TECH BUILT

Home Comfort System

PACKAGE UNITS

V 03.14.23

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?

_____

_____

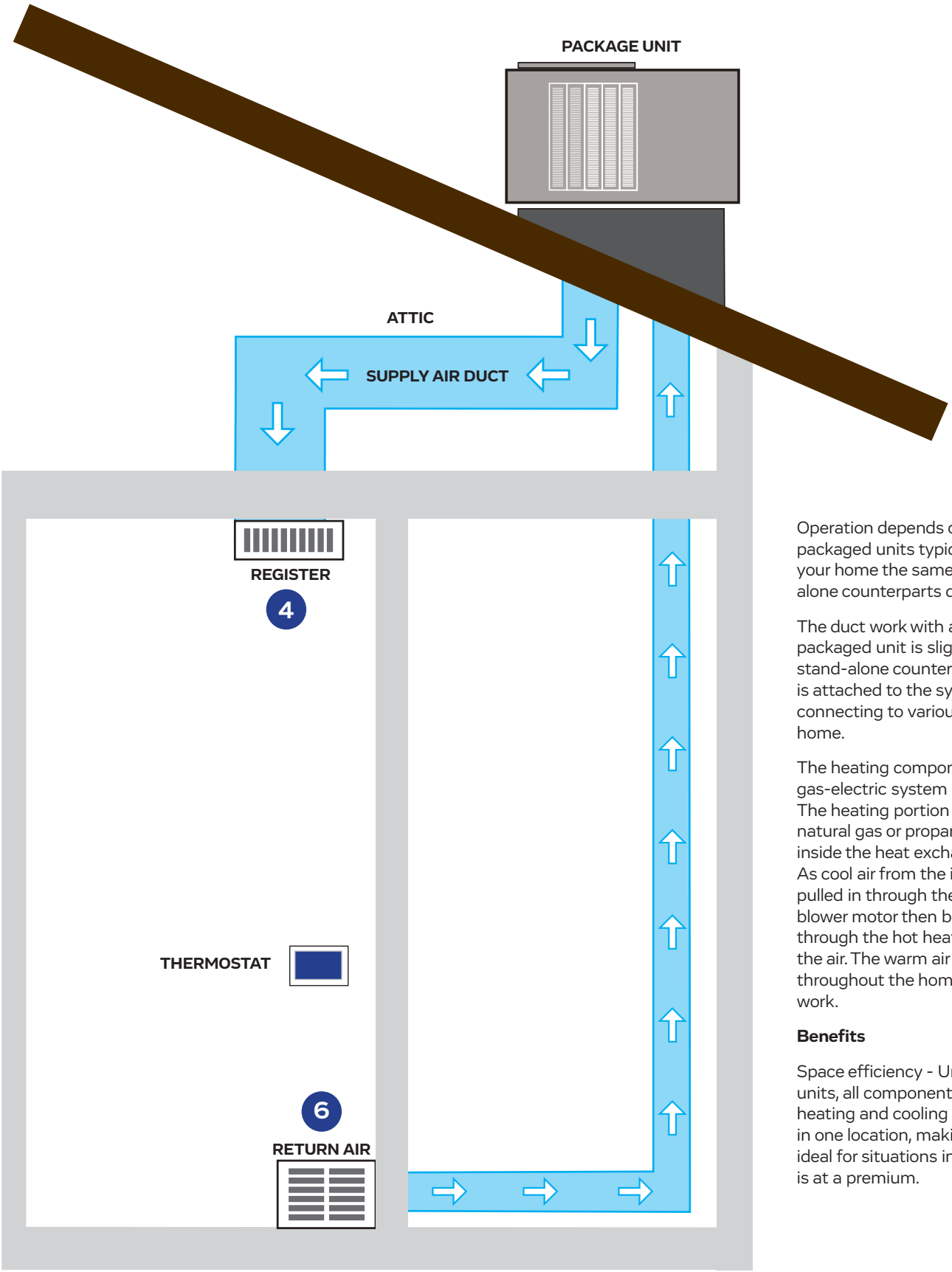
What would you like to see improved in your current system?

