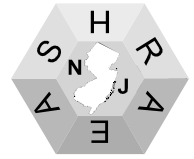




THERMOGRAM



The New Jersey Chapter of ASHRAE Newsletter

WWW.NJASHRAE.COM

NOVEMBER 2006

REPLY@NJASHRAE.COM

CHAPTER OFFICERS

PRESIDENT

JORI FAHRENFELD
609-520-1600

PRESIDENT - ELECT

PETER FRANGISKOU P.E.
201-945-9999

VICE-PRESIDENT

MARK RICHTER P.E.
212-354-5656

TREASURER

MARK MCLEOD
973-633-7730

SECRETARY

JANET SHIPTON
732-380-1100

BD. OF GOVERNORS

LINDA CAROLAN
908-663-2189

RUTH GIACOBBE
732-968-4850

YOGESH SHAH P.E.
201-447-6400

CHRIS PHELAN
973-777-6700

RUSS GRAHAM
908-663-2189

COMMITTEES

MEMBERSHIP

CHRIS PHELAN
973-777-6700

RESEARCH PROMOTION

YOGESH SHAH P.E.
201-447-6400

STUDENT ACTIVITIES

PETER FRANGISKOU P.E.
201-945-9999

REFRIGERATION

JIM CASEY

ROSTER/DIRECTORY

OPEN

DECEMBER 7, 2006

WOODBIDGE SHERATON ROUTE 1, GILL LANE, ISELIN, NJ

RESEARCH PROMOTION NIGHT

**COST \$50.00 MEMBERS, \$55.00 GUESTS &
\$5.00 STUDENT**

PRESENT A MECHANICAL SLIDE RULE AT REGISTRATION AND RECEIVE
A \$5 DISCOUNT OFF YOUR DINNER REGISTRATION FEE.

RSVP TO:

**REPLY@NJASHRAE.COM
NO LATER THAN DEC 6, 2006**

4:30 BOARD OF GOVERNORS MEETING

5:30 GUEST REGISTRATION / COCKTAIL HOUR

6:30 CHAPTER ANNOUNCEMENTS

7:15 DINNER AND PRESENTATION

DINNER TOPIC:

“BUILDING ENERGY EFFICIENCY”

PRESENTED BY:

**MR. JEFFREY GRANT P.E., C.E.M., C.E.P.
MACK CALI REALTY CORPORATION**

The presentation topic addresses utilizing building electricity load profiles to improve building operating efficiency. As part of the presentation, the challenges and benefits of bringing tangible understanding of facility electricity use to bear on operating decisions will be illustrated as well as the impacts of electricity tariffs on the bottom line operating decision costs.

IMPORTANT NOTICE

WE HAVE ELIMINATED OUR TOLL FREE 800 NUMBER. IF YOU NEED TO CONTACT THE CHAPTER, EMAIL WWW.REPLY@NJASHRAE.COM OR CONTACT ANY OF THE CHAPTER OFFICERS OR COMMITTEE CHAIRS.

COMMITTEES
(CONTINUED)

