



ASHRAE LOUISVILLE CHAPTER NEWS

American Society of Heating, Refrigeration and Air Conditioning Engineers
Serving the commonwealth for 45 years.

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ROOFTOP APPLICATIONS AND THE DANGERS OF OVERSIZING

**Monday, November 6, 2006
Lunch Meeting**

ABSTRACT:

The air handler is typically the second largest energy use in the mechanical system, and can even exceed the energy use of the cooling plant in some cases. Optimizing the air handler system is essential to achieve an efficient and cost effective system. Oversizing of systems is the main cause of poor comfort, excessive energy consumption, and premature equipment failures.

SPEAKER:

Mr. Chris Slade is a Graduate of Vanderbilt University, where he received his Bachelor of Engineering degree. He has over 10 years of experience in the HVAC related industries through first working as a Sales Engineer for the Tom Barrow Co. in Nashville, TN and currently serves as a Sales Engineer Koch Air LLC in Louisville, KY and Evansville, IN.

MEETING LOCATION:

**The University of Louisville Alumni Club from 11:30 am until
1:00 pm**

The cost for attending is \$20.00, cash or check (made payable to ASHRAE). Students and university facility may attend for \$5.00. Due to our current arrangements with the University Club, reservations are not cancelable after 5:00 PM Thursday prior to the meeting date. We want to encourage attendance, but emphasize the importance of notifying the treasurer if plans to attend have changed. Your consideration will help avoid meeting fee increases to offset losses associated with extra meal preparation.

It is extremely important to make your reservation no later than Wednesday, November 1st with Julian Donahue by simply using one of the following three options: 1) Calling (502) 569-3600 x 2422 2) E-mail jdonahue@lwckv.com.

UPCOMING EVENTS/PROGRAMS:

Below is a list of upcoming meetings and events for 2006. Please mark your calendars:

December 2 – Christmas Party, location TBA
January 8 – Dinner meeting at the U of L Alumni Club
February 5 – Lunch meeting at the U of L Alumni Club
March 3 – Engineers' Day at University of Louisville
March 5 – Joint Dinner meeting with ASME and Student - Presentations in the Vogt Building at U of L
April 2 – Lunch meeting at the U of L Alumni Club
May 14 – Golf outing, location TBA

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VISIT THE LOUISVILLE CHAPTER ON THE WEB!

<http://www.ashraeregion7.org/louisville/index.html>

MESSAGE FROM THE CHAPTER PRESIDENT

By Joe Nitzken

We have a solid group of members in Louisville's ASHRAE Chapter. Please consider assisting on the following opportunity.

The Louisville Chapter has been asked to prepare an action plan for an emergency Chapter Regional Conference (CRC). This "safety fall-back" plan is in the event situations such as hurricane or other problems develop for a particular planned event location.

The best example for a needed emergency plan was when the CRC for Mobile, Alabama was canceled due to a hurricane. A mini CRC was then held in Tennessee.

Neither the 2007 CRC planned for North Alabama at the Huntsville Space and Rocket Center, nor the 2008 in Memphis should be problems. However, our ASHRAE Region 7 CRC is planning to go back to Mobile, Alabama in 2009 and then back again into the Deep South in 2010. Possible locations would be Baton Rouge and New Orleans.

We would like to assemble a small group to begin putting together ideas and then a plan. The plan would list hotels that could be used, entertainment venues, museums, tours that are available, food catering options, etc. The Plan could provide the Instruction Manual or Menu of how Louisville could quickly activate a CRC plan.

Those of you with ties to the Chamber of Commerce and the Louisville scene can present the Louisville Chapter with options. There is plenty of time for such an effort and the first step is for someone to volunteer to be Chair. Please consider this the invitation for Chairing or joining this committee.

SATELLITE BROADCAST - MULTIPLE BENEFITS SOLUTIONS FOR ENHANCED BUILDING SECURITY

This broadcast will inform the audience of the many efforts that can be taken to reduce vulnerability to terrorist acts that also provide reduced vulnerability to natural and accidental incidents, and may provide improvements in reliability, safety, comfort, energy use, and operating cost of the building and its systems. Some of these efforts may even reduce operating expenses sufficiently to allow recovery of the associated costs within a reasonable time frame and favorably impact insurance premiums. This free program is sponsored by ASHRAE's Building Safety and Security Special Committee with support from the Alfred P. Sloan Foundation.