_____

_____

_____

HOW IT WORKS



Operation depends on configuration, but packaged units typically heat and cool your home the same way their stand-alone counterparts do.

The duct work with a single cabinet packaged unit is slightly different than its stand-alone counterpart. The duct work is attached to the system rather than connecting to various components in your home.

The heating component of a packaged gas-electric system is a gas furnace. The heating portion of the system uses natural gas or propane to combust inside the heat exchanger, creating heat. As cool air from the interior spaces is pulled in through the return ducting, the blower motor then blows the air over and through the hot heat exchanger, heating the air. The warm air is then circulated throughout the home through the duct-work.

Benefits

Space efficiency - Unlike split-system units, all components of a complete heating and cooling system are contained in one location, making packaged units ideal for situations in which indoor space is at a premium.

FAQS

CHOOSING A CONTRACTOR

Why Should I hire a licensed & bonded 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 electricians, plumbers, 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, 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 crucial 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 essential 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?
Several factors 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 cleaning.d.

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

PACKAGE UNITS

What size package unit do I need?
The essential factors are your home, including its size and your climate. In short, the larger your home is and the harsher your climate, the larger the required gas pack will be.

In terms of efficiency, you don't have any choice for heating, since gas pack furnaces are all 80% or 81% efficient, unlike split system gas furnaces that range from 80% to 98% efficient. The warmer and longer your summers are, the higher the SEER2 rating should be on the unit you choose..

Will a package unit ruin my roof?
There are several benefits to a roof-mounted unit. First is limiting the amount of work the unit needs to do — in turn, lowering your energy cost. Because cold air sinks, a rooftop install takes advantage of the air's natural tendency. Forced air furnaces, meanwhile, need to push this cooled air up through the ductwork in your home, which requires higher fan speeds and more power.

Will maintenance cost more on a package unit?
Installing a rooftop air conditioner also has the advantage of keeping all moving parts together. If something breaks down in a central air conditioner, a repair technician will need to check your furnace, the A/C unit, and all the connections that run between them. As a result, troubleshooting A/C problems or even routine maintenance may be time-consuming and costly. If a rooftop unit experiences a problem, a professional HVAC technician needs to look only in one place.

Will the weather affect/ruin my unit?
Ground units can be more exposed to damage from a variety of sources: yard appliances, broken trees/limbs, children's activities – the list can belong. Having your unit on top of your roof keeps it far away from ground activity that could be detrimental.

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 PACKAGE UNIT 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!

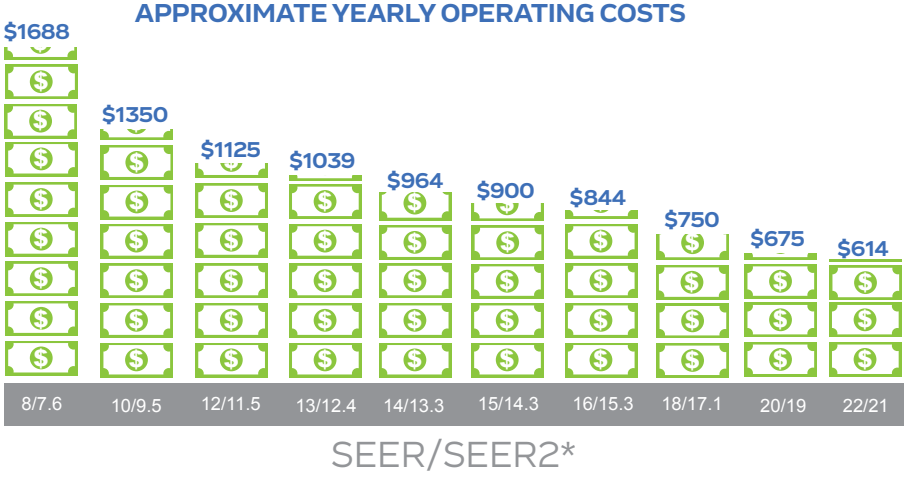
LOWER YOUR ENERGY BILLS WITH A NEW HIGH EFFICIENCY SYSTEM

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.

