



The HVAC&R Industry

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Advancing HVAC&R to Serve Humanity and Promote a Sustainable World

The HVAC&R Industry, ASHRAE's free weekly eNewsletter for HVAC&R professionals, provides relevant, timely information about industry and technology for people who create healthy, comfortable indoor environments.

Industry News

Plans for 'Shape-Shifting' Skyscraper Unveiled

DUBAI, United Arab Emirates—Architects have unveiled plans to build a revolutionary 420 m (1,380 ft) "shape-shifting" skyscraper in Dubai. Each floor of the 80-story Dynamic Tower would be capable of rotating independently, according to a press statement released by New York-based architectural firm Dynamic Group. The tower, described as the "world's first building in motion," also will be the first skyscraper constructed from prefabricated units. The floors' motion would be powered by wind turbines between each floor.

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Researchers Developing Miniature Refrigeration System for Computers

WEST LAFAYETTE, Ind.—Researchers at Purdue University are developing a miniature refrigeration system to fit inside laptops and personal computers. The research focuses on miniature compressors and evaporators. The researchers have developed a model for designing tiny compressors that pump refrigerants using penny-size diaphragms. According to the researchers, miniature refrigeration would dramatically increase how much heat could be removed compared to conventional cooling systems, which use a fan to circulate air through heat sinks attached to computer chips.

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'Make a Difference' Message Can Attract Young People to Engineering

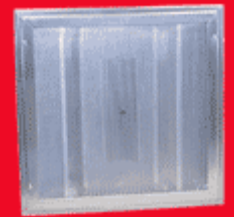
WASHINGTON—Encouraging young people to make a difference in the world through an engineering career is more likely to attract them than emphasizing the challenge of math and science skills, says a new report from the National Academy of Engineering on ways to improve public understanding of engineering. The report, *Changing the Conversation: Messages for Improving Public Understanding of Engineering*, recommends that the engineering community begin using tested messages in a coordinated communications strategy. The highest-rated messages focus on the importance of engineers in solving current problems and in shaping the future.

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'Green' Buildings Earn Higher Rents, Says Study

BERKELEY, Calif.—Investments in green building practices lead to increases in a property's market value and effective rent, or the average rent paid per square foot. This is according to a recent systematic analysis of environmentally sustainable construction and its economic impact on the real estate market by the University of California,

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Berkeley. Buildings certified by various sustainable design programs produced an 8.5% increase in effective rent. The study analyzed nearly 700 commercial buildings in large cities throughout the U.S.

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ASHRAE News

[ASHRAE Installs New Officers, Directors](#)

SALT LAKE CITY—ASHRAE installed new officers and directors at its 2008 Annual Meeting held here June 21–25. The new president is William Harrison, president of Trane Arkansas in Little Rock, Ark. His presidential theme, *Maintain to Sustain—Delivering ASHRAE's Sustainability Promise*, focuses on operating buildings to deliver the energy efficiency inherent in their design, including effective commissioning, improved documentation, and programs to educate and certify building operators. Other officers installed for a one-year term are president-elect Gordon V.R. Holness, P.E., Fellow/Life Member ASHRAE; treasurer Lynn G. Bellenger, P.E., Fellow ASHRAE; and vice presidents Jim Fields, Member ASHRAE; Andrew Persily, Ph.D., Fellow ASHRAE; Vincent Tse, Fellow ASHRAE; and Thomas Watson, P.E., Member ASHRAE. Directors for the 2008–11 Society years also were named.

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[ASHRAE Donates Solar Rooftop to Teen Home](#)

SALT LAKE CITY—ASHRAE donated a solar-powered water-heating system to the YWCA of Salt Lake City's Teen Home during the 2008 Annual Meeting. ASHRAE designed and installed the system at no charge. The YWCA facility is a residence for up to 12 adolescent girls and their babies who have been homeless or are in state custody. The solar heating system will reduce the annual operating costs of the facility and decrease the environmental impact of its current heating system, said YWCA chief executive Anne Burkholder. She added that it also will help the girls learn the importance of sustainability and environmental responsibility. The Salt Lake project is the first for a new ASHRAE program to provide technical and financial support for a sustainable project in each of the cities where its meetings take place.

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Feature of the Week

[HVAC Power Density: An Alternate Path to Efficiency](#)

By Stephen P. Kavanaugh, Ph.D., Fellow ASHRAE; **Steven Lambert, P.E.**; and **Nickless Devin**, Student Member ASHRAE

According to the authors, the recommended practice of conducting a building energy simulation may not be an affordable option for some projects. This article covers using HVAC system power density guidelines as an alternative to conventional design. This method directly identifies the impact of all system components on the net efficiency of the building HVAC system.

This article was originally published in December 2006. [Click here](#) to download the article. It will be available here through July 10.

After July 10, access to the article from this eNewsletter will no longer be available. It will remain available for free download by Members [here](#) and for purchase by nonmembers in the [ashrae.org bookstore](#).

Product News

Environmental Monitor From Control Company

FRIENDSWOOD, Texas—Control Company introduces the Model 4410 Traceable® monitor. It shows current, minimum, and maximum displays for dew point, wet-bulb, humidity, and temperature, and includes programmable high/low visual and auditory alarms for all parameters.

[Read more](#)

Environment-Friendly Occupancy Sensors From Watt Stopper/Legrand

SANTA CLARA, Calif.—Watt Stopper/Legrand introduces a line of RoHS-compliant occupancy sensors. RoHS is the European Union's (EU) directive on the restriction of hazardous substances in electrical and electronic equipment sold in the EU market. The sensors feature lead-free materials and other components designed to reduce the amount of hazardous waste that enters the environment, as well as save energy.

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System Cable Coupling From Bridgeport Fittings

STRATFORD, Conn.—Bridgeport Fittings introduces the 4157-DC combination coupling for new construction and retrofit applications in schools and commercial buildings. It enables users to join electrical metal tubing (EMT) to two AC/MC (armored or metal-clad) cables quickly and easily. The coupling's large internal dimension allows conductors to pass through to the EMT conduit without damaging insulation.

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