

RESIDENTIAL HYDRONICS:

An Exciting Time!

The residential hydronics industry is on the verge of a very exciting time. That's the word from William Root, vice president of sales and marketing, Laars Heating Systems, Moorpark, CA. "Market forces — chiefly, the push for higher energy efficiencies — are driving the need for condensing technology that extracts heat from flue gasses within the system, pushing combustion efficiencies into the 94 to 96% range," says Root.

"The construction market has been strong for years," he adds. "And, as part of that, we're now seeing much higher interest in radiant heat and snowmelt systems. These trends push forcefully at what, just a decade or so ago, seemed to be a dying replacement-only industry. That's a big win for the boiler guys."

Laars

Laars is ready for the demand with its Summit boiler. The Summit is a natural gas or LP-fired, low-mass, condensing boiler that achieves operational efficiencies of up to 96%. The direct-vented, sealed combustion system weighs just 275 pounds, making one-man installations a possibility. The Summit can



be installed on combustible floors and requires just a one-inch clearance from the jacket, with no clearance needed for the venting.

The modulating Summit boiler comes in two sizes. The smaller of the two has an output range of 126 to 199.9 MBH, and the larger model has an output range of 114 to 231 MBH. The units have a low NOx exhaust rating of 14 ppm.

(www.laars.com)

Uponor Wirsbo

"We're seeing tremendous growth in the radiant market, and once people discover the comfort that radiant offers, they become very passionate about it," says Jan Andersson, heating product manager,



Uponor Wirsbo, Apple Valley, MN. "Contractors feel that they're selling, and homeowners feel that they're buying, the radiant experience rather than just a heating system."

To create a more satisfying radiant experience for everyone, the company offers its proPANEL® comfort management system. Essentially, the Wirsbo proPANEL is a mechanical room in a box. The controls and piping are delivered in one package, which eliminates the time-consuming process of planning and piping the mechanical room.

Fully assembled, fully wired, and fully piped, the Wirsbo proPANEL comfort management system is designed around the functions and capabilities of the Wirsbo pro Series controls.

The proPANEL is available in five sizes. Contractors can use a stand-alone proPANEL for a small application, or connect multiple panels together to meet the needs of a more demanding application. A modular communication cable simply attaches one panel to the next. No additional controls or wiring are required.

"When we get calls from the field about a problem with a radiant heating system, most of the time the root the mechanical room piping and the controls," Andersson says. "The proPANEL eliminates those challenges for a less experienced radiant system designer. And for those who are very skilled and experienced with radiant heat, the proPANEL is a great time saver, eliminating 30 to 40 hours of assembly work.

"What I really feel sets our panel apart is that it perfectly matches the piping and the control, rather than a contractor creating a mechanical piping system and then trying to find a control to operate it," Andersson adds. (www.wirsbo.com)



Watts Radiant

"One of the trends that has most influenced the hydronics market recently is use of the

Manufacturer Roundup

radiant products to warm large, expansive areas surrounded by windows and doors,” says Mike Chiles, president of Watts Radiant, Springfield, MO. “This creates the need for higher heat output than some

installation techniques can provide.”

That’s why Watts has introduced the SubRay™ Radiant Subfloor, which can deliver up to 45 Btus per sq.ft. SubRay sandwiches radiant tubing in a low-profile subfloor.

With SubRay, an installer secures standard 3/8-in radiant tubing at two opposite sides of a room with cabinet grade, multi-ply Baltic Birch header sticks. Between these are sleepers that organize the tubing into two-inch wide radiant channels, spaced on eight-inch centers. Beneath the tubing is aluminized Mylar tape. This reflects energy upward to an aluminum diffusion layer that extracts heat closest to the floor surface, spreading warmth to the entire finished floor.

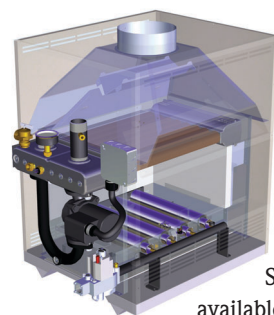
With its wide channels, a SubRay floor makes no noise from expansion and contraction of tubing. The tubing simply lies freely in broad channels, requiring no adhesives. According to Watts Radiant, SubRay has undergone years of performance testing, allows for fast installation, and is competitively priced. (www.wattsradiant.com)

Lochinvar Corp.

Lochinvar® Corp., Lebanon, TN offers its radiant heat source solution: the Solution™ high-efficiency residential heating boiler.



The Solution boiler features a gasketless copper finned-tube heat exchanger that provides for fast, high-efficiency heat transfer, and is designed to allow easy access to all major components for servicing. Other features include a two-stage firing



control system and a built-in pumped by-pass.

The compact, lightweight Solution is

available in models from 45,000 to 260,000 Btuh, and comes with Lochinvar’s exclusive 20-year Limited Warranty. (www.lochinvar.com)

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Manufacturer Roundup

Grundfos

Tired of having to size, spec, stock, and carry a large number of circulator pumps?

That frustration no longer has to be accepted as a fact of life, thanks to the


SuperBrute™ wet rotor circulator from Grundfos, Olathe, KS (U.S. headquarters).

With this pump, the simple turn of a switch selects one of its three speeds. The wide choice in operating



range allows the SuperBrute to replace many single-speed models. The new pump also enables more than mere convenience. In many applications, an over-sized pump creates excessive turbulence and noise. Or, if the required flow rate is less than the existing pump can produce — especially following downstream upgrades or retrofits — pumps will need to be swapped-out. That's not the case with the SuperBrute. A turn of the switch sets the speed to achieve optimal performance.

“This pump permits flexibility on the jobsite, not only for system installation, but for the possibility of change-orders or later retrofits,” says Tony Radcliff, Grundfos’ product manager. “It can meet many, very different needs, and yet be tightly matched to the characteristics of each system. We’ve designed it to be the one pump an installer might need for 80% of residential applications. It greatly simplifies the installer’s life, and improves system performance overall.”

The SuperBrute includes an integrated, removable check valve designed for minimal friction loss, making it an ideal choice for zoning hydronic heating systems because it eliminates backflow from adjacent zone pumps. The pump has a patented torque booster to ensure strong starting torque, and an internal check valve. It’s fully compatible with glycol mixtures. (www.grundfos.com) 

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