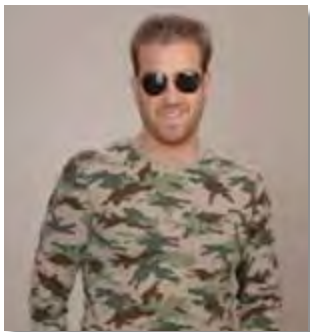


FOG DISPENSER



June 2012 DINNER MEETING

MAIN PROGRAM:
SPOUSES AND PAST-PRESIDENTS DINNER - INTERACTIVE WORKSHOP



SPEAKER:
JOSH BUKSTEIN, NERD IMPROV

The simple idea

- 1) It's fun. (Laughs)
 - 2) It's great for team building. (Working together)
 - 3) It's fantastic for individual communication skills.
- (Thinking on the fly, trusting your instincts, reacting to situations...to name a few)

Philosophy

Quickly growing companies are developing the next generation of business leaders in non-traditional environments. Too often, these environments include an over-reliance on electronic communication as the main medium of discourse both internally and externally. Nerd Improv will create opportunity for companies and individuals to explore beyond their current comfort zone(s) in your respective culture. By focusing on team communication skills, internal/situational examples and just plain fun, a shared memorable experience is the result.

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THURSDAY, JUNE 14, 2012
(5:30 PM TO 8:45 PM)

SCOTT'S SEAFOOD,
OAKLAND

AGENDA:

- 5:30 pm**
Registration and
Social Hour
- 6:30 pm**
Dinner with
announcements
and introductions
- 7:00 pm**
Break
- 7:10 pm**
Main Program
- 8:45 pm**
Adjourn

COST:

**GG ASHRAE Members and
Spouses, but please register**

Before 3pm, Fri. 6/8 \$40.
After 3pm, Fri. 6/8 \$50.

**Non-Members,
but please register**

Before 3pm, Fri. 6/8 \$50.
After 3pm, Fri. 6/8 \$55

Students/Voucher Holder
Free, but please register

**GOLDEN GATE ASHRAE
FOG DISPENSER
VOLUME L - NUMBER 6
JUNE 2012 COVER**

2012 EVENT CALENDAR:

► **THURSDAY, JUNE 14** **5:30 PM - 9:00 PM**

LOCATION: Scott's Seafood, Oakland

TOPIC: *Interactive Workshop*

SPEAKER: Josh Bukstein,
Nerd Improv

www.nerdimprov.com

TBD = To Be Determined. Visit www.ggashrae.org/calendr.htm for updates, presentation summaries, speaker biographies and to register for the meetings.

JUNE DINNER MEETING

The program is generally described as:

- Introduction to Improv Comedy
- Warm up games
- Improv comedy games
- Exercises focusing on group cohesion, supporting innovation personal confidence
- Breakdown on group cohesion, supporting innovation and personal confidence
- Breakdown/de-brief of Workshop Attendee experiences
- Summary

2012-2013 Calendar Preview

Thursday, October 11 2012 5:30 pm - 9:00 pm Location TBD	Don't turn Active Beams into Expensive Diffusers	Andrey Lichvak, Halton Group Americas Chris Lowell, Halton Indoors Americas
Thursday, November 8 2012 5:30pm - 9:00pm Location TBD	UCSF Mission Bay – Integrated Project Delivery	Tad Smith, Acco Raj Daswani, Arup Paul Switenki, Arup
Thursday, December 13 2012 5:30 pm - 9:00 pm Joint meeting w/ San Jose Chapter	Evaluation of low-flow system operation for energy and comfort at the Yahoo Campus	Hui Zhang, CBE Gwelen Paliaga, Taylor Engineering
Thursday, January 10 2013 11:30am – 1:30 pm Location TBD	Ten Myths About Behavior, Energy, and Buildings	Rick Diamond, Staff Scientist, Lawrence Berkeley National Laboratory
Thursday, February 14 2013 5:30 pm - 8:45 pm Location TBD	Air Change Effectiveness in Laboratory Tests of Combined Chilled Ceiling and Displacement Ventilation	Fred Bauman, Stefano Schiavon, CBE Julian Rimmer, Price Industries
Thursday, March 14 2013 5:30 pm – 9:00 pm Joint meeting w/ Redwood Section Location TBD	TBD	
Thursday, April 11 2013 5:30 pm - 8:45 pm Location TBD	Geothermal systems – case studies	Marco Alves, PAE Consulting Engineers
April 2013 Tour	TBD	
Thursday, May 9 2013 5:30 pm - 9:00 pm Location TBD	Awards and Product Show	Award Winners and Scholarship Recipients
Thursday, June 13 2013 5:30 pm - 9:00 pm Location TBD	TBD	



