



THERMOGRAM



The New Jersey Chapter of ASHRAE Newsletter

www.njashrae.com

September 2010

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ASHRAE

*Modeling a Sustainable
World*

NJ Chapter of ASHRAE Meeting

Tuesday, October 5th, 2010
RESEARCH & PROMOTION NIGHT

Renaissance Woodbridge Hotel
515 US Highway 1 South
Iselin, New Jersey

*“An Introduction to HVAC’s
VRF Technology”*

Presented by: **Bob Skorupsky**
Mitsubishi Electric



Cost: Members \$50.00
Non-members \$55.00
YEA members \$25.00
Students \$5.00

Cocktails: 5:30 pm
Dinner and Speaker: 6:30 pm

**RSVP: REPLY@NJASHRAE.COM or
Call 732-218-7463**



Congratulations to ASHRAE President
Lynn Bellenger of Region I who was installed
as the first female ASHRAE President



COMMITTEES
(continued)

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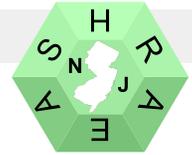
Calendar of Upcoming Meetings



- November 2, 2010 Jim Newman - Newman Consulting Group (Distinguished Lecturer) Past President’s & History Night *Green Practices & ASHRAE Standards 90.1 & 62.1*
- December 7, 2010 Membership Night DDC round table, speakers TBA
- January 12, 2011 Joint meeting with MCA and ASPE, Speaker and Topic TBA
- February 1, 2011 Dave Halko - Emerson Student & YEA Night *Refrigeration*
- March 1, 2011 Scott Casado Research & Promotion Night *Vibration Isolation - High Wind Areas*
- April 5, 2011 Dennis Stanke - Trane *Standard 62.1*
- May 3, 2011 Jerry Sipes - Price HVAC Installation of New Officers *Displacement Ventilation*
- June 2011 Spouse’s Night

www.njashrae.com
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732-218-7463

ASHRAE Society
Toll Free Number
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October Dinner Menu

Green Seasonal Salad

Three Bean Salad

Chicken Waldorf Salad

**Your choice of* Chicken Francaise

or

Penne Vodka

Vegetables and Potato

Assorted Pastries & Cake

Iced Tea, Coffee, Hot Tea

**Vegetarian selection available*

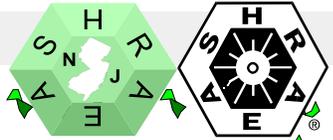
Meeting Speaker Biography: Bob Skorupsky

Bob Skorupsky has been the Northeast Zone City Multi-Sales and Engineering Manager/Commercial Project Manager for Mitsubishi Electric HVAC since 2004 supporting and specifying VRF product with specifying engineers, architects, owners, developers and distribution.

He spent 28 years in a family-owned business as president of Trico Air Conditioning Inc., a commercial Refrigeration/HVAC contractor company in New Brunswick, NJ. He also worked as Zone Manager for Friedrich Air Conditioning and was Senior Application Engineer and District Sales Manager of Copeland Corporation for OEM refrigeration.

Bob has a BSME from Newark College of Engineering and an MSM from the New Jersey Institute of Technology and resides in New Brunswick, NJ.





Green ASHRAE News: ASHRAE President Testifies on Optimizing Federal Building Efficiency at Congressional Subcommittee

The impact of the U.S. buildings is surprisingly large, with CO₂ emissions alone approximately equaling the combined emissions of Japan, France and the United Kingdom for transportation, industry and buildings.

The U.S. Federal government is the nation's single largest energy consumer and greenhouse gas emitter, and in Congress's efforts to seek ways of improving the energy efficiency of federal buildings, the U.S. House Subcommittee on Government Management, Organization and Procurement held a hearing on Wednesday, July 21 to examine the federal government's role in greening buildings.

Testifying at the hearing, ASHRAE President Lynn G. Bellenger said that, "over the years significant progress has been made in the federal, commercial and residential sectors, and we are poised to embark on a new era of energy efficiency and taxpayer dollar stewardship that will lead us to net-zero-energy buildings.

