



COMPLETION DATE

April 2016 through 2020

PROJECT TEAM

Developer/Builder

Frye Custom Builders,
Nicholasville, Kentucky

HVAC Contractor

Richmond Mechanical,
Inc., Lexington, Kentucky

Distributor

The Habegger
Corporation, Cincinnati

CHALLENGE

Finding an HVAC technology that meets the zoning needs of a 250-unit condo development

SOLUTION

Zoned Comfort Solutions™
from Mitsubishi Electric

RESULT

True zoning capabilities and reliable heat on even the coldest of days

As homeowners settle into their houses in Brannon Gardens, a new condo development in the suburbs of Lexington, Kentucky, they will come to know reliable, year-round comfort. They won't know that achieving that comfort initially created a significant challenge for developer and builder William "B" Frye of Frye Custom Builders, Nicholasville, Kentucky. It was a challenge that plagued people for multiple months until it was solved with Diamond Comfort Systems™ from Mitsubishi Electric Cooling & Heating (Mitsubishi Electric). Now homeowners' comfort is assured – good news for them. That's also good news for Frye as he expands the development from a dozen to 250 homes over the next few years – all cooled and heated exclusively with Mitsubishi Electric products.

Brannon Gardens offers ranch-style houses with an additional upstairs bedroom. **Buyers can customize their homes with additions like basements and bonus rooms, or they can stick with the standard 2,200-square-foot model.** Regardless, they'll get a beautiful, upscale home. A key factor for enjoying that lifestyle is comfort; it's something home buyers expect. Unfortunately the HVAC system originally spec'd for the homes – and installed in several – resulted in discomfort and multiple complaints. Frye said, "We were having zoning issues with the previous systems from Carrier. With these houses I've got a very small upstairs – just a bedroom, bathroom and closet. That upstairs was always really warm or really cold, and we got several complaints."

Frye was committed to getting it right. That meant researching a solution. "It's not practical to add a second system to cool and heat one room, but I couldn't do it all on the one system I was using. So I started thinking of other options. First, I knew I didn't want window units or PTAC units. They're

just not attractive or professional." When he found split-ductless technology, he sensed it could be the answer to his troubles. He also appreciated the efficiency that split-ductless systems offer: **"These machines use less electricity to run because of their variable-speed motors. I'm all for lower monthly electric bills."**

From there, Frye needed a good brand. **"I researched all of the brands. Mitsubishi [Electric] is the only one that goes to 13 below zero. It's the only one that has a 3-ton air handler you can put ducts on and run to multiple rooms.** It's a big, powerful ducted unit. And I know that Mitsubishi [Electric] does a nice job; it's a quality company with a quality product. I figured my buyers would agree with that."

Mitsubishi Electric put Frye in touch with The Habegger Corporation – a distributor out of Cincinnati – who introduced him to William Richmond, owner and president of Richmond Mechanical, Inc., Lexington. "It was a great decision. I'm so fortunate to have Richmond Mechanical," said Frye.

Richmond was a big proponent of matching Frye's needs with **Mitsubishi Electric Diamond Comfort Systems™ – a whole-home zoning solution comprised of indoor units connected to a Hyper-Heating INVERTER® (H2i®) multi-zone outdoor unit.** "With the old system, Frye was having trouble getting airflow to the upstairs. His clients were complaining – saying, 'I've got this bedroom up there and it's just not useable.' The contractor who installed that system tried fixes like dampers but just couldn't get it to work. So it was the inverter technology that drew Frye in. That would give him zoning, a quiet outdoor unit and a low cost of operation because of the system's efficiency."

He continued, “I’ve worked with Mitsubishi [Electric] for 10 years now. The technology is great and now they provide an opportunity to do the whole house. Plus, they’re the only ones who can give you a multi-zone that heats down to negative 13 degrees – not to mention the efficiency. Electric bills are only going to go up. Why not get the most efficient system?”

With the entire project team in agreement, the first installations took place. **Richmond Mechanical has already installed almost a dozen systems in Brannon Gardens houses with various floorplans. Some, like the base model, have two zones. Others have three, four and so on, up to 10.** Richmond said, “With the 10-zone house, the owner was able to make a garage workshop for himself. You just can’t add zones like that with a traditional system.”

A great help to the Mitsubishi Electric systems’ versatility and flexibility is the MVZ unit – a multi-position air handler offering up, down, left or right airflow, and earning Seasonal Energy Efficiency Ratio (SEER) ratings of up to 18. As part of the Diamond Comfort System, each new home in Brannon Gardens includes an MVZ unit. “The MVZ is just perfect. It means I can have one outdoor unit and no zoning issues,” said Frye.

Richmond further explained the draw: “The MVZ has the advantage of variable speed, which offers comfort. It’s also built sturdy, so there’s

no air leakage. It’s got a nice filter rack already in it, and it’s versatile in installation. In short, it’s well-built and sealed – key factors for a good product.”

For the homeowners, this has meant all good things. Frye said, “The buyers are great with the Mitsubishi [Electric] systems and are saving money on utilities. The units are quiet and we don’t have any problems. **That issue with the upstairs room never being comfortable? Problem solved. This was the perfect solution.**” This is also what Richmond called a “win-win situation – people have more comfort in their house at a lower cost of operation.” Many of the homeowners are also using Mitsubishi Electric’s kumo cloud™ programmable controller app, which allows them to control their indoor units remotely over their smartphone, tablet or computer.

Frye also spoke to saving money on utilities, having seen it firsthand. “We have units we pay the bills on before people move in. So we can look at the bills for houses with the Mitsubishi [Electric] equipment and compare those to the bills from houses with the Carrier equipment. The ones with Mitsubishi [Electric] – they’re significantly lower.”

Over the next four years, the project team will build another 200+ homes. They will all have Mitsubishi Electric Diamond Comfort Systems, and they will all – finally! – be comfortable.



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- William “B” Frye, developer and builder, Frye Custom Builders



EXAMPLES OF MITSUBISHI ELECTRIC EQUIPMENT INSTALLED

Base Model (Two Zones): 1 MXZ M-Series Outdoor Unit, 1 MSZ Wall-mounted Indoor Unit, 1 MVZ Multi-position Ducted Indoor Unit

Seven-zone Expanded Model: 1 MXZ M-Series Outdoor Unit, 6 MSZ Wall-mounted Indoor Units, 1 MVZ Multi-position Ducted Indoor Unit