Satellite broadcast will be hosted by Harshaw Trane in the Louisville Plantside Drive Learning Center on November 14, 2006 from 1:00 pm to 4:00 pm EST. Drinks will be provided. Please RSVP to Laura Whitus at (502) 499-7000 no later than November 7.

RESEARCH PROMOTION AWARDS

November will kickoff the 2006-2007 Campaign to raise funds for ASHRAE sponsored research.

Attend the November Meeting where the following individual members and companies will be recognized for their generous contributions to last year's Research fund drive, which raised over \$13,000.

\$3000 or more

General Electric Company
Louisville ASHRAE Chapter

\$1000 or more

AAF International

\$500 or more

Frank Harshaw / Harshaw Trane
York International
Koch Air
Airguard Industries
AST/Electrofin

\$150 or more

James E. Forst and Assoc.
Kerr Greulich Engineers
LSE Engineering
P.L. Sherman Company
Larry Fisher
Vitok Engineers
Air Equipment Company
Rademaker Corporation
Lockett & Farley Arch. & Engineers

\$100 or more

Ameresco
Brent Caswell

\$250 or more
Environmental Safety Technologies
R.L. Craig Company

Matt Hargan
Raymond Beaufait
Julian Donahue
Joseph Nitzken
Dennis Skees
Raymond Thornton
Rick Vowels
Edward Dusch

\$350 or more
Kenneth Peet



Leading South Central KY mechanical contracting and engineering firm seeks an **Engineering Manager** for their growing organization.

The **Engineering Manager** will be a self-motivated team player who will lead the design, engineering and project management functions. This position requires a Mechanical Engineering degree, PE license, 7-10+ years of progressive mechanical/HVAC design and management experience. Broad-based general business experience is a big plus.

Competitive salary, bonus and profit-sharing!
Excellent opportunity for personal and career growth!

For more information about this position or to apply confidentially, please contact:

Paige Huber
phuber@olivergroup.com
502-228-0383 - phone
502-228-7403 - fax



POSITION: RELIABILITY AND SAFETY ENGINEER

ESSENTIAL FUNCTIONS

Detailed and day-to-day execution of reliability program management and execution for projects (development of accelerated testing, field tests, etc.)

Manage all FMEA activities and records.

Interface with Customer Service, Operations, Purchasing and Quality Control regarding product quality and warranty concerns.

Process returned water heater inspections from Customer Service and Legal Department.

Perform water heater installation inspections as required.

Perform other duties as assigned.

REQUIREMENTS

Bachelors' Degree in Electrical or Mechanical Engineering.

Three to five years experience in product reliability and/or quality, or a CRE is preferred.

Familiarity with The National Fuel Gas Code, ANSI and UL standards as related to gas and electric appliance is desired.

Familiarity with the NFPA (NFPA 921), IAAI, and/or NAFI is desired.

POSITION: PROJECT ENGINEER

JOB FUNCTION

Responsible for the design and implementation of new or improved products.

ORGANIZATIONAL RELATIONSHIP

Reports to Manager - Product Development Engineering

ESSENTIAL FUNCTIONS

Complete project responsibility from inception to completion.

Interface with and direct the Model Shop, Laboratory, Drafting, and Bills of Material on specific project needs.

Work cooperatively with Manufacturing, Engineering, Marketing, Purchasing and Quality during product implementation, improvement and cost reduction projects.

REQUIREMENTS

Minimum BSME with five years industry and job related work experience. Proven track record of effective project management and innovation.

Experience in sheet metal design, heating product design and project management, which includes interfacing with multiple departments to coordinate project activities. Experience in business practices and financial analysis of engineering projects is highly desirable.

Proven track record of experience in New Product Development Process, mechanical design of components and assemblies. Three years of industry experience in CAD and solid modeling is preferred. Experience in Concurrent Design For Manufacturability (CDFM) and command of manufacturing, production and fabrication processes.

Familiarity with Failure Modes and Effects Analysis (FMEA), Finite Element Analysis, Computational Fluid Dynamics, Design of Experiment and Reliability Engineering is highly desirable.

Familiarity with ANSI standards, UL standards, and The National Fuel Gas Code as related to Gas and Electric appliances is desirable.

Knowledge of design techniques, tools, principles involved in production of precision technical plans, drawings, prototyping, and CAD models.

