

AFTER 232 YEARS, INN SHIFTS TO HIGH EFFICIENCY

A 98% efficient water heater keeps the place cooking on its busiest day of the year

he Griswold Inn, founded in Essex, CT, in 1776 near the banks of the Connecticut River, is the oldest continuously run tavern in the U.S. The "Gris" has catered to yachtsmen and overland travelers every day of the year for 232 years.

The venerable inn – captured by British troops and used as a base of operations during the American Revolution and as a place of entertainment for sailors during Prohibition – has seen generations of Americans come and go.

But last Christmas day, it needed a substantial overhaul brought on by the sudden death of an eight-year-old, half-million Btuh commercial water heater, the only source of domestic hot water for the Griswold's award-winning kitchen.

Years earlier, just after a competitor installed the terminally ill water heater, the owners tapped Old Lyme, CT-based Appleby Plumbing Co., a third-generation family business, to "manage energy affairs" for their many real estate and business holdings, work that Chuck Appleby says has put the Gris and many of their other buildings back on par with new facilities

"The Gris is an amazing place, but with all that history, retrofitting, and updating plumbing and mechanical systems, [it] requires a lot of preplanning and care," says Appleby.

"Of course, the old inn, which includes guest rooms and

a world-class restaurant, was never built to accommodate modern mechanical systems," he adds. "But, fortunately, that didn't become a roadblock to the quick delivery and installation of a new, 400,000 Btuh commercial water heater there, which we had in place and operable just a few days after the emergency began."

Appleby recalls the frantic nature of the initial call. The restaurant was filling, and a fresh snowfall "added a sense of perfection to everything," he said. "Except, that is, the restaurant was rapidly running out of hot water at one of the busiest times of year."

The chef was beside himself. The owner was perplexed.

With crossed fingers, Appleby was able to reach his whole-saler, F. W. Webb. Since it was a holiday, he called sales pro John Blades at his home who, as soon as he pulled his children out of the bathtub, drove to his Hartford warehouse to check the inventory and make preparations for the shipment.

Appleby told Blades that he knew exactly what he wanted as a replacement – a 400,000 Btuh, LP-fired, high-efficiency eF water heater made by Bradford White. Appleby explained that Nick Giuffre, the manufacturer's executive vice president, had introduced him to the eF at the last AHR Expo, and it was just what the Gris needed.

A few days later, Appleby's three-man crew removed the old water heater and fully installed the new unit in one 10-hour day. What he recalls vividly was the oh-so-lucky fit of the new unit as the crew moved it from the loading dock, through the kitchen door, down 30 straight steps, and through several sharp turns before its arrival and final resting place in the subterranean mechanical room.

The water heater they replaced had required a 12-in. stainless steel draft hood and chimney. The new one requires a 4-in. PVC stack and, at 98% efficiency, costs the owner a whole lot less to operate. A big advantage is the new unit's high recovery rate. Because the water heater could heat much more water, Appleby was able to size it at 100,000 fewer Btuh, a move that also had a huge impact on fuel consumption.

That was the bell-ringer for the owner who recognized that, when the old water heater was installed, LP gas cost him \$1.69 a gallon. Their cost today is \$3.55. The higher-efficiency system is sure to save a lot of fuel dollars.

Another attribute was elimination of stack losses because the unit is equipped with sealed combustion and uses PVC exhaust and combustion air piping. The water heater also offers several venting options, electronic controls, four protective magnesium anode rods, a sediment reduction system, and factory-installed dielectric fittings.

Considering the waste of resources on the stainless steel stack, which Appleby left in place, he devised a plan that gave it new purpose.

"We used it as an intake air ventilation duct to cool the restaurant's large refrigeration equipment," he says. "They had a growing problem there because the equipment had been running hot, and this was consuming electricity [highest, by far, of all energy sources in the state] at an alarming rate. Typically, the air around the refrigeration systems was 120°F to 130°F year-round. Using the 12-in. duct to bring fresh air in, we were able to get those temperatures down substantially."

"The biggest benefit of all was in the energy savings," remarks Appleby. "Today, no one can responsibly afford to



The old inn contains a world-class restaurant.



Chuck Appleby solders a joint (safety glasses removed for the photo).

waste energy, not even the owners of a successful enterprise like the Gris. Here in Connecticut, electric rates are at the screaming high end nationally. Fuel oil is also at the highest level in the country — the state average is now \$5.50 a gallon and moving up each day."

"We also attend regional and national industry shows, and manufacturer training seminars where we stay up to date with new products and technology," continues Appleby. "We've settled on a list of manufacturers that have served us and our customers exceptionally well over the years."

On Appleby's list of suppliers are Grundfos Pumps, Charlotte Pipe & Foundry, Ward Mfg., Toto, Gerber, Moen, NIBCO, Apollo Valves, and Bradford White.

Clearly, Appleby's concern for customer welfare and installation quality has contributed to the success of his enterprise. His restless need to lead, to be involved, to positively impact customer lives and, most importantly, to give back to the industry that's been so good to him has propelled him into state and national involvement in Plumbing-Heating-Cooling Contractors National Association. He is also chairman of Connecticut's plumbing and piping board, a recent appointment by Governor M. Jodi Rell. Appleby is also past president of the state's plumbing association, currently serving on the board of directors. He holds state unlimited contractor licenses in plumbing, heating sheet metal; has medical gas vacuum systems certification; and is a registered well casing contractor and a registered home improvement contractor.

Never one to sit for long or to miss a "sign in the sky," Appleby is now preparing for solar-thermal contractor certification.

"And that brings us back around to energy savings and energy stewardship," he concludes. "It all ties together. It's our responsibility as licensed professionals not only to serve our customer's best interests, but also to evolve with important changes affecting the industry and the planet we share."