CTTC – TEGA

MARK RICHTER P.E.
212-354-5656

NEWSLETTER ADS

OPEN

NEWSLETTER EDITOR

MARK RICHTER P.E.
212-354-5656

NOMINATING

RUSS GRAHAM
908-663-2189

PROGRAM

PETER FRANGISKOU P.E.
201-945-9999

SEMINARS

MARK RICHTER P.E.
212-354-5656

TECHNICAL SESSIONS

PETER FRANGISKOU P.E.
201-945-9999

SCHOLARSHIP

RUSS GRAHAM
908-663-2189

SPECIAL EVENTS/GOLF OUTING

CHRIS PHELAN
973-777-6700

AUDIT

LINDA CAROLAN
908-663-2189

BUDGET

MARK RICHTER
212-354-5656

HISTORIAN

BOB DALY

ATTENDANCE/RECEPTION

MARK MCLEOD
973-633-7730

HONORS & AWARDS

JEFFREY GRANT
908-272-6755

WEB PAGE DESIGN

LINDA CAROLAN
908-663-2189

CHAPTER BYLAWS

LINDA CAROLAN
908-663-2180

WWW.NJASHRAE.COM
WWW.REPLY@NJASHRAE.COM

ASHRAE ATLANTA
TOLL FREE NUMBER
1-(800)-527-4723

• **PRESIDENT'S MESSAGE**

Please join us for our monthly meetings. NJ ASHRAE meetings are held the first Thursday of the month at the Sheraton Woodbridge on Route 1. There are excellent networking opportunities with engineers, contractors, manufacturers' reps, engineering students, and others involved with HVAC&R. There is always a presentation of a topic of interest at the meeting – whether it's a review of noise criteria for auditoria, geothermal applications, or heatwheel technology. Some presentations qualify for PDH credits, which are useful for those registered in some other states to keep up their P.E. licensure. We are looking to increase participation by our younger NJ ASHRAE members as part of YEA (Young Engineers in ASHRAE). There is a wide range of involvement opportunities for members in the various stages of your membership - as a new member or a long-term member – there's a place here for you!

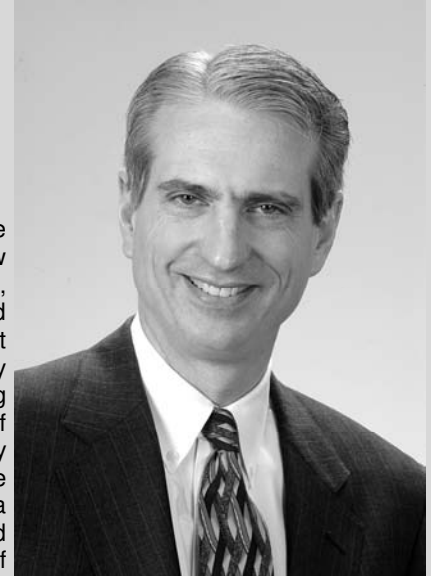
Hope to see you at the next NJ ASHRAE meeting.

Sincerely,
Jori Fahrenfeld, *Chapter President*

NOVEMBER SPEAKERS BIOGRAPHY

Jeffrey Grant, PE, CEM, CEP

Director of Corporate Energy
Mack-Cali Realty Corporation
11 Commerce Drive
Cranford, NJ 07016



Mr. Jeffrey Grant is the Director of Corporate Energy with Mack-Cali Realty Corp., a New Jersey based real estate investment trust, where he oversees developing and implementing retail energy procurement programs and other strategic energy efficiency infrastructure programs for new and existing facilities. Mr. Grant has over 25 years of experience in HVAC systems design, energy conversion systems design and energy use analysis. At Mack-Cali, he has implemented a corporate energy program for procuring and managing contracts for over 60 megawatts of power for Mack-Cali's DC, New York and New Jersey office facilities. Also as part of this program he implemented the EPA Energy Star Building benchmarking procedures that resulted in seven Energy Star Building labels for Mack-Cali properties in New York and New Jersey. In addition, he implements methods to reduce energy consumption through operations best practices and maximizes building efficiency by improving design requirements for new building systems.

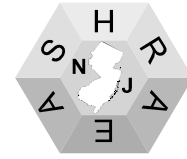
Mr. Grant is a past president of Energy Expo, Inc., the not-for-profit organization that produced energy related programs for the tri-state region; past president of the North Jersey Chapter of the American Society of Heating Refrigeration and Air Conditioning Engineers; and member of the New Jersey chapters of NAIOP, BOMA and the Association of Energy Engineers.

Mr. Grant is a past president of Energy Expo, Inc., the not-for-profit organization that produced energy related programs for the tri-state region; past president of the North Jersey Chapter of the American Society of Heating Refrigeration and Air Conditioning Engineers; and member of the New Jersey chapters of NAIOP, BOMA and the Association of Energy Engineers.