Dear Golden Gate ASHRAE Members and Friends,

As this ASHRAE year wraps up I think back on my time on the Golden Gate board and in leadership positions. I can only hope I have been able to give back as much as I have gained from my involvement. I have witnessed an exciting shift in Society's focus on the broader built environment represented by this year's branding change. I have learned QuickBooks and parliamentary procedures. Mostly I have gained the wonderful experience of volunteering with some amazing people and being a part of a prominent chapter membership.

Thanks to the board for tireless effort and dedication to our chapter and Society.

GARY: Thanks for always checking in with me and sharing your opinions and experience.

TYLER: As a first year member you jumped right in, especially with CTTC.

ERIK: Your focus and sense of humor have been invaluable.

ANNIE: A challenging year of financial duties did not slow you down.

ISABELLE: Continued to send an excellent FOG Dispenser and announcements to our members.

TOM: A terrific schedule of programs made the year so interesting. I have such respect for you and confidence in your presidency as I turn over the reins.

Thanks to the many committee chairs who keep activities and chapter members engaged in a variety of ways!

Needless to say, it has been a long road to this point and I am excited to stay involved with Golden Gate chapter on its next journey. Please join us for Significant Other & Past-President night at the June meeting as we celebrate the future and past of Golden Gate ASHRAE. We'll have a blast together with the Improv comedy routine. Don't miss this fun opportunity to try something new.

Respectfully Yours,

Kristin DeMartini, Golden Gate ASHRAE President

June – 2012...ASHRAE – Golden Gate's... end-of-year meeting....soon to be History

Tom Gilbertson, Chapter Historian

Moving through the Memorial Day Weekend**"ASHRAE"**...and its part in the events that helped frame this National Holiday come to mind....Recall that in the summer of 1941 **Golden Gate** was the Host Chapter to ASHRAE's (then ASHVE) annual meeting that was held in San Francisco.....The meeting featured special, dedicated, railroad car accommodations for the 4-day trip from Chicago for our members' travel ...and the meeting activities included, among other things, a deep-sea fishing trip, and golf tournament, ...and three technical sessions....All this while the Country was still observing "Decoration Day"...later to be called "Memorial Day"....(*do you know the difference between "Decoration Day" and Memorial Day?*)..... and I suspect the members, in June of 1941..... had little idea of exactly what was to come to our industry.....and our world...

But the Country was perhaps....not so slowly as our Society's 1941's annual meeting's activities might suggest....coming to a full utilization of all of "ASHAE's" capabilities.

Recall just this last week the City did "lose" the opportunity to have the permanent display of the IOWA – battleship, in San Francisco Bay....The "IOWA-Class" battle ships had been planned starting in 1939 and 1940 and the plan was to build 4 of these ships...the famed-MISSOURI, the NEW JERSEY, the WISCONSIN....and they did. (Later two more ships were planned....the ILLINOIS and the KENTUCKY, and one was started, but never completed).....These ships represent enormous repositories of the technology....then and now...of our ASHRAE-driven industry. The heating, ventilating, cooling, refrigeration, pumping, and over 212,000 boiler hp, etc.... that fills these ships was an almost overwhelming source of "work" for our "down-on-the-heels" industrial activity of the Nation....let alone how important this "work"....**prior to WWII**...was to be. Do not be confused.... these ships were authorized in 1940 not only with a "war-effort" in mind...but recognizing that this activity put many people to work.....Does any of this sound familiar?

