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Two recent trips

By Dan Foley, Contributing Writer

I just returned from the ACCA-RHC (Radiant and Hydronics Council) Roundtable Conference held in Providence, R.I. (Full disclosure: I am the current chairman of the RHC). This group was started just under a year ago to serve contractors performing radiant and hydronic work. One thing that makes our group unique is that we are contractor-centric: We are made up of contractors and run by contractors. Yes, we do have outside consultants on our council, but all decisions are voted on by our contractor council members.

The RHC represents the contractor. We serve the needs of the practicing hydronics contractor. We have set short and long term goals with a strong focus on contractor training and standards. We have a broad view and embrace all hydronics systems including radiant, radiators and baseboard, steam, hydro-air, chilled water and renewable systems such as solar and geo. Basically, if it involves transferring energy through a fluid, it is on our agenda.

I have served on many panels and boards made up of many wonderful people in this great industry. I have learned that one organization cannot serve the needs of the entire industry. Sometimes our goals and visions do not align exactly. By focusing on the contractor, we have minimized the distractions that keep us from achieving our goals. One more thing I have learned: When the contractor is successful, everyone else in the supply chain shares this success. Distributors, reps, wholesalers, manufacturers and designers all benefit. The inverse is true as well.

Our meeting kicked off with a President’s dinner Monday evening with key sponsors and trade press in attendance. We were joined by ACCA CEO Paul Stalknecht and ACCA chairman Laura DiFilippo. The idea of this dinner was to introduce ACCA leadership to our sponsors and industry leaders and the trade press over an informal dinner. The evening was a success: We plan on making this a tradition at our annual conference.

The conference burst out of the gates with an energetic keynote address by longtime r

adyent advocate and “This Old House” plumber, Richard Trethewey. Richard stressed the need to design our hydronic systems to operate at low temperatures to achieve maximum efficiency. He also touched on pumping design. One key point Richard stressed over and over was the fact that hydronics is the technology that ties all of the emerging and sustainable technologies together.

The hydronics contractor is in the driver’s seat.

We then broke out into a series of seminars presented by industry legends John Siegenthaler, Robert Bean, fellow Phc News columnist “Hot Rod” Rohr, Brian Stack, Greg Jannone, John Abulanrage, Jeff Persons and the one and only John Barba. With over 110 attendees at the conference, the seminars were packed. Later that afternoon, a reception with liquid refreshments and appetizers allowed everyone to mingle around our sponsors’ tabletop displays. This gave our sponsors face time with the contractors interested in their products. It also gave old friends a chance to catch up over a beer or soda while also making new friends.

We achieved our goal of a successful inaugural conference. I saw many old friends and industry veterans. I also got a chance to make new connections. We would like more people to attend and will work on this for future events. We would also like to bring more air and HVAC contractors into the fold. ACCA has over 4,000 contractor members, the majority of which focus on forced air systems. We would like to invite these contractors to future events and have them incorporate hydronics into their product mix.

We are already planning next year’s event. I invite you to join us and help make it a success, while increasing your hydronics knowledge. More information can be found at www.acca.org/hydraulics.

Last week, I had the privilege of touring the NIST (National Institute of Standards and Technologies) test house in Gaithersburg, Md., at the invitation of Glenn Hourahan, senior VP at ACCA. The full name of this structure is the Net-Zero Energy Residential Test Facility (NZERTF). This home, built on the NIST campus, is loaded with many different building and environmental technologies and equipped with sensors to measure performance and energy usage. For example, multiple environmental systems have been installed, including solar thermal, solar PV, air-source heat pumps, geo with vertical loops, geo with horizontal loops, zoning systems, ventilation systems, ductless mini-splits and ERVs. There are several redundant distribution systems, including conventional ducted, high-velocity ducted and radiant in a concrete slab (basement only, not yet connected at the time of our tour).

We appreciated the follow! #FF @AREVScalc @Boilesupplies @WilliamsProduct @FurnaceFilters @oreillydepalma
This project is funded by our tax dollars as part of the stimulus package. The concept was to build a net-zero residential home with a high performance envelope where different technologies can be tested and measured. This home should produce as much energy as it consumes annually. It was designed to look like a typical home that can fit into any suburban neighborhood.

During the first year, the home will be closed up; NIST technicians will simulate a family of four living in the structure. The idea is to measure how technologies perform in real-world conditions rather than in a laboratory. Complete information on this project is on the NIST website (www.nist.gov/el/nzertf/index.cfm), including photos, videos, architectural drawings, MEP drawings, architectural renderings and a cool time-lapse video showing the house being built.

I think the concept is great. This is something our industry should have done on our own long ago. Of course, I have a biased opinion about what technologies should have been included but were left out. As tax dollars are being spent, I would have preferred to see this house built on a private lot where it could be sold after testing is complete. That would allow some of the cost to be recouped, as well as allowing for a true test of the house and systems rather than a simulated test.

I would have liked to have seen a high efficiency natural gas condensing boiler installed as a heat source and measure its performance compared to the other systems, including geo. I love geo and have multiple systems installed, but I question why it is rubber-stamped “green” or sustainable in all applications. When the source of electricity is clean PV energy, I will agree. When the source of electricity is a 50-year-old coal burning power plant, it may not be.

I would have loved to have seen radiant floor heat (and cooling) installed throughout, rather than just in the basement slab. How did we let this opportunity pass us by? We have been arguing for years whether radiant is more energy efficient than other distribution systems without any real, substantive scientific studies. This was our chance to measure true performance of a radiant system in a tight structure against other systems. Opportunity missed!

Our trade associations, including RHC, need to stay on top of opportunities like this and lobby for the technologies we believe in. In this case, the design was done several years ago, but we need to be ready for the next chance when the opportunity arises. I eagerly anticipate the results of this study to see which technologies really produce and which don’t.

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