"Going forward, maximizing building efficiency and sustainability will require a fundamental shift in how buildings have been approached - from design to operation. Working together toward a whole building approach that fully considers how each system and building component will interact - instead of each discipline focusing on their own area of expertise - will be an essential element of ensuring that taxpayer dollars are well-spent."

ASHRAE has long-partnered with the federal government on efforts to improve building efficiency, and ANSI/ASHRAE/IES Standard 90.1, *Energy Standard for Buildings Except Low-Rise Residential*, now serves as both a federal building standard and the national reference for state-adopted commercial building codes. During the hearing, Bellenger highlighted several efforts and initiatives that ASHRAE is engaging in that will help lead to increased building efficiency, including ASHRAE's:

- Advanced Energy Design Guides for achieving 30 percent savings over Standard 90.1-1999, the forthcoming Guides for achieving 50 percent savings, followed by Guides for achieving net-zero-energy consumption (www.ashrae.org/freeaedg)
- Certification programs for high-performance building design, building energy modeling, healthcare facility design, commissioning process and operations and performance management professionals (www.ashrae.org/certification)
- Building Energy Quotient (Building EQ) labeling program that includes both As Designed (asset) and In Operation (operational) ratings for all building types, except residential. Building EQ allows the general public, tenants, building owners, prospective owners, operations and maintenance personnel and others to quickly and easily view how energy efficient a building is in operation compared to its design through an easily understood letter grade and color scale (www.buildingeq.com)
- Standard 189.1, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential* - the first code-intended green building standard in the United States. Published by ASHRAE in collaboration with IES and USGBC, Standard 189.1 also serves as a jurisdictional compliance option of the International Green Construction Code (IgCC), published by the International Code Council. (www.ashrae.org/greenstandard)

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Raising Energy Efficiency Highlighted at ASHRAE Meeting

Raising efficiency to new levels was the focus of the ASHRAE 2010 Annual Conference held in Albuquerque, N.M. Highlights of the meeting included ASHRAE's receipt of ENERGY STAR® for its Headquarters in Atlanta, celebration of the 35th anniversary of publication of the energy conservation standard now known as Standard 90.1 and an update on the ASHRAE Building Energy Quotient program.

Some 1,456 attendees took part in the conference held June 26-30 in Albuquerque.

A highlight of the meeting was induction of the Society's first female president, Lynn G. Bellenger, P.E., Fellow ASHRAE, partner, Pathfinder Engineers & Architects, Rochester, N.Y. Her presidential theme focuses on "Modeling a Sustainable World," drawing attention to modeling tools that enable us to create and refine our vision of a building. To read her presidential address, visit: www.ashrae.org/bellenger.

Another highlight was presentation of ENERGY STAR by Jean Lupinacci, chief of the ENERGY STAR Commercial & Industrial Branch, recognizing energy savings following the 2008 renovation of ASHRAE Headquarters. To earn ENERGY STAR, ASHRAE, among other steps, reduced its estimated annual energy usage by more than 32.5 percent through enhancements to the building envelope and use of the following systems: dedicated outside air system with energy recovery, ground-source heat pumps, and mini-split systems with heat recovery.

Together, ASHRAE and the Illuminating Engineering Society of North America celebrated the 35th anniversary of publication of its energy conservation standard, now known as ANSI/ASHRAE/IES Standard 90.1, *Energy Standard for Buildings Except Low-Rise Residential Buildings*. Since being developed in response to the energy crisis in the 1970s, Standard 90 has become the basis for building codes, and the standard for building design and construction throughout the United States.

It was announced that ASHRAE, for a third year, had met its Research Promotion fundraising goal, hitting the \$2,075,000 mark. The figure represents a 2 percent increase over last year. ASHRAE's Research program has supported more than 700 projects in the last 50 years, addressing areas such as indoor air quality, refrigeration, and energy efficiency.