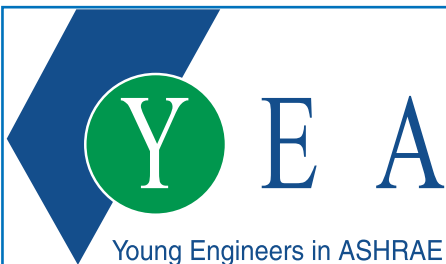
The contribution of these ships to our Nation's existence, as we know it today, can only now, be appreciated....and our industry met its obligations to help make them possible.

Having worked on some ships...including the S.S. United States...I can assure you that ASHRAE-technology is more than vital to ship-operation...it is mandatory.

Golden Gate's presence...in San Francisco...(Hunter's Point, Mare Island, Marin-Ship, Angle Island, Treasure Island...to name a few)....gave our members a location from which to see enormous facets of history unfold....Consider, for a moment the tale of Fletcher Jones...long time mechanical contractor with James A. Nelson Company, whose presence played important roles in San Francisco's two largest buildings....the 52-story BofA Work HQ...and the Transamerica Building....(More about these later)...Fletcher, in the U. S. Army...was to be sent, debarking from Angel Island, with his fellow soldiers to Singapore in

November of 1941...but the ship's mechanical problems delayed the start of the trip, from San Francisco, until December 4th....On the morning of **December 7th, 1941**.... The ship has been underway for three days...a fight breaks out on the deck between two soldiers....the question is asked...."What is this fight about?"....as it turns out the men were engaged in a heated argument about which way the ship was sailing....one fellow said the ship had "turned around".... noting that the sun was now coming over the "starboard-rail"...clear evidence that the ship was sailing "East"....back towards San Francisco.... and it was!.... The ship having been told of Pearl Harbor was returning home....consider what would have happened if the ship had sailed on time...and the men on board would have made it to Singapore...in time for it to fall....and perhaps never return.....yes....Memorial Day is a time upon which to reflect.





The Young Engineers of ASHRAE (YEA) is committed to encourage participation from our Golden Gate members 35 years old and below. Please contact Michelle Dionello (michelle.dionello@arup.com) with any comments or if you are interested in becoming more active in our group. YEA hosts social events, technical tours, and helps with outreach to young students in the Bay Area.

For more information on Golden Gate YEA check out: www.ggyea.org

Also [Golden Gate YEA](#) is on Facebook now!

Latest Event

The Golden Gate YEA committee hosted a Speed Networking event on May 8th! The intent was for younger Golden Gate ASHRAE members to get to know our chapter's Distinguished Members of ASHRAE (DMA) in a fun new way. The event was a great success! Golden Gate members met at the Autodesk Gallery in San Francisco to eat, drink, and wander through the Autodesk exhibits, which beautifully illustrates the role technology plays in great design and engineering.

The event began with members exchanging names, affiliation, and something neat about one another for 4 minutes. Then the whistle blew- SWITCH! Members were off to the next person to network. After the speed networking portion of the event, members were able to reconnect with those they left in mid-sentence. Overall a very fun event and we are looking forward to hosting it again and including other professional societies! Thank you to the members that participated and our generous sponsors Norman Wright and Autodesk.



David Blindheim, ASHRAE Golden Gate CTT Committee Chair

Join the CTTC Committee

If you like to assist the chapter and get involved with ASHRAE, the Chapter Technology Transfer Committee is one of the best places and we could use your help. Talk to a board member or contact David Blindheim at dblindheim@integralgroup.com.

MARBLE DRAW



Ross Farris & Christine Lee

A big thank you to Nazarro & Associates, Norman-Wright, and California Hydronics Corporation, who graciously donated prizes for the last meeting! Congratulations to Dan Schuster, who was the lucky marble draw winner! That means the odds of winning have been reset to 1 in 9. A few other lucky folks won the many other prizes that were provided by our sponsors.

Thank you to all who donated at last month's meeting for making it the best meeting so far in terms of marble draw donations! We are looking for a sponsor for the next meeting. Please contact us if you want to sponsor the prizes for this meeting. If your company donates prizes, your company's logo will display on a slideshow during the non-speaker portions of the meeting.