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ACCESS DOOR ADDENDUM PROPOSED FOR ASHRAE BACNET STANDARD

ATLANTA – An addendum that would extend BACnet to support access control systems is being proposed by ASHRAE.

ANSI/ASHRAE Standard 135-2004, *BACnet -- A Data Communication Protocol for Building Automation and Control Networks*, is the only open, consensus-developed standard in the building controls industry.

Proposed addendum f to Standard 135 establishes a standard BACnet object, which represents a door operated as part of an access control system. It presents information and alarms about the door such as its status (open or closed, door open too long, door forced open), and provides means for controlling the door (lock, unlock, etc.), according to Bill Swan, chair of ASHRAE's BACnet committee.

This object is the first access control work item to come out of the BACnet committee's Life-Safety and Security Working Group. The group is working to develop full support for access control in BACnet, with more extensions to BACnet to follow. The group is working closely with the Security Industry Association to develop common data models and methods for access control systems.

The proposed addendum will be open for public review until Nov. 6. To review the proposed addendum or to comment, visit www.ashrae.org/publicreviews.

ASHRAE, CAMEE Pursue Interests in Advocacy, Education

ATLANTA – The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and the Council of American Mechanical and Electrical Engineers (CAMEE) have signed a memorandum of understanding.

The agreement formalizes a working relationship between ASHRAE, which is interested in the technical aspects of the building environment, and CAMEE, which is focused on the business aspects of mechanical and electrical engineering. CAMEE is a coalition of the American Council of Engineering Companies (ACEC).

"The agreement serves to bridge the gap between ASHRAE and CAMEE and their common interests in government advocacy on behalf of our members and education for the operation of engineering businesses," said Terry Townsend, P.E., ASHRAE president. "ASHRAE and CAMEE can now market our activities to the mutual benefit of our collective memberships."

"We look forward to our cooperation with ASHRAE and the benefits that will accrue to both organizations," said David Raymond, president of ACEC.

ASHRAE, founded in 1894, is an international organization of 55,000 persons. ASHRAE fulfills its mission of advancing heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education.

CAMEE is a coalition of mechanical/electrical engineering firms within ACEC. It was formed to provide information to member firms on how to best serve their clients.

Infiltration Credit in ASHRAE Standard 62.2 Open for Comment

ATLANTA – The role of an existing infiltration credit in ASHRAE's residential ventilation standard is open for public comment.

ANSI/ASHRAE Standard 62.2-2004, *Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings*, provides the minimum requirements necessary to achieve acceptable indoor air quality for dwellings.

Proposed addendum j would eliminate the section describing the infiltration assumptions that are present in the standard.

"This proposed addendum illustrates why public comment is so important to the standards development process," David Grimsrud, chair of the Standard 62.2 committee, said. "We have strong opinions on both sides of the fence regarding this addendum. Working to reach common ground will help build a stronger standard."

Some feel that the section is often misinterpreted by code officials who use it to require more mechanical

ventilation than is currently required in the standard in new housing, Grimsrud said. Also, the requirement could imply that new houses are as tight as they ever will be and that new housing should be leaky enough to provide the amount of infiltration suggested.

On the flip side, removing the credit could significantly reduce the recommended ventilation rate in new housing, thereby increasing steady-state pollutant concentrations, according to Grimsrud.

Still others suggest that weatherization agencies that use the standard in assessing strategies for tightening existing homes and/or adding mechanical ventilation will be left without guidance, he said.

Also open for public comment is proposed addendum k, developed in response to recent studies of window opening patterns in California. The study was done in the region included in an existing exception of the standard. The study has shown that household residents open windows much less than expected.

So window opening, which is assumed to provide the ventilation required in the exception, should not be an acceptable alternative to the ventilation requirements, according to Grimsrud. The proposed addendum would remove the exception that whole-building mechanical systems are not required in that specific region.

Proposed addenda j and k will be open for public comment until Nov. 6. To read the proposed addenda and comment, visit www.ashrae.org/publicreviews.

ASHRAE Proposes New Moisture Control Standard

ATLANTA – In recent years, moisture problems such as mold growth have become big issues for building owners and operators.

