

**Project:** Orlando Residence

**Location:** Orlando, Florida

*Daikin Heat Pump systems are an excellent retrofit solution for existing homes that want both improved comfort and low energy bills.*

## The Challenge:

*Changing system designs in an existing home to enable multiple comfort zones, without adding ductwork or soffits that reduce interior space.*

## The Solution:

*Daikin Multi-Zone split systems improved comfort, provided energy savings and freed up enough space to expand an existing kitchen pantry!*

The owners of this mid-sized Orlando, Florida home knew it was time to update their 25-year-old conventional HVAC system. Comfort levels were inconsistent, and they wanted more individualized comfort control throughout the home. The current system was also using too much energy in the peak of summer, with total home energy usage hitting over 100 kWh per day. They knew there was substantial energy savings to be had from newer systems, and the search began.

English Air of Orlando was contacted to help update this home's HVAC system. Step one was the decision to use two high efficiency Daikin multi-zone split systems, locating one at each end of the home, reducing the amount of refrigerant piping and ductwork required in the attic.

Step two was the decision to adapt attic space above the hallway entrances for the low profile slim-ducted indoor units, with 30" x 30" return filter grilles below them, providing ample unit access for service. Removal of the old furnace and coil assembly from the garage provided enough extra space to expand the existing pantry off the kitchen.



2,100 square-foot residence



Daikin 4MXS32 and 3MXS24 outdoor units were used to supply the slim ducted indoor units, which now served seven individual comfort zones. The homeowner used the standard wireless remote controls, and especially enjoys the "Dry Mode" feature. This helps reduce humidity in the home during the shoulder seasons with maximum efficiency and improved comfort. Overall, total home electric power consumption has been reduced by 40% with HVAC energy expenditure reduced by approximately 60%. Of course, natural gas is no longer required to provide heat in the colder months.

The homeowners are happy in their much more comfortable home, enjoying substantial monthly energy savings (almost 1300 kWh in August 2012 alone). And they love their larger pantry!

### Project information

**Contractor:** Anton Martin  
English Air  
Orlando, Florida

**End User:** Jeff Bledsoe  
Daikin AC  
Orlando, Florida

### Daikin AC Equipment

- 3 (Model # CTXS07JVJU) Wall Mounted Indoor Unit
- 2 (Model # CTXS09HVJU) Wall Mounted Indoor Unit
- 2 (Model # FDXS12DVJU) Slim Duct Indoor Unit
- 1 (Model # 4MXS32GVJU) Outdoor Unit
- 1 (Model # 3MXS24JVJU) Outdoor Unit

### Total Home Energy Savings

