air conditioner or unitary heat pump in BTUs during its normal annual usage period for cooling divided by the total electric energy input in watt-hours during the same period. \*Actual cost savings may vary depending on personal lifestyle, system settings, equipment maintenance, local climate, home construction, installation of equipment and duct system, hours of operation. and local utility rates.

Three-year heating savings of compound units - dollar amounts computed at \$.092 CCF, for 2,500 full-load heating hours and a system rated at 60,000 BTU. Actual rates and patterns of usage according to individual lifestyle.

New for 2023: SEER2 and HSPF2 are new ratings that reflect changes to national testing standards. Think of it like a highway vs city gas mileage. SEER2 and HSPF2 more closely reflect energy efficiency in real life applications, which is why the rating is slightly lower.

# PLATINUM

# X-Series Condenser Air Conditioning 17 SEER2

Condenser

**Technology Compressor** The Condensing Units and Heat Pumps are capable of regulating the compressor motor speed to quickly adjust and maintain a precise temperature at a lower compressor speed while making the unit more energy efficient.

| Estimated Annu<br>Cooling Cost | <sup>al</sup> \$750* |
|--------------------------------|----------------------|
| Efficiency                     | 100%                 |
| Quietness                      | 100%                 |
| Comfort                        | 100%                 |
| Warranty                       | 100%                 |



10-YEAR PARTS WARRANTY 10-YEAR COMPRESSOR

### A-Series 80% Two Stage Variable

**EHX<sup>TM</sup> Technology** EHX Technology makes heat exchangers more durable, and with its advanced airflow system, more air contacts the heat exchangersurface area for greater heat exchange, enhancing efficiency and comfort.

**Two-Stage Heating** Rather than being "all on" or "all off", your furnace can adjust its heat output based on conditions inside and outside your home. So you use less energy to maintain comfort.

Quiet Combustion<sup>™</sup> Technology Uses a smaller BTU input per burner for quieter start-up and operation, while providing more even heat distribution.

Comfort Sync Communication thermostat compatible

| Efficiency | 100%  |  |
|------------|-------|--|
| Enterency  | 10070 |  |
|            |       |  |
| Quietness  | 100%  |  |
|            |       |  |
| Comfort    | 90%   |  |
|            |       |  |
| Warranty   | 100%  |  |

10-YEAR PARTS WARRANTY



**FECH** 

### **Carbon Media Air Cleaner MERV 13**

Lowest pressure drop MERV 13 filter at 0.24" w.c.

Sized for air handlers and furnaces

Easy filter size identification

Quick filter media replacement

Painted steel cabinet

Positive seal gasket material included

Two-stage filter seal on cabinet door

Minimal air leakage design



LIMITED LIFETIME CABINET ONLY WARRANTY

### Active Air Purifier 12" 24V

Innovative carbon fiber brushes increase ion production.

Effective against biological growth, bacteria, odors, VOC's, and more, in the air and on surfaces.

Auxiliary power port to power an additional 24V Germicidal UV-C light allowing to easily add an additional UV light to any HVAC system.

7-YEARS POWER SUPPLY WARRANTY 2-YEAR LAMP WARRANTY

### Pro9000 Programmable Color Touchscreen WiFi Thermostat

Displays indoor and outdoor temperature and humidity information right onscreen.

Your customers can easily monitor and manage home comfort from any device, anywhere with Honeywell's Total Connect Comfort app.



2-YEAR WARRANTY

# GOLD

### X-Series Condenser Air Conditioning 15.2-17 SEER2 Condenser

**Technology Compressor** The Condensing Units and Heat Pumps are capable of regulating the compressor motor speed to quickly adjust and maintain a precise temperature at a lower compressor speed while making the unit more energy efficient.

| Estimated Ann<br>Cooling Cost | <sup>nual</sup> \$900* |  |
|-------------------------------|------------------------|--|
| Efficiency                    | 90%                    |  |
| Quietness                     | 90%                    |  |
| Comfort                       | 100%                   |  |
| Warranty                      | 100%                   |  |



10-YEAR PARTS WARRANTY 10-YEAR COMPRESSOR

### AC Pro 80% Two Stage Variable Furnace

**Two-Stage Heating** Rather than being "all on" or "all off," your furnace can adjust its heat output based on conditions inside and outside your home. So you use less energy to maintain comfort.

**Variable Speed Fan Motor** By changing the speed of its airflow during start-up, your furnace can adjust humidity levels and create more even temperatures throughout your home, while enhancing efficiency and reducing operating noise.

Quiet Combustion<sup>™</sup> Technology Uses less energy for a quieter start-up, more cost effective operation while keeping the family comfortable year round.