APPROXIMATE YEARLY OPERATING COSTS



SEER/SEER2*

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.

GOLD

A-Series Packaged Heat Pump 15.2 SEER2 Two Stage

Variable-speed motor has two stages of cooling and heating

10 YEAR LIMITED PARTS WARRANTY

10 YEAR LIMITED COMPRESSOR WARRANTY

Package Unit Air Purifier

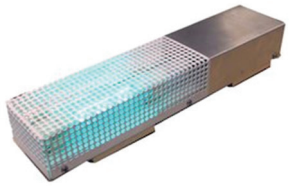
Kills bacteria, viruses and mold.

Reduces odors and VOCs (chemical odors).

Easy, no-tool installation. Adjustable magnetic feet attach without fasteners to the blower unit itself making installation as trouble-free as possible.

Hvac Blower Size 1200-3000 cfm.

Tonnage: 3.5 to 7.5 ton

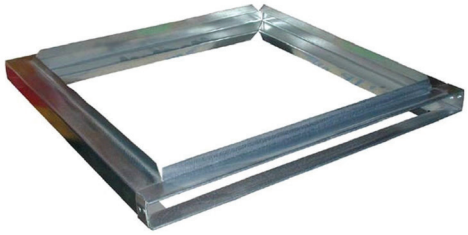


2 YEAR UV LAMP

4 YEAR MX4 CORE

5 YEAR POWER SUPPLY

Filter Kit Package Units (OEM)



Downflow Conversion Kit

Nest E Pro Programmable WiFi Thermostat

Nest E Pro saves energy by turning itself down when you're away

Control it from anywhere with the Nest app

Frosted display screen and white outer ring is designed to blend right in

Saves an average of 10-12% on heating bills and 15% on cooling bills

2-YEAR LIMITED WARRANTY

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

Total investment: _____

Monthly investment: _____

SILVER

M-Series Packaged Heat Pump 13.4 SEER2 Single Stage

Small Footprint

Heavy gauge painted, removable base rails

10 YEAR PARTS WARRANTY

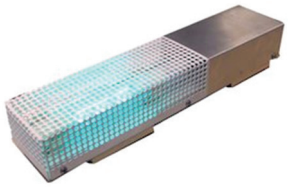
10 YEAR COMPRESSOR WARRANTY

Package Unit Air Purifier

Kills bacteria, viruses and mold.

Reduces odors and VOCs (chemical odors).

Easy, no-tool installation. Adjustable magnetic feet attach without fasteners to the blower unit itself making installation as trouble-free as possible.



Hvac Blower Size 1200-3000 cfm.

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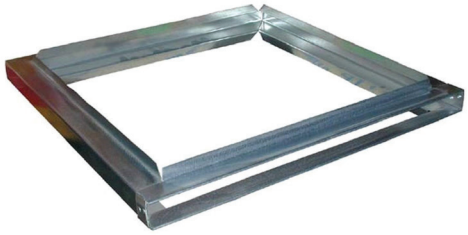

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2-YEAR LIMITED WARRANTY

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BRONZE

M-Series Packaged Heat Pump 13.4 SEER2 Single Stage

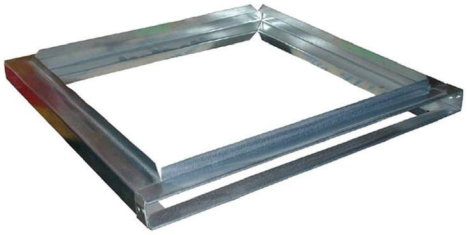
Small Footprint

Heavy gauge painted, removable base rails

10 YEAR PARTS WARRANTY

10 YEAR COMPRESSOR WARRANTY

Filter Kit Package Units (OEM)