Conference attendees also received an update on the Building EQ program, which currently is a pilot program designed to encourage the building industry to cut energy use and costs. Seventeen provisional assessors have spent the last couple of months assessing energy use, which is then provided in an easily understood scale to convey a building's energy use in comparison to similar buildings, occupancy types and climate zone. For more information on the program, visit www.buildingeq.com.

Top ASHRAE Learning Institute courses included *Understanding Standard 189.1 for High-Performance Green Buildings* and courses related to healthcare facility design.

Top-attended technical program sessions included a first look at proposed Standard 90.1-2010, retrofitting HVAC in older buildings for higher efficiency, evaluating the performance of existing buildings, evaporative cooling in high and dry climates, natural refrigerants, BIM load calculations, retrocommissioning, HVAC equipment needs for net-zero-energy homes, energy efficiency through building controls and building energy simulation. All of these sessions and others are available in the Albuquerque Virtual Conference at www.ashrae.org/NewMexicoVirtual.

Top-selling publications at the meeting were newly published standards, ANSI/ASHRAE Standard 62.2 -2010, *Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings*, and ANSI/ASHRAE Standard 62.1-2010, *Ventilation for Acceptable Indoor Air Quality*; the newly published *Performance Measurement Protocols for Commercial Buildings*, developed in collaboration with the Chartered Institution of Building Service Engineers (CIBSE) and the U.S. Green Building Council (USGBC); Standard 189.1, *Standard for the Design of High Performance, Green Buildings Except Low-Rise Residential Buildings*; and the ASHRAE Handbook Online. ASHRAE also debuted a new online bookstore on ASHRAE.org designed to make finding products and publications quicker and easier.

As part of the Conference, the Albuquerque Host Committee is working to bring hope to a local nonprofit to leave behind a lasting sustainable footprint in the cities where the Society's Conferences are held. Casa Esperanza, or House of Hope, works with area hospitals to provide appropriate housing and emotional support for patients and their families who reside temporarily in Albuquerque while receiving treatment. (cont'd next page)



ASHRAE, NEMA Partner on Standard to Create Facility Smart Grid Model



We may not be traveling in flying cars or have talking robot maids as shown in the television cartoon “The Jetsons,” but homes, commercial and institutional buildings and industrial facilities are about to get a lot “smarter” when it comes to electrical use.

Under a national Smart Grid effort, ASHRAE and the National Electrical Manufacturers Association (NEMA) are jointly developing a standard that would provide a common basis for electrical energy consumers to describe, manage and communicate about electrical energy consumptions and forecasts.

A kickoff meeting to begin work on the proposed standard is taking place Aug. 30-31 at ASHRAE Headquarters in Atlanta.

ASHRAE/NEMA Standard 201P, *Facility Smart Grid Information Model*, will define an object-oriented information model to enable appliances and control systems in homes, buildings and industrial facilities to manage electrical loads and generation sources in response to communication with a “smart” electrical grid and to communicate information about those electrical loads to utility and other electrical service providers.

“Smart grids lead to smart meters lead to smart systems,” ASHRAE President Lynn G. Bellenger, P.E., said. “As the smart grid adjusts to suit load distribution and maintain power quality and reliability, one of the steps will be to communicate with building metering systems which, in turn, will communicate with building systems and equipment. This ties into demand response control to reduce peak demand. One day in the future, we likely will have real-time pricing with dramatic differences in power costs dependent upon the time of day or grid load.”

“NEMA and the members of their smart grid and high-performance buildings councils see the creation of this standard as a strategic element in driving development of a nation-wide smart electrical grid while increasing energy efficiency, occupant productivity and cost-effectiveness in safe secure buildings,” Jim Lewis, manager, High Performance Buildings, NEMA, said.

The standard is part of ASHRAE’s supporting efforts for the Smart Grid Interoperability Panel, a public-private partnership initiated by the National Institute of Standards and Technology to speed development of interoperability and cyber security standards for a nationwide smart electric power grid.

The proposed ASHRAE/NEMA standard will coordinate with work by the North American Energy Standards Board to develop a basic energy usage data model standard and create a facilities data model that provides additional energy usage data elements for commercial and industrial buildings. This includes lighting, heating, HVAC&R and other electrical loads.