Computer simulation tools have been developed to predict thermal and moisture conditions in buildings, but the results can vary greatly with the assumptions for indoor and outdoor conditions

To help combat this issue, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) is proposing a standard that formulates design assumptions for moisture design analysis and criteria for acceptable performance. ASHRAE's proposed Standard 160P, Design Criteria for Moisture Control in Buildings, is open for public comment until November 6, 2006. The proposed standard goes beyond prescriptive recommendations for moisture control in buildings that are currently in the ASHRAE Handbook and in building codes.

"Standard 160 gives us a methodology for the first time to make consistent design recommendations, such as the need, type and placement of vapor retarders, in any climate," says Anton TenWolde, chair of the committee that drafted the standard. "The standard requires the designer to think about the interior conditions that will be maintained in the building and the effect that may have on the building envelope."

A draft of the proposed standard is available only during the public review period. To obtain an electronic draft version of Standard 160P during the comment period, log on to ASHRAE.org at www.ashrae.org/publicreviews.

Yo! ASHRAE Video Promotes Engineering as Career



ATLANTA – The hottest new rap video can't be seen on MTV, BET or even VH-1 – it's on ASHRAE.org.

That's right – "rap video." Not something you would think that the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) had the 4-11 about, right?

"If ASHRAE and our industry are going to be successful in promoting engineering and HVAC&R as career options, then we have to reach out to young people in a way that is entertaining and interesting to them," Ron Johnson, chair of ASHRAE's Student Activities Committee, said. "Hence, this video."

ASHRAE: Licensed to Chill features a hot soundtrack accompanied by interviews with young members highlighting the importance of the HVAC&R industry to the world; the diverse and creative opportunities related to engineering as a career; and the difference the building industry makes related to sustainability.

“The video drives home the message that our industry truly engineers the world we live in, and that young people don’t want to miss out on the chance to be a part of that,” he said.

The video will be made available to middle and high schools that seek information about careers in engineering from ASHRAE. It also is available in several formats suitable for downloading at www.ashrae.org/chill.

New Designations Proposed for ASHRAE Refrigerant Safety Standard

ATLANTA – Eight proposed addenda, including three adding new refrigerant designations, to ASHRAE’s refrigerant safety standard are open for public review.

ANSI/ASHRAE Standard 34-2004, Designation and Safety Classification of Refrigerants, establishes a simple means of referring to common refrigerants in place of chemical names, formulas or trade names. It also establishes safety classifications based on toxicity and flammability data.

To read the proposed addenda or to comment, visit www.ashrae.org/publicreviews.

The following addenda are open for public review from Sept. 22 until Oct. 22:

- 34d would require refrigerant applications to be submitted in electronic format in addition to printed copies.
- 34i would add a designation of R-426A to a blend of R-125/134a/600/601a.
- 34j would add a designation of R-427A to a blend of R-32/125/143a/134a.
- 34l would add a designation of R-428A to a blend of R-125/143a/290/600a.

The following addenda are open for review from Sept. 22 until Nov. 6:

- 34m would remove the requirement to submit refrigerant property data elements that are not needed in determining the refrigerant designation or safety classifications.
- 34t would add an informative appendix containing refrigerant data removed from the standard by addendum 34u-2004 and bubble/dew points for azeotropic blends.
- 34v would update addendum 34u-2004 text and tables based on an increased oxygen depletion concentration level from 69,100 parts per million (ppm) to 140,000 ppm, increased cardiac sensitization default from 0 to 1000 ppm, new toxicity information for R-22, 32 and 227ea, new lower flammability limit values, and addition of new refrigerants.

34w would add an informative appendix containing toxicity values for single-compound refrigerants, compiling toxicity information from various sources into one table.

ASHRAE Research Provides Comparison Data for Unitary Equipment

ATLANTA – New research from ASHRAE will lead to better understanding of humidity control and energy cost when comparing unitary equipment.

ASHRAE Research Project-1254, Evaluating the Ability of Unitary Equipment to Maintain Adequate Space Humidity Levels, Phase II was funded in part by the Air-Conditioning and Refrigeration Technology Institute.

“The results will help designers better understand the humidity control and energy cost impacts of the unitary equipment options compared in this project,” said lead researcher Michael J. Witte, Ph.D., GARD Analytics. “Many of these options are in limited use so actual performance experience is not available for a broad range of building types or climates. What performs well on a restaurant in Orlando may not be effective on a retail store in Atlanta. This comparison of 18 system types across seven building types in 10 climates provides additional equipment selection information.”

