One of the “greenest” home builders in North Carolina has taken their commitment to high efficiency HVAC to a new level. Anne & Bradshaw General Contractors, Inc., based in Wrightsville Beach, NC (www.anneandbradshaw.com) chose “green build” as their strategic path several years ago. “We’ve never regretted the move,” said Pamela Fasse, general contractor and partner in the firm. “I’ve considered myself an environmental builder for many years, with a focus on energy efficiency and sustainability.”

“We feel it’s important to stay current with conservation techniques to minimize cost without sacrificing comfort,” added Fasse’s partner and husband, Brad Karl. “There’s a level of global responsibility at work, but it’s right here at home where we can have the greatest impact.”

One of the key contributors to Anne & Bradshaw’s green-build approach has been the recent addition of ductless mini split air conditioning and heat pump systems. “We completed North Carolina’s first whole-house ductless mini-split application just a few months after we returned from a trip to Asia where we saw ductless systems used extensively,” she said.

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They’ve since installed several of the mini-split systems in homes they’ve built with the help of Walt Rager and Jamie Fowler of Four Seasons HVAC, and Don Lewis, owner of All Pro Services, an HVAC firm also based in Wilmington.

According to Lewis, the equipment offers ultra-high efficiency with quiet, reliable operation and sleek design. The Halcyon line now includes __ air conditioning and heat pump systems with capacity ranges of 9,000 to 42,000 BTUs, many also offering sophisticated Indoor Air Quality (IAQ) plasma air filtration.

Standard features include wireless remote control, plasma filter, sleep timer, 24-hour timer, dry mode, auto louver, auto mode, quiet mode, auto restart/reset, auto changeover and efficient operation with low, or high ambient temperatures.

Inverter technology continuously modulates its energy production to match heat loss and gain. That’s like feathering the gas pedal in your automobile to meet the speed you need. Toss in new “automatic modulation” and you get ultra-high efficiency operation, complete with the chauffeur to drive the car.

“We’re glad that Fujitsu went with significantly more efficient 410a refrigerant and automatic inverter technology. Other suppliers stuck with R22 refrigerant, which will be phased out in just two years,” said Rager.

Fasse adds that it can cost up to 10 percent more to build a green home than it does a conventional one. But, ultimately, it costs less to live in them because of their greater energy efficiency and easier maintenance.

Fasse said the average monthly cost of electricity in her Parade home has been about $850, versus $200 in a conventional home. “Our home owners are delighted with the technology and so are we. We’ve now added a key new ingredient to our green home recipe.”

A coil of copper refrigerant line stands ready at the jobsite, where it will transport refrigerant between an outdoor condensing unit and an interior air handler.