Raising Energy Efficiency Highlighted at ASHRAE Meeting (cont’d from previous page)

ASHRAE members are helping replace the organization’s central boiler, which charges a storage tank, with a new tank containing a solar heating coil. Solar collectors are being placed on the roof and provide the primary means of charging the storage tank. A new boiler is being installed to make up any capacity deficiencies, such as a night. All necessary design services are provided by local ASHRAE members, who are soliciting equipment and labor donations from manufacturer representative and contractors.

ASHRAE holds its 2011 Winter Conference, Jan. 29-Feb. 2 in Las Vegas, accompanied by the AHR Expo, Jan. 31-Feb. 2. For more information, visit www.ashrae.org/lasvegas.



ASHRAE Vice President Testifies at DOE Hearing on Sustainable Design Standards



A newly published high-performance green standard would provide a solid foundation on which the federal government could build its efforts to make its buildings more sustainable, according to testimony today from ASHRAE.

The U.S. Department of Energy held a hearing Wednesday, July 27, on the notice of proposed rulemaking on energy efficiency and sustainable design standards for new federal buildings and major renovations of federal buildings.

Testifying at the hearing, ASHRAE Vice President Ross Montgomery encouraged the DOE's Federal Energy Management Program to reference ANSI/ASHRAE/USGBC/IES Standard 189.1, *Standard for the Design of High Performance, Green Buildings Except Low-Rise Residential Buildings*, compliance option of the International Green Construction Code (IGCC) as a means of meeting the requirements in the rulemaking.

"Standard 189.1 represents a revolutionary new step for building standards, as it provides a long-needed green building foundation for those who strive to design, build and operate green buildings," Montgomery said. "From site location to energy use and recycling, this standard will set the foundation for green buildings through its adoption into local codes. ASHRAE strongly believes that Standard 189.1 can help meet many of the Federal government's building needs."

Standard 189.1 was published in January 2010 and serves as a jurisdictional compliance option of the IGCC being developed by the International Code Council, the American Institute of Architects and ASTM International. ASHRAE's partners in developing 189.1 are the Illuminating Engineering society of North America and the U.S. Green Building Council.

Standard 189.1 is the first code-intended green building standard in the United States. It covers key topic areas similar to green building rating systems, including site sustainability, water use efficiency, energy efficiency, indoor environmental quality and the building's impact on the atmosphere, materials and resources. For complete information on the standard, including a readable copy, visit www.ashrae.org/greenstandard.

Important Information about Codes: NJ Adopts New Set of Codes

New Jersey has adopted a new set of codes. Visit the NJ DCA website for a listing of the Adopted Codes and Standards using this link: <http://www.state.nj.us/dca/divisions/codes/codereg/>

Included on the NJ DCA Website is information regarding the six month grace period:

Grace Period

For a period of six months following the operative date of a subcode revision, applicants may submit a complete permit application, including all prior approvals, to be reviewed under the code in force immediately preceding the subcode revision. Provided that the application is complete, the construction official and applicable subcode officials shall perform the plan review and issue construction permit(s) based on the code in force immediately prior to the operative date of the subcode revision. This grace period shall apply only to revisions of subcodes.



Encouraging Sustainable Design Worldwide: ASHRAE Standards Translated

Tools to help further the fast growing green market in South America have been developed by ASHRAE and partnering organizations in that region.

Two ASHRAE standards regarding energy efficiency and sustainability recently were translated into Spanish and Portuguese.

“South America is very progressive and aggressive when it comes to green building,” Ross Montgomery, ASHRAE vice president who works closely with members in South America, said. “There are many green building engineering firms, contractors and vendors who are working to deliver green building design and green technology products to the marketplace. These translations, along with the cooperation between ASHRAE and other building industry groups in the region, provide new tools to help further green building technologies.”

ASHRAE’s Argentina Chapter recently translated ANSI/ASHRAE/USGBC/IES Standard 189.1-2009, *Standard for the Design of High Performance, Green Buildings Except Low-Rise Residential Buildings*, into Spanish.