The project provides designers with:

- Comprehensive analysis of humidity control performance of a wide range of DX system configurations, including sub-cool reheat, wrap-around heat pipes, dual-path systems, enthalpy heat recovery and desiccant dehumidifiers.
- Significant advancement in whole building energy simulation capabilities for modeling DX equipment by adding new capabilities to EnergyPlus. This provides designers and analysts with access to study specific applications and extend the results of this analysis, according to Witte.

Identification of key issues for further exploration to better understand some of the key drivers and possibly develop some simple new system configurations that can efficiently control humidity.

The final report can be purchased from “research results” at www.ashrae.org/research. The cost is \$30 (\$24 ASHRAE members).

ASHRAE/ACCA Inspection, Maintenance Standard Open for Review

ATLANTA – A proposed standard currently open for public review will be the first to deal exclusively with inspection and maintenance of HVAC systems in buildings where the public is exposed to the indoor environment.

ASHRAE/ACCA Standard 180P, Standard Practice for Inspection and Maintenance of Commercial Building HVAC Systems, would establish minimum HVAC inspection and maintenance requirements that aid a system's ability to achieve acceptable thermal comfort, energy efficiency and indoor air quality in commercial buildings.

The standard is being developed by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and the Air Conditioning Contractors of America (ACCA).

“Inconsistent practices in inspection and maintenance of HVAC systems is common in the building industry,” Bob Baker, chair of the committee writing the standard, said. “As a result, systems frequently operate outside optimum performance, without providing the energy efficiency, thermal comfort and indoor air quality they were designed to provide.”

Baker notes that a standard practice would benefit occupants and also ensure that indoor environmental conditions are maintained as energy efficiently and cost effectively as possible.

Highlights of the proposed standard include:

- Responsibility for compliance with the standard is clearly on the building owner; a common reason given for lack of maintenance is lack of sufficient resources available to maintenance personnel.
- Each building must have a written plan that addresses 57 inspection/maintenance items required if those components are present in the building (for example, if a building has cooling towers, items dealing with cooling towers are mandated as part of the plan).
- An additional list of 563 optional inspection and maintenance items that building owners/operators may wish to consider when preparing their individual plans is included. “This listing assembled by 24 of the most knowledgeable persons about HVAC system maintenance in the industry is an incredible resource that has never before been available to those planning and managing maintenance activities,” Baker said.
- The standard especially concentrates on those factors that impact thermal comfort, energy efficiency and indoor air quality so as to promote sustainability.

The proposed standard is open for public comment until Nov. 6. To read a draft of the standard or to comment, visit www.ashrae.org/publicreviews.

ACCA is the nationwide association of heating, ventilation, air conditioning, and refrigeration contractors, representing members in every state. For over 40 years ACCA has served the educational, policy, and technical interests of the small businesses who design, install, and maintain indoor environmental systems.

Educational Programs at ASHRAE '07: Health Care Design Guidance Provided in New ASHRAE Courses

ATLANTA – Guidance to help designers create safe indoor environments in health care facilities is provided in new educational courses at the AHR Exposition held in conjunction with ASHRAE's Winter Meeting.

In all, ASHRAE will conduct three professional development seminars and 14 short courses at the ASHRAE meeting, January 27-31 in Dallas. Among them are two new short courses related to health care facility design.

Health Care Facilities - Best Practice HVAC Design Considerations and Criteria introduces design considerations. A major emphasis is on the necessary considerations for various diagnostic and treatment and support areas. The course also offers guidance on how to deal with existing facilities, smoke and life safety design issues.

Health Care Facilities-Best Practice Applications of HVAC Systems introduces best practice designs, with a focus on air distribution designs for surgical and patient rooms. Various control and energy efficiency techniques for cooling and heating plants are presented along with O&M and other commissioning topics. Smoke control and life safety best practices and application issues also are covered.

Both courses are based on ASHRAE's HVAC Design Manual for Hospitals and Clinics.

"HVAC systems for hospitals and health care facilities have special requirements because of their functions and the unique susceptibility of patients," Anand Seth, P.E., design considerations course instructor, said. "Designers must create ventilation systems that minimize exposure hazards for health care providers, patients and visitors while providing a comfortable working environment."