Please contact Ross Farris or Christine Lee for more details:

***RFarris@glumac.com -
415.398.7667.***

***Christine.Lee@arup.com -
415.957.9445***

2012 Winners of Golden Gate ASHRAE Scholarships

Eric Thor Andresen Memorial Fund:

- \$2,000 to Mallory Taub, UC Berkeley

Other scholarships/grants:

- \$1,500 to Heidi von Korff (Stanford University)
- \$250 to David Heinzerling + travel grant (UC Berkeley)
- Undergraduate grant: \$500 to Zachery Kohnke (Cal Poly)

Congratulations!

PG&E Classes

Benchmarking Energy Use in Commercial Buildings

Sponsored by PG&E, taught by Mark T. Jewell

California law (AB 1103) will soon require the disclosure of an energy performance benchmarking score prior to selling, refinancing or leasing certain whole buildings. Learn how to benchmark your building's energy performance with the help of PG&E's Automated Benchmarking Service - a free, easy-to-use service that automatically sends your commercial building's energy use information to the EPA's ENERGY STAR(R) Portfolio Manager every month. This class will include a hands-on benchmarking exercise using portable Wi-Fi hotspots so that attendees can evaluate an actual building from start to finish and see the ENERGY STAR score. PG&E sponsored classes are free, but seating is limited.

Credits: 4.0 AIA HSW/SD, 4.0 GBCI (LEED)

SAN FRANCISCO – June 12, 2012 8:30am-12:30pm

Register here: <https://www.surveymonkey.com/s/061212PEC>

SAN JOSE – June 19, 2012 8:30am-12:30pm

Register here: <https://www.surveymonkey.com/s/061912SJ>

SAN RAMON – June 20, 2012 8:30am-12:30pm

Register here: <https://www.surveymonkey.com/s/062012SR>

What's Next After Benchmarking?

Sponsored by PG&E, taught by Mark T. Jewell

Getting your building's benchmarking score is just the beginning. This course explores how to set targets for improvement: estimating the actual amount of energy savings needed to reach a higher score; which low-/no-cost or capital upgrades might produce various magnitudes of savings; which utility incentive programs could help identify or finance those improvements; etc. It's not about what your building's score is today -- it's about what you want that score to be and how to get it there!

Credits: 3.5 AIA HSW/SD, 3.5 GBCI (LEED)

SAN FRANCISCO – June 12, 2012 1:00pm-4:30pm

Register here: <https://www.surveymonkey.com/s/061212PEC>

SAN JOSE – June 19, 2012 1:00pm-4:30pm

Register here: <https://www.surveymonkey.com/s/061912SJ>

SAN RAMON – June 20, 2012 1:00pm-4:30pm

Register here: <https://www.surveymonkey.com/s/062012SR>

ASHRAE 2012 GOLF TOURNAMENT ***Golden Gate Chapter***

WEDNESDAY, AUGUST 22, 2012

12:30PM SHOTGUN START

Tilden Park Golf Course

<http://www.americangolf.com/tilden-park-golf-course/>

10 Golf Course Drive, Berkeley, CA 94708

Registration begins at 10:00 am

Awards Dinner • Scramble Tournament • Prize Raffle

- Men & Women's "Longest Drive" Contests
- Two "Closest to the Pin" Contests
- Putting Contest Begins at 11:00 am

PRICING:

(all packages include dinner and golf goodies):

Gold Sponsor..... \$2,500.00

(4 foursomes, 2 tee sponsorships)

Silver Sponsor..... \$1,850.00

(3 foursomes, 1 tee sponsorship)

Bronze Sponsor..... \$1,260.00

(2 foursomes)

Basic Team..... \$670.00

(1 foursome)

Single Player..... \$175.00

Contest Sponsors, Tee Sponsors, and Prize Donations are graciously requested

Please RSVP before July 15th



All proceeds benefit ASHRAE Research

For more information and registration,

please contact Tim Goepfner

email: tgoepfner@calhydro.com

phone: 510.266.7894



2nd Annual REASHRAE End of the Year Tour & Dinner Friday, June 15, 2012

Open to REASHRAE Members, Spouses & Friends

TECHNICAL TOUR

Presented by Greg Stocker (Clois Du Bois) & Mike Davidson (CMSI)

