The Anderson Residence, located in Malvern, Pennsylvania, was designed to need limited to no air conditioning due to its location in the woods and orientation on its spectacular lot. After years of suffering through muggy, humid conditions, the Anderson's had enough and reached out to James Brown Plumbing Heating & A/C for a solution. They were not trying to install "central" air conditioning due to the unique layout of the space and unwillingness to perform "major" construction.

**Design Challenge**

The home was very well constructed with tight insulation and high efficient windows. The challenge was where to fit air conditioning since there was only one attic space that was over the great room that did not help to condition the kitchen or master bedroom. James Brown Plumbing elected to use a three zone Halcyon unit with one concealed unit and two wall hung units, one in the master bedroom and one in the kitchen. It was definitely a challenge to work in the great room with 18' ceilings to install the (2) ceiling registers that deliver the supply air into the space. But the contractor was able to duct the concealed unit in the attic of the great room which worked out perfectly. Each wall mount unit was precisely located to make sure only one condenser unit was needed on the outside of the home.

**Solution**

Fujitsu was the perfect choice due to the flexibility, zoning capability and the compact size. As mentioned, "central" air conditioning was not ideal, making a zoned Halcyon mini-split system fit perfectly!

**Results**

The Fujitsu system far exceeded the client’s expectations with minimal invasion. The humidity problems were no longer there and the cooling capacities of the equipment worked wonderfully. The heat produced from the Halcyon system is more efficient than the customers current propane-fired hot water boiler system, making the customer delighted with the system's performance in summer and winter months.
“It was a challenge to install 2 ceiling registers in the great room with 18’ ceilings that could deliver the supply air into the space but the outcome was well worth it!”

A slim duct unit was installed above the great room in the attic. It provides the concealed look of central air with the efficiency of a mini-split!

Two wall mounted units were used, one in the master bedroom and one in the kitchen.