The Professional Development Seminars organized by ASHRAE are:

- The Commissioning Process in New and Existing Buildings
- Facility/HVAC Terrorism Threat and Vulnerability Reduction
- Mechanical Insulation Training Program

Each seminar is a full day long and includes handouts.

The 3-hour ASHRAE short courses being held at the AHR Expo are offered on the following topics:

- Successful Solar Applications
- Introduction to Ground Source Heat Pumps
- Introduction to Commercial Desiccant Dehumidification Systems
- Leadership Skills for Engineering Leaders – Situational Leadership®
- Introduction to Thermal Energy Storage Systems for Air Conditioning
- Introduction to Green Buildings and Sustainable Construction
- Complying with Requirements of ASHRAE Standard 62.1-2004
- People Skills for Engineering Leaders— Myers-Briggs Type -Indicator® (MBTI®)

- MasterFormat#1652; 2004 and HVAC Specifications
- Compliance with ASHRAE Standard 90.1–2004 HVAC Mechanical
- Designing Residential Ventilation Systems to Meet ASHRAE Standard 62.2
- Emerging Dehumidification Enhancements for DX Cooling Systems
- Health Care Facilities - Best Practice HVAC Design Considerations and Criteria
- Health Care Facilities-Best Practice Applications of HVAC Systems

Professional Development Seminars award attendees 6 PDHs and .6 CEUs and earn AIA and New York and Florida recognition. Short courses award attendees 3 PDHs, .3 CEUs, 3 AIA LUs and New York and Florida recognition.

For complete course information and to register, visit www.ashrae.org/dallas.

Proposed Load Calculation Standard Open for Review

ATLANTA – Heat transfer interactions that occur inside and outside conditioned buildings are highly complex and involve thousands of variables.

This creates a challenge not only for engineers but also for code officials and other entities when trying to assure the proper engineering care was used in determining the load.

To address this need, a new standard is being developed and may soon be available from the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and the Air Conditioning Contractors of America (ACCA).

Selected portions of ASHRAE/ACCA Standard 183P, Peak Cooling and Heating Load Calculations in Buildings except Low-Rise Residential Buildings, are open for public comment until Oct. 22. To read those sections or to comment, visit www.ashrae.org/publicreviews.

If the current public review is successful, the standard could be published in early 2007, according to Chris Wilkins, chair of the committee writing the standard.

The proposed standard would establish minimum requirements for both the methods used in peak cooling and heating load calculations and the execution of these methods as they apply to commercial, industrial, and high-rise residential buildings.

"We plan to establish a minimum level that is as inclusive of as many methods as possible while still being restrictive enough to mandate an appropriate level of care and accuracy," Wilkins said.

Guidance on load calculations can be found in the ASHRAE Handbook as well as ACCA's Manual N, which currently are being referenced as the calculation "standards" since no true standard exists, according to Wilkins.

"The Handbook and Manual N are useful but are not written to serve as standards so there was a void," he said. "With publication of this standard, code bodies and other organization will have a true standard to reference what embodies what ASHRAE and ACCA believe is an appropriate level of care in performing load calculations."

International Code Council Takes Action on ASHRAE Proposals

ATLANTA – International building codes may soon incorporate new requirements from ASHRAE standards, thanks to several recent proposals now under consideration.

ASHRAE made several proposals to the International Code Council, which develops model codes that may be adopted by code jurisdictions in the United States or internationally. After a public review of the proposals, final hearings for the code change proposals take place May 21-22, 2007. If the proposals are accepted, they would be included in the 2007 code supplement.

"It is the governmental use of building codes and the conversion of standards into codes that derive the greatest benefit from the ASHRAE standards' development process," Terry Townsend, ASHRAE president, said at a meeting with ICC leadership, encouraging adoption of the proposals.

A proposal to include new ventilation rates from ANSI/ASHRAE Standard 62.1-2004, *Ventilation for Acceptable Indoor Air Quality*, was approved for inclusion in the International Mechanical Code (IMC). The change would lower zone ventilation in many zones, particularly those with high-occupant density, and improve overall ventilation results in systems where zones with differing ventilation requirements are served by a common ventilation system.

"For many high occupant-density zones (like classrooms and places of worship) these new rates reduce outdoor air intake requirements by 50 percent or more, compared to the IMC," Dennis Stanke, chair of the Standard 62.1 committee, said. "HVAC systems for these buildings can be designed with fewer air conditioning tons and operated using less energy. Lower intake rates tend to reduce both first cost and operating cost."