Time: 5:00 PM - 6:00 PM (please be prompt)

Location: Clois Du Bois Winery
19410 Geyserville Ave.
Geyserville, CA 95441



COURTYARD BUFFET DINNER

Social Hour: 6:30 PM
Dinner: 7:00 PM

Location: Bear Republic – Healdsburg Brewery/Tasting Room
345 Healdsburg Avenue
Healdsburg, CA 95448

Cost: \$55 per person (payable by check or cash at the door)

Includes:

- ▶ REASHRAE Scholarship Presentation
- ▶ Open beer bar (3 or 4 varieties)
- ▶ Live Music by the "Psycho-Metrics"
- ▶ Live Raffle to benefit REASHRAE

Registration Deadline: June 6, 2012

RSVP: Email completed registrations with **REASHRAE** in the subject line to:
Adrian Giovenco: agiovenco@trane.com or **Jeff Hiatt:** jeff.hiatt@trane.com
or FAX your registration form to: 888-418-3991 (Attn: Jeff Hiatt)
For questions: Call Adrian Giovenco at 415-418-0197

Hotel Options:

- ▶ Best Western (inexpensive, \$5 cab ride from Brewery)
- ▶ Healdsburg Hotel (pricier, walking distance from Brewery)
- ▶ Many other B & B's and hotels in the Healdsburg Area

Carpools:

4:00 PM - 4:30 PM
Meet at Bear Republic Healdsburg Brewery to carpool/caravan to the Clois Du Bois Winery.

☐ **Dinner only**

Name: _____
Company: _____
Total Number of Attendees: _____
Work Phone: _____
Email: _____

☐ **Dinner and Tour**

Currently I am a:

- ☐ Member of REASHRAE
- ☐ Student
- ☐ Guest of _____
- ☐ Other _____

No shows and cancellations received after June 7th, 2012 will be invoiced for the full cost of the event.

MEMBERSHIP PROMOTION

Erica Stewart

Please join us in welcoming the following members:

ASSOCIATE:

Mr. Mark J Calkins
Mr. Paul Ganz
Mr. Kurtis Raymond

Kolnowski
Mr. Patrick D Moore
Mr. Simon Jonas Olivieri

MEMBER:

Ms. Lisa Dellanno
Mr. Chris Gale
Mr. Leopoldo Marzan

Mr. Shawn Wilson
Mr. Talyie Zarraby

As a reminder, to be a member of the Golden Gate Chapter you must first be a member at Society (www.ashrae.org/membership/page/589). If you are currently a Society member and wish to join the Chapter, you must complete an application and send a check made payable to Golden Gate ASHRAE to our treasurer, Annie Foster (P.O. Box 19154, San Francisco, CA, 94119). Chapter dues are \$50 for Associates and Members, \$20 for Students. And remember, dinner is free for full-time students, all year long! Contact erica.stewart@kp.org for an application.

MEMBERSHIP ADVANCEMENT

If you are an Associate member, becoming a full member may be easier than you think. The following count toward the 12 points necessary to advance to full Member status. You must update your biography on the Society web site and email membership@ashrae.org to advance.

Non-accredited degree = 4 points

Accredited degree = 6 points

P.E. = 3 points

Every year working in industry = 1 point

CHAPTER RESEARCH COMMITTEE

The following individuals and companies have generously supported ASHRAE Research and the Golden Gate Chapter for the 2011-12 Campaign.

Thank you for supporting the research of tomorrow, TODAY!

