

# HVAC — The Water-to-Air Connection



■ by Jim Wheeler

➤ While I was attending this year’s AHR Expo at the McCormick Convention Center in Chicago (January 26-28), I was collared by an old friend, PR agent extraordinaire John Vastyan of Common Ground ([www.seekcg.com/experience.htm](http://www.seekcg.com/experience.htm)). And he insisted that I at least go by and talk to the people at one of the companies he represents, Climate Master, a water-source heat pump manufacturer out of Oklahoma City ([www.climatemaster.com/](http://www.climatemaster.com/)).

Well admittedly I wasn’t too thrilled, because I think of such products as mostly regional — to states like Oklahoma and Indiana, where progressive electrical co-op companies offer financial incentives and support to install these systems. And when I got there, they didn’t even have a new product offering — oh boy!

But I was there, so I politely asked: “So, why should my supply-house readers nationwide be interested in selling your product?” And the answer surprised me. John Bailey, Climate Master’s vice president of sales and marketing,



Deep geothermal bore-hole supply and return lines must be trenched below the frost line.

pumps is that I thought of them as more of a product that well drillers would be interested in. However, as Bailey pointed out, a large percentage of the equipment they sell today is used with buried closed-loop pipes (under parking lots and the like). So perhaps picking up and promoting such a line of products (both residential and commercial) would be something for you to consider, if you’re not already in that market.

## Water-source heat pumps are one of the HVAC industry’s fastest growing segments.

told me: “Because we are currently one of the HVAC industry’s fastest growing segments, and that’s important to both suppliers and contractors in a slowing economy. Why, we saw an increase in sales of almost 50% last year! In addition, the Emergency Economic Stabilization Act of 2008 (H.R. 1424) has extended tax incentives for geothermal heat pumps until the year 2016, so people are very interested in water-source heat pumps.”

I like the whole concept of water-source heat pumps, because they are extremely efficient (SEERs to 25), and they usually don’t require any supplemental resistance heaters. However, the experience that I had with them back in the early 1980s was a bit spotty, because people were experimenting with some ideas that just didn’t work well. But as I was told, all of this experimenting has finally resulted in a very good collection of information on what works well and what doesn’t.

The other problem that I had with water-source heat



If a suitable body of water is nearby, lake plate heat exchangers are an excellent way to harvest thermal energy for geothermal systems.

Well, that ended my first day at the show, and then John took me off to one of his customer's hospitality suites for an evening of dining and relaxation (yep, pretty nice). This one was being held in Chicago's Museum of Science and Industry. And while I was there, I got a glimpse of a new product that they weren't ready to announce yet, so I can't tell you the company's name, but they were showing a prototype residential/light-commercial heat pump that has extremely high efficiencies and provides year-round 125° F hot water! All the controls are built in, and they are using the heat generated by their variable-speed compressor motor drive to generate the hot water.

As I said in last month's column, this year's Expo was a bit light on new technology, but I wanted to add these two items for your consideration as:

- 1 A possible new type of product line for your company,
- 2 And some new technology to look forward to. <<



ClimateMaster's HFC-410A Tranquility 27 water-to-air geothermal heat pumps extend from 2- to 6-ton sizes with efficiencies up to 31.5 EER and 5.1 COP in upflow, downflow, horizontal and split system configurations.

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