Four proposals written by ASHRAE's Code Development Committee for ANSI/ASHRAE/IESNA Standard 90.1-2004, *Energy Standard for Buildings Except Low-Rise Residential Buildings*, and ANSI/ASHRAE Standard 90.2-2004, *Energy-Efficient Design of Low-Rise Residential Buildings*, were approved for inclusion in the International Energy Conservation Code.

- EC39: Lowers the solar heat gain coefficient requirements in residential buildings in Climate Zones 1 and 2 to 0.37 from 0.40. This requirement is consistent with Standard 90.2-2004.
- EC84: Adds a U-factor table to the code, and add definitions for C-Factors, and F-Factors.
- EC98: Adds a requirement for hot-gas-bypass to the code.
- EC125: Revises exterior lighting control requirements.

Also related to its energy standard, ASHRAE plans to submit a public comment on a proposal to provide R-Value, U-Factor requirements and removal of the Standard 90.1 envelope section as a compliance method. ASHRAE opposes approval of proposal EC82 because it removes a partial reference to Standard 90.1.

"While ASHRAE thinks the UA trade-off may be desirable, the envelope requirements and appendices of the standard should continue to be an alternative compliance pathway because they are technically based within a consensus process," Townsend said.

Also approved was a proposal to make the IMC more consistent with ANSI/ASHRAE Standard 34-2004, *Designation and Safety Classification of Refrigerants*. The change would add new refrigerants for which the standard has given a designation and safety classification. The addition will facilitate use of these refrigerants.

Registration Opens: Multiple Benefits Broadcast Benefits Building Designers, Operators, Owners

ATLANTA - Registration is now open for ASHRAE's free satellite broadcast and Webcast, Multiple Benefits Solutions for Enhanced Building Security.

You can register at www.ashrae.org/homelandsecuritybroadcast2 The broadcast takes place from 1-4 EST Nov. 14, 2006.

The broadcast is sponsored by ASHRAE's Building Safety and Security Special Committee with support from the Alfred P. Sloan Foundation. The program features two panel discussions with short presentations, and live question-and-answer sessions with the audience.

The first discussion focuses on the principles of risk management and how they can allow treatment of health, safety and security issues beyond those normally considered in current practice, codes and standards. Panelists are George Glavis, P.E., the U.S. Department of State; D. Scott Fisher, P.E., State Farm Insurance Co., James Woods, Ph.D., P.E., The Building Diagnostics Research Institute Inc.; Richard Bielen, P.E., National Fire Protection Association; and Ronald Vallort, P.E., Ron Vallort and Associates, Ltd.

The second panel discusses the application and integration of architectural and engineering principles and

practices to achieve the levels of acceptable risks and benefits defined by the risk management approach. Panelists are Stuart Knoop, Oudens + Knoop Architects; Andrew Persily, Ph.D., the National Institute of Standards and Technology; William Coad, P.E., Coad Engineering Enterprises; Patrick Spahn, P.E., and Lawrence Spielvogel, P.E., consulting engineer.

For more information regarding presenters, the broadcast program, and resources, visit www.ashrae.org/homelandsecuritybroadcast2 or call 678-539-1139.

ASHRAE Looks to Develop Water Conservation Standard

ASHRAE – Requirements regarding the amount of water used to operate HVAC, plumbing and irrigation systems would be established under a proposed standard from the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

"Water is the most important renewable resource on this planet," Terry Townsend, P.E., ASHRAE president, said. "To protect this source of life, we must reduce the demand and consumption that the built environment is placing on available water sources. It is our intention to develop a standard that can be used globally to conserve this valuable resource."

The proposed standard, *Conservation of Water Use in Building, Site and Mechanical Systems*, would provide baseline requirements for the design of buildings, landscapes, and mechanical systems that minimize the volume of water required to operate HVAC systems, plumbing systems, and irrigation systems.

The standard would address water use efficiency through water conservation measures implemented during design and construction of residential, commercial, institutional and industrial projects. It would not apply to storm water management.

The proposed title, purpose and scope of the standard are open for public comment until Nov. 20. Also, members are being sought to serve on a committee to write the standard.

To join the committee or comment on the draft title, purpose and scope, visit the standards actions for Oct. 6 at www.ashrae.org/publicreviews.