He has a BS in mechanical engineering from Tulane University and an MBA from Rutgers University. He is a professional engineer, a certified energy manager (CEM), and a certified energy procurement professional (CEP).



NJ ASHRAE 2006 – 2007
DINNER MEETING SCHEDULE



JANUARY 10, 2007
JOINT MEETING WITH MCA & ASPE
SPECIAL GUEST

FEBRUARY 1, 2007
MEMBERSHIP AND HISTORY NIGHT

COMPARISON OF ASHRAE NOISE CRITERION
MR. MATTHEW MURELLO, P.E.
LEWIS S. GOODFRIEND & ASSOCIATES

MARCH 1, 2007
AIR OUTLET DESIGN AND DISTRIBUTION
MR. PETER PETRACA
N.J. AIR PRODUCTS

APRIL 5, 2007
STUDENT NIGHT
CHILLED CEILING IN PARALLEL WITH DEDICATED OUTDOOR AIR SYSTEMS (DOAS)
ASHRAE DISTINGUISHED LECTURER
MR. STANLEY MUMMA, PHD

MAY 3, 2007
SCHOLARSHIP AWARD NIGHT

INSTALLATION OF OFFICERS
JOINT MEETING WITH N.J. USGBC
TBD

JUNE 7, 2007
SPOUSES NIGHT

2006-2007 PRESIDENTIAL AWARD OF EXCELLENCE (PAOE) SUMMARY

Chapter #	Chapter Name	Chapter Members/ students	Member Promotion	Student Activities	Research Promotion	CTTC	History	Chapter Operations	Chapter PAOE Totals
007	N.J.	831	0	0	0	0	25	280	305

ASHRAE Region 1 Executive Committee 2006-2007

<p>DRC - DIRECTOR & REGIONAL CHAIR Term: 2006-07-01 to 2009-06-30 Garry N. Myers Flack + Kurtz Inc. 73 Bonnie Way Allendale, NJ 07401 Phone:(B) 212-951-2815 Email: Garry.Myers @ ny.fk.com</p>	<p>ARC - ASSISTANT REGIONAL CHAIR & TREASURER Term: 2006-07-01 to 2007-06-30 Mike Circosta County Of Westchester 8 Bayberry Rd Armonk NY 10504-1005 Phone:(B) 914-995-2573 Email: mgc3 @ westchestergov.com</p>
<p>NOMINATING COMMITTEE MEMBER Gus Mastro University of Vermont 24 Tanglewood Drive Essex Junction, VT 05452 Phone:(B) 802-656-2186 Email: gmastro @ uvm.edu</p>	<p>NOMINATING COMMITTEE ALTERNATE Cliff Konitz 4 Dennis Road Wappingers Falls, NY 12590 Retired Phone:(H) 845-297-5864 Email: c.konitz @ verizon.net</p>
<p>RVC MEMBERSHIP PROMOTION Term: 2006-07-01 to 2007-06-30 Spencer Morasch Jersey Central Power Light Bldg. 3 331 Newman Springs Road Redbank, NJ 07701 Phone:(B) 732-212-4133 Email: smorasch @ firstenergycorp.com</p>	<p>RVC RESEARCH PROMOTION Term: 2006-07-01 to 2009-06-30 Ron Swarthout 921 Forest Road Endwell, NY 13790 Retired Phone: (607)-754-7590 Email: rwswarthou @ cs.com</p>
<p>RVC CHAPTER TECHNOLOGY TRANSFER Term: 2006-07-01 to 2009-06-30 Lee Loomis 74 Copper Woods Pittsford, New York 14534 Retired Phone: (H) (585) 248-0219 Email: leeloom @ aol.com</p>	<p>RVC STUDENT ACTIVITIES Term: 2004-07-01 to 2007-06-30 Emery Otruba Steam Plant Systems, Inc. 900 Commerce Drive Clifton Park, NY 12065 Phone:(B) 518-877-8805 Ext 16 Email: eotruba @ steamplantsystems.com</p>
<p>REGIONAL CHAPTER PROGRAMS Term: 2006-07-01 to 2007-06-30 Peter Oppelt R.F. Peck Co. 889 Atlantic Ave. Rochester, NY 14609 Phone:(B) 585-697-0836 x103 Fax: 585-697-0839 Email: poppelt @ rfpeck.com</p>	<p>REGIONAL REFRIGERATION CHAIR Term: 2006-07-01 to 2007-06-30 Wayne J Vanasse ARC Mechanical Contractors, Inc. PO Box 307 Wells River, VT 05081 Phone: (B) 802-222-9255 Fax: 802-222-5111 Email: wvanasse @ arcmech.com</p>
<p>REGIONAL HISTORIAN Term: 2006-07-01 to 2009-06-30 Phil Knowlton Knowlton Associates 191 Middle Haddam Road Portland, CT 06480 Phone: (B) 860-642-3970 Email: pbknowlton @ comcast.net</p>	<p>WEBMASTER & NEWSLETTER JUDGE Term:2001-07-01 to 2009-06-30 Mike Colwell Tri Cities Temperature Control 122 Park Avenue Binghamton, NY 13903 Phone: (B) 607-724-8282 Email: mike.colwell @ mail.ashrae.org</p>
<p>2006 CRC GENERAL CHAIR, Maine Chapter Term: 2006-07-01 to 2007-06-30 Jeff LaPierre, PE, LEED AP DiGiorgio Associates, Inc. 484 Maine Ave. Farmingdale, ME 04344 Phone: (207) 582-2400 Fax: (207) 582-8320 email: jlapiere @ dai-boston.com</p>	