ORGANIZATIONS

\$1000 & Over

Golden Gate Chapter

\$250 to \$999

R.F. McDonald Co.
Conservation Mechanical
Acutherm
Taylor Engineers

Up to \$249

Peterson Mechanical

INDIVIDUALS

\$1000 & Over

Glenn Friedman

\$250 to \$999

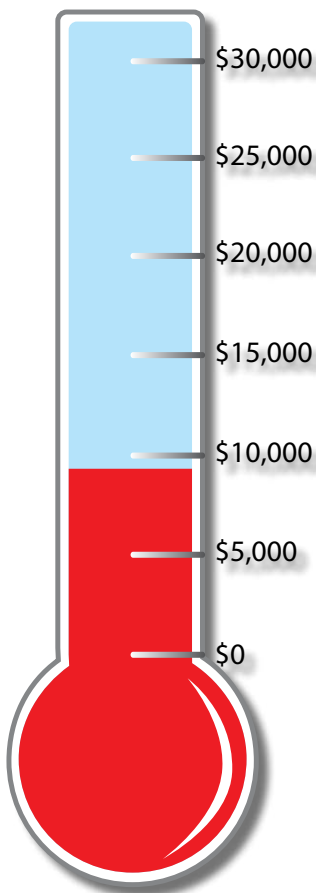
Richard Charles
Mark Hydeman
Steven Taylor

INDIVIDUALS

Up to \$249

Edgar De Guzman
Kristin DeMartini
Gary Harbison
Scott Wayland
Erik Kolderup
Thomas Weaver
Isabelle Lavedrine
Annie Foster Courtney

Kyle Blocker
Dennis Thompson
Tyler Bradshaw
Kevin Dowling
Matthew Williamson
Matt Russell
Michelle Dionello
Gail Brownell
Cliff Blythe
Wasil Popow
Gabriel Romero
Shlomo Rosenfeld
Clifford Scofield
Jack Palmer
Joo Kim
James Nemecheck
John Cross
Robert Judd



Donations are tax deductible, by check, credit card or online at www.ashrae.org.

For more information, please contact Jon Shipley 415-264-5509, jshipley@victaulic.com

We are currently at \$8,788.

Guidance on Variable Refrigerant Flow Systems Included in New ASHRAE Handbook

New guidance on variable refrigerant flow is featured in ASHRAE's new 2012 Handbook volume.

The 2012 ASHRAE Handbook – HVAC Systems and Equipment discusses systems and the equipment that comprises them, including features and differences. It is designed to help system designers and building operators select and use equipment. It contains 52 chapters.

Chapter 18, Variable-Refrigerant-Flow (VRF) Systems, describes these systems, their components and applicable standards in detail, and includes a system design example and important guidance on costs, controls and safety. In previous volumes, variable refrigerant flow was covered in the unitary products section.

"This new chapter covers the A to Z of variable refrigerant flow – from application of VRF to understanding how VRF works and from analyzing a building load in terms of VRF to zoning with VRF," Paul Doppel, chair of ASHRAE's technical committee on variable refrigerant flow that wrote the chapter, said. "The chapter offers an excellent overview of VRF technology, including discussion about 2-pipe and 3-pipe system performance during heating operations."

The chapter also includes a section that lays out a process for designing with VRF including a load analysis, as well as discussions regarding system expansion and designing systems to meet ASHRAE standard requirements.

"Since VRF systems can connect more than 100 percent nominal capacity of indoor units (up to 150 percent in some cases), the chapter also addresses shows how VRF can be used to satisfy changing building conditions with smaller capacity systems by using building diversity and multiple indoor units," Doppel said.

Other highlights in the 2012 volume:

- Chapter 12, District Heating and Cooling, has an extensive new section on economic comparisons, plus several new detailed examples.
- Chapter 17, Ultraviolet Lamp Systems, has new results from ASHRAE research project RP-1509 on degradation of materials irradiated by UVC energy.
- Chapter 19, Duct Construction, has a rewritten section on duct leakage, and new information on air dispersion systems and factory-built grease duct systems.
- Chapter 21, Fans, has added descriptions of types of fans and their applications; many upgraded figures; vibration categories, grades and limits; and a complete rewrite and update for the controls section.
- Chapter 51, Thermal Storage, has new content on unitary thermal storage systems (UTSSs), two new detailed sizing examples, several new figures, and extensive new guidance on equipment selection and operation.

The cost of the 2012 ASHRAE Handbook – HVAC Systems and Equipment, print edition (either I-P or SI and includes a CD of all content in both I-P and SI units) is \$199. The 2012 volume also is available in CD format for \$179.

To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide) or visit at www.ashrae.org/bookstore.

