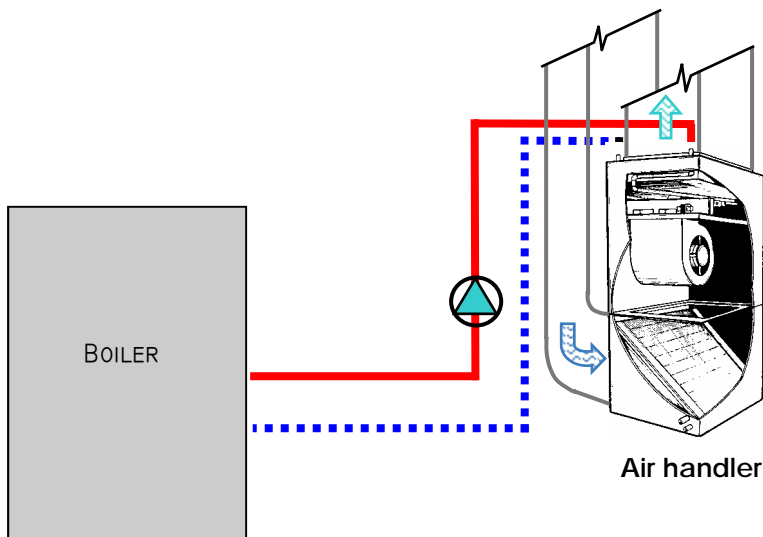


Hydro-Air Systems



How it works:

The air handler acts like the blower on a warm-air furnace, moving air through the home's duct system.

In a hydro-air system, hot water from the boiler is pumped through a coil inside the home's air handler, heating the air as it passes over the coil.

The air handler blows the heated air through the home's duct system.

Overview

Hydro-air systems send hot water from a boiler to a coil inside the home's centrally ducted air handler. Homeowners with hydro-air systems experience greater comfort levels with a "wet" forced-air system, than from a conventional furnace. When coupled with an indirect-fired hot water storage tank, the system offers higher water-heating efficiencies than standard water heaters. Since the system is powered by a central boiler, it can be added to in the future more easily.

Hydro-air becomes a more valuable option to homeowners *versus* a conventional forced-air furnace when...

- 1) ...a home has high domestic hot water needs that would otherwise require multiple water-heaters. Hydro-air is a safer, lower-maintenance alternative to multiple combustion-appliances, and offers a significantly lower lifetime cost of ownership.
- 2) ...owners plan to build an addition, extend the heating system into future rooms, or add other applications, such as snow-melting or pool-heating.
- 3) ...supplemental or auxiliary heat is needed for radiantly heated homes.
- 4) ...homeowners want the combined benefits of hydronic heating *and* a centrally ducted, whole-house air-filtration/ventilation system. Like all ducted systems, hydro-air configurations can be integrated with a variety of air-purification and central ventilation technologies.



In the above photos, the boiler (left) sends hot water to the home's air handler (right). The air handler is connected to Unico System high-velocity mini-ducts, which provide both heating and air-conditioning to the 3,000 sq.-ft. post-and-beam home. The system also integrates with a whole-house energy-recovery ventilator (ERV).