HELP WANTED

Drafter/Estimator/Designer

A well established New Jersey family-owned Design-Build Mechanical Contracting & Service company is seeking a highly qualified Drafter / Designer / Estimator to join their expanding commercial and institutional contracting business.

Job Purpose:

Candidate will work closely with owners in preparing mechanical drawings, estimating material/equipment/sub-contracting costs, and designing new construction projects.

Minimal Requirements:

10-15 years in commercial/industrial HVAC industry, non-smoker, college degree, experience with CADD, project design, estimating & organizational skills for multiple projects, ability to work independently meeting specific time deadlines.

Duties:

- Prepares rough sketches and final as-built drawings.
- Onsite observations to validate mechanical layout.
- Organize and prioritize multiple projects.
- Solicit vendors and accurately make comparisons for material cost take-offs.
- Design drawings for new design/build projects.
- Maintains reliable data base on current and future work.

Skills/Qualifications:

CADD, Microsoft office suite, scheduling, self-motivated, vendor relationships, deadline-oriented, U.S. citizen, excellent teamwork, focused concentration, emotionally resilient, pleasant attitude.

Salary/Benefits: Competitive salary, comprehensive medical/dental/401k plan

Ken Celiano, Psy.D.

Dir. Personnel & Organizational Development

AJ Celiano, Inc. 460 Ludlow Ave

Cranford, NJ 07016 847-338-2199 (mobile)

www.ajceliano.com - kceliano@ajceliano.com



SCHOOR DEPALMA
Engineers and Consultants

Sr. HVAC Engineer for our Manalapan, New Jersey office

Schoor DePalma, one of the region's leading engineering and consulting firms, employs more than 1100 professionals from 22 office locations throughout New Jersey, Pennsylvania, New York, Florida, Arizona and Maryland.

Schoor DePalma is looking for a senior HVAC engineer to manage an HVAC group as part of an MEP Department in the Manalapan, NJ office. 10+ years of HVAC building design experience required and a NJ PE license. LEED accredited a plus. Excellent growth opportunity in a growing department.

