

Hydronic Heating System Pique

Builder Interest in Propane

High-efficiency hydronic heating systems, including radiant floor heat, appear to be adding to builder interest in using propane, according to research from the Propane Education & Research Council (PERC). The council conducted a survey of builders that found they would install radiant floor heat in 13% of their homes in the next 12 months, an 11% increase over usage of just 2%. The web-based poll, conducted by the National Association of Home Builders' Research Center on behalf of PERC, included a nationally-representative sample of 302 builders.

The survey results, which are highlighted on the Hydronics Industry Alliance website, showed radiant heat systems are gaining popularity across the U.S., with 23% of builders saying they planned to increase, or greatly increase, their use of radiant floor systems in the next 12 months. The poll quoted builders saying home buyers prefer radiant floor heating systems because they provide quiet, even heat and are energy-efficient. "With radiant floor systems, the warmest air is kept at the floor—so room temperatures can be kept lower, decreasing operating costs," noted one builder.

To satisfy demand for accurate, reliable, and up-to-date information, hydronic (heating with hot water) equipment manufacturers recently formed the Hydronics Industry Alliance. The alliance, chaired by Richard Simons, director of residential combustion controls for Honeywell International (Mor-

ristown, N.J.), is a coalition of members of the Hydronics Institute Division of the Gas Appliance Manufacturers Association. Twenty-two companies have joined the alliance to increase industry and consumer awareness of the latest technological advances in hydronic heating.

"In recent years, radiant floor heating has caught the attention of the North American public," the group said in announcing its formation. "Popularized on television and increasingly promoted by contractors, radiant floor heating is acknowledged as an efficient and economical form of home heating."

Hydronic heating systems traditionally use hot water as the heat transfer medium instead of fan-driven, heated air. Typically a boiler transfers heat to water, which is then circulated to heat distributors throughout the home or building. Heat distributors can be radiators, finned-tube baseboards, radiant tubing, kick-space heaters, or even towel warmers. Boilers can also be used to indirectly heat domestic water and spas, and can also be used for ice and snow melting on sidewalks and driveways.

Tankless systems are also available. Noritz America Corp. (Lake Forest, Calif.) late last year introduced two tankless hydronic heaters it says eliminate the need for a water boiler.

Although Americans have used hot water and steam boilers for decades, recent technological advances in boil-

ers and heat distribution systems have spurred an increased demand for hydronic installations. The advent of extremely durable plastic tubing, which is designed to last more than 200 years, has made it possible to hydronically heat floors, walls, sidewalks, driveways, and pools. The tubing delivers constant, draft-free warmth.

There are three basic radiant floor heating installations: slab-on-grade systems have heating tubes laid within a newly-poured concrete slab; thin-slab systems include heating tubes laid within a light concrete or gypsum-based flooring material, which is poured over an existing floor; dry systems feature heating tubes that can either be stapled under an existing floor between floor joists, or between a sub-floor and a finish floor.

A propane and hydronics segment that aired on the HGTV, Food, and DIY cable networks late last year showcased tankless water heaters and radiant floor heat. The segment, part of the Scripps TV show "Hot Trends: In and Around the Home" included homeowners discussing their energy choices and an interview with propane spokesman M. Scott Gregg, a master plumber, author, and heating, ventilating, and air conditioning expert.

The Hydronics Industry Alliance's website, www.myhomeheating.com, details the benefits and applications for hydronic heating and answers frequently asked questions. —John Needham