



Connecticut homeowners opt for energy efficient makeover

For 21 years, on a quiet rural property, Ken and Karen Kline have enjoyed an idyllic lifestyle. However, as they entered retirement following long careers as educators, the cost to heat their 2,200 square foot, modernized 1970s two-story home acquired new significance.

A service professional told them in fall 2012 that the 42-year-old steel, oil-fired boiler with tankless hot water coil was soon ready for its retirement too. So the Klines wisely did what many folks do – they asked friends and neighbors for referrals and prowled online for information.

The name Chuck Appleby surfaced several times, so he was among those called by the Klines. Chuck is president of a third-generation, five-person plumbing and mechanical firm based in Old Lyme, Conn. – Appleby Plumbing & Heating Company.

By the time December 2012 rolled around, Appleby won the opportunity to replace the Klines' heating and fuel system, with an option to also replace the domestic water heating as well.

Chuck Appleby's recipe for the home is a 30 MBH, 95 percent AFUE, LP-fired wall-hung mod-con boiler, a Noritz tankless water heater, and a brief list of Taco components to bring zest, sizzle and performance.

"It's an upgrade that many customers wisely opt for," Chuck said. "These days, with the higher cost of heating oil, and the reduced cost for natural and LP gas, we've been doing a lot of oil-to-gas heating system conversions lately. Another thing the Klines were thinking

of was the risk that their 275-gallon oil tank, outside and at the back of the house, was at risk if there'd be a tidal surge."

Chuck explained that the Klines' home is bordered by salt marsh that could flood on rare occasion. During Hurricane Sandy, they watched nervously as brackish water rose, acknowledging that an unprotected oil tank was a liability.

In mid-December 2012, as temperatures fell, Appleby's crew began work at the Kline residence. Within a week, the project was complete, even though it entailed the modest complication of system start-up while the old boiler provided heat. With the flick of a switch, the new system came online. With a last, few remaining adjustments, Appleby's crew cut out, dismantled and removed the old, oil-burning behemoth.

Hydronic recipe

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time to settle on a mechanical recipe or two. He drew a comparison to a well-respected chef who’s best known for a signature meal.

“It didn’t take long to know that the old boiler and fuel oil had to go,” Chuck commented.

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According to Chuck, improving the efficiency of the heating system was priority number one. The Klins had watched the cost for fuel oil increase, with growing discomfort, year after year. Now that the time had come for a mechanical makeover, they assured Chuck that they were ready to remove the tether to offshore oil dependence. They also wanted to see a significant increase in overall system efficiency.

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So when the hydronic components were assembled on

the wall with the boiler and water heater centrally located, the Bumble Bee pump became the geographic center of operations. Mounted above it were four Taco Zone Sentry zone valves, each tasked with circulation responsibility for baseboard zones. Chuck also accommodated circulation and temperature control for a lower-temp, in-floor radiant heat zone that serves the master bedroom and bath.

“We were one of the first in the state to install a Bumble Bee,” Chuck recalled. “We’ve since installed dozens of them, often tied to Zone Sentry zone valves just as we did at the Kline home. We really like the pump, and the Zone Sentrys for their reliable ball valve, full-flow operation. We just did another job with a small Bumble Bee connected to eight Zone Sentrys – they make a great combination.”

For the Kline job, Appleby also installed a Taco 4900 air eliminator.

“I’m particularly fond of these because of their stainless steel pall rings to remove microbubbles in the system,” Chuck said. “They’re much more resistant to corrosion from chemicals in solution than units with internal brushes made of copper.”

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Appleby also chose Taco’s newest zone control – easily tasked with management of system circulation while adding what Chuck referred to as “basic, common sense” value.

“If a thermostat activates upstairs, you know it right at the zone control. Or if a zone valve – say, one that’s installed above a drop ceiling, or in a crawl space – you also know when it’s open or closed without having to physically check it. Those are big advantages when trouble-shooting or checking system operation,” Chuck noted.

Last winter, the Klins knew they’d made the right decision when they experienced firsthand the advantages of new, super-efficient heating systems.

“We saved over \$2,000 in the first heating season alone,” Ken said. “That already moves us nicely toward recovering our investment in the work we had done here. Plus, we’re very comfortable in the home and have never had more hot water on tap.”

Outside, after removing the old, 275-gallon fuel oil tank, the Appleby crew used coated braided stainless steel cables to tie down two, 120-gallon LP tanks. The tanks sit atop and are attached to a heavy concrete pad. Come heck or high water, the Klins are now ready for whatever Mother Nature throws at them.

“We couldn’t be more pleased with the work that Chuck Appleby did at our home,” Ken said. “My wife and I are delighted to know that we’re now saving energy dollars. We just wish now that we’d have done it sooner.” ■