HELP WANTED

WANTED – TOP NOTCH ENGINEERS / TECHNICIANS!!

Specializing in hands-on field testing and evaluation of HVAC systems and site utilities, the Dome-Tech Group provides engineering services, energy consulting and project development and implementation to optimize building performance, reduce energy expenses and improve indoor environmental quality. Dome-Tech is actively hiring for the following challenging career positions:

Commissioning Field Technician / Engineer

The ideal candidate must have 5+ years of field related experience with HVAC systems such as air/water balancing, system start-up and commissioning, service/maintenance, operations and troubleshooting. Experience conducting functional tests of chillers, boilers, AHUs, VAVs and other HVAC equipment required. An engineering or technology degree is desired.

Energy Engineer

Dome-Tech Energy Advisors is seeking qualified energy engineers to support demand for its energy consulting services. The ideal candidate will possess either a BSME or BSEE (PE, CEM desired) with experience in energy auditing, project screening and energy engineering.

Project Engineer

Dome-Tech Energy Solutions (DES) is seeking qualified project engineers to support the growing demand for our turnkey design/build services. The ideal candidate will possess a BSME (PE, CEM desired) and mechanical design experience with central plant utility systems (chilled water & steam). Candidate must have design experience in heating / cooling load calculations, pipe sizing and pressure drop calculations, combined heat and power analysis, and energy conservation measures, including life cycle cost analysis.

Sr. Project Engineer – Pump Systems

Dome-Tech Energy Solutions (DES) is seeking a qualified project engineer to support the growing demand for pump system projects for our municipal and utility customers. The ideal candidate will possess a BSME and have experience identifying and analyzing root causes of pump system degradation or failure. Candidate must be able to identify opportunities to improve pump system performance (repair, upgrade, replace) as part of energy conservation management program. Experience with numerous pumps / pumping system designs is essential – utility, HVAC and process pumps.

Salary / Benefits: Competitive salary commensurate with experience, medical/dental benefits, 401K, flexible spending account, paid vacation and holidays.

Please email resumes to recruiting@dome-tech.com or fax to 732-590-0129.

Joe Martino, Technical Staffing

Phone: (732) 590-0122, ext. 133

Fax: (732) 590-0129

E-mail: recruiting@dome-tech.com

Website: www.dome-tech.com

Statements made in this publication are not expressions of the Society or of the Chapter and may not be reproduced without permission of the chapter.

SOCIETY NEWS.....

Enhanced Building Security Satellite Broadcast

By now you have received information on the upcoming satellite broadcast entitled "**Multiple Benefits Solutions for Enhanced Building Security**" scheduled for November 14th. This is a great opportunity for your members, and potential future members, to learn about a number of strategies to improve building security while also increasing energy efficiency, improving indoor air quality and perhaps realize other benefits as well. I am requesting that you publicize the event among your members and professional community. Please visit the following website for more details:, information on PDHs, a promotional flyer, etc: www.ashrae.org/homelandsecuritybroadcast2.

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.

###

SOCIETY NEWS.....

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.”

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.

SOCIETY NEWS.....

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.

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).

SOCIETY NEWS.....

ASHRAE '07 Winter Meeting—Energy-Efficient Buildings the Focus of Public Session

ATLANTA – In the big-energy State of Texas, where else would you expect engineers to seek to emphasize the importance of reducing energy use in buildings in order to achieve a sustainable future? At the 2007 ASHRAE Winter Meeting, of course. Energy use in buildings from HVAC&R and lighting account for up to 40% of a building's energy use. Examples of engineers' ability to significantly reduce a building's energy consumption and footprint on the environment will be demonstrated at a free public session at ASHRAE's 2007 Winter Meeting in Dallas. Strategies for Low Energy Efficient Buildings will be held Monday, January 29 from 3 p.m. to 5 p.m. at the Dallas Convention Center. "With the support of building owners, engineers can create green buildings that use energy wisely, provide a productive indoor environment for occupants, and have a minimal impact on the environment," said Brian Wandling, the session organizer on the program committee. "ASHRAE is a leader in the sustainability movement, and this public session highlights what ASHRAE and the HVAC&R industry is doing to make buildings more energy efficient."