The Argentina Chapter, along with other groups including the Asociación Argentina del Frío (AAF), are working to increase the market for green buildings in the country, notes Florentino Roson, past president of the Argentina Chapter, vice president of AAF and a green building controls expert in Argentina.

“Making our society aware of the benefits of sustainable buildings is one of our most important priorities,” he said. “The translation was spurred by our desire to save energy through responsible building. Although application of the standard is not yet mandatory in Argentina, we believe Standard 189.1 will be used as a benchmark in the design, building and maintenance of sustainable buildings in the near future.”

On Sept. 2 and 3, the Argentina Chapter hosted a seminar on Standard 189.1.

In addition, ASHRAE also worked with the Green Building Council Brasil on the Portuguese translation of Standard 90.1-2007, *Energy Standard for Buildings Except Low-Rise Residential Buildings*. The Council wanted a translation of the standard for use in the Leadership in Energy and Environmental Design (LEED®) rating program in that country.

“We will use Standard 90.1 to guide energy efficient practices in the Brazilian civil construction industry,” Felipe Faria, operational manager, the Green Building Council Brasil, said. “The standard is used by the engineers in Brazil, but the language is still a barrier for the dissemination of this knowledge. With this translation, we believe this barrier will disappear and the professionals can project buildings suitable in our current scenario of environment concern in terms of energy efficiency, low operational costs, CO² emission reduction, indoor air quality, etc.”

In addition, ASHRAE past president Kent Peterson visited Brasil earlier this month to support ASHRAE chapters and the Society’s work with ABRAVA, SMACNA and Green Building Council Brasil.

“The building industry groups in South America have a common goal - to encourage green building,” Montgomery said. “We strive to work together to continue the synergy of sustainability.”

Both translations are available for purchase from ASHRAE. To order, contact ASHRAE Customer Service at 1-800-527-4723, fax 404-321-5478, or visit www.ashrae.org/bookstore.



Members First Newsletter Link

To access the September issue of the Members First Newsletter please click on the following link: http://www.ashrae.org/docLib/20100902_MembersFirstSEPT10.pdf



Standard 90.1: Setting the Energy Foundation in Buildings for 35 Years

While high-performance buildings are the obvious choice in today's sustainability-focused industry, it was only a short 35 years ago that the first standard for energy efficiency was established, setting the engineering engine of sustainability into motion.

This year marks the 35th anniversary of publication of the ASHRAE/IES energy standard, now known as ANSI/ASHRAE/IES Standard 90.1, *Energy Standard for Buildings Except Low-Rise Residential Buildings*. Since being developed in response to the energy crisis in the 1970s, Standard 90.1 has become the basis for building codes, and the standard for building design and construction throughout the United States.

The anniversary of the standard was celebrated last week at ASHRAE's 2010 Annual Conference. For more information about the standard, visit www.ashrae.org/90.1history.

"Since its inception in 1975, Standard 90.1 has been widely adopted as the benchmark for energy efficiency in buildings," ASHRAE President Lynn G. Bellenger said. "It has set the foundation for energy efficiency in buildings in the United States and we expect that to continue internationally. No doubt, 90.1 has been a game changer in the building industry, and that influence is even greater today than it was 35 years ago."

IES agreed, saying it is pleased and proud of its long-standing association with Standard 90.1, which began when IES provided technical support for lighting to ASHRAE Standard 90-1975. By the 1980 version of the standard the IES name was associated with the standard as a co-sponsor, a role that was formalized in a joint sponsorship agreement dated June 25, 1986. That agreement to jointly sponsor energy standards has continued to the present. It states that energy conservation standards must address all elements of the building that affect energy use and recognizes that ASHRAE has the primary expertise for HVAC&R and that IES has the primary expertise in illumination.