Comfort Sync Communication thermostat compatible

Self diagnostic saves last 5 fault codes regardless of power interruptions

| Efficiency | 80% |  |
|------------|-----|--|
|            |     |  |
| Quietness  | 90% |  |
|            |     |  |
| Comfort    | 80% |  |
|            |     |  |
| Warranty   | 90% |  |
|            |     |  |
|            |     |  |
| VARIABLE   |     |  |
| SPEED      |     |  |
| FAN MOTOR  |     |  |

10-YEAR

PARTS WARRANTY



### Carbon Media Air Cleaner MERV 13

Lowest pressure drop MERV 13 filter at 0.24" w.c.

Sized for air handlers and furnaces

Easy filter size identification

Quick filter media replacement

Painted steel cabinet

Positive seal gasket material included

Two-stage filter seal on cabinet door

Minimal air leakage design







Innovative carbon fiber brushes increase ion production.

Effective against biological growth, bacteria, odors, VOC's, and more, in the air and on surfaces.

Auxiliary power port to power an additional 24V Germicidal UV-C light allowing to easily add an additional UV light to any HVAC system.

7-YEARS POWER SUPPLY WARRANTY 2-YEAR LAMP WARRANTY

### Pro9000 Programmable Color Touchscreen WiFi Thermostat

Displays indoor and outdoor temperature and humidity information right onscreen.

Your customers can easily monitor and manage home comfort from any device, anywhere with Honeywell's Total Connect Comfort app.



2-YEAR WARRANTY



\*Estimated operating cost based on 25¢ per kwhr at 1,500 hours & a 3 ton system.

LIFETIME HEAT

EXCHANGER

# SILVER

### M-Series Condenser Air Conditioning

Quiet Operation with sound levels as low as a casual conversation (62 dB)

Powder coated galvanized steel cabinet protects against rust

Compact design

Maximum overcurrent protection of up to 45 amps

| Estimated An<br>Cooling Cost | <sup>inual</sup> \$964 | *                     |  |
|------------------------------|------------------------|-----------------------|--|
| Efficiency                   | 80%                    |                       |  |
| Quietness                    | 100%                   |                       |  |
| Comfort                      | 100%                   |                       |  |
| Warranty                     | 100%                   |                       |  |
| 10-YE<br>PARTS WA            |                        | 10-YEAR<br>COMPRESSOR |  |

### AC Pro 80% Two Stage Variable Furnace

Two-Stage Heating Rather than being "all on" or "all off," your furnace can adjust its heat output based on conditions inside and outside your home. So you use less energy to maintain comfort.

Variable Speed Fan Motor By changing the speed of its airflow during start-up, your furnace can adjust humidity levels and create more even temperatures throughout your home, while enhancing efficiency and reducing operating noise.

Quiet Combustion<sup>™</sup> Technology Uses less energy for a quieter start-up, more cost effective operation while keeping the family comfortable year round.

Comfort Sync Communication thermostat compatible

Self diagnostic saves last 5 fault codes regardless of power interruptions

| Efficiency | 80%   | _ |
|------------|-------|---|
| 0.1.1      | 0.00% |   |
| Quietness  | 90%   |   |
|            |       |   |
| Comfort    | 80%   |   |
|            |       |   |
| Warranty   | 90%   |   |



10-YEAR PARTS WARRANTY LIFETIME HEAT EXCHANGER

### **Carbon Media Air Cleaner MERV 13**

Lowest pressure drop MERV 13 filter at 0.24" w.c.

Sized for air handlers and furnaces

Easy filter size identification

Quick filter media replacement

Painted steel cabinet

Positive seal gasket material included

Two-stage filter seal on cabinet door

Minimal air leakage design

LIMITED LIFETIME **CABINET ONLY** WARRANTY



### Active Air Purifier 12" 24V

Innovative carbon fiber brushes increase ion production.

Effective against biological growth, bacteria, odors, VOC's, and more, in the air and on surfaces.

Auxiliary power port to power an additional 24V Germicidal UV-C light allowing to easily add an additional UV light to any HVAC system.

7-YEARS POWER SUPPLY WARRANTY 2-YEAR LAMP WARRANTY

### Honeywell T6 Pro WiFi Programmable Thermostat

Up to 2 Heat / 1 Cool heat pump and 2 Heat / 2 Cool conventional

Large, clear backlit digital display

Selectable 7 day, 5-2, or non-programmable options.