The session, moderated by Brian Wandling of Control Specialists Inc., will consist of several case study presentations that examine various energy-efficiency strategies and obstacles. Speakers for the session are:

Ken Fulk, principal, Reed Wells Benson & Co., presents a case study about Dallas-based Highland Oaks Church of Christ replacing their aging ice storage system and air-chilled coolers after deregulation.

David Hale, Associate Member, HDR Architecture, talks about a McKinney, Texas, office building that, when completed, will achieve a 67% decrease in energy usage based on cost as compared to ASHRAE's 90.1-1999.

Daniel Nall, Flack & Kurtz, presents a case study about the New York Times headquarters building and its various green design features, including its underfloor air distribution system and its fully programmable digitally addressable lighting interface (DALI) system.

Paul A. Torcellini, senior engineer, NREL, presents six low-energy buildings to discuss their strategies for energy efficiency and implications for reaching the Department of Energy's research goal of achieving net zero-energy buildings) by 2025.

Held with the ASHRAE Winter Meeting is the ASHRAE co-sponsored International Air-Conditioning, Heating, Refrigerating Exposition, Jan. 29-31, at the Dallas Convention Center. For more information, contact International Exposition Company at 203-221-9232, info@ahrexpo.com, www.ahrexpo.com.

Focus on Small Retail—ASHRAE Releases Next Advanced Energy Design Guide

ATLANTA – Buildings designers are one step closer to a net-zero energy building.

Published by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), the Advanced Energy Design Guide for Small Retail Buildings is the second in a series of publications that cover various types of building construction. Intended for use by builders, contractors and architects, the guide covers energy-efficient design for retail buildings up to 20,000 square feet.

"The purpose of the design guide is to provide a simple, prescriptive menu of options that will result in a building using 30% less energy than those constructed in accordance with the 1999 version of ASHRAE Standard 90.1, the foundation for energy efficiency in building codes throughout the United States," said Merle McBride, chairman of the committee overseeing the book's creation. "Those looking to achieve a LEED certification from the U.S. Green Building Council (USGBC) will find this guide particularly useful."

The guide offers energy efficiency guidance in many areas, including lighting, HVAC efficiencies, windows, skylights and envelope measures. A major difference from Standard 90.1 is that the guide provides equipment efficiencies by climate zone to take into account varying environmental factors, instead of having one number for the entire United States.

The guide resulted from collaboration among ASHRAE, the Department of Energy, USGBC, Illuminating Engineering Society of North America (IESNA) and the American Institute of Architects (AIA). The retail industry provided guidance to the guide's development team to ensure building owner perspectives were considered when forming design recommendations. To help in future editions, users of the guide will be able to provide feedback via an Internet link.

The guide is part of a series of ASHRAE publications that will progress toward providing net-zero energy designs for buildings of various types. The first publication in the series focused on small office buildings, and the next energy design guide will address K-12 schools.

"This is a long-term endeavor by ASHRAE," said McBride. "ASHRAE is focusing on improving the energy efficiency of the nation's building stock, targeting where the greatest energy-saving impact can be achieved."

ADVERTISEMENTS.....



EFI COMMISSIONING SERVICES, LLC

MR. EDWARD ICZKOWSKI

HVAC COMMISSIONING SPECIALISTS
PO Box 386 • DENVILLE, NJ 07834
(973) 537-5482 • FAX (973) 537-8792 • WWW.EFICX.COM

If you would like to place an advertisement in the Thermogram, please contact Mr. Mark Richter @ 212-354-5656 or via email mrichter@AKF-eng.com for further details.