Downflow Conversion Kit

AC Pro T705ACP Thermostat

Easy to program

Backlit display

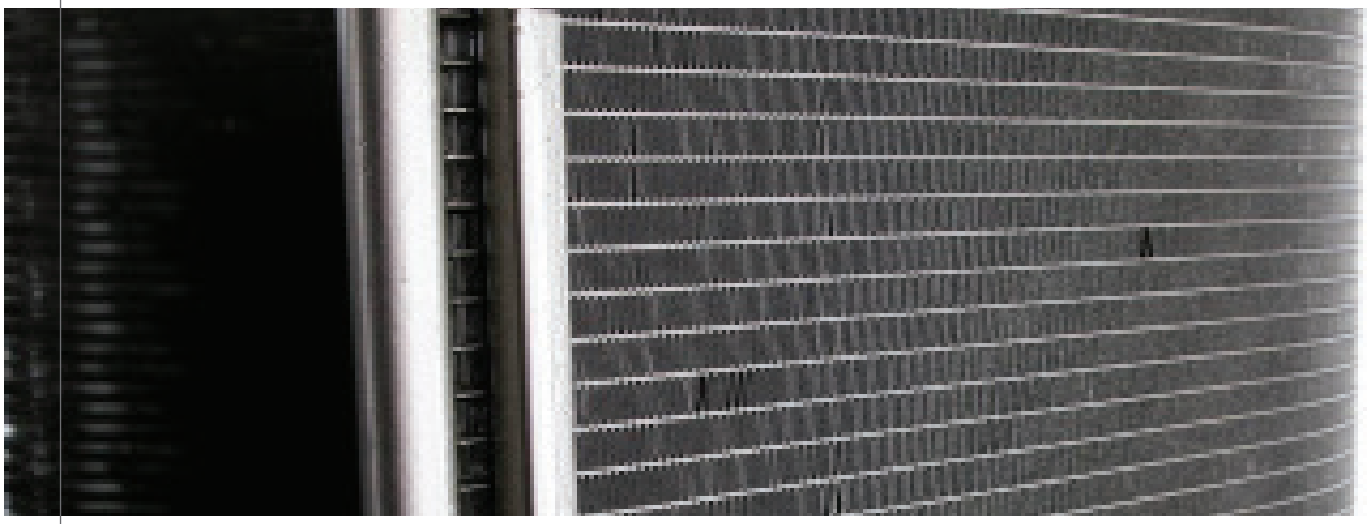
Neutral color blends with most décor

2-YEAR WARRANTY

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

Total investment: _____

Monthly investment: _____

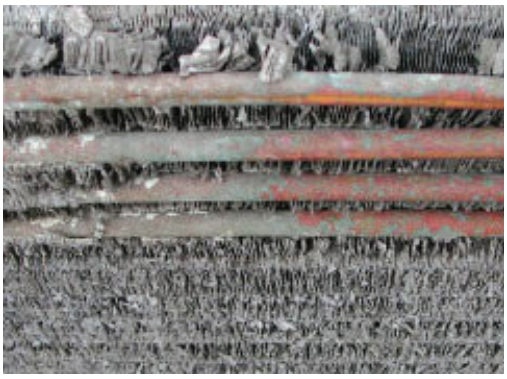


COIL COATING

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.

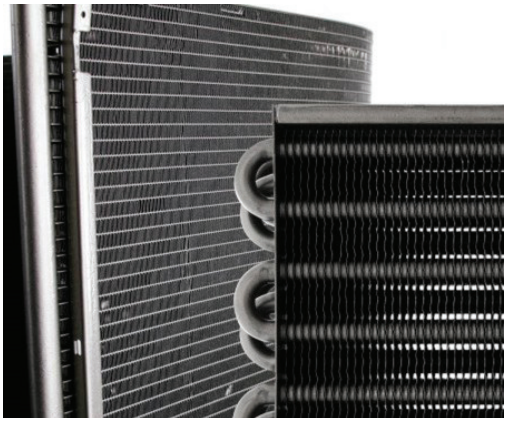
- Designed to provide corrosion resistance for post-manufactured unit's coils
- Coil is fully exposed, cleaned, and prepped prior to coating procedure
- Protects against all corrosive environments and extends life of equipment
- Manufacture endorsed coating that reduces equipment maintenance and operating 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

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.