

New Technology for Domestic Hot Water Recirculation

There's a lot of buzz these days about hot water recirculation (HWR) for domestic water systems. Today, spurred by consumer demand for hot water instantly at the tap, and water conservation, it's one of the fastest-growing trends in the plumbing industry. Statistics show that HWR saves about 11,000 gallons of water each year for a family of four . . . water that's otherwise wasted as people wait for hot water at taps and showers.

The new Comfort System and UP10-16 from Grundfos are the latest in HWR technology. The ready-for-retrofit Comfort System is an ultra-fast install for contractors. The one-pump, one-valve combo is typically installed within an hour or two - without the need to install a return line to the water heater. The Comfort System offers customers enhanced comfort, delivering hot water instantly from any water source in the home.

There's even a timer on the pump to make it more efficient during evening and mid-day downtime. The Comfort System begins working when the timer-activated pump at the hot water tank pushes hot water toward a one-way patented bypass valve beneath the furthest fixture in the house. The valve connects the hot and cold water supply lines; as long as the water in the hot line remains cold, the valve stays open and the cold water is sent back to the heater through the cold water line. But when the incoming water reaches 98 degrees,

the bypass valve closes, and the hot water stands ready to come out when the tap is turned on.

The UP10-16 is an even simpler install. The one-piece HWR solution for new construction is installed at the water heater and relies on the installation of a return line for completion of the recirculation circuit, easy to accomplish when a

home is being plumbed. The UP10-16 is the only HWR solution that combines an integrated check valve, isolation valve, 24-hour timer and an aquastat that can be set to stop



The Comfort System for easy HWR retrofits.

the pump at a preset liquid temperature in the 95-150°F range. The UP10-16 offers a flow range of 0-3 GPM and a head range of 0 to 5.4 feet.

"Both of these solutions circulate water back to the heater so it's always hot and comfortable from the moment it's needed at the tap or shower," said Tom Phillips, a business specialist with the firm's Domestic Building Services group. "Hot water recirculation is something that homeowners are demanding more and more of plumbers and builders alike. With one of these systems in place, homeowners have a much more responsive system, and save water.

"As a global innovations leader in the pumps industry, and well aware of the need to conserve water worldwide," added Phillips, "we feel it's our obligation to develop this and other water-conservation technology. It will no doubt make a positive impact if we can educate and influence homeowners."



The UP10-16 by Grundfos is the HWR solution for new construction.