"Congratulations from the Illuminating Engineering Society of North America on this 35th anniversary of the standard," Rita Harrold, IES director of technology, said. "It has been a wonderful personal experience for me to be involved with many of the 90.1 committees throughout this period of time in various roles - as an IES volunteer supporter in the early years and more recently as an IES staff liaison. Each committee has brought new information, new methodologies and new perspectives to revisions of the standard. Each committee has faced a series of different challenges in developing a consensus standard that achieves energy savings while remaining cognizant of the needs of users for a quality environment. Its success has been in allowing an open dialogue where technical opinions are heard and considered. The standard will continue to explore new strategies to save energy and IES will continue to fully support those endeavors."

How has the standard contributed to reducing energy use? Figures show that, without consideration of plug and process loads, a building built according to Standard 90.1-2007 is 35 percent more energy efficient than one built in compliance with Standards 90-75 and 90A-1980. One built in accordance with Standard 90.1-2010, to be released later this year, is expected to use less than half the energy per floor area than one built to Standards 90-75 and 90A-1980.

"Between the launch of Standard 90 in 1975 and the 2004 version, we reduced building energy use by almost 33 percent," Bellenger noted. "We are striving to reduce that by a further 30 percent in just six years from the 2004 standard to the 2010 version, and that is a huge challenge."

Mick Schwedler, immediate past chair of the Standard 90.1 committee, stated, "Using analyses performed by a third party, the energy reduction from 90.1-2004 to 90.1-2010 is currently estimated to be between 21.7 and 30.9 percent, depending on modeling assumptions. While the range is large, assumptions such as ventilation rates and which loads to include in the final percentage calculation make a big difference. In addition, some of the energy-saving addenda approved by the ASHRAE Board of Directors at the 2010 Annual Conference have yet to be modeled, with final estimates expected in the fall. The volunteers on the committee have done an amazing job."

Work on the standard - then known as the *Design and Evaluation Criteria for Energy Conservation in Buildings* - began in 1973. The U.S. government's National Bureau of Standards had previously started on a standard at the request of National Conference of States on Building Codes and Standards (NCSBCS). In 1974, NCSBCS asked ASHRAE to assume responsibility.

The goal of ASHRAE was to provide a method of designing the energy consuming systems in a building and to evaluate these systems so that the overall energy consumption could be reduced to a minimum while still maintaining occupant comfort. (cont'd next page)



ASHRAE Encourages States to Meet Current Building Energy Codes

As the developer of the nation's first standard for energy efficiency in buildings, ASHRAE applauds a recent announcement by the U.S. Department of Energy regarding funding to states to implement the most current energy codes.

This week, the U.S. Department of Energy (DOE) announced it is seeking proposals to support activities related to the adoption and implementation of the most current building energy codes. Proposals must address activities to adopt the target codes, which includes ANSI/ASHRAE/IESNA Standard 90.1-2007, *Energy Standard for Buildings Except Low-Rise Residential Buildings*, training activities or activities that advance the state's level of compliance with state building codes. States are allowed to partner with technical and other organizations, such as ASHRAE, and consultants in their proposals.

As of June 2010, the building codes of 14 states and four territories do not meet the requirements in 90.1-2007.

A total of \$5 million is available to be awarded for up to 20 states (only one award per state). Award sizes will vary with a maximum of \$250,000 available for each award.

"ASHRAE is committed to continually improving building energy performance, so we are pleased with this call from the Department of Energy encouraging states to meet the target codes, which includes the ASHRAE/IES Standard 90.1-2007," ASHRAE President Lynn G. Bellenger said. "To encourage energy conservation in buildings, we must always strive toward higher efficiencies. Later this year, ASHRAE and IES will release the 2010 version of Standard 90.1. The revised version implements a significant reduction in energy consumption over the 2004 standard."

States are encouraged to express initial interest by Aug. 17 by contacting Bryan Colley at the Pacific Northwest National Laboratory: bryan.colley@pnl.gov or 509-375-2585.

The call to meet current building codes comes as ASHRAE and IES celebrate the 35th anniversary of publication of Standard 90.1. Since being developed in response to the energy crisis in the 1970s, Standard 90.1 has become the basis for building codes, and the standard for building design and construction throughout the United States.



