



Foley Mechanical Perfects the Efficient Retrofit

November 8, 2013

“Inside the Beltway and outside the box,” is the unofficial motto of Lorton, VA-based Foley Mechanical Inc. (FMI). Owner Dan Foley has no shortage of opportunities to think “outside the box,” given the sheer number of custom homes in the greater Washington D.C. area. After starting the company in 2002, he keeps 14 technicians busy all year. When not on calls, they’re training.



Dan Foley (r) stands tall with Foley Mechanical techs Brian Golden (c) and Fred Johnson.

Today, the name Foley is synonymous with unique system design, unparalleled quality and attention to detail. Custom builders, architects and many homeowners in the high-rent districts of D.C. are familiar with the green-labeled FMI trucks. A wide variety of industries in the area – not to mention the government – help maintain a steady demand for high-end commercial and residential systems.



Brian Golden gets ready to start work at the jobsite.

But, the FMI following isn't exclusive to those areas. In some of the older, more modest neighborhoods, they have quite a list of homeowners who won't call anyone else. Foley and his technicians have earned that rapport by consistently making good on their word, responding promptly, and providing solutions that work.

Part of that process has been to perfect the quick, efficient retrofit. Instead of the super-involved design phases and year-long installations that his custom home clients require, residents of the older neighborhoods are comfortable in homes they've owned for years – and wish to remain comfortable. Most of the homes employ fin-tube or cast-iron radiation, making most boiler swap-outs similar. But every once and a while, they do it under the gun.



Fred Johnson conducts a diagnostic check of the Burnham Series 2 boiler.

A beautifully remodeled home – built in the 1920s – was the site of an urgent call early this year. Just two doors down from the home Richard Nixon occupied while in D.C. as a U.S. Congressman from California, the home blends seamlessly into one of the city’s countless picturesque old neighborhoods.

But when the home was renovated, its 30-year-old gas boiler was overlooked.

The resolution

“We received a ‘no heat’ call on the morning of New Year’s Day,” recalled Foley. “One of our techs, Joe Guerrero and I arrived on-site half an hour later. It proved to be an ignition issue. Since it wasn’t a safety concern, we put a band-aid on it to last until the following day.”

“I called R.E. Michel, our local Burnham distributor, at 6:30 the next morning,” continued Foley. “Brian Kaminsky, who’s branch operations/sales manager of the Alexandria branch, didn’t have the right size unit there, so he drove to another branch to get us the correct boiler. Talk about a good supply chain.”

“When we can’t use a condensing boiler – for whatever reason – our go-to unit is the Burnham Series 2,” said FMI Lead Pipefitter, Brian Golden. “It’s a solid, workhorse boiler – simple to install, simple to service, and has a price tag homeowners aren’t sore about. We put them in and never have to worry about them.”

The 4,800 square-foot house calls for 200 MBH, which is distributed mainly by cast-iron radiators, including one large unit suspended from the basement ceiling. The kitchen and master bath are served by radian in-floor tubing. With the time constraints of the retrofit, a Series 2 was the perfect fit.



On Jan. 2, Foley put four guys on the job. Waiting for the new boiler to arrive gave them the time they needed to pull out the old boiler, and prep everything for the installation of the new Series 2. Early that afternoon, the new Burnham was sending heat to all zones.

“Trust me, we believe in hi-efficiency,” said Foley. “Here, the looming deadline was the barrier; otherwise it may’ve been a good fit. If it had been summer, the homeowner would have considered installing a condensing boiler.”

The home originally used a gravity-flow water system, made evident by the 6,000 BTU ceiling radiator in the finished basement. It handles the entire lower level. An extra large Watts expansion tank on the mechanical room wall further indicates that the system’s water volume is substantial.

“It was all about timing,” continued Foley. “Venting for a condensing boiler would have slowed the install, and we all wanted this to be a same-day project.”

But venting has presented itself as a problem in other instances as well. FMI has used Series 2 boilers in row homes, where venting hi-efficiency boilers would have been a challenge.

Sweeter with time

“Again, I’ll use condensing boilers whenever they fit the application,” said Foley. “But where it doesn’t, we look at Burnham boilers first. I still use their V-8, V-9, Independence and Mega Steam models on a pretty regular basis. As a matter of fact, I installed my first Series 2 in 1987, when I worked for Arlington Heating.”

Since then, the Series 2 has only changed for the better. The addition of the IHC control module not only eliminated standing pilot ignition per last year’s implementation of the

Energy Independence and Security Act (EISA), but brought with it the capability to easily add plug-and-play Auxiliary High Limit and Low Water Cut-Off kits.

With a size range from 37.5 – 299 MBH and years of field-proven reliability, it's high time to check out the Series 2 again. It's easy to sell, easy to install, and easy to service.