

## For Immediate Release

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## Uponor's First-ever Radiant Cooling Summit Provides In-depth Exposure to Technology

Uponor recently welcomed approximately 60 consulting and specifying engineers from across North America to its first-ever Radiant Cooling

Engineering Summit: a day and a half of lectures and discussions, a product exposition and even actual project tours, all focused on this rapidly growing, energy-saving technology for commercial buildings. Held April 8 and 9 at the Bellagio Hotel in Las

Vegas, the event took place concurrently with the 2010 Uponor

Convention, which itself drew a record 688 attendees — mainly plumbing and mechanical contractors, as well as distributors and independent sales agents.

Citing the American Institute of Architecture's 2030 Challenge, which calls for a 50% cut in fossil-fuel consumption by new commercial buildings, summit program host Dan Sullivan, LEED® AP, CEM, of Uponor stressed the contribution that radiant cooling — and radiant technology in general — now



Wayne Gaw, P.E. (center, blue shirt) of WSP Flack + Kurtz (San Francisco) leads a group of Summit attendees on a tour of Crystals, the retail and entertainment district at CityCenter in Las Vegas.

makes to the drive for increased efficiency and sustainability in commercial construction.

According to Sullivan, Uponor radiant cooling systems have been specified and installed on many new LEED projects in recent years, including LEED

Platinum projects such as the National Renewable Energy

Laboratories Research Support Facilities (Golden, Colo.), the David Brower Center (Berkeley, Calif.) and the California Academy of Sciences (San Francisco, Calif.).



Summit attendees inspect a manifold wall cabinet during their tour of Crystals at CityCenter in Las Vegas.

"Since 2005, radiant heating and cooling system specifications have risen 36 percent, so that approximately 8.5 percent of all new commercial construction is now specified with this technology," commented Sullivan, who serves as senior product manager of Uponor's commercial radiant business. "By 2013, that fraction is projected to rise to around 13 percent." (*Source: McGraw-Hill Green Report, 2009*)

Sullivan cited several key drivers behind the growing popularity of radiant cooling technology, including:

- **Superior thermal comfort and indoor air quality:** "Residential customers have long been familiar with the thermal comfort of radiant heating floor systems," said Sullivan. "A commercial radiant heating and cooling system, combined with a Dedicated Outdoor Air Ventilation System (DOAS), has the added benefit of allowing a building's air system to be downsized, thereby reducing draft and noise while improving air quality."
- **Lower energy consumption,** thanks to the superior efficiency of moving water with a pump, rather than moving air with a fan motor: "Water contains more than 3,500 times the heat capacity of air,

making it a clearly superior vehicle for transmitting heating and cooling energy," he said.

- **Greater architectural freedom:** A radiant system needs no ductwork, radiators, registers or any other outlet protruding from the walls, floors or ceilings. Instead, the system turns these surfaces into heat-radiating or –absorbing devices by running heated or chilled water through loops of crosslinked polyethylene (PEX) tubing concealed within them. "This concealment, in turn, can reduce building heights and give the architect and the interior designer far greater latitude in how they work with the interior space," Sullivan said.

These factors, bolstered by government incentives and the industry-wide drive for LEED certification, have made "radiant heating and cooling technology an increasingly vital part of the integrated-design approach that the commercial building sector now embraces," Sullivan said.

"Like the other sustainable technologies and techniques gaining popularity among building designers and specifiers, radiant cooling is now seen as an integral part of a comprehensive strategy for reducing energy usage and improving comfort."

Among the highlights of the day-and-a-half Radiant Cooling Engineering Summit was an ASHRAE Distinguished Lecturer Program, "Human Factors in HVAC and Radiant-Based HVAC," jointly presented on Thursday afternoon, April 8, by Robert Bean, R.E.T., and Peter Simmonds, Ph. D. of IBE Consulting Engineers. While Bean focused on the positive impact of radiant technology on our indoor environments and our personal health, Simmonds offered guidelines for incorporating the technology into the building design and planning process. By attending the lecture, Summit registrants received three Professional Development Hour credits from the state of Nevada.

The next day, following additional lectures and a visit to the Uponor product exposition in a nearby hotel room, attendees boarded a shuttle to tour the MGM Mirage CityCenter™ in downtown Las Vegas. At \$8.5 billion, CityCenter is currently the largest privately funded construction project in the

United States, spanning 18 million square feet under roof and a total of 67 acres. Six of its properties (ARIA, Vdara, Crystals, Mandarin Oriental, Las Vegas and Veer Towers) have achieved LEED Gold certification from the U.S. Green Building Council.

The host for the tour by the summit group was the San Francisco-based firm of WSP Flack + Kurtz, the lead consulting engineer for the CityCenter Project. Wayne Gaw, an F+K vice president-engineering, first took the group to Crystals: a mix of high-end retail and entertainment space within CityCenter, featuring outlets operated by Tiffany, Vuitton, Dior, Prada, Hermes, and Porsche Design, among others. Radiant floor cooling was installed in 60,000 square feet of the structure to reduce energy consumption by the facility's mechanical system and to boost occupant comfort.

The second half of the tour was devoted to the CityCenter's remote, fully automated Central Water Plant, which supports the entire complex and itself earned LEED Silver status. Among its many sustainable design features is the first instance of energy generation in any building on the Las Vegas Strip. Waste heat from the facility's eight-megawatt Co-Gen plant provides domestic hot water for every hotel, restaurant, spa and pool at CityCenter.

Because the inaugural Radiant Cooling Engineering Summit proved such a success, its hosts are in the early planning stages of an encore performance next year in conjunction with the annual AHR Expo, according to Joel Culp, Uponor vice president of Offerings/Marketing. The AHR Expo will also be held in Las Vegas on Jan. 31 – Feb. 2.

"Our goal with this first conference was not only to make attendees aware of radiant cooling and its benefits, but to provide them with practical information for implementing the technology in their own design and construction planning," Culp comments. "If they return home and experiment with radiant cooling in even a small part of a project, that positive hands-on experience will likely translate into bigger projects. That's the sort of familiarity and confidence we were looking to generate at the Summit."

**Uponor, Inc.** is a leading supplier of plumbing, fire safety and radiant heating and cooling systems for the residential and commercial building markets in the United States. Uponor, Inc. employs 380 people at its North American headquarters in Apple Valley, Minn. For more information, visit [www.uponor-usa.com](http://www.uponor-usa.com) or call (800) 321-4739.

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**Hi-res versions of a photograph to accompany this release** are available for immediate download in .tif format by using this link: [http://uponor.oreilly-depalma.com/2010/uponor\\_first\\_radiant\\_cooling\\_summit.shtml](http://uponor.oreilly-depalma.com/2010/uponor_first_radiant_cooling_summit.shtml)

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