

# Homeowners reduce energy costs, humidity with variable speed heat pumps

## Result

- Homeowners saved 30-40 percent on energy bill
- Crystal River, Florida area homes benefited from almost immediate 20-25 percent reduction in humidity
- Hot air supply without supplemental heating
- No callbacks on installed systems

## Emerson Technologies and Service

- Copeland Scroll™ variable speed compressor
- Carrier® Infinity® heat pump with Greenspeed™ intelligence

## Application

- Heat pumps were installed as replacement systems in homes in the Crystal River region of Florida

## Customer

- Bay Area Air Conditioning & Heating recommends Carrier Infinity Greenspeed intelligence heat pump systems, with more than 30 installed to date. President Dave Hutchins is a 2011 Carrier Hall of Fame award winner for lifetime achievement in the industry. The company employs 52 with a fleet of 30 trucks.

## Challenge

Air conditioning is essential in Florida. Managing both temperature and comfort throughout the home are challenges facing any residential heating and cooling system.

According to the U.S. Energy Information Administration, Florida's per capita residential electricity demand is among the highest in the country, due in part to high air conditioning use during the summer and the fact that about 90 percent of Florida households use electricity for heating. In fact 40 percent of new systems in Florida are heat pumps.

Due to increasing interest from homeowners in cutting electric bills without sacrificing comfort, contractors are being asked to deliver high-efficiency heat pump systems that offer both humidity control and increased hot air supply.



“ Our customers are noticing the difference in comfort immediately. One homeowner told us this was the best air conditioning he'd had in his life. The hot air supply is so good on this system, we have had to talk homeowners out of supplemental heating.

I installed one of these systems in my own home and saved 42 percent on my energy bill. ”

Dave Hutchins, President  
Bay Area Air Conditioning & Heating



Contractors are also encountering more educated consumers who have researched concepts like HSPF and SEER and want to ensure their homes have the latest HVAC technology.

## Solution

Bay Area Air Conditioning & Heating began installing Carrier Infinity heat pumps with Greenspeed intelligence as soon as the new system was available. “We had one gentleman call us about the system before it was even in stock. He had seen the announcement online and was eager to have a system in his home that offered the potential of 20 SEER and 13 HSPF,” said Bay Area President Dave Hutchins.

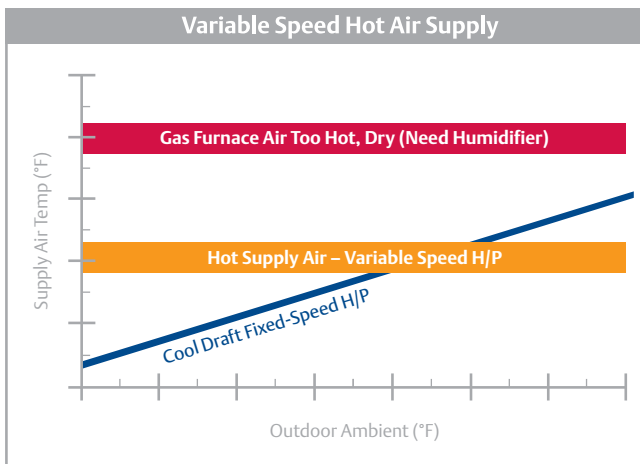
The Carrier variable speed heat pump features Emerson’s Copeland™ variable speed scroll compressor, which enables this unprecedented efficiency with 40 percent greater year-round energy savings than standard heat pumps.

With the Copeland variable speed scroll compressor, systems can deliver significant improvement in year-round comfort for homeowners. By maintaining capacity at low ambient temperatures, systems equipped with Copeland variable speed compressors deliver hotter supply air, a key need for heat pumps. In addition, summer humidity control is significantly improved. The Copeland variable speed scroll compressor also provides diagnostics and protection capabilities to improve ease of service and system reliability.



“We’ve had the system for three months and have seen a 30 percent savings so far. We’ve been delighted when we get the electric bill now, which is rare these days. With the cost of energy going up, we felt the investment would pay off in the long haul.”

Alex Jango, Crystal River homeowner



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