Standard 90.1: Setting the Energy Foundation in Buildings for 35 Years (cont'd from previous page)

Since being published in 1975, the standard has been republished six times, evolving as input from the building community was given and as technology changed. Some 38 states currently have building codes that meet or exceed a version of 90.1.



**Call
for
Papers**

ASHRAE's 2011 Annual Conference Seeks Papers on Alternative Technologies, Engineering Tools, Net-Zero Buildings

Papers addressing advances in alternative technologies and net-zero buildings, as well as HVAC&R fundamentals and commissioning are being sought for ASHRAE's 2011 Annual Conference in Montreal, Quebec, Canada.

The deadline for paper submissions was Sept. 17, 2010.

The 2011 Annual Conference takes place June 25-29. The technical program includes tracks that push the engineering envelope.

The Alternative Technologies track sought papers on photovoltaic (PV), geothermal, wind power and variable-refrigerant-volume (VRV) systems, solar and other technologies, as well as how these systems affect the first cost and operating cost of the building. Papers describing the science behind emerging technologies incorporated into net-zero-energy (NZEB) design are sought.

The Net-Zero Buildings track sought papers that examine NZEB design, cost to achieve these buildings, existing NZEBs and operational and maintenance issues and costs. Case studies illustrate how to achieve NZEB in designs are sought, also.

The Engineering Tools track sought papers that address the range of different energy modeling and building information modeling tools available, their use and specific applications and integrated approaches. Papers from owner or architect perspectives or case studies that illustrate modeling techniques were requested.

In addition, papers were sought for tracks on Commissioning, HVAC Systems, HVAC Fundamentals and Applications, Professional Skills and Refrigeration.

The conference is expected to attract some 1,500 attendees from 60 countries. The technical program takes place Sunday, June 26-Wednesday, June 29, and includes paper presentations as well as non-paper presentations. Approved papers are published in ASHRAE Transactions.

ASHRAE Launches iPhone App

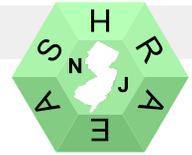
ASHRAE has made calculating ventilation rates a little easier with a new iPhone application specifically for an interactive calculation spreadsheet related to ASHRAE's ventilation standard.

Developed for Apple's iPhone, iPod touch and iPad, the ASHRAE Standard 62.1 app allows for convenient calculations while in the field, performing the outdoor air calculations found in the Ventilation Rate Procedure and the interactive 62M2Calc spreadsheets contained in the ASHRAE User's Manual for Standard 62.1, Ventilation for Acceptable Indoor Air Quality.

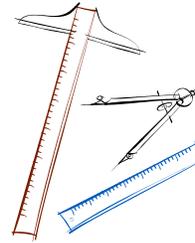
The ASHRAE 62.1 app can also be used to determine 62.1 compliance of simple ventilation systems (single zone, 100% outdoor air and changeover-bypass VAV), as well as more complex ventilation systems (single-path, multiple zone recirculating). Other benefits include the ability to store and access multiple projects within the app and to email inputs and results for use in a spreadsheet at a later time.

The ASHRAE 62.1 app can be purchased through Apple's online iPhone App Store for \$19.99. The app applies to the calculations and spreadsheet in the 2007 standard and User's Manual. When the documents are updated to correspond with new editions of Standard 62.1, purchasers will receive a free upgrade.





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- ◆ Business Card ad in 9 Newsletters (next newsletter is October)

COST: \$100

Website Ad Includes:

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- ◆ Link to your website

COST: \$300

Newsletter and Website Includes:

- ◆ Business card ad in 9 newsletters
- ◆ Business card ad on website for 1 year
- ◆ Link to your website

COST: \$350

Do you want to become more involved with NJ ASHRAE ?

There are many ways you can participate with NJ ASHRAE. Look at the left hand margins of pages 1 and 2 which list chapter officers, committees, and committee chairs. Visit the NJ ASHRAE website for more information about what each committee does.



Contact any officer or committee chair for additional information.