Proposed Revisions to Energy Standard for Existing Buildings Open for Public Comment

Public input is being sought into revision of an ASHRAE/IES standard that addresses retrofit of existing residential and commercial buildings to achieve greater energy efficiency.

Last year, ASHRAE and the Illuminating Engineering Society (IES) announced they were revising ANSI/ASHRAE/IESNA Standard 100-2006, Energy Conservation in Existing Buildings, to provide greater guidance and a more comprehensive approach to the retrofit of existing buildings for increased energy efficiency. The standard was first published in 1981, and the need for its requirements has grown as more attention is paid to improving energy in current building stock.

"Information from the International Energy Agency shows that the building sector is the largest consumer of energy in the United States, using some 40.3 quadrillion Btus of energy in 2002, around 41 percent of total U.S. energy use," Rick Hermans, chair of the committee writing the standard, said. "Compliance with this standard by every building would reduce that energy use by three quarters."

continued on next page

Public input to the proposed changes is being sought from May 4 until June 18. For more information on how to comment, visit www.ashrae.org/publicreviews.

The proposed changes include criteria for energy use surveys and auditing and requirements related to implementation and verification. Appendices are included for life cycle cost analysis procedures as well as identification of potential energy conservation measures.

Recognizing that the actual occupancy of the building plays a key role in its performance, the standard established the need for development of an energy management plan and an operation and maintenance plan.

"The standard takes advantage of the fact that any building which has been in operation for at least 12 months can quickly determine its performance relative to some benchmark, which is defined in the standard as an energy use intensity target," Hermans said. "This concept is the new paradigm for energy conscious design, construction and operation of buildings."

The standard provides requirements for the retrofit of existing buildings and addresses major and minor modifications for both residential and commercial buildings, single and multiple activity buildings with variable occupancy periods and identifies an approach for 53 building types in 16 climate zones/sub-zones.

The revised standard also identifies energy efficiency requirements for buildings with and without energy targets and provides multiple levels of compliance.

ASHRAE Launches New Terminology Site – ASHRAEwiki

Common definitions for terms found in ASHRAE standards and other publications can now be found at a new website from the Society.

The free ASHRAEwiki is located at www.ashraewiki.org and contains over 6,000 terms related to buildings with a particular focus on mechanical, envelope, electrical, lighting, load calculations, design, water design/conservation and energy use and measurement metrics.

"Common terminology in communications and particularly in standards helps users in their understanding, thus encouraging adoption and use," Art Hallstrom, a member of ASHRAE Technical Committee 1.6, Terminology, said. "The ASHRAEwiki goal is to improve communication by encouraging the use of consistent terminology definitions within ASHRAE and the industry, worldwide."

The new ASHRAEwiki can create custom reports of terms and primary definitions that will aid in the development of standards, guidelines, Handbooks and other ASHRAE publications. With time, it may have broader use across the industry, according to Hallstrom.

Each term in the wiki has one or more primary (recommended) definitions, in which ASHRAE standard(s) the term is used, the definition source and known legal information such as trademark registration. The wiki also lists any secondary definitions used in an ASHRAE standard or guideline, which will help with the development of consistent standards.

"There is no requirement to use an ASHRAEwiki primary definition, but standards developers should be able to see the value in consistency across all standards," Hallstrom said.

ASHRAEwiki terms are grouped by words, symbols, abbreviations and acronyms. Definitions that include units may use Inch-Pound (I-P) or International System (SI) as primary units. ASHRAEwiki is in English but might be expanded to other languages in the future.

"ASHRAEwiki content is controlled by the ASHRAEwiki editors and TC 1.6 but suggestions from individuals or organizations are welcome," Bruce Billedeaux, TC 1.6 vice chair, said. "Suggestions can be entered in the wiki discussion section or sent to the ASHRAEwiki editor."

ASHRAEwiki replaces a proposed ASHRAE Standard, Standard 166P, Heating, Ventilating, Air-Conditioning and Refrigerating Terminology, which had been proposed to offer uniform terminology for use in the HVAC&R industry.

Advanced Energy Design Guidance Offered for Large Hospitals

A dose of guidance to help save energy in hospitals is prescribed by the newest Advanced Energy Design Guide (AEDG), written by a group of leading building industry organizations.