5-YEAR LIMITED WARRANTY



# BRONZE

### **M-Series Condenser Air Conditioning**

Quiet Operation with sound levels as low as a casual conversation (62 dB)

Powder coated galvanized steel cabinet protects against rust

Compact design

Maximum overcurrent protection of up to 45 amps

| Estimated Ar<br>Cooling Cost | <sup>inual</sup> \$96 | <b>4</b> *    | TECH BUILT |  |
|------------------------------|-----------------------|---------------|------------|--|
| Efficiency                   | 80%                   |               |            |  |
| Quietness                    | 100%                  |               |            |  |
| Comfort                      | 100%                  |               |            |  |
| Warranty                     | 100%                  |               |            |  |
| 10-Y<br>PARTS WA             |                       | 10-Y<br>COMPR |            |  |

### AC Pro A-Series Gas Furnace 80% Single Stage

An 80% AFUE\* means the 80G1 converts a full 80% of the fuel it consumes into usable heat. That can help you spend less on energy every month.

The aluminized steel heat exchanger resists corrosion, and is crimped instead of welded for long life and safety.

The anti-vibration blower assembly helps reduce noise during startup and shutdown for peaceful, quiet operation.

| Efficiency | 70% |
|------------|-----|
|            |     |
| Quietness  | 90% |
|            |     |
| Comfort    | 70% |
|            |     |
| Warranty   | 90% |
|            |     |



10-YEAR PARTS WARRANTY LIFETIME HEAT EXCHANGER

### Non-Carbon Media Air Cleaner MERV 13

Lowest pressure drop MERV 13 filter at 0.24" w.c.

Sized for air handlers and furnaces Easy filter size identification Quick filter media replacement Painted steel cabinet Positive seal gasket material included Two-stage filter seal on cabinet door Minimal air leakage design



# Active Air Purifier 12" 24V

LIMITED LIFETIME CABINET ONLY WARRANTY

Innovative carbon fiber brushes increase ion production.

Effective against biological growth, bacteria, odors, VOC's, and more, in the air and on surfaces.

Auxiliary power port to power an additional 24V Germicidal UV-C light allowing to easily add an additional UV light to any HVAC system.

7-YEARS POWER SUPPLY WARRANTY 2-YEAR LAMP WARRANTY

### Honeywell T6 Pro WiFi Programmable Thermostat

Up to 2 Heat / 1 Cool heat pump and 2 Heat / 2 Cool conventional

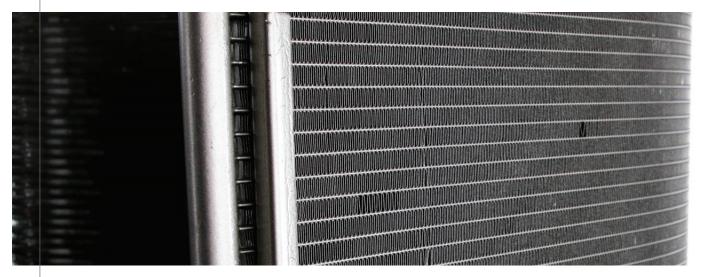
Large, clear backlit digital display

Selectable 7 day, 5-2, or non-programmable options.



5-YEAR LIMITED WARRANTY



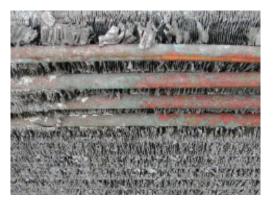


# COIL COATING

### **INSITU® SPRAY APPLIED COATING PROTECTION**

Any coating is better than no coating at all. But when it comes to protecting expensive HVAC&R equipment and systems, there is no better protective coating Insitu® Spray Applied Coating. At Insitu®, we're ready when and where you are. If time does not allow for e-coating, we can provide the service and coating you need to prevent corrosion and protect your investment. Find out more about Insitu® Spray Applied Coating and how we can provide you the best corrosion protection.

- Designed to provide corrosion resistance for post-manufactured unit's coils
- Coil is fully exposed, cleaned, and prepped prior to coating procedure
- Protects against all corrosive environments and extends life of equipment
- Manufacture endorsed coating that reduces equipment maintenance and operating costs
- Coil lasts 3-5 times longer than an uncoated coil in the same location



### **TROPI-COAT® SPRAY APPLIED COATING PROTECTION**

TROPI-COAT® anti-corrosion coating is specifically designed for harsh environments, including coastal communities. The coating is embedded with 316 stainless steel and is applied internal and external components.

- Designed as a top coat post-manufacturing finish for equipment in marine environments
- Coating is applied to all coil surface areas, internal components, copper tubing, external cabinet and base rails
- Protects against all corrosive environments and extends life of equipment
- Reduces equipment maintenance and operating costs
- Coil lasts 3-5 times longer than an uncoated coil under the same conditions



# NOTES

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# NOTES

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# TECH BUILT

Due to our policy of continuous improvement, specifications are subject to change without notice. Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners must be matched with appropriate coil components to meet the ENERGY STAR criteria. Ask us for details or visit www.energystar.gov. Our gas efficiency AFUE ratings are certified by the Gas Appliance Manufacturers Association. Not approved for use in mobile home applications.