The AEDG for Large Hospitals is the fourth in the series, designed to provide recommendations for achieving 50% energy savings when compared with the minimum code requirements of ANSI/ASHRAE/IESNA Standard 90.1-2004, Energy Standard for Buildings Except Low-Rise Residential Buildings.

continued on next page

The book was developed by a committee representing a diverse group of energy professionals drawn from ASHRAE, the American Institute of Architects (AIA), the Illuminating Engineering Society (IES), the Department of Energy (DOE) and the United States Green Building Council (USGBC).

“Most important in the Advanced Energy Design Guide for Large Hospitals is the recognition that patient outcomes, safety and experience trump all cost- and energy-saving strategies,” Shanti Pless, chair of committee that wrote the guide, said. “However, a well designed, constructed, operated and maintained facility is a major contributor to the environment of care and can improve patient outcomes, safety and comfort.”

The Guide focuses on standard mid-to-large-size hospitals that would typically be at least 100,000 square feet in size but the strategies apply to all sizes and classifications of large hospitals. Space types covered include conference, lobby, lounge and office areas; reception/waiting areas and examination and treatment rooms; clean and soiled workrooms; nurse stations, nurseries, patient rooms; operating rooms, procedure rooms, recovery rooms and sterilizer equipment areas; pharmacies and laboratories; triage, trauma and emergency rooms; physical therapy and radiology/imaging rooms; and storage, receiving and mechanical/electrical/telecom rooms.

Included in the Guide are recommendations for the design of the building opaque envelope; fenestration; lighting systems; HVAC systems; building automation and controls; outdoor air requirements; service water heating; measurement and verification; and plug and process loads, including kitchen equipment.

Along with whole building and technology case studies, the Guide highlights that existing reliable technologies and design philosophies can be used to reduce energy, according to Pless. Some of the technologies and philosophies highlighted in the book include:

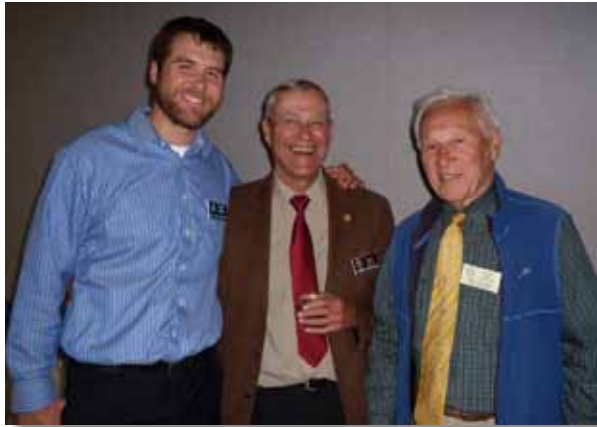
- Use of shape and form to give access to daylighting in spaces that usually have no windows
- Daylighting of staff areas and public spaces while at the same time specifying proper glazing to control solar gain
- Elimination of reheat, which is the largest energy saver from the HVAC system. Other HVAC savings comes from the de-coupling of ventilation air treatment and space conditioning and the elimination of steam boilers
- Recommendations to reduce and control plug and process loads including commercial kitchen equipment
- Reductions in interior and exterior lighting
- Recommendations involving LED surgery lights, which have the added benefit of allowing surgeons to set the thermostat higher in the operating rooms
- Measurement and verification recommendations to demonstrate savings are being realized with the added benefit of helping solve operational issues

The 50% Advanced Energy Design Guide series follows an earlier series that provided guidance to achieve 30% savings. The ultimate goal is to provide guidance to achieve net zero energy buildings; that is, buildings that, on an annual basis, produce more energy than they consume.

Other books in the 50% savings series deal small to medium office buildings, K-12 schools and medium to big box retail buildings. Since the Guides first began to be offered as free downloads at the beginning of 2008, more than 400,000 have been downloaded.

For more information on the entire Advanced Energy Design Guide series, or to download a free copy, please visit www.ashrae.org/freeaedg. A print version of the Guide may be purchased for \$82 (\$69, ASHRAE members). To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, or visit www.